Design-Based Research to Inform the Creation of an Early Childhood Education Framework for Pakistan

by

Mohammad Afzal Khan

Master of Political Science, University of Peshawar, Pakistan

Master of Education in Educational Leadership and Management,

Aga Khan University, Pakistan

Master of Education, Specialisation in Early Childhood Education,

Monash University, Australia

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April 2021

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Statement of Ethical Conduct

The research associated with this thesis abides by the international and Australian codes on human and animal experimentation, the guidelines by the Australian Government's Office of the Gene Technology Regulator, and the rulings of the Safety, Ethics and Institutional Biosafety Committees of the University.

This research has obtained:

- Ethics approval (Ethics Ref: H0017036) from the Human Research Ethics Committee (Tasmania) Network (approval date 13 February 2018),
- Approval from the Department of Education, Tasmania, Australia to seek permission from the principals of Tasmanian schools to be involved in the study (approval date 13 June 2018), and
- Approval from the Aga Khan Education Services, Pakistan for conducting research at Aga Khan Schools in Pakistan (approval date 21 November 2018).

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Dedication

To Mum and Dad

List of Abbreviations

BSF	Building Sound Foundations (a proposed ECE framework for Pakistan)
BSFtECE	Building Sound Foundations through Early Childhood Education
CFC	Child and Family Centre
CoC	Confirmation of Candidature
CRE	Culturally Responsive Education
DAP	Developmentally Appropriate Practices
DBR	Design-Based Research
DIP	Developmentally Inappropriate Practice
ECD	Early Childhood Development (this term is most popular in Pakistan)
ECE	Early Childhood Education
ECEC	Early Childhood Education and Care
ECED	Early Childhood Education and Development
EFA	Education for All
EPYP	Early Primary Years Program
EYDFS	Early Years Development Framework of Singapore
EYLF	Early Years Learning Framework of Australia
ESR	Education Sector Reforms
GoP	Government of Pakistan
IBO	International Baccalaureate Organisation
INGO	International Non-governmental Organisation
NEP	National Education Policy
NAEYC	National Association for the Education of Young Children (of the United States of America)

NCGECE	National Curriculum Guidelines on Early Childhood Education and Care in Finland
NGO	Non-governmental Organisation
OECD	Organisation for Economic Co-operation and Development
SWOT	Strengths, Weaknesses, Opportunities and Threats
TAS	Tasmania
TSSHREC	Tasmania Social Sciences Human Research Ethics Committee
V1 V2 V3	Versions 1, 2, 3 of the proposed ECE framework document
VEYLDF	Victorian Early Years Learning and Development Framework
VIC	Victoria

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Abstract

Evidence from research suggests that early childhood education (ECE) programs can create a robust base for success in life (Karoly & Levaux, 1998; Nores & Barnett, 2010; Organisation for Economic Co-operation and Development [OECD], 2016). To ensure young children receive good quality education, several countries across the world have created ECE frameworks responsive to their socio-cultural contexts, sensitive to their ideological needs and appropriate to the development of their young children. These frameworks are based on contemporary ideas and best classroom practices. A local ECE framework better serves the needs of children, families and the nation. Importation and imposition of an education model which does not match cultural, contextual, social and educational values, needs, identities and dynamics of the host country can create hurdles for children. This importation model can also create challenges for teachers, parents and schools. Thus, when an imported ECE approach was implemented in the context of Pakistan in the past, it created challenges for several stakeholders.

Currently, the education system in Pakistan largely follows a didactic approach to teaching and learning. This didactic approach encourages rote memorisation rather than developing conceptual understanding and children's holistic development. ECE in Pakistan is based on traditional approaches to education which promote the teacher's authority and students' dependency. For a more holistic approach to the development of young children, Pakistan was in dire need of an ECE framework based on contemporary ideas and evidence from research, responsive to its cultural dynamics and sensitive to its ideological needs. Thus, this investigation has created an early childhood education framework for the context of Pakistan. This was achieved cyclically, after exploring developmentally appropriate and culturally sensitive practices of education in the contexts of Australia and Pakistan.

This study was conducted in five main phases using design-based research. The research process included ECE framework document analysis, then in-depth semi-structured interviews with principals and focus groups of ECE educators in Australia and Pakistan. Qualitative content analysis (QCA) strategy was used to analyse data collected from these interviews and focus group discussions. The second level of analysis of the same data was carried out using the data management and content analysis software called NVivo to aid the analysis process. The work of Reeves (2006) 'phases of design-based research' provided the theoretical framework for this study. The framework design was an iterative process throughout the study, consistently informed by the data collected during the research.

The major outcomes of this study are the creation of an ECE framework teacher and parent guides for the context of Pakistan. These documents may be provided to early childhood educators in Pakistan to facilitate them to develop effective and culturally sensitive curriculum programs for the children they teach.

The major findings of this study suggest the development of an ECE framework is an ongoing process. It requires extensive consultations, deliberations and discussions. An effective development process includes multiple methods such as classroom observations, public consultation, online forums, consultation seminars, feedback sessions, and listening to experts in order to obtain input from a range of stakeholders.

Chapter 1

Introduction and Background

This design-based research was undertaken in order to inform the creation of a proposed early childhood education (ECE) framework for Pakistan through the review of contemporary literature and exploration of developmentally appropriate and culturally responsive practices in the context of Australia and Pakistan. The name of the proposed framework is 'Building Sound Foundation (BSF) through Early Childhood Education'.

This Chapter commences with a short introduction and background to the study, followed by the rationale of the study. It discusses the Pakistan education system, provides details related to the development processes of international frameworks, presents ways to assess the quality of education frameworks, and outlines the structure of the thesis.

1.1 Background of the study

The literature (Early Childhood Intervention Australia, 2016; Fleer & Van, 2017; Winter & Luddy, 2010) illustrates that young children's early experiences influence their later education, development, learning and success. In the early stage of education, teaching and learning should be tailored and presented in a way which is appealing to children (Chowdhury, 2017). Children are at the highest stage of readiness to learn before reaching the age of eight and their development can be augmented or inhibited, depending on the nature of experiences they have had in their early childhood (Nores & Barnett, 2010; United Nations International Children's Emergency Fund [UNICEF], 2012). UNICEF (2012) stated that young children need access to good health, nutrition, care, protection, early stimulation and

learning opportunities as early as possible in order to lay a sound foundation for later education and life chances.

According to Hunzai (2007) a common perception of schooling in Pakistan is that it is characterised by didactic, rote learning and teacher-centred approaches. Children are regarded as passive recipients of knowledge while teachers are seen as the source and imparter of education and knowledge. Further, the environment of the classrooms in the majority of public schools is not conducive to learning due to lack of proper infrastructure and unavailability of learning resources (Shamim, 2008). Classrooms often have no displays and offer no demonstration facilities with which to engage students. A mixed method research by Shallwani (2015) investigated 'school and classroom factors associated with children's transition outcomes' in Pakistan and reported that teachers in public schools are inclined to use conventional methods of teaching such as recitation, dictation, rote learning and lecturing without engaging students. Teachers heavily rely on memorisation of grammar rules and back and forth translation of texts in order to teach compartmentalised subject areas. The literature indicates that these methods of education do not promote the holistic development and wellbeing of children (Hunzai, 2007). These methods of teaching do not even support conceptual understanding and critical thinking because they favour rote learning and recitation without providing opportunity for discussion, analysis and exploration. This view is supported by a report published by the Asian Development Bank authored by Sipahimalani-Rao and LaRocque (2019), who argue that in Pakistan the focus of public examinations is on reproducing information through rote memorisation which encourages the public education sector in Pakistan to follow a deficit model of education. In a deficit model, students are forced to learn by rote information for acquiring good grades, promotion to the next classes, and gaining admission to the good schools of the country. In Pakistan, the pre-school and primary education sector predominantly focuses on reading, writing and basic numeracy only

without sense making and where children are expected to attain high scores in paper-and-pencil examinations (Farooq & Kai, 2017). Domains of children's holistic development such as the cognitive, social, emotional, spiritual and physical aspects, including key academic skills, are not covered. In this kind of education students are taught to follow rules without question and do as instructed which corresponds to autocratic worldviews of learning (Alamri, 2014).

1.2 Rationale for the research

The importance of ECE was not widely known in Pakistan until the end of the 20th century. In 2000 the government of Pakistan (GoP) for the first time, through its education sector reforms (ESR) policy, identified ECE as the foundation stone for the entire education system. At the same time, the government of Pakistan officially accepted the Katchi class (a class before Grade 1) as part of the formal education system in public schools. In those days I was working with an international non-governmental organisation (INGO) in Pakistan. The initial inspiration for this study and creation of a culturally responsive ECE framework for the context of Pakistan basically originated from my several years' experience of working in the field of ECE in Pakistan. While working with that INGO I benefited from opportunities to attend some of the key ECE training sessions in Pakistan, to conduct baseline studies, to design reference materials, including a manual for ECE teachers' training programs, parents' awareness session plans and policy documents for the implementation and monitoring of ECE services in Pakistan. I was involved in conducting professional development programs for teachers as well. As an Academic Advisor Education and later on as National ECE Coordinator I visited a number of schools in Pakistan and noted that the focus of teaching and learning in the majority of schools was the transfer of knowledge and product of education rather than the process of learning and conceptual understanding. I realised that the existing

ECE in the public schools of the country was based on rote-memorisation as schools lacked stimulating learning environments, relevant learning resources and well-equipped learning areas. Bartlett (2013) reviewed a number of studies on the effectiveness of transitions programmes in 10 countries on three continents including in Pakistan and found that in Pakistani public schools' "investment is low, teachers are poorly trained and frequently absent, and facilities and learning materials are woefully inadequate" (p. 24). Outdated textbooks were the only source for transferring knowledge to ECE children in overcrowded and congested classrooms. This view is supported by Ahmad, Rauf, Rashid, Rehman and Salam, (2013) who argued that the problems in the Pakistan's education system are numerous. The basic problems are lack of good quality teachers, use of old-fashioned textbooks, lack of purposely built classrooms.

No national ECE framework was in place in Pakistan to ensure that children receive good quality education and provide a broader structural guidance around which ECE service providers could build high quality early years education and development programs for young children. The need for a curriculum framework became obvious when the High/Scope framework (developed in the US) was implemented in schools in Pakistan. The essence of the High/Scope was, in some ways, in conflict with traditional Pakistani educational philosophies and cultural dynamics derived from ancient Arabic ways of life, i.e. teacher authority, discipline and acquisition of knowledge through memorisation. According to Allamnakhrah's (2013) qualitative case study research, children in Saudi Arabia are culturally conditioned to expect their teacher to be the authoritative figure and are used to the traditional teaching methods such recitation and memorisation. As a result of High/Scope's implementation, some parents and community members, including religious clergy, resisted ECE programming, and argued that High/Scope was a foreign approach to education which interfered with traditional teaching, parenting and local cultural values (Christina, 2011).

Consequently, there was a reduction in children's attendance at some of the project schools.

I was part of the team that was responsible for the implementation of the High/Scope project in Pakistan. While working with this project in Pakistan I realised that children appeared to be trapped in an educational system that did not relate to their culture, traditions, communities and homes. Fulford's (2007) ten case studies in aboriginal schooling with a particular focus on First Nation Peoples in Canada suggested that one of the key purposes of education should be to enable children to relate their learning to their daily life, communities, to religious practices and to their customs and traditions and to affirm their pride in their identity. My role as an Academic Advisor Education and National ECE Coordinator made me aware of the high importance of culturally sensitive ECE programs and encouraged me to acquire contemporary knowledge about alternative early learning approaches and practices. This led me to travel to Australia for the first time to study a Master of Education in ECE at Monash University and subsequently a PhD at the University of Tasmania. As I progressed through my studies in Australia, not only did I better understand effective pedagogical approaches to the children's holistic development and play-based learning curriculum, but I also came to know about different international ECE frameworks such as the Early Years Leaning Framework (EYLF) in Australia and Te Whāriki in New Zealand, as well as the ECE frameworks in Singapore and Finland.

Bearing in mind the poor situation of ECE in Pakistan and the grave challenges of extreme poverty, religious extremism (International Crises Group, 2014); political instability corruption, terrorism (Gul & Shah, 2019; Nawaz & Sultana, 2019); and a lack of funds (Ahmad, Kahil ur Rehman, Khan, & Khan, 2014), I strongly felt that there is a dire need to redesign the education system of the country, particularly for ECE, through the creation of a culturally responsive and developmentally appropriate ECE framework that teachers will be

able to use and implement even when facing current challenges in Pakistan. These reports and reviews triggered my thinking. I began to reflect deeply on the critical role of education in nation building which led me to feel that education is the road to national prosperity, modernisation and development because education develops the capabilities of people to fight against poverty, injustice, violence, corruption and inequality. According to Ahmad et al. (2014) the current education system of Pakistan is more than 70 years old; therefore, it failed to raise the nation economically, politically and socially.

Pakistan ECE needs a more balanced and culturally sensitive ECE framework based on contemporary ideas while still maintaining Pakistani traditions and culture. This kind of ECE framework may nurture democratic thinking from an early age for generating peace and harmony in the country in the long run (Khan, 2013). Given these circumstances, I came to Australia in order to undertake a doctoral study that would explore and research developmentally appropriate and culturally sensitive practices for creating a culturally responsive ECE framework for the context of Pakistan. This culturally responsive ECE framework encourages ECE teachers to work closely with children, parents, families, communities, and religious leaders to overcome the current challenges of the country by preparing children to become peaceful, democratic, respectful and mindful citizens of the country who are eager to contribute for the betterment of the entire world through their actions and education. The proposed ECE framework promotes cultural diversity, religious harmony and democratic thinking. Reports (Khushik & Diemer, 2018; Malik & Rose, 2015) suggest that the government of Pakistan is unable to provide resources for learning to children due to lack of funds; therefore, the BSF framework urges teachers to develop and use teaching and learning resources from the local context using the natural environment that is relevant to local cultural dynamics rather than waiting for government budget provisions to buy resources from commercial markets.

1.3 Purpose of the study

The study aimed to develop an ECE framework for the holistic development of young children in Pakistan which is culturally responsive and developmentally appropriate for Pakistani schools. This was achieved through the exploration of best ECE practices in the context of Australia and Pakistan. After going through the entire process, this investigation created an ECE framework for the Pakistani context. The proposed ECE framework (see Appendix K) is sensitive to the cultural dynamics and ideological needs of Pakistan.

1.4 Pakistan's education system

Article 25-A of the Constitution of Pakistan obligates the state to provide free and quality education to children of 5–16 years of age. The Education system in Pakistan is class based. Public schools and low-cost private schools cater for children of the middle and lower-middle classes, and high-cost elite private schools offering a high quality of education cater for children of the upper class. Religious schools cater for children from the poorest families of the country. Public, private and religious education sectors all follow different curricula and textbooks. Ahmad et al. (2014) believed that education systems with different curricula cause many problems for the society.

According to the projections of the National Institute of Population Studies quoted in Government of Pakistan (2018b), there are currently over 51.53 million children between the ages of 5–16 years in Pakistan, and 22.84 million of these children are not attending any school. According to the law of the land, pre-school education is not compulsory.

Public schools are the largest free education providers up to Grade 12 and under this education system, the scope of ECE is limited to a level of class called Katchi which is a class before Grade 1. The Katchi class caters for children aged 4–5 years. Public schools

teach this class using the prescribed textbooks of their respective province, and Pakistan has four provinces and two administrative territories. The public sector, as the largest provider of education, enrolled 24,398,021 students across the country in 2017 (Government of Pakistan, 2018b). See Table 1.1 below for further details.

Table 1.1: Public schools, enrolment and teaching staff

Level	No. of schools	Enrolment (millions)		Teaching staff
		Boys	Girls	
Pre-school	No separate centres and rooms	2,564,398	2,164,879	No separate allocation of teachers
Primary	125,573	6,275,643	5,087,322	324,561
Secondary	29,594	3,463,583	2,653,181	372,074
Higher Secondary	1,865	855,128	524,414	55,342
Degree (Grades 13 and 14)	1,259	107,645	81,342	34,710

Source: Government of Pakistan (2018b)

Operated by individuals, groups, registered societies and political parties, the non-elite low-cost private schools are the second largest provider of secular education in the country. The literature on the quality of Pakistan's pre-school education suggest that the ECE in Pakistan is not very encouraging in these schools because of substandard teacher training programs, staff with fewer qualifications, a high turnover of teaching staff, and a lack of teaching and learning resources (Ahmad et al., 2013; Ahmad et al., 2014; Ali & Tahir 2009; Farooq & Kai 2017). These schools charge monthly tuition fees ranging from AU$5 to AU$80 depending on their standard of education. They teach using textbooks written in English and the official medium of instruction is also English. However, the medium of instruction totally depends on how proficient the teacher is in English as some of the private schools hire teachers with low

English language proficiencies as well. A total of 16,114,731 children were enrolled in the non-elite low-cost private schools sectors across Pakistan in 2017 (Government of Pakistan, 2018b).

High-cost elite private schools such as those in school systems including Beacon House, City Schools, Head Start and the Roots Schools system are few in number and provide organised pre-school education to the children of rich families (British Council [BC], 2010). They follow the International Baccalaureate curriculum and Cambridge education system. These schools charge a high amount of fees and provide world-class ECE facilities including learning resources. See Table 1.2 below for further details.

Table 1.2: Private schools, enrolment and teaching staff

Level	**No. of schools**	**Enrolment (millions)**		**Teaching staff**
		Boys	**Girls**	
Pre-school	Not reported	2,630,454	2,169,485	2,785
Primary	20,256	4,190,764	3,265,907	98,236
Secondary	54,878	2,006,777	1,533,917	551,677
Higher Secondary	3,605	105,963	80,748	67,719
Degree (Grades 13 and 14)	159	73,823	56,893	2,372

Source: Government of Pakistan (2018b)

Religious schools (Deeni Madaris where the focus is religious education. These madaris follow 272 years old education system called Dars-e-nizami course) do not teach the early years in the same way that ECE classes are organised in good secular schools for young children aged 4–8 years. Being the second largest education provider, they provide free education, accommodation and food to students aged 10–28, mostly catering children from poor families and the working class (Anjum, 2017). They offer Islamic-oriented education

and follow a traditional Islamic curriculum based on the teaching of specific interpretations of Islamic Fiqa (one particular group within Islam) (BC, 2010) See Table 1.3 below for further details of providers of education in the religious sector.

Table 1.3: Religious schools, enrolment and teaching staff

Levels	**No. of religious schools**	**Enrolment (millions)**		**Teaching staff**	
		Boys	Girls	Male	Female
For students aged 10–28 years	34,117	1.38	0.788	57,023	17,625
Total	**34,117**	**1.38**	**0.788**	**57,023**	**17,625**

Source: Government of Pakistan (2018b)

At present, the total number of active religious schools is 32,272 in Pakistan, out of which 3% are in the public sector. Total enrolment in this school system is 2.26 million, out of which 64% are male students and 34% are female students of various grades (Government of Pakistan, 2018b). According to Anjum (2017) this education system (madrasa education) runs parallel to modern and secular education, and attempts to empower its followers to confront contemporary ideas.

The education system in Pakistan is generally divided into six main levels: pre-school, primary, secondary, higher-secondary, graduation and post-graduation. Statistics provided by the Government of Pakistan (2018b) that relate to the various levels of education in Pakistan are presented in Figure 1.1.

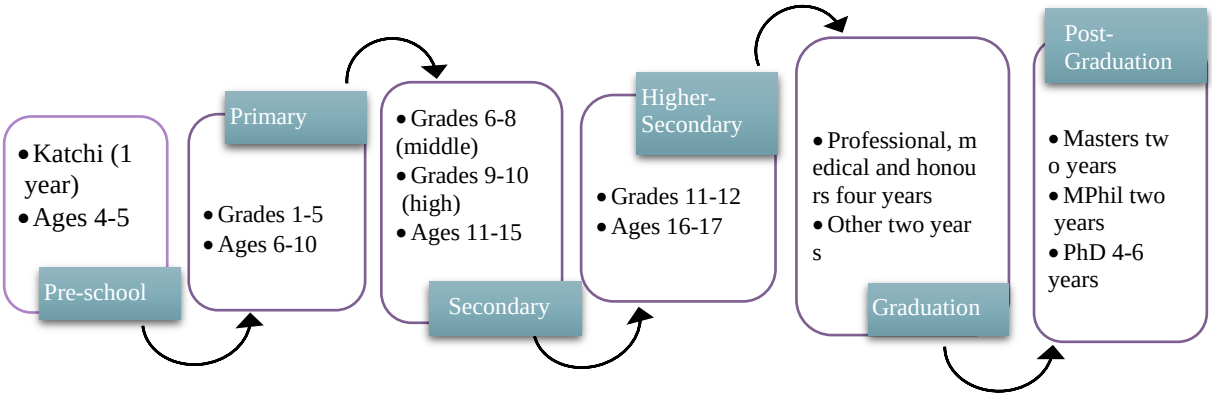


Figure 1.1: Structure of public schools' education system in Pakistan

1.4.1 Pre-school education

According to the amended Constitution of Pakistan (the 1972's constitution of Pakistan was amended in 2010) pre-school education is optional, however wherever available it is provided free in public schools whereas in the private sector tuition fees are charged for their services. Separate classrooms are not available for pre-school children in the public sector of the country. The national ECE curriculum of Pakistan 2017 caters for children aged 4–5 years so the notion of ECE is confined to this age of students only. Current enrolment data is not available however in 2018 total enrolment in pre-school education was 9.783 million (Government of Pakistan, 2018b). Surprisingly, there is no separate allocation of teachers to the pre-school level in the public sector, whereas the reported number of teachers at the pre-school level in the private sector for the entire country is 2,636 (Government of Pakistan, 2018b).

1.4.2 Primary school education

Theoretically, the official entry age to the first grade of primary school is 5 years in Pakistan. Education at this level is also free for all children irrespective of their nationality, religion, cast and ethnicity. The language of instruction in public primary schools and religious

schools is Urdu across the country whereas the medium of instruction in elite primary schools is English. In both public and religious primary schools, the assessment of students' learning is summative (annual exams) which leads to rote-oriented education to produce high scores and these scores determine the quality of education (BC, 2010). Pakistan does not have any national curriculum framework neither are there common standards so the public, private and religious schools all follow different curricula, instructional strategies, textbooks and assessment systems which has created a lot of disparities (Government of Pakistan, 2018a). According to the Government of Pakistan (2018b), as at the end of 2017, the reported number of primary schools in Pakistan was 150,129, the total enrolment in the primary level of education was 19.351 million, and the total number of teachers was 453,614.

1.4.3 Secondary school education

Secondary education begins in Pakistan at Grade 6 and lasts for four years. The minimum entry age to the first grade of secondary school is 10 years. According to the 1972 law of the land, education at this level is also free for all children irrespective of their nationality. Both private and public sectors work side by side in the field of secondary education as well. Khattak's (2012) study scrutinised the examination and assessment system in schools in Pakistan from primary through to secondary education (Year 10). His study reported that in the public schools and the majority of large low-cost private schools, assessment of students' learning is carried out at the end of an academic year with the ultimate goal of promotion of students to the next grade. These schools are responsible for conducting annual examinations for Grades 6–8 which are mostly based on a paper-and-pencil test whereas annual examinations for Grades 9 and 10 are conducted by the corresponding Board of Intermediate

and Secondary Education (BISE).[1] School completion and participation rates remain persistently low at the secondary level (Sipahimalani-Rao & LaRocque, 2019). The medium of instruction in public secondary schools, the majority of private schools and the religious schools is Urdu across the regions. The public, private and religious schools all follow different curricula, instructional strategies, textbooks and assessment systems from grade six to eight whereas in grades nine and ten all education providers follow the same textbook in order to prepare their students for centralised public or external examinations (standardised tests). Upon successful completion of these examinations, they are awarded a Secondary School Certificate at the age of 16 years.

1.4.4 Higher secondary school (HSS) education

After successful completion of the Secondary School Certificate, students are eligible to enter an intermediate college or a higher secondary school to pursue the two-year education provided by those colleges and schools. The medium of instruction across all types of schools at this level of education is English (Sipahimalani-Rao & LaRocque, 2019). Students need to successfully pass the end-of-year Higher Secondary School Certificate (HSSC) public examination at the end of both Grades 11 and 12 in order to be eligible for the award of HSSC. Rind and Malik's (2019) study investigated the examination trends at the secondary and higher secondary level in Pakistan with a special focus on the quality of items in the examination papers. This study reported that assessment conducted at this level of education is mainly summative tests of the students' memorisation and comprehension. This type of assessment usually promotes examination-oriented pedagogies. Currently there are three main streams from which students may choose at this level: science, arts, and commerce.

[1] The Board of Intermediate and Secondary Education (BISE) is an examination board responsible for conducting centralised examinations of Grades 9–12 students. There are over 31 BISEs in Pakistan including the Aga Khan Education Board which is the only private examination board in Pakistan.

Generally, continuous assessment is rarely done. Therefore, in this kind of education, students tend to develop memorisation and comprehension skills only (Rind & Mari, 2019).

1.5 ECE Pakistan: The existing situation

Pakistan is one of the signatories of Education for All (EFA) (a global initiative led by UNESCO) and several other worldwide education movements and declarations for providing easy access and good quality education for all children (Zada, 2014). In Pakistan, education has never been recognised as a critical factor for enhancing living standards, life expectancy and health for all. ECE in Pakistan is regarded as a new field of education, not yet a fully mature, developed or completely understood sector of education (Ahmad, 2011; Hunzai, 2007; Malik, Sarwar, & Khan, 2010). The Ministry of Education Pakistan (2009) affirms that "historically, ECE has not been formally recognised by the public sector in Pakistan" (p. 35). In the public sector "the concept and understanding of ECE has been largely confined to a single class called Katchi", an unofficial class before Grade 1 (Shakil, 2002, p. 7). In most cases, Katchi-class children share a room with Grade 1 and Grade 2 students under the same roof, as almost all public primary schools follow multi-grade seating arrangements due to a scarcity of classrooms, resources and teachers. Traditionally, Katchi classes have existed in Pakistan since 1979; however, separate teachers, rooms and specified curricula have not existed for this class (Ministry of Education Trainings and Standards in Higher Education, 2015; Rich-Orloff, Khan, & Juma, 2007). In 2002, Shakil conducted a situation analysis of ECE in Pakkistan. Shakil (2002) found that whilst students are being registered, no proper teaching is carried out as teachers are not sure about the appropriate content for this age group. Teachers are supposed to provide oversight of the children if children are making too much noise. Children aged 4 years old are eligible to register in the Katchi class.

In order to fulfil its international commitments for the improvement of education, the

government of Pakistan has introduced several policies and reform agendas. The government led by the former President of Pakistan, Parvez Musharaf (1999–2008), announced the Education Sector Reform (ESR) policy in 2001 in order to fulfil its international commitments to Millennium Development Goals (MDG), EFA and the Convention on the Rights of the Child. The policy document suggests plans for the development of cognitive, social, physical and emotional dimensions of a child's life (Ministry of Education Pakistan, 2002). As a part of its reform agenda, ESR produced a National ECE Curriculum document for the Katchi class in 2002 (Ministry of Education Pakistan, 2002). The National Curriculum Pakistan for Katchi class was created almost 17 years before without consulting a large amount of evidence from research studies.

The government of Pakistan has not yet been successful in operationalising its ECE commitment in public sector schools despite having approved policies and declarations, and this is mostly due to political reasons, lack of determination, a dearth of funds and unavailability of a contemporary ECE framework. Rich-Orloff et al. (2007) report that "while the government made a commitment [in 2002] to institutionalise ECE into the formal schooling system and to open Katchi/ECE classes in public sector primary schools, this could not be achieved due to the lack of resources and finance constraints" (p. 44).

The private sector (excluding religious schools) is the largest provider of organised pre-primary education. This school system operates pre-primary schooling in a more systematised way using Montessori, Kindergarten and Reggio models of ECE (Akhtar, Shah, Nasiruddin & Iqbal, 2011). Some of the non-governmental organisations (NGOs), including the Aga Khan Education Service, Pakistan, offer two years of pre-primary education for children aged 4 and 5 years old and follow mostly imported pedagogies. In the private sector education, students are provided with plenty of opportunities to take an active and engaged part in

learning activities (Hunzai, 2007). Hunzai found that unlike the public schools, in NGO ECE settings, promotion to the next class is based on formative assessment procedures. These schools are few in number and a vast majority of the population is deprived of such facilities.

The current pre-primary and primary education system in Pakistan is a continuation of the traditional colonial education system which does not fulfil the needs of Pakistan in the 21st century and it does not even match Pakistan's ideology[2] (Rana, Saeed, & Shafiqur, 2015). Due to the unavailability of developmentally appropriate practices and a culturally responsive ECE framework, the process of early childhood education is to some extent poor in Pakistan.

Efforts have been made a number of times to import and implement foreign models of ECE, including the High/Scope, in the context of Pakistan. However, the imported models of education have always interfered with traditional teaching, parenting, and local cultural values (Christina, 2011). The reality is that the world has changed a great deal and continues to change; therefore, according to David and Powell (2005) education, in order to be truly meaningful for students, must reflect the time and place where they live. As a result, Pakistani schools need a more balanced ECE framework based on contemporary ideas while still maintaining Pakistani traditions and cultural dynamics in ECE. 1.5.1 Key challenges of ECE in Pakistan

There seems to be a wide array of factors which obstruct the flourishing of ECE in the Pakistani context. It is apparent that the foremost challenge is lack of will and realisation of the importance of ECE among authorities, including members of Legislative Assemblies and policy makers. They have no interest in providing quality ECE services to the children of everyday people and common man. Khatak (2014) undertook a comparative analysis of the

[2] Pakistan ideology – creation of an enlightened and secular society and to follow the "modernist" ideals of Islam and to avoid imposition of several centuries old conditions.

elite–English-medium schools, state Urdu-medium schools, and Dini-madaris in Pakistan. Khatak found that children of political and bureaucratic elites and influential decision makers of the country are admitted to elite private schools where the education system, particularly ECE, is by no means less than that of Western countries. Therefore, because of the lack of political will there is an absence of well-prepared regulations, policies, ordinances, laws and rules for launching quality early childhood education in public schools. According to Gul & Shah, (2019) lack of political motivation means that the budget allocation for the entire education sector is approximately 2.3% of the total GDP which is severely inadequate considering the needs and importance of the sector. Unavailability of funds for ECE is another significant challenge the country is confronting.

In his article published in Asian Journal of Political Science, Feisal (2007) argued that the political instability in Pakistan that has existed for several decades has led to massive corruption in government ministries, including the provincial ministries of education. Due to corruption, nepotism and the demise of meritocracy provinces, district communities and schools lack the capacity to plan, implement and monitor ECE programs.

A key issue raised by Shafi (2019) in his article ‘the role of civil society in religious extremism in Pakistan post-9/11’ is lack of religious tolerance towards secular education. He argued that until quite recently there has been a huge amount of violence and influence of anti-state actors in the country. Because of religious extremism a number of secular schools were set alight across the country and many children, teachers and social workers perished in these suicide attacks. According to Rana et al. (2015), another key challenge is the lack of real educational reforms and the continuation of the traditional colonial education system which does not fulfil the needs of the country.

1.6 Pakistani government's guidance about the importance of ECE - the BSF framework and current government ECE policies

The BSF framework has been designed taking account of the Pakistan government's ECE preferences, democratic values, political decision making and the country's cultural dynamics. According to Article-9 of the Pakistan constitution, it is the responsibility of the appropriate government to make necessary arrangements for providing free pre-school education and early childhood care for children above the age of 3 years until they join formal schools. The BSF framework is culturally responsive to the Pakistani context and is developmentally appropriate for children aged 3-8 years and it aims to provide opportunities for children's holistic development. Article-9 further elaborates that all children have a right to life, and to survive and develop physically, mentally, spiritually, morally, psychologically and socially to their full potential. To accommodate the provision of Article-9 of the constitution, sections titled 'continuum of child's development' and 'life skills education programmes' are included in the BSF framework (see pages 32-36 and 22-23 of BSF framework) which provide guidelines and examples of activities to teachers for the development of children's intellectual, cultural, physical, social, spiritual, aesthetic and cognitive abilities. The BSF framework provides suggestions to teachers to actively engage young children in exploration, discussions, games, solving problems, creative art activities and asking questions.

The importance of ECE was not widely known in Pakistan until the end of 20th century (Ang & Oliver, 2015). The ECE field started gaining policy makers' attention in the post-2000 scenario when the Pakistan government declared that ECE is a legal obligation in the state in the light of Universal Declaration of Human Rights (1948) as well as the United Nations Convention on the Rights of the Child (1989). In 2000/2001, for the first time the government

of Pakistan officially identified ECE as the foundation stone for the entire education system; however, in the public sector the concept and understanding of ECE has been largely confined to a single class called Katchi, a class before Grade 1.

The National Education Policy (NEP; 2017) acknowledges that all young children need easy access to quality learning opportunities, health, nutrition, care, protection and stimulation as early as possible in order to lay a sound foundation for later education and life chances. The policy aimed at ensuring ECE is learning through play and physical activity. The holistic development of the child is the main focus of this policy. The policy provisions further aimed at providing quality pre-primary education to all ECE children, basic ECE infrastructure, information and communication technologies facilities for the promotion of ECE and teacher capacity development. To address teachers' professional development the BSF framework encourages ECE teachers to become reflective practitioners, critical thinkers and good readers. A Teacher's Guide has been developed which highlights suggestions to develop knowledgeable, responsive, and committed ECE teachers (see pages 19, 22 of BSF framework and ECE Teacher's Guide).

The BSF framework accommodates government policies and wider political context of the country by addressing gender equity in education and acknowledging all children's rights to education, wellbeing, nutrition, care, security, and development. The proposed ECE framework aims to enrich learning for all children (boys and girls) from 3-8 years. The framework draws on contemporary international best practices (see pages 42-44 BSF framework) and provides guidelines to ECE practitioners in Pakistan for ensuring that all young children in all ECE settings receive the quality education they deserve. It has a specific emphasis on play-based learning (see page 23 BSF framework) because children learn best through play

(Fleer & Van, 2017), and when they are actively involved in the construction of their own knowledge. In the current scenario in Pakistan, funds are not available to organise purposeful play-based activities in public schools (Gul & Shah, 2019); however, outside play areas can be established for fostering children's physical and mental health, social skills and cognitive development. Respondents in the current study in Pakistan and Australia suggested that outdoor experience has positive impacts on the child's entire development and also on the growth of the child's brain; therefore, the BSF framework urges teachers to use outdoor spaces for making children strong physically, emotionally and mentally so that they can concentrate and stay on task for a longer period of time. The BSF framework recognises the key role and use of communication and information technologies (see page 41 of BSF framework) in promotion of early education, learning and development.

The government of Pakistan, through its education policies, intended to maximize the role and participation of parents, family and community in the provision of pre-primary education (Rashid, 2004). The NEP (2017) prioritises mobilisation and sensitisation of various ECE stakeholders including parents and community members about the importance of ECE (Government of Pakistan, 2017). To address this policy provision a Parent's Guide (see Appendix N) has been created for the context of Pakistan which may be provided to the parents of young children for creating awareness and to maximise their support to their children's education. The BSF has special emphasis on fostering home-school partnership and community engagement (see pages 17, 19, 20, 22, 25-26, 39 of BSF framework) for better education of children. The main purpose behind the creation of the proposed ECE framework was making a difference for children, making a difference for families, and making a difference for teachers and the community.

After carefully analysing Pakistan's current Prime Minister and Federal Education Minister's media talks since 2018 I feel like the political view on young children in Pakistan is rapidly changing from needy, dependent or deficient young people/human being to capable, curious and powerful learners. Drawing on a range of philosophical thinking, the BSF framework also challenges traditional ways of seeing children. In the BSF framework, children are positioned as informed, creative, responsible, active and competent learners. NEP (2017) states that the provision of better early childhood care and education makes a positive difference in children's future learning, career, and adult life; therefore, "ECE will be top priority" (p.31). The BSF framework is an inclusive document which has a specific emphasis on balanced diet, importance of exercise and significance of healthy food for healthy body and mind.

Recent reports (Government of Pakistan, 2017; Khushik, & Diemer, 2018; Majoka, & Khan, 2017; Rich-Orloff et al., 2007) suggest that, despite having approved policies, action plans, curriculum and declarations, the government of Pakistan has not yet been successful in operationalising its ECE commitment in public sector schools. Khushik and Diemer (2018) claimed that "all previous policy documents failed to implement and to achieve their objectives for a range of reasons" (p.15). Low priority of the government for ECE, lack of political will, highly ambitious policies, corruption, political instability, and lack of requisite funds have been the main hurdles in efficient policy implementation in the country (Ahmad, Rauf, Rashid, Rehman, & Salam, 2013; Government of Pakistan, 2017; Khushik, & Diemer, 2018). The academics in Pakistan who reviewed the proposed ECE framework supported the view that lack of parents' engagement, dearth of political will, corruption, unavailability of budget, overcrowded classrooms, and harsh weather conditions are major obstacles in improving quality of existing education system and launching new education services in Pakistan. However, I believe that the development of a culturally responsive and

developmentally appropriate ECE framework for the Pakistani context is itself a beginning of change to occur in the education sector of the country. It is expected that ECE teachers in Pakistan may be able to use and implement this framework even when facing current challenges because it provides children with regular opportunities of learning through play by connecting children's learning with the natural environment and materials drawn from nature. It urges teachers to develop and use teaching and learning resources from the local context of the natural environment and to be responsive to children's cultural roots.

In his first speech to the nation in July 2018, the current Prime Minister of Pakistan Imran Khan expressed his political will to improve quality of education and pledged to launch quality services and programmes for young children and parents with low socio-economic status across the country. He has been in power for almost three years; however, no visible improvement has yet occurred in the field of ECE. It may be because of the shrinking economy of the country. Like almost every country around the globe, Pakistan's economy badly suffered in 2020 because of the Corona Virus pandemic. Based on my interactions with public and private school teachers and parents in Pakistan over social media platforms (i.e., on Facebook and Twitter) and after regularly reading Pakistan's online newspapers (such as THE DAWN, THE EXPRESS TRIBUNE and THE NEWS), it appears the people of Pakistan want to see some concrete reforms in the education sector of the country in the near future. It is hoped that by offering an alternative framework that utilises alternative ways of learning (i.e., not textbooks but utilisation of skill development through play from things readily available) and opportunity for parental understanding through the parent's guide, that this may support the beginnings of change to occur.

All children, including those from Pakistan, have a right to quality education in order to build a solid and broad foundation for lifelong learning and wellbeing (UNICEF, 2019). According

to the UN Convention on the Rights of the Child (1989) “the child should be fully prepared to live an individual life in society” (p.1) and every child is entitled to get the best possible quality of education regardless of their race, religion, colour, sex and geographical location. The proposed ECE framework might be a useful document for preparing children for further education and for a better future life in the Pakistani context.

1.7 Processes adopted for developing, reviewing and refining education frameworks across the world

Early childhood is a vital time for children to learn and develop and as a result ECE reforms are happening around the world. To date, many countries across the globe have created their ECE frameworks for ensuring that their young children receive high-quality early experiences, interactions and education. According to McCuaig (2014) quality ECE framework documents have been designed for providing guidance to adults who work closely with young children, to ECE providers, key ECE decision makers and to the people who directly or indirectly have roles to influence young children education.

This section of the chapter discusses the development processes of Australia, Pakistan, USA, New Zealand, Finland, and Singapore ECE frameworks. (Please see pages 103-104 of this thesis for rationale for inclusion of only these ECE frameworks into this study). By doing so, the intention is to explore, analyse and understand the rich body of work that has been carried out around the globe for the development of various ECE framework documents. May’s (2002) paper on the historical perspectives of ECE policy in Aotearoa-New Zealand suggested that it takes time to develop a curriculum framework that is accepted, inclusive, meaningful and makes a difference for children, for families and for nations.

One of the pioneering ECE frameworks is Te Whāriki, the New Zealand ECE curriculum which was introduced in the year 1996. In 1991, a contract was awarded to 15 nationally

recognised researchers, trainers and academics (at the University of Waikato) to coordinate the process and develop the national ECE framework for the country. Carr and May (1993) (both of whom were involved in the development process of Te Whāriki) narrated that the framework development team engaged in a very extensive process of consultation and deliberation spreading over a five-year time frame and involving teachers and ECE service providers in New Zealand. The team included coordinators of four specialist working groups linked to the curriculum development team. The coordinators of these specialist working groups worked closely with various cultural groups, including parents, in order to obtain their input and to address their concerns as well as to ensure that their feedback and suggestions were included in the framework document. The specialist working groups then developed the common curriculum principles, aims, goals and strands. An advisory group consisting of representatives from all ECE providers, government agencies, universities, and research and training institutions in New Zealand gave their feedback throughout the process of development (Carr & May, 1993). Input was included from practitioners derived from a range of church-based and private childcare centres, kindergartens, home-based programs and programs in hospitals who engaged in lively debate and thoughtful discussion. In addition, consultative seminars were organised in order to discuss key components of Te Whāriki. After rigorous consultation, the draft guidelines of the framework were released in November 1993 and sent to all ECE providers for trial (Carr & May, 1993). Before sending for trial, the New Zealand government introduced nationwide training for all pre-school educators and principals. The framework document was revised a number of times during the process.

The Early Years Development Framework (EYDF) of Singapore was created after a very extensive process of consultation over a period of three years. Ting (2007) has discussed key steps of the development process of Singapore ECE framework in her paper published in *International Journal of Child Care and Education Policy*. She mentioned that, prior to the

creation of the EYDF, a comprehensive review of literature from the field of brain research, analysis of several key ECE frameworks and background research into current practices in childcare settings in Singapore were undertaken. During the process an online forum was launched for receiving feedback, comments and suggestions from all interested parties across the country. The framework development involved several stakeholders whose input and advice were sought. The preparation of the framework sought guidance from Piagetian, Vygotskian and Malagozian philosophical thinking as well. This exercise provided rich and culturally relevant data to inform the formation of this document. After three years of extensive deliberation the framework was formally launched in 2005 (Please see more detail in Chapter 4 related to Singapore ECE frameworks).

The EYLF Australia was introduced in 2009 by the Australian government after a rigorous process of discussion, consultation and deliberation that engaged several stakeholders. At the beginning of the development process an analysis of national and international framework documents was conducted. The framework was created with considerable input from state and territory governments, feedback from researchers, academics, parents and ECE service providers and ECE educators across the country. According to Tayler (2016), input was included from stakeholders by engaging them in national symposia, national public consultation forums, focus group discussions (see page 94 for the support of **focus groups** by connection to research), an online forum and case study trials. (For more details related to EYLF please see section 2.5.1 of this thesis).

In Finland, the process of ECE framework development lasted four years. At the very beginning of the process a Curriculum Road Map (including the most important topics for discussion) was prepared and published to guide the flow of the process. According to Soukainen (2018) during the development process of Finland ECE framework thirty

curriculum working groups were formed and a digital feedback system was launched. Over a period of time, the development process of Finland's ECE framework invited various stakeholders from several government ministries, labour unions, teachers, parents, the municipal workers, textbook publishers, industry and ethnic groups to participate in various stages of its creation. An expert hearing was also organised. During the design process, several drafts of the framework were published on the website for feedback and input from citizens. The results of various research, evaluation and development projects were collected, consulted, analysed and shared with the framework developers. According to Halinen (2018), focus group discussions and consultation with school principals, parents and teachers of young children and students were useful for the curriculum developers to identify existing strengths, weaknesses and opportunities of currently on-offer ECE services. After the four-year consultative process with ECE teachers, principals, local education authorities, teacher educators, parents, students, researchers and other stakeholders from all over the country, "the core curriculum for early childhood education and care was published in 2016" (Halinen, 2018, p. 78).

The High/Scope framework was created by Dr David Weikart and a team of academics and researchers in the US at the beginning of 1962. According to Izadpanah and Günçe (2014) from the beginning, as part of the design, a careful analysis of contemporary ECE research was undertaken and research was conducted in addition to focus group discussions, and seminars involving ECE teachers, parents, academics and researchers in order to explore and understand best classroom practices and powerful ideas of the time. Reviewers' input and feedback were taken into account and incorporated in the final document of the curriculum (French, 2012). The High/Scope framework underwent improvements a number of times. The framework was revised and upgraded several times, informed by research studies and the experiences of classroom practices over 50 years. Besharov, Germanis, Higney, and Call,

(2011) assessed 26 publications on High/Scope and reported that the most important development process of this framework was a longitudinal study. Through that study, a group of High/Scope children was followed thoroughly during their childhood and adult life in order to explore its impact on their practical life, and the results were compared with a control group of children.

A review of the above ECE frameworks included in Chapter 4 revealed that there are some common threads in the framework development processes. For example, focus group discussions were common across most processes of development of selected ECE frameworks for seeking advice and acquiring feedback from core stakeholders. In recent contributions to the focus group literature, Sagoe (2012) and Mishra (2016) suggested that focus group discussions allow a researcher to gather more and in-depth information, opinions, views, and inputs in a short period of time from large number of participants, including community members and other stakeholders. Most framework developers of the selected ECE frameworks used this method of deliberation in order to engage teachers, parents and community members in various stages of framework development. Review and analysis of previously constructed ECE frameworks, as well as hosting national symposia, are also common across most processes of framework development across regions. The EYLF Australia, High/Scope, Te Whāriki, Singaporean and Finnish ECE frameworks were all created after a thorough review of literature and broad consultation with teachers, parents, students, researchers, academics and community members through a wide range of national symposia, interviews and conferences. The provision of an online feedback mechanism was not very common across the processes of development. However, Singapore, Australia and Finland engaged a large number of parents, teachers, researchers and ECE professionals through digital platforms to seek their input and advice in various phases of framework development.

1.8 Ways to assess the quality of ECE frameworks

Creation of an education framework is an extensive, ongoing and complicated process. It is believed that assessment of the quality and effectiveness of a framework is an integral stage of curriculum development and refinement process which has been frequently overlooked in the literature (Haider, 2016). Internationally there is no one agreed way to evaluate and measure the quality and effectiveness of development processes of an education framework. Various techniques and models are available with which to check the quality of an education framework. Of the mostly cited models are Bradley's effectiveness model; Tyler's objectives-centred model; Stufflebeam's context, input, process, product model; Scriven's goal-free model, and Stake's responsive model (Ayuba, 2019; Stabback, 2016). There have been continuous deliberations regarding the appropriateness of these framework evaluation models. Most of the curriculum evaluation discussed in the current literature has been undertaken in order to check if the aim, objectives and goals for the curriculum framework are clear and achievable, if the document is relevant to students' current and future lives, if the framework is appropriate for the host context, if it is suitable for the targeted age group, if it was developed based on ideas from the contemporary studies, and if it meets the needs of students, interested parties and the community as a whole in the context of change (Hussain, Dogar, Azeem & Shakoor, 2011; Mahmood & Aziz, 2018). Measuring the equality and effectiveness of an ECE curriculum is a complex activity. The European Commission (2014) suggests three common quality principles with which to evaluate and determine the quality of any ECE framework, these being process quality, structural quality, and learning outcome quality of the framework.

Process quality: The first principle with which to determine the quality of a framework is process quality. The process of a framework's development varies from jurisdiction to

jurisdiction, mainly depending on the experience and expertise of the framework development team. One of the key principles for the evaluation of quality of an ECE framework is to examine the process of the framework development. The process quality looks at the development processes of a framework. According to the European Commission (2014), Stabback (2016) and Wentzell (2006), exploring answers to the following questions may be helpful to check the quality of the development process of an education framework.

- Why it was important to create a framework?
- Who was included and who was excluded in the process of framework development?
- How was the process initiated and when was it published?
- Is the framework built based on contemporary effective and innovative ideas related to the child's development?
- Was the framework development process spiral, collaborative and consultative and include the input of curriculum development experts?
- Are the voices of students, parents, teachers and other key stakeholders heard and included?
- How does the framework document underpin the significance of learning through play?
- Was baseline research conducted in order to set the scene and establish priority areas?
- Was a pilot study conducted in order to trial the new framework before implementation?
- Is teachers' ongoing development part of the process?
- Who were involved in the review and refinement process?
- What different methods were used for gathering feedback, input, suggestions and comments from several types of stakeholders?

Structural quality: The second principle with which to determine the quality of a framework is checking the structural quality of the framework (European Commission, 2014). An ECE framework is a core ECE policy document. Priority issues and components to be covered and included in the framework document differ from country to country. The structure of the framework usually includes guiding principles, quality practices and desired learning outcomes in addition to statements about underlying vision, values, purpose, regulations, policies, theoretical underpinnings, and implementation strategies (European Commission, 2014; Stabback, 2016*)*. The structural quality looks at the structure of the framework. According to the European Commission (2014), Stabback (2016) and Wentzell (2006), the following questions might be useful to ask for gauging the structural quality of an education framework.

1. Are clear aims and objectives for the framework mentioned?
2. Are there links between early childhood frameworks and frameworks for older children?
3. Is the framework responsive to the cultural, contextual and ideological needs of the host country? If yes, how?
4. Does the framework cater to the needs of all children?
5. Does the framework explicitly describe the role of childhood teachers and other adults involved in the education of young people?
6. Is it learner-friendly and does it encourage home-school partnership?
7. Is the framework flexible and does it allow modification and enrichment if there is a need to do so?
8. Does the framework place special emphasis on children's holistic development?
9. Is the framework appropriately sequenced, and well-structured?
10. Is the framework backed up by contemporary philosophical thinking?
11. Does the framework provide guidelines for the development of core academic skills?

Learning outcome quality: The learning outcomes of a framework are clear statements of learners' achievements at the completion of certain level of study identified by the framework's developers. According to the European Commission (2014) in a framework document, learning outcomes are usually developed for each goal/principle of the framework. The third principle with which to determine the quality of a framework is therefore learning outcome quality. This outcome quality looks at the benefits of the framework for children, families, communities, and society. According to the European Commission (2014), Stabback (2016) and Wentzell (2006), the following questions may be useful to assess the outcome quality of a framework document.

1. Is the framework forward-looking and does it prepare young children for future opportunities?
2. Does the framework encourage teachers to organise programs for the child's entire development?
3. How and in what ways does the framework contribute to the preparation of children for further learning, school readiness and adult life?
4. Is the framework relevant to the students' current life and does it prepare children to be informed and responsible global citizens?
5. Does the framework encourage children to become independent and lifelong learners?
6. Does the framework enable children to reach to their full potential?

1.9 Structure of the thesis

Chapter 1 of this thesis introduces my research and expounds its background, rationale, the Pakistani education system (including existing situation of ECE), the processes for developing and refining education frameworks, and ways to assess the quality of an ECE framework.

Chapter 2 explores the literature and discusses the background of ECE, developmentally appropriate practices, globally recognised ECE curriculum approaches, the redesign of ECE pedagogies in the 21st century, ECE in Australia and culturally responsive education. It presents the pre-design phase of the BSF framework development and outlines the research questions.

Chapter 3 narrates the research framework and design. This theoretical lens assisted my data collection, analysis and theme development. In this chapter I explain my methodology, research design, settings, selection of participants and instruments of data collection.

Across the next three chapters, I present my data analysis and findings. Chapter 4 reviews and presents data from the analysis of international ECE framework documents under several themes. The chapter provides recommendations for the refinement of the first version of BSF framework document. Chapter 5 presents data collected in Australia for the refinement of the BSF framework. Chapter 6 presents, and analyses data collected in Pakistan for the finalisation of the BSF framework document.

Chapter 7 discusses and compares the development process of the BSF framework with the processes used by other ECE frameworks. It presents the implications of this research, sheds light on its limitations, and offers recommendations and directions for future work. The chapter closes with a few concluding remarks.

Chapter 2

Literature Review and Theoretical Framework (preliminary and creation phases of framework development)

This review begins with an introduction to early childhood education and goes on to discuss the origins of ECE and the significance of developmentally appropriate practices in early childhood. It then briefly discusses globally recognised curriculum approaches followed by a short discussion on redesigning ECE pedagogies for the 21st century. It briefly reviews the Early Years Learning Framework (EYLF) Australia followed by a discussion on the significance of culturally responsive ECE for children's holistic development. The review concludes with the current scenario and the emerging needs of ECE in Pakistan. This literature review is structured to:

- Gain a breadth of existing knowledge relating to culturally responsive and developmentally appropriate practices in order to create an ECE framework for Pakistan.
- Find what has already been published on this topic and what needs to be investigated.

2.1 Background and history of early childhood education

ECE encompasses the educational, health, psychological, philosophical, cultural, historical and sociological domains (Bose, 2010) of education and development from birth to age 8 years through meaningful child-centred learning programs. Studies (for instance Fox, Levitt, Nelson III, & Charles, 2010; Hawley & Gunner, 2000; Oberklaid, 2007) identify that the most sensitive period of learning and growth is between the ages of 0–8 years when children

are fully ready to learn. During this period of life, children develop quickly and the most rapid brain growth and development occurs before the age of 8 years (Oberklaid, 2007).

The literature indicates that images of and perceptions about children are created by adults as well as "the history of childhood and children tends to be written from adults' perspectives" (Hendrick, 2009, p. 99). Adults' own experience and exposure to life's circumstances influence the construction of their perceptions of certain images of children and childhood (Honig, 2009). Traditionally, childhood and children are understood through adults' lenses so children's own viewpoints seem to be the "missing piece of the puzzle in understanding childhood" (Smith & Taylor, 2000). Qvortrup (2009) suggests that we need to explore and respect children's own point of views and perceptions for gaining better understanding of their childhood and their social images. Adults' assumptions about children and childhood may not be accurate; therefore, cannot provide helpful information and knowledge about children and children. Also, not all the children are same.

Centuries ago, the general perception was that children were unproductive (Akinbote, 2006; Bloch, 1991; Qvortrup, 2009). This belief assumed that children were immature, dependent and incomplete; therefore, they were not able to identify new ideas and could not concentrate on learning. This misconception prevailed in underprivileged regions, including in the context of Pakistan and other countries. There was a culture of sending children to schools very late even, in some contexts, when the child was above 8 years old in the belief that this would benefit their children (Nonoyama-Tarumi, Loaiza, & Engle, 2010; Wils, 2004). This still occurs in some instances where children are considered as 'empty vessels' (Britto & Limlingan, 2012). This perception prevailed for centuries and teachers, parents and other caregivers followed traditional child-nurturing practices, with the aim of bringing up obedient children (Jafari, 2009). Caregivers were not aware of the significance of early-age brain

development and its key function in learning and in daily life chores. Their perception of childhood and children's images were influenced by their limited understanding of the study of children (Oberklaid, 2007). Literature indicates that in traditional or authoritative child development contexts, children may become dependent in their thinking, passive recipients of knowledge, over-obedient and weak in critical thinking and in interactions with other people (Jafari, 2009; Moss, 2010). Whereas, in some supportive and child friendly contexts children are regarded as a source of social prestige to their parents and therefore parents ensure that their children are exposed to better education right from the early years (Akinbote, 2006; Qvortrup, 2009). Misconceptions about children may exist in today's world as well and children can be regarded as "out of control, innocent, evil, snowballing, miniature adults, adults in training, victims, and in danger" (Sorin, 2005, p. 19).

In contrast, in developed countries, notions of ECE and development are not new. Starting from birth, children are regarded as active learners, co-constructors of knowledge, researchers, active risk takers and curious learners and they are born with a ' hundred languages' (Malaguzzi, 1987). McCartney and Harris (2014) employed multiple data points within a qualitative approach to investigate the image of the child constructed by preservice teachers in international contexts and noted that in developed countries, images of children and childhood have been constructed over a period based on extensive research studies, contemporary theories and classroom practices. Serious work for children education, health, development, protection and care began in Europe in the 17th century during the Reformation period through a campaign that encouraged separation of children's schooling from adults (Rahikainen, 2017). Old understandings of childhood were shifted to better understanding of children development (Woodhead, 2009). In her book titled *Centuries of child labour: European experiences from the seventeenth to the twentieth century*, Rahikainen (2017) narrated that attitudes towards children's education and development were changed during

17th century and several ECE movements and educational philosophies started flourishing. Jean Jacques Rousseau was one of the modern thinkers to suggest a more authentic alternative to traditional education in his work ‘Émile’ . According to Rousseau, children are capable learners and therefore are able to generate knowledge if provided learning opportunities. Good quality early intervention helps in the determination of their later adjustments in the community (McDevitt & Ormrod, 2010).

During the 19th and 20th centuries, the notion of ECE really began to burgeon (Albon, Miller, & Pound, 2011). Cameron and Moss (2020), in their recent contribution to the ECE literature, noted that research studies conducted in developed countries began to show evidence that children learn best when they are actively involved in the construction of their own knowledge. Therefore, influenced by progressive reformation movements, developmentally appropriate practices were introduced for the holistic development of young children (Copple & Bredekamp, 2009).

2.2 Developmentally appropriate practices

Developmentally appropriate practice (DAP) is a research-based framework for education and an approach to teaching that ensures the optimum development of young children (Bhamani & Bhamani, 2014). The National Association for the Education of Young Children (NAEYC) published DAP guidelines in the shape of a book in 1987 with a revised version in 2009 (Copple & Bredekamp, 2009). This book is accompanied by samples of both appropriate and inappropriate classroom practices (Kim & Han, 2015). Primarily, the DAP philosophy was generated to influence ECE educators’ beliefs and to modify their classroom practices to move away from didactic teaching practices and to adopt child-centered activities suitable to children’s age, need, level, background and interests (Copple & Bredekamp, 2009). According to Copple and Bredekamp (2009), the “full spectrum of development and

learning is fundamental to children's lives and to their future participation in the society" (p. 11). The traditional system of education comprising paper-and-pencil, rote-drill and reproducing facts could not fulfil the emerging needs of children's holistic development whereas constructivist and child-centered approaches foster all domains of children's development (Kamerman, 2006).

DAP has five key areas with each of these being interlocked. All key areas play a significant role in children's holistic development. These areas are shown in Table 2.1 below:

Table 2.1: Key areas of developmentally appropriate practices

Key areas of practice	**Details**
Community of Learners	- Everyone, including teachers and parents, are learners therefore contribute to one another's learning and well-being
Teaching	- Both child-initiated and teacher-directed - Learning by doing and knowledge expansion
Curriculum	- Individually appropriate, culturally sensitive and developmentally relevant
Assessment	- Authentic, ongoing, intentional manner, from multiple sources and being used for improvement
Families	- Partnership with family - Regular, open and positive communication - Respect for family goals

Source: Copple and Bredekamp (2009)

Children need opportunities in order to utilise their learning capacities in activities and to reach their full potential. ECE educators need to focus ~~emphasise~~ on entire child development through a range of pedagogies taking into account children's age, background, abilities, interests and characteristics (Department of Education and Training, 2016). DAP offers a wide range of opportunities for active learning through stimulating and interactive teaching strategies. DAP follows three core principles to ensure that the holistic education system in

place is: (i) individually appropriate, (ii) culturally sensitive, and (iii) developmentally relevant (Bhamani & Bhamani, 2014). DAP teachers are sensitive to individual differences and respectful to each child's culture and social context. Teachers in DAP settings are cautious about the strategies and approaches they are using in the classroom. They choose the best strategies for meeting the needs of children and families. They critically and regularly reflect on their teaching and the children's achievements in order to enhance their pedagogies.

The DAP approach stresses that children's needs must be the primary source of the curriculum and a tailormade curriculum meets the needs of children best. The DAP curriculum is flexible, interactive and enriching, thereby providing a range of options for children to learn (Bhamani & Bhamani, 2014). It is intended to maximise all domains of development (Copple & Bredekamp, 2009) rather than confining students to doing the same thing. In contrast, a developmentally inappropriate practice (DIP) curriculum provides a 'one-size-fits-all' approach of activities which do not serve the purpose of children's holistic development. Evidence from research suggests that at the ECE stage knowledge cannot be segregated, therefore a DAP curriculum is thematic and integrated (Vengopal, 2015). Principles of DAP have been derived from the seminal theories of John Dewey, Vygotsky, Bronfenbrenner and Rogoff (Rababah, 2012) in addition to evidence from contemporary research studies.

2.3 Globally recognised ECE curriculum approaches

Based on the child development theories, evidence from research and experience of classroom practices, some progressive models of ECE frameworks have been developed, for instance, the Montessori, Reggio Emilia, High/Scope and International Baccalaureate have been created and adopted worldwide. These curriculum approaches are important because

schools around the world regard them as good models for ECE; therefore, parents prefer to send their children to schools with these brand names. Educators around the world also look to them for best practice.

2.3.1 The Montessori philosophy

This is one of the popular ECE approaches, created by the Italian physician, Maria Montessori (1870–1952). Initially, she became a teacher to a group of mentally disadvantaged street children. Inspired by the educational works of Gaspard Itard and Edouard Seguin (1774–1880) for teaching language skills to deaf and disadvantaged children and based on her own scientific observations, Maria Montessori upgraded and improved her methods to cater for all children's holistic development (Akinbote, 2006; Barrueco, Wall, Mayer, & Blinka, 2016).

The Montessori's philosophy stresses that learning must be free from rivalry and false incentives, rewards and punishments, and students' natural intellectual abilities can be enhanced through self-correcting activities (Williams & Keith, 2000). The Montessori approach views children as authors of their own development, constructors of their own knowledge and independent, capable decision makers (Edwards, 2002). In this approach, activities are designed based on children's interests and choices. She believed that during the 'sensitive period' (between the ages of 2 and 6 years) children are at the high state of readiness for learning (Edgar, 2012; Lopata, Wallace, & Finn, 2005). The essential elements of this approach are as follows:

1. Teachers are trained in Montessori approaches;
2. Diverse age and heterogeneous group of students learn together;
3. Students' freedom of movement and selection of activity from available options;
4. Uninterrupted ideally up to 3 hours work time;

5. Aesthetically pleasant environment and easy access to specialised educational materials (Barrueco et al., 2016; George, 2010).

2.3.2 The Reggio Emilia philosophy

Another recognised and progressive pre-school approach is Reggio Emilia, created by the Italian psychologist Loris Malaguzzi (1920–1994) for children 3 months to 6 years of age. Deeply rooted in a constructivist approach to learning, it was inspired by various seminal philosophical thinkers such as Dewey (1859–1952), Piaget (1896–1980), Vygotsky (1896–1934) and Bruner (1915–2016) (Rinaldi, 2006). In a Reggio setting, children are collaborators of knowledge and teachers act as nurturers, guides and researchers, and the environment is 'the third teacher' that provides opportunities for learning. The approach is based on the principle of respect for children, relationship, responsibility and community. The approach emphasises that learning activities must be based on children's interests and expectations rather than a teacher's knowledge. Children's freedom is at the heart of Reggio philosophical thinking and a child is allowed to touch, see, taste, move, listen, explore and discover the world around them in a supportive and enriching environment (Rinaldi, 2006). Its worldwide fame and reputation is because of its following key principles:

- The approach follows various means (100 languages) of communication such as speech, writing, painting, graphs, drawing, movement, sculpture, dance, singing, music, shadow play and collage work (George, 2010; Hall, 2013).
- The Reggio curriculum is flexible, therefore topics are selected from the environment, culture, and other family and community events (Baker, 2015; Hall, 2013).
- The Reggio education system portrays the child as capable, curious and a powerful learner rich in mind and soul with unlimited potential. "This principle reminds teachers to view each child not as needy or deficient, but as a source of strength and inspiration"

(Gardner & Jones, 2016; Hammond, Walsh, & Waugh, 2012, p. 23).

2.3.3 The High/Scope teaching and learning approach

David Weikart and colleagues first introduced the High/Scope in Michigan, US in the 1960s as a way to educate at-risk children of low-income families. The approach was inspired by theories of various seminal philosophical thinkers, particularly Vygotsky's social development and Jean Piaget's cognitive development. The approach underwent improvement and was upgraded a number of times informed by research studies and the experiences of classroom practices over 50 years (Izadpanah & Günçe, 2014). It is now used worldwide in playgroup, childcare, primary schools, and nursery classes for the holistic development of young children (OECD, 2004). The active learning approach is at the heart of the High/Scope framework. In active learning, children have direct hands-on and minds-on experiences with people, objects, events and ideas. The active learning approach provides a multi-directional learning experience for teachers as well as for students (Schweinhart & Weikart, 1997). The following are five essential ingredients of active learning approach:

- Materials: Children need interesting materials to engage them in the process of learning. Children use resources to learn and practice new knowledge and skills.
- Manipulation: Children are freely involved in hands-on manipulation of materials.
- Choice: Children are allowed and encouraged to select what they want to explore, with whom and how. They are allowed to change play partner and activities if they want at any time. They take responsibility and plan, do and review their activities.
- Language: Children are encouraged to express their thoughts, share ideas, discuss and describe what they want to do and what they are doing. Teachers provide plenty of opportunities for children to speak, read, write and listen.

- Support: Teachers provide support to students by joining in their play. Teachers in this approach work as partner and guide. They respect students and consider them to be co-constructors of their own knowledge.

The approach is based on the philosophy that children best learn if they: (i) pursue their own choices, use their own language for discussion and use interesting local materials from their own culture (Thomas, 2010): (ii) are encouraged to explore things around them and interact with others (Izadpanah & Günçe, 2014), and (iii) are free to ask and answer questions and solve problems (OECD, 2004; Schweinhart & Weikart, 1997). In this approach the teacher helps children in the completion of their tasks without interrupting them (Schweinhart & Weikart, 1997). A typical High/Scope classroom follows daily routines in order to carry out tasks in a logical order. Consistent daily routines of the class provide an idea of time for the children and encourages them to complete their activities within the allocated time. At the heart of this approach is 'plan-do-review' that builds students' confidence, their capacity for independent learning and their abilities of decision-making and problem-solving skills.

2.3.4 International Baccalaureate (IB): An early primary years programme (EPYP)

International Baccalaureate was founded in 1968 to provide an international opportunity for education by using a globalised framework for children of diplomats and others interested to a continuum of international education. International Baccalaureate aims to develop the whole child, focusing on children's intellectual, physical, emotional and ethical aspects of life with the ultimate aims of making the world a better place to live and to improve connections among nations for global citizenship. For the first time, International Baccalaureate introduced its childhood education program for children aged 3–12 years worldwide in 1997.

Early years education in the IB is transdisciplinary and focuses children's holistic

development rather the teaching of stand-alone subjects. IB aims to nurture students to excel not only in their studies but also addresses children's social, ethical, cultural, emotional and physical wellbeing going beyond their academic achievements and cognitive development (Kauffman, 2005). The International Baccalaureate curriculum is global, balanced, broad and conceptual, and provides children with opportunities to reach their fullest potential. The International Baccalaureate program "encourages creation of rich personal and cultural identities" (International Baccalaureate Organization [IBO], 2013, p. 3) by offering opportunities for children to explore similarities and diversities in the society and to appreciate beliefs, values and traditions (Drake, 2004). International Baccalaureate fosters the idea of 'think globally and act locally' and prepares children to address global challenges of environment, conflicts and governance for making the planet safer place to live.

The International Baccalaureate education system is popular worldwide for its learners' key profiles as "knowledgeable, risk takers, active communicators, open minded, inquiring, caring, principled, critical thinkers, reflective and independent learners" (IBO, 2013, p. 3). It prepares and inspires students for:

- "healthy relationships, individual and shared responsibility and effective teamwork and collaboration;
- making informed, reasoned, ethical judgments and develop the flexibility, perseverance and confidence they need in order to bring about meaningful change;
- to ask questions, to pursue personal aspirations, to set challenging goals and to develop the persistence to achieve them;
- the creation of rich personal and cultural identities" (IBO, 2013, p. 4).

In summary, IB education aims to better prepare children for the challenges of the contemporary world by engaging them in multicultural, multidisciplinary and multinational education programs (Davy, 2011).

The seminal ECE curriculum approaches discussed above promote the notions of child-centred education, children's freedom, children's choices, children as creative learners and co-constructors of their own knowledge. The following section is devoted to discussing contemporary ECE pedagogies, which may be used for the holistic development of young children.

2.4 Redesigning ECE pedagogies for the 21st century

According to Burger (2010), a wealth of research studies illustrate that children's access to the provision of high-quality ECE programs contributes to society's transformation. Children who successfully complete ECE programs perform better socially, emotionally, physically and academically (Lexmond & Reeves, 2009; Winter & Luddy, 2010). The contemporary noteworthy ECE practices and their impacts on children's holistic development are well documented in the literature worldwide (Early Childhood Intervention Australia, 2016). Education through technology, play-based learning, inquiry-based teaching and problem-based learning are some of the best approaches, widely supported in the literature, essential for the holistic development of young children (Burger, 2010).

2.4.1 Education through technology

The advancement in and access to technology has transformed approaches to teaching and learning in ECE and this has affected how teachers teach and how young learners learn (Masters, 2005). Technology has brought innovation and transformation into the classroom,

making teaching and learning an enjoyable activity for students as well as for teachers (Wood, Specht, Willoughby, & Mueller, 2008).

In recent years, extensive research studies have investigated the impact of technology on teaching and learning in Europe, the US and elsewhere. Lincoln (2015) suggested that the use of technology in ECE classrooms enhances learning achievement and helps in the holistic development of young children, therefore the creation of 'technology-rich space" (p. 43) is vital in order to enhance students' learning achievements. The Early Years Learning Framework of Australia (Department of Education, Employment and Workplace Relations [DEEWR], 2009) also emphasises the use of technology for investigation and solving problems, as its use encourages autonomy, creative exploration and a move towards personalised and independent learning. The High/Scope also engages children deeply in problem-solving activities. Research reveals that technology creates joy for children in their learning of abstract concepts as well that which is not possible through the didactic approaches of teaching strategies. Literature reveals that despite the numerous benefits of technology, it is infrequent in global education programs, particularly in the context of ECE (Blackwell, Lauricella, Wartella, Robb, & Schomburg, 2013; Giannakos, Jaccheri, & Proto, 2013) because of the cost involved in purchasing computers and the unavailability of educators with computer skills in schools. EYLF also encourages educators to use technology for creating an environment for play-based learning.

2.4.2 Play-based learning

Play is central to early childhood learning. A number of studies have investigated play, learning and young children's holistic development (Levinson, 2005; Samuelsson & Carlsson, 2008). Studies found that play-based learning plays a fundamental role in developing children's physical, social, emotional and intellectual qualities (Lillemyr &

Søbstad, 2001). Rogoff (2003) argues that through play young children come to understand their world and learn to function in it. In the developed countries, play-based learning is considered essential in order to create opportunities full of learning. By nature, children love to play; therefore, teachers have been using play activities increasingly in classrooms across the world. ECE teachers, researchers and practitioners consider play as a relevant and effective teaching tool. Chowdhury (2017) asserts that play is an excellent tool through which students learn social skills, time management, ethics, academic skills and demonstrate the rules of one's community.

A general perception that prevails in the context of Pakistan is that play in any form is considered to be a waste of children's time. There is a dire need to shift approaches from rote learning and teacher directed to play-based pedagogy as the play-based approach to learning will avail children of the opportunity to enrich their knowledge as independent learners and enjoy the process of learning instead considering it a burden (Hunzai, 2007; Pardhan & Pelletier, 2017).

Teachers, researchers and practitioners have introduced various forms of play for the holistic development of young children. Some of the relevant forms of play for Pakistani context have been briefly discussed in Table 2.2 below.

Table 2.2: Play types.

Play type	**Description**
Constructive play	Creatively making, constructing, shaping and manipulating objects to create something new/innovative. This play can be used across subject areas and for the development of all domains.
Dramatic play	Using imagination, acting out real events, taking part in fantasy play about unreal things, try out roles and occupations. This type of play is

Play type	Description
	good for the development of cognitive, physical, language and early numeracy skills.
Games with rules	In this type of play students and teachers together establish rules in advance if there are no pre-specified external rules for the game. Everyone has to follow the rules during the game. This type of play particularly prepares children to obey the rules and regulations of the family, community and nation.
Digital play	This is the most emerging type of play. In this play students use digital technologies for playing video and computer games and create digital content (Susan & Bird, 2017).

These forms of play are interesting because they provide excellent opportunities for children to develop qualities such as effective communication, sense of self, collaboration and, most importantly, they learn to inquire through play-based learning. In addition, these forms of play engage children in learning through action, imaginative, creative processing, and problem solving (Ginsberg, 2007).

2.4.3 Problem-based learning (PBL)

This approach uses real-life problems to engage students and build their knowledge (Barrett, 2010; Savery, 2015). The approach is based on a social constructivist theory of learning, collaboration and contextualised learning (Ribeiro, 2011) and is therefore regarded as student-centred rather than teacher-directed.

According to Edwards & Hammer (2007), PBL is a systematic and demanding approach to learning. In this approach students are actively engaged in activities and problem-solving exercises therefore this does not simply present problems to students (Ribeiro, 2011), rather

the teacher encourages students to choose problems and to solve them. It also “empowers learners to conduct research, integrate theory and practice and apply knowledge and skills to develop a viable solution to a defined problem” (Savery, 2015, p. 9). The IB education system engages students in problem-solving activities through small-scale research activities. The literature clearly demonstrates that in the problem-based approach students learn by doing and they are more engaged in the process of learning. Most importantly, the weaker students gain significant benefit from problem-based learning approaches through working in mixed-ability groups and problem-solving activities (Ribeiro, 2011). The literature further discloses that problem-based learning approaches provide students with opportunities to improve their skills such as independent learning, thinking, planning and reasoning skills (Pagander & Read, 2014). The Reggio and High/Scope approaches also encourage students to use problem-based and inquiry-based learning approaches to solve real-life problems.

2.4.4 Inquiry-based learning

Inquiry-based learning is influenced by problem-based learning approaches. Students’ previous knowledge and current opportunities for exploration are the foundation of inquiry-based learning (Touhill, 2012). In this approach, children are regarded as sources of strengths and inspiration rather a needy recipient of knowledge. Being a culturally responsive pedagogy, the approach encourages students to ask and answer many questions in order to constructing their learning. By nature, young children are curious; they use questions as a powerful tool with which to learn from others and explore the world around them. They love to give answers to questions as well. According to Robbins (n.d.) “quality questions create a quality life. Successful people ask better questions, and as a result, they get better answers” (para. 2). Students are being involved in hands-on experiences, investigation and processing information as a part of inquiry-based learning (Cindy, Hmelo-Silver, Duncan, & Clark,

2006; Touhill, 2012) whereas in the didactic and traditional system of education students become passive recipients of knowledge. Teachers use inquiry-based learning approach to engage students in deeper explorations and encourage their active and involved participation (Ministry of Education New Zealand, 2017).

Touhill (2012) suggests that the inquiry-based learning approach is used by countries to promote children's learning and thinking skills. According to the EYLF Australia, the central component of effective learning is inquiry and by using the inquiry-based learning approach, educators create interesting, engaging and collaborative opportunities for young children's holistic development (DEEWR, 2009). Inquiry-based learning allows children to practise and learn concepts and ideas over a period of time through many experiences. It is believed that young children can better learn from trials, errors and mistakes. They need more practice in order to understand new concepts as a single experience is not enough for building sound understanding of concepts (Touhill, 2012). The IB early primary education system also actively engages children in inquiry and provides opportunity to construct their knowledge by working through a specific project of their interest and choice for deeper learning.

2.5 ECE in Australia: Best practices

The Australian ECE sector uses contemporary approaches to education and development to support children's holistic development, giving children a more central position in the process of learning to ensure that every child has the opportunity to develop to their full potential (Gonzalez-Mena, 2011). The Australian early childhood context mainly takes a child-centred approach framed within the Early Years Learning Framework (EYLF) Australia (Tayler, 2016). In 2009, Australia introduced its first national ECE learning framework, which promotes children's holistic development and also promotes the idea of learning through play and socialisation. The framework encourages educators to treat children as

constructors of knowledge.

In the recent past, the Australian government introduced a range of high-quality early childhood programs for the holistic development of young children (Tayler, 2016). Key initiatives taken include: universal access to high-quality ECE programs for children from birth to age 5 years; paid parental leave to take care of their children in order to encourage parents; infrastructure development; governance; funding and, most importantly, development and implementation of Australia's first early years learning framework (EYLF) (Australian Institute of Health and Welfare, 2015; Tayler, 2012).

2.5.1 Early Years Learning Framework (EYLF) Australia

To raise the status of ECE as part of its education quality reforms agenda the Australian Government introduced its first national ECE learning framework in 2009. This framework is built based on contemporary evidence from research and good practices from ECE classrooms (Ortlipp, Arthur, & Woodrow, 2011). It provides an innovative vision for new ECE and for building a sound foundation for a strong nation. The vision reads, "*by 2020 all children have the best start in life to create a better future for themselves and for the nation"* (Council of Australian Governments, 2009, p. 4). The framework offers guidelines for the cognitive, ethical, cultural, physical and social-emotional aspects of children's lives from pre-natal to age 8 years (Cumming, Sumsion, & Wong, 2015).

The EYLF identifies the following three key interconnected concepts: belonging, being and becoming.

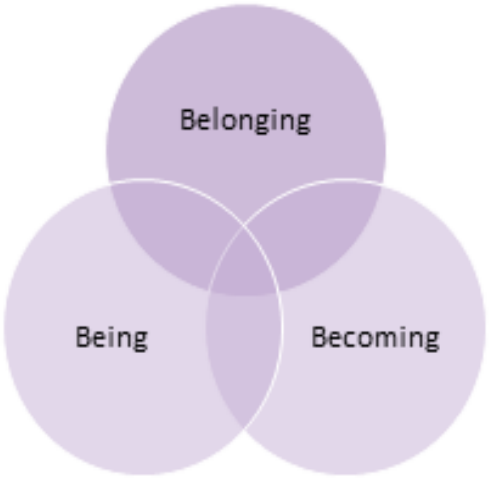


Figure 2.2: Key elements of EYLF adopted from Early Years Learning Framework Australia

These concepts characterise the fact that even before birth, children are connected with their culture and context. Initial schooling begins at home through interaction with everything around them. Their immediate environment, family members, others who have interactions and relationships with their parents and invisible cultural norms influence their development (DEEWR, 2009). The framework explains how children learn, develop, grow, change and create their own identities through their interactions with the environment.

The framework identifies five key principles on the basis of contemporary theories and research evidence (Connor, 2011). These principles guide educators to reflect, plan, implement and review their work and they provide a sound base to professionals in assisting each child to make progress in order to achieve learning outcomes. The five principles are the following:

- "secure, respectful and reciprocal relationships;
- partnerships between early childhood educators and families;
- high expectations and equity;

- respect for diversity;
- ongoing learning and reflective practice" (DEEWR, 2009, pp. 12–13).

The EYLF is comprised of five learning outcomes: identity, communication, community, wellbeing and learning and is backed up by 19 key components and a number of indicators in the form of examples of learning that children may display as they learn (Moss, 2006). The learning outcomes are as follows:

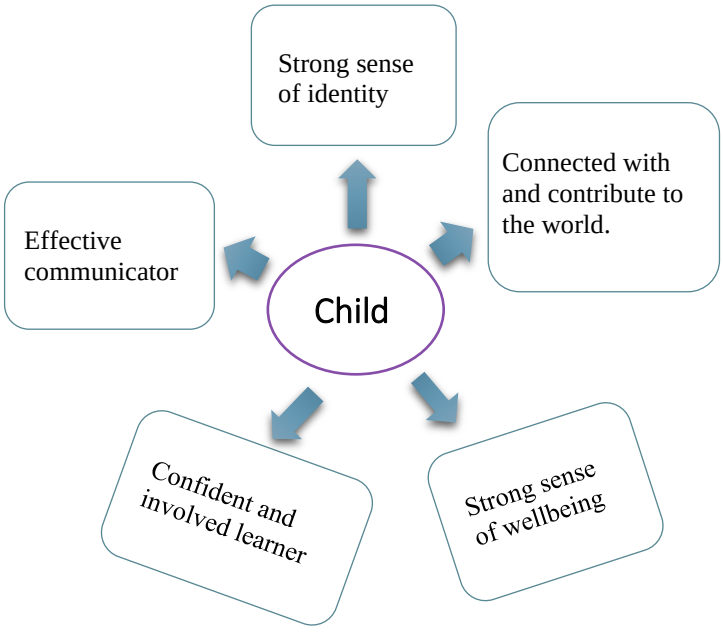


Figure 2.1: Key learning outcomes adopted from EYLF Australia (DEEWR, 2009)

These outcomes work together to create the whole child. Connor (2011) pointed out that learning outcomes are long-term goals therefore they keep changing throughout life but seeding starts from early childhood. In addition to some key reform agendas, one of significant emphasis in the EYLF has been given to culturally responsive ECE. (For more detail related to EYLF please see section 4.2.5 of this thesis)

2.6 Culturally responsive education (CRE)

ECE should be culturally responsive and sensitive to the needs of the children and the community (Bondy, Ross, Gallingane, & Hambacher, 2007; Morrison, Robbins, & Rose, 2008) because culturally responsive ECE programs can enhance children's self-esteem and makes them proud of their own identity (Morrison et al., 2008). Children learn about their world through the context of their language, traditions, behaviours, beliefs and values (Lasser & Fite, 2011). Nguyen, Terlouw and Pilot (2006) suggest that the application of Western educational theories and pedagogical approaches into other contexts of the world, without considering the dynamics of the host culture, creates new challenges for teachers and parents. An education system created in a very different context for the development of very different children taking into consideration their needs cannot possibly always meet challenges that students are facing in other contexts (Abbott, 2011). As Miller and Pound (2011) assert, curricula and frameworks are "undoubtedly culturally shaped and cannot always be readily transferred from one environment to another" (p. 5). However, the insights acquired from good practices may be transferred to another context for designing developmentally appropriate programs for students' development.

Referring to a number of researchers (for example Nguyen et al., 2006; Shaikh & Kelly, 1989; Zhou & Fischer, 2013), Reyhner, Gilbert and Lockard (2011) state that "students have trouble finding meaning in decontextualized one-size-fits-all curriculum and instruction that does not relate to their cultures, communities and homes" (p. vii). An example of this was when the High/Scope was implemented in schools in Pakistan. The essence of the High/Scope (developed in the US) were, in some ways, in conflict with traditional Pakistani educational philosophy derived from the ancient Arabic way of life, i.e. teacher authority, discipline, and acquisition of knowledge through memorisation. Khan (2013) reported that some parents and community members, including religious clergy, resisted early childhood development (ECD) programming, and argued that it was a foreign approach and interfered

with traditional teaching, parenting and local cultural values (Christina, 2011). The society in Pakistan follows Arabic cultural values and typically views schools through an Islamic religious lens[3]. Consequently, the study by Khan (2013) described how children's attendance at participating schools reduced. In a country such as Pakistan, teacher authority and discipline are still considered important for both cultural transmission and early learning (Dean, 2007). As a result, Pakistani schools need more balanced pedagogical/curriculum approaches drawing on Western ideas while still maintaining Pakistani traditions and culture in ECE.

Pakistan, a multicultural country greatly influenced by the religious traditions of Islam borrowed from Saudi Arabia, is deeply rooted in ethnic and tribal ways of life and thinking, is affected by extreme weather conditions, and has its own cultural dynamics and sensitiveness. David and Powell (2005) quoted in Chowdhury (2017) asserted that "the success of imported pedagogies, ideas, and curriculum models like Reggio-Emilia, Montessori or DAP [developmentally appropriate practice] depends on how these are tailored to accommodate the values and expectations of a given society" (p. 35).

UNESCO has mandated to ensure that children of member nations receive culturally responsive education. In 2007, at the United Nation Organisation (UNO), 143 countries of the world, including Australia and Pakistan, voted in favour of culturally sensitive education for the children of member countries (United Nations, 2008; Zhou & Fischer, 2013). Article 14 of the declaration on the *Rights of Indigenous Peoples 2007* states that "children of member nations have the right to receive education in their own native languages and in a manner appropriate to their cultures" (Reyhner et al., 2011, p. vii). UNO's member nations have

[3] Islam was created within Arabic cultural norms. According to a GALLUP poll conducted in 2002 religion (Islam) is paramount over family in four Islamic countries including Pakistan where religion in the shape of Arabic culture strongly dominates and influence schools, families, courts, social interactions, marriages and the daily lives of people.

emphasised a number of times the importance of CRE through their resolutions and declarations.

Culturally appropriate education is important in order to sustain culture and keep traditions alive. One of the key purposes of education is to enable children to relate their learning to their daily life, communities, to religious practices and to their customs and traditions and to affirm their pride in their identity, at the same time respecting the cultures of others (Fulford, 2007). A study conducted by Shaikh and Kelly (1989) found that half the Muslim participating parents residing in the UK strongly emphasised having culturally appropriate education for their children in order to help preserve their identities and encourage their cultural values to flourish. Culturally responsive and sensitive education play key roles in the development of children's intellectual, social, emotional and political learning by using cultural referents to impart knowledge, skills and attitudes. Singh (2011) illustrated that "culturally appropriate pedagogy recognizes and utilizes the students' culture and language in instruction, and ultimately respects the students' personal and community identities" (p. 21). Evidence indicates that rather than blindly adopting curriculum approaches and education systems from other parts of the world, host cultures need the creativity to design responses sensitive to their own local cultural needs (Richmond, 2007). Richmond revealed that students in developing countries are ill prepared for the challenges their nations are facing because educational institutions prefer to teach western content which may provide few solutions to their problems.

Evidence from research shows that children who attend culturally appropriate ECE programs perform better in schools and are more likely to complete school education (OECD, 2012)whereas Olivas (2013) observed that "cultural conflict adds stress to students and could even impact whether or not they finish their school" (p. 1). David and Powell (2005) reported

that powerful philosophical thinking and contemporary research studies have transformed our education system but the success of imported ideas and approaches of education depends on how a host country or a given society tailor and use these ideas to transform its education system without compromising its values, culture and histories. There is overwhelming evidence indicating that in order to overcome contemporary challenges, host countries should create their own models of ECE because decontextualised frameworks cannot fulfil the needs of other nations (Chowdhury, 2017).

2.7 Pre-design phase: Writing of the Building Sound Foundation (BSF) framework

As mentioned earlier, my initial inspiration for designing a culturally responsive ECE framework for the context of Pakistan originated from my several years of service in the field of ECE in Pakistan. I came to realise that the education system of Pakistan was unable to provide high-quality education to young people due to outdated textbooks. In the preliminary phase of this design-based study the research problem was identified through close communication, interaction and discussion with ECE teachers and school principals in Pakistan. My prior understanding of issues, strengths and limitations of the context and discussion with key stakeholders provided a strong base from which to develop the design. According to Shinde (2014), a design-based researcher prepares their design based on previous research and teaching experiences gained from different disciplines. A thorough review of contemporary literature was conducted in order to identify the gap and to understand the depth of the problem. A number of previous studies and current knowledge of early childhood education and development (ECED) were also consulted in order to obtain better insight into the processes of a framework development. A detailed review of literature related to the background and history of ECE and developmentally appropriate ECE practices was

conducted. In addition, a review of the early childhood development curriculum in Pakistan, and other online reliable resources and websites related to Pakistan and its education system was also carried out so that a good knowledge of the current status of ECE in Pakistan was gained. During this phase, a conceptual framework of the study and a preliminary design (a prototype that incorporated only the main components) of the proposed ECE framework was designed, informed by the detailed review of current literature and previous empirical studies. In addition, a profile of Pakistani schools operating with the brand name of Kindergarten, Montessori, Rudolf Steiner, Head Start, IB primary years programme and High/Scope was studied in order to see their effectiveness, strengths, differences, similarities and weaknesses. The literature review in this chapter led to the identification of aims, goals, vision statement and key ECE regulations in Pakistan and international ECE treaties to be included in the proposed ECE framework. Further detailed exploration of the literature and deliberations related to the globally recognised ECE curriculum approaches including Reggio Emilia, IB primary years programme, Kindergarten and Montessori approaches of ECE led to the identification of possible core components of the proposed ECE framework such as Guiding Principles, Suggested Practices and Desired Learning Outcomes. A thorough analysis of research papers and other work conducted by ECE practitioners and researchers around the world that are related to education through technology, play-based learning, problem-based education and inquiry-based learning was helpful for designing the pedagogies of the proposed ECE framework document.

2.8 Research question and Sub-questions

What does a culturally responsive and developmentally appropriate ECE framework for Pakistan look like in practice?

Sub-questions

1. How do early childhood educators in Australia design and implement developmentally and culturally appropriate pedagogies for the holistic development of young children?
2. What kind of culturally sensitive pedagogies and developmentally appropriate practices are suitable for ECE in Pakistan?
3. How can developmentally appropriate ECE practices in Australia and Pakistan inform the development of a culturally responsive ECE framework for Pakistan?

2.9 Summary

Children are at the high state of learning during early childhood. A strong body of research evidence indicates that children and their family's easy access to the provision of high-quality ECE programs contributes to the holistic development of young children. Culturally and developmentally appropriate high-quality provisions of ECE programs can create a robust base for success in studies and later life chances for children. The ECE sector is a fairly new field of education in Pakistan. The existing ECE curriculum of Pakistan is based on didactic approaches to education which encourages teacher-centred learning. To promote every aspect of the child's life, Pakistan needs a framework based on contemporary ideas while still maintaining its cultural and contextual dynamics.

Chapter 3

Research Framework and Design: Introducing Design-Based Educational Research

The aim of this study was the creation of a culturally sensitive and developmentally appropriate ECE framework for the holistic development of Pakistan's young children. The overall PhD project was in the form of design-based research (DBR). The current project adopted five phases of DBR for the creation of an ECE framework, namely pre-design/planning, creation, revision and refinement, finalisation and production, and the evaluation phase. For creating the proposed ECE framework, the study reviewed contemporary literature relevant to the project, analysed six key international ECE frameworks, explored views of ECE educators in Australia and Pakistan and collected and examined the framework reviewers' comments and input. The current Chapter details the research methodologies and the design that was implemented in order to address the aims of the study. The study follows an interpretivist approach.

3.1 Interpretivist approach

To understand the perspectives of research participants in terms of how they make sense of culturally and developmentally appropriate practices within children's education and development in the context of Australia and Pakistan, the study adopted an interpretivist investigation/research. According to Naughton, Rolfe and Siraj-Blatchford (2001), "interpretivism seeks to explain how people make sense of their circumstances, that is, of the social world" (p. 41). The approach can be used as a method through which to understand a complex environment and design solutions to improve the existing educational practices. By

using this approach, I was able to explore socially and culturally constructed beliefs, views and perceptions of ECE practitioners when they talk about culturally and developmentally appropriate practices for children's holistic development. This approach enabled me to "understand socially constructed, negotiated and shared meanings" (Naughton et al., 2001, p. 42) of the topic under investigation. An interpretive enquirer believes that "a phenomenon can never be captured objectively and people construct shared understanding" (Michael & Wellington, 2013, p. 33). For an interpretivist researcher, there is no one reality, rather reality is constructed by people therefore it is subject to interpretation and meaning making.

According to Case and Light (2011), the objectives of the research and research questions determine the choice of methods and methodologies. The objective of this research, as mentioned earlier, was the creation of an ECE framework for the context of Pakistan. A thorough review of research methodologies and approaches was conducted in order to find relevant methods and methodology by which to carry out this investigation. Based on a review of contemporary literature, design-based research emerged as the most suitable methodology with which to address the objective of this research.

3.1.1 Design-based research (DBR)

The study employed design-based research methodology (also known as educational design research and design experiment) within an interpretivist inquiry as the paradigm because of the nature of the study itself, which aimed to create ECE framework for Pakistan. Using a series of approaches, design-based research is conducted for "producing a new theory, to design artefacts, documents and practices to impact learning and teaching in naturalistic settings" (Barab & Squire, 2004, p. 4). According to Herrington, McKenney, Reeves and Oliver (2007), DBR methodology allows and guides a researcher to begin with an analysis of the current situation so that research problems may be identified. The method has been

widely used in the education sector to design solutions and plans informed by contemporary literature to address educational problems and create documents to enhance students learning achievements (Borhan, 2014; Coffin, 2014).

According to Mantei (2008) the adoption of DBR is relevant if the intention is to produce educational documents and to improve existing practices by creating solutions for emerging challenges. The current research adopted the following interlinked five phases of DBR recommended by Reeves (2006) in order to undertake this PhD project (see Figure 3.1).

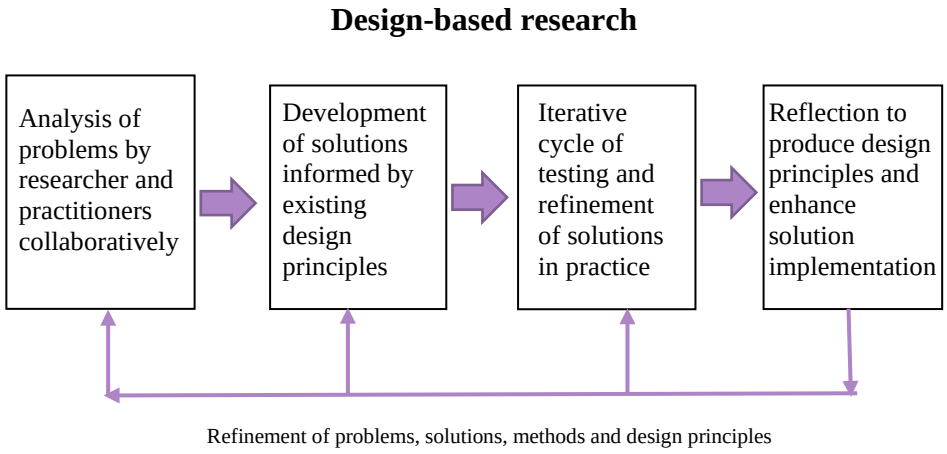


Figure 3.1: Design-based research approach, adopted from Reeves (2006)

According to Laleka, and Rasheed (2018) a design-based research in an education setting strongly relies on views, feedback and input from several stakeholders including parents, students, teachers and educational experts for designing solutions for pedagogical challenges and instructional issues. Evidences from current studies (Euler & Collenger, 2018; Laleka & Rasheed, 2018) indicate that collaboration with practitioners in a real context provides the researcher with an opportunity to undertake in-depth explorations for the refinement of problems and designing viable solutions to improve existing practices. Wang and Hannafin (2005) noted that DBR is used "to improve educational practices through iterative analysis, design, development and implementation based on collaboration among researchers and

practitioners in real world settings and leading to contextually-sensitive design principles and theories ” (p. 6). Barab and Squire (2004) reported that DBR is a useful methodology for creating educational interventions because the approach places special emphasis on the strong relationship between the learner and the learning environment. The learning environment plays a significant role in children’s education and nurturing; therefore, the DBR approach is heavily dependent on collaboration in a natural context with practitioners and other stakeholders for developing viable solutions to academic challenges and to transform traditional educational practices into authentic learning opportunities and create effective and vibrant solutions for complex problems (Herrington et al., 2007). The existing research intended to create an ECE framework through seeking advice from teachers, principals, teachers’ educators and university academics. The literature indicated that DBR is a flexible approach to investigating complex educational settings, therefore it allows multiple methods of data collection including interview, focus group discussion, document analysis and survey.

3.2 Research design and methodological framework

The design of this study determined that design-based research was the most appropriate methodology with to undertake this project as DBR relies more on techniques used in qualitative methods (such as interviews, document analysis, focus groups and observations) in a natural setting (Coffin, 2014). Creswell (2014) argued that in a qualitative approach “the researcher seeks to establish the meaning of a case from the views and experience of participants” (p. 19). The intention of this study was to explore ECE professionals’ perceptions, views and beliefs related to culturally responsive and developmentally appropriate practices in the context of Australia and Pakistan for developing a BSF framework.

The methodology, methods and research instruments used for this investigation are presented in Table 3.1 below.

Table 3.1: Methodological processes of the Building Sound Foundation framework development

Design Phases	Methodology	Methods	Time in months	Participants	Outcome/ Product
Preliminary Preparation Phase	Context analysis in order to identify practical research problems	Discussion with practitioners and review of literature	3	Researcher, ECE teachers, principals	
	- Proposal development - CoC preparation - Development of study's conceptual framework	Literature review & document analysis	8	Researcher	- research proposal - Confirmation of Candidature
	Ethics application to Tasmania Social Sciences Human Research Ethics Committee	Literature review & document analysis	3	Researcher	Approval for data collection
	Ethics application to Department of Education VIC, Tasmania and Pakistan	Literature review & document analysis	4	Researcher	Approval to access schools in Australia and Pakistan
	Entry negotiation with schools in Tasmania, Victoria, and Pakistan	Communication by telephone and email	3	Researcher	Schools agreed to participate
Creation Phase	Designing prototype of proposed ECE framework for Pakistan	Extensive review of literature	3	Researcher	**Design**: Development of ECE framework prototype
Consultation and Refinement Phase	Analysis of ECE framework documents from six international jurisdictions	Desk review of ECE framework documents	3	Researcher	**Version 1:** Development of the first draft of the proposed ECE framework
	Data collection in Australia, transcriptions and data analysis	- Interview and focus group - Content analysis	4	Educators, principals and researcher	**Version 2:** Revised draft of the proposed ECE framework
	Exploring culturally responsive practices in Pakistani context, data transcription and analysis	-Interviews and focus group -Content analysis	4	ECE teachers, principals, researcher	**Version 3:** Refined draft of the framework
Finalisation and Development Phase	Reviews of the BSF ECE framework by educators and researchers in Pakistan	- SWOT analysis and reviewers' feedback	4	Education officers and university academics	**Version 4:** Final full draft of the proposed ECE framework

This research was conducted in five main phases in order to create the BSF framework document as shown in Figure 3.2 below. These phases are discussed in the subsequent section.

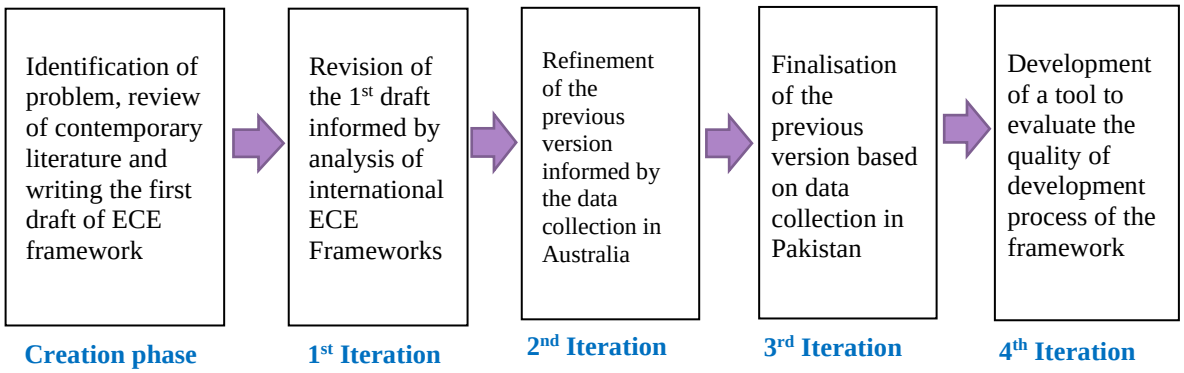


Figure 3.2: Process of ECE framework development using design-based research

3.2.1 Development Phases of BSF framework

Planning and pre-design phase

The literature indicates that the preliminary planning phase of DBR is the most important phase, when the researcher and the practitioners work collaboratively to identify and formulate the research problem (Štemberger & Cencič, 2014). This phase of my research was mainly devoted to consultations and interaction with ECE teachers and other practitioners in Pakistan in order to analyse the context and identify the research issue. It was also helpful to conduct an initial review of the literature to familiarise myself with the topic under investigation. My prior understanding of the issues, strengths and limitations of the educational context of Pakistan and discussion with key stakeholders provided a strong base from which to develop the preliminary design of the BSF framework. According to Shinde (2014), a design-based researcher prepares her/his design based on previous research and teaching and work experiences gained from different disciplines. A thorough review of the

contemporary literature was conducted in order to identify the gap and to understand the depth of the problem. A number of previous studies and current knowledge of ECE were consulted to obtain better insights into the processes of framework development. During this phase, a conceptual framework of the study was developed in order to guide the process of the entire research project. Figure 3.3 below illustrates the conceptual framework.

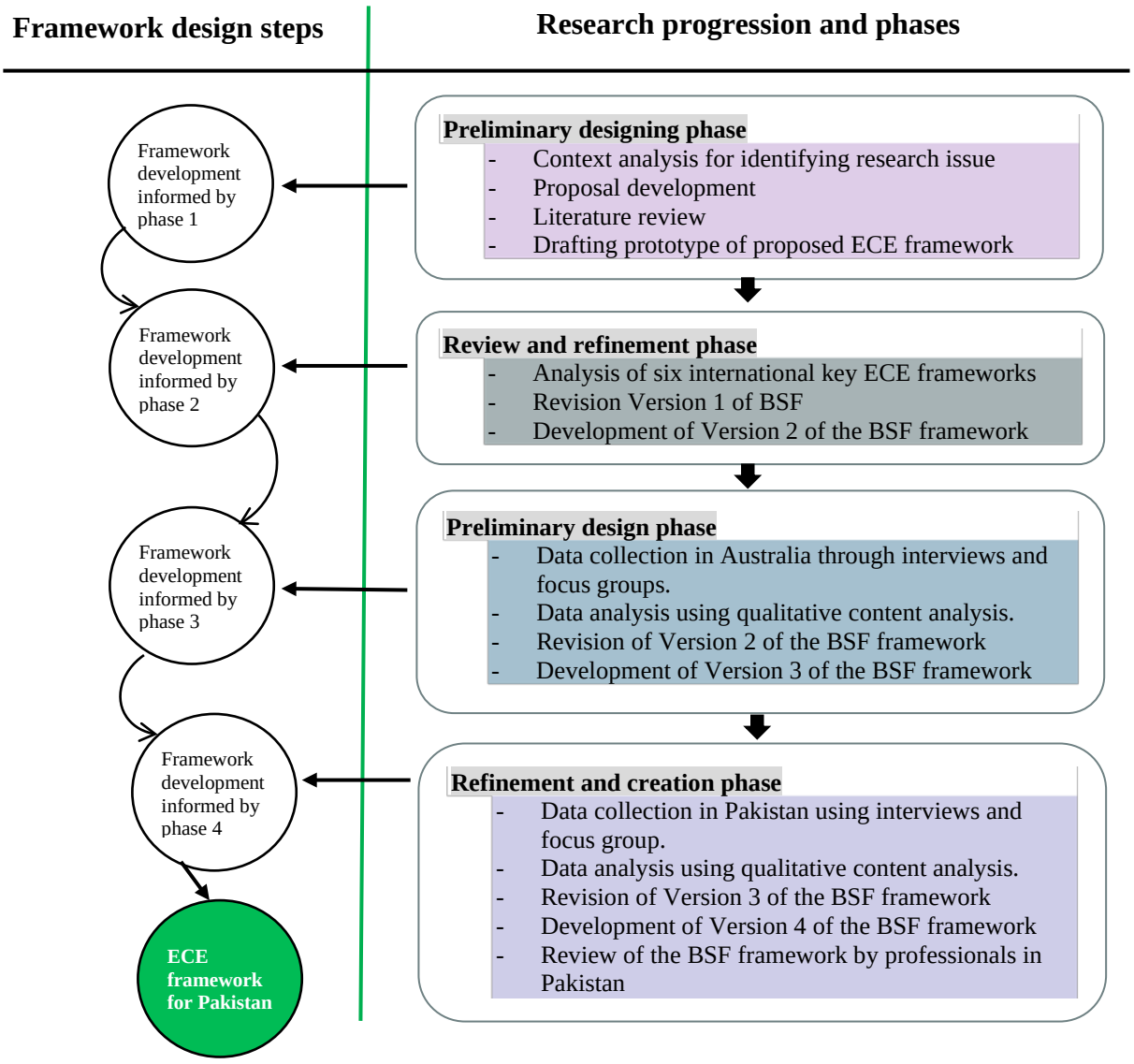


Figure 3.3: Designing the early childhood framework for Pakistan

The literature review in this phase led to the identification of the main components of the

framework such as aims, goals, vision statement and key ECE regulation in Pakistan and international ECE treaties to be included in the proposed ECE framework. At the end of this phase the core components and main themes of the framework was finalised (See Appendices H-J for various versions of the proposed ECE framework).

Design and creation phase

In this phase a prototype of the proposed ECE framework was created. The prototype was comprised of the core components of the BSF framework (see Appendix H). The review of contemporary literature was also continued in this phase. The main purpose of the literature review in this phase was to support the problem of the study and to determine core components of the proposed ECE framework. The researcher conducted a thorough review of some of the influential pre-school education theories and programmes which led to organize initial draft of the BSF ECE framework (see literature review Chapter for more details).

A review of current empirical studies related to education through technology, play-based learning, problem-based education and inquiry-based learning (see Chapter 2) proved to be helpful for designing the draft pedagogies of the proposed ECE framework document. The first full tentative draft of the BSF framework was created at the end of this phase. This draft of the BSF framework then frequently modified, revised and refined during the revision and modification phase.

The revision and modification phase

In this phase of the DBR the proposed ECE framework document was modified and revised several times. The process of modification and revision was spread across four iterations over a period of three and half years.

In the first iteration, six international ECE framework documents were selected in order to review and compare their salient features and key components (see Chapter 4). The documents originate from New Zealand, Singapore, Finland, Australia, USA (the High/Scope) and Pakistan. The analysis, review and comparison were conducted under various emerging themes. Themes were produced after reading these ECE framework documents several times. Identified themes are evidence of quality practices and are common across all selected framework documents. The analysis extracted the common key features, theoretical underpinnings and internal inter-connections of these documents. The selection of these frameworks for analysis was undertaken based on the effectiveness and global reputation of their ECE services. This comparative analysis led to the production of a revised draft of the proposed ECE framework for Pakistan. The review in this iteration suggested that an ECE framework must go beyond a traditional focus of education to one that is more child-centred and play-based education. In defining play-based education, Walker (2011) signified it as child-owned active and creative activities which demands a friendly relationship between teacher and children in which teachers often become playmates. Therefore, a number of modifications were made to the first draft of the BSF framework after this review to ensure it covers and appreciates play-based education. Version 2 of the BSF framework emerged from this analysis of key ECEC frameworks documents.

In the second iteration, the design-based research drew on ECE educators' and principals' perspectives in Australia (see Chapter 5 for further details). This iteration was aimed at investigating and exploring best ECE practices in the context of Australia with the ultimate aims of refining and revising Version Two of the BSF framework. In this iteration, data were collected from five Australian schools through interviews with principals and ECE educator focus group discussions. A total of 10 schools in Victoria and another 10 schools in Tasmania were initially contacted by means of emails and follow-up phone calls, inviting their

participation in this study. Out of 20 schools, only 5 schools agreed to participate. In order to seek advice from ECE professionals and explore the ideas and views of educators and school principals in Australia, approximately 40-minute interviews and 60-minute focus group discussion were organised. This investigation in Australia led me to speak to Australian ECE professionals who have been implementing the Early Years Learning Framework of Australia in their early childhood centres. Using design-based research, this interaction was helpful in that it provided an opportunity to listen to educators' and principals' ideas, interpretations and perceptions, and build a better understanding of best ECE practices commonly used in the context of Australian ECE. Based on the analysis of data collected in Australia, a number of significant sections were added to Version 3 of the framework document in addition to improving the existing contents of the document. The process in this iteration generated Version 3 of the BSF framework.

In the third iteration of this design-based research, data were collected in Pakistan, involving ECE teachers in focus group discussions and school principals by means of in-depth interviews (see Chapter 6 for details of data collection in Pakistan). The aim of this data gathering in Pakistan was to refine Version 3 of the proposed ECE framework and create a refined draft of the framework document based on the suggestions of ECE professionals working in high-quality ECE programs in Pakistan. The interactions in Pakistan with ECE teachers provided a good opportunity for me to listen to participants' perceptions and beliefs about existing practices of ECE in Pakistan. Data collected through interviews and focus group discussions in Pakistan were transcribed, and eight themes were identified through a manual coding system. NVivo 12's textual analysis tool was employed to organise themes manually identified from the data. The NVivo analysis led to the identification of a number of direct quotations and a representative selection of texts and overarching refences from the data. Based on the analysis of data collected in Pakistan, Version 3 of the proposed ECE

framework for Pakistan was further revised and refined to create the final draft. The analysis of the Pakistan data added more value to the existing contents of the proposed ECE framework and proved to be helpful in making improvements and enhancing the existing contents through the suggestions made by the ECE professionals in Pakistani. The final draft of the proposed ECE framework was then sent for comments, critique and feedback from ECE teacher educators and researchers in Pakistan in the finalisation phase.

Refinement and finalisation phase

In the fourth and the last iteration of this design-based research, teacher educators, ECE professionals and university academics were engaged in Pakistan to critique the contents and components of the document and to review the BSF framework considering the current cultural, contextual, ideological and religious dynamics of the Pakistani context in order to determine whether this framework fulfils the needs of the host context. In this connection, university academics, ECE practitioners and researchers with curriculum development, research and teaching experience were contacted by means of emails, telephone calls and face-to-face interaction, asking if they could manage to find time to review the framework document. Eight ECE professionals agreed to review the framework and gave their feedback. Their input was included in the final draft of the proposed ECE framework for Pakistan. Teacher educators reviewed the BSF framework using a SWOT[4] analysis approach. Using this approach, the reviewers identified the strengths, weaknesses, opportunities and threats of the framework documents. Another level of review was conducted by university academics. After critically reading and analysing the provided copies of the proposed framework document, the university academics gave their written feedback and comments. The feedback from educators and academics were included in the final draft of the framework document.

[4] A strategy to find out the strengths, weaknesses, opportunities and threats of a program

The final draft of the BSF framework appeared after this iteration and after incorporating reviewers' comments and feedback.

3.3 Permission to conduct research and selection of schools and participants

A compulsory and most crucial step in social science research is presenting an application with all relevant details to the Human Research Ethics Committee in order to gain ethics approval to conduct the research (Head, 2020). After the committee's consideration of the application, the Chair of the Human Research Ethics Committee Tasmania approved the minimal risk ethics application of this study on 9 February 2018. After ethics approval a second-level lengthy and arduous process for permission to access public schools was sought from the Department of Education (DoE) in Tasmania and Victoria. Upon receiving permission from DoE Tasmania (see Appendix B), a third level of process for obtaining permission from public schools was commenced. Selected schools were sent a letter (see Appendix C and Appendix D) with all relevant details asking them if they were willing to participate in this research. The second and third levels of process for gaining permission to access schools were unnecessarily very lengthy as DoE Tasmania and schools in Tasmania took altogether approximately 15 crucial months of my studies to reach a decision as to whether or not they were going to take part in this research. Despite DoE Tasmania and Victoria's permission, all of the sample schools in Victoria and the majority of schools in Tasmania refused to participate in this study after this very lengthy wait; however it was easy to access schools and research participants in Pakistan.

In gaining access, I needed to consider how negotiation for entry could be achieved and whose permission must be sought (Suter, 2012). The five schools who agreed to participate were sent an information package (see Appendix C and Appendix D for information letters)

including consent forms. Interested ECE teachers and principals returned the signed consent forms (see Appendix M) in a self-addressed reply-paid envelope. Collection of data from good sample schools in Tasmania and the north of Pakistan fully served the purpose of this research.

Comparatively, entry negotiation with schools in Pakistan was smooth, less complicated, less time consuming and easier. Upon receiving my application for conducting research in Pakistan, the Aga Khan Education Services, Pakistan approved the application within two weeks and a permission letter was sent via email which allowed me to contact selected schools for their participation in this study. Five out of six principals in Pakistan agreed to participate in this study and sent their signed consent forms via email to me directly. I then contacted the ECE teachers of the sample schools, inviting their participation in this study through email and telephone. The return of signed consent forms for interviews and focus group discussions indicated that participants had understood the implications of this research.

Shortly after receiving consent forms from the selected participants in Australia and Pakistan, I contacted participants in order to make arrangements for the interview and focus group at a mutually convenient time and place. Table 3.2 illustrates the number of schools and the sample size participated in this study.

Table 3.2: Overview of sample size

Locations	Participants – sample size						
	Total schools			Principals	Educators	Framework reviewers	Sample size
	Public	Private	Total				
Australia	4	1	5	5	13	0	18
Pakistan	0	5	5	5	16	6	27
Total	4	6	10	10	29	6	45

3.4 Purposeful sampling

For exploratory research such as that undertaken in this study, the identification of well-informed respondents was crucial (Bell, 2014; Cohen, Manion, & Morrison, 2013; Creswell, 2013) because they were the key sources of information and their contributions, in the form of data, has shaped the study for creating a culturally appropriate framework for the holistic development of Pakistani children. I sought out those who had good experience of employing contemporary culturally responsive approaches to children's holistic development in the context of ECE Australia and Pakistan and who would be able to provide relevant information (McMillan, 2008). I did not try to acquire representative samples, instead, using purposive sampling techniques, more informed teachers were selected. Creswell (2007) suggested that "it is better to select a few, rather than many sites and participants to study, to provide an in-depth understanding of the phenomenon" (p. 241). The selection of participants for this project was mainly based on purposiveness and accessibility, the two mentioned by Silverman (2015). More specifically, the considerations for selecting sample schools were:

- Opportunistic access for data collection
- A willingness to participate

- An early childhood program catering for children aged 4 to 8 years.
- Evidence of a multicultural cohort
- A sound understanding of ECE principles (based on the Early Years Learning Framework in Australia)
- A reputation for a successful and culturally appropriate curriculum.

3.4.1 Demographics of research participants

The entire Australian sample in this study was comprised of female participants, except for one male interview participant, whereas all interview participants of this study in Pakistan were male and all focus group discussion attendees were female ECE educators. Out of 45 participants of the study 17 belonged to public schools and 28 participants were from the private sector school systems in Australia and Pakistan. Please see Appendix N for a brief introduction to participants.

3.5 Data collection

According to Creswell (2014) there are many types of methods that are used in social science research for the purposes of data collection. These include interviews, observation, formal discussions, SWOT analysis, informal talks, focus groups, and document reviews. In this research I used interviews, focus groups, SWOT analysis and document analysis for collecting data in Pakistan and Australia. Each added richness to my descriptions, depth to my understanding and breadth to my findings. A brief overview of these data collection procedures is presented below.

3.5.1 Semi-structured interviews and focus group (FG) discussions

The interviews were conducted over a period of 18 months starting at the beginning of March

2018 and finishing at the end of August 2019. During the second iteration, the study incorporated school visits to speak to informed Australian and Pakistan ECE educators to seek their advice. In the first round (during second iteration) of data collection, the principals and ECE educators of the sample schools in Australia were interviewed in a face-to-face setting using semi-structured open-ended questions followed by probing questions, in a place and time convenient to them. Creswell (2014) posited that this type of interview is effective to collect qualitative and open-ended data. It allows informants the freedom to express their thoughts, views, beliefs and feelings in their own terms. In the words of Wellington (2000), open-ended semi-structured interviews allow researchers to go deeper and provide enough time for research participants to express in-depth views, reflections, beliefs and perceptions (Lichtman, 2010). The use of semi-structured interviews allowed me to probe further when I needed to seek clarification in order to gain a deeper understanding of the situation.

In the second round (during the third iteration) the study incorporated school visits in Pakistan to seek guidance from ECE professionals, academics and researchers. A total of 16 ECE educators participated in focus group discussions and five principals in face-to-face in-depth interviews in Pakistan. In order to carry out data collection in Pakistan, the participants of this study were interviewed using semi-structured open-ended questions as per the time schedule prepared in light of discussion with school management and respondents. The use of semi-structured interviews allowed me to probe further when I needed to seek clarification to gain a deeper understanding of the situation (Lichtman, 2010). The interviews were conducted in sample schools on mutually agreed time and place. As Creswell (2003) suggests, interviewing in a natural setting is the most effective method of data collection because it engages individuals in focused and profound discourse.

The study sought guidance from ECE professionals in selected schools for the refinement of

the proposed ECE framework. I conducted 10 focus group interviews in total: one from each school. The focus group is a key method through which to explore the perceptions, opinions and beliefs of a group of participants. A focus group discussion is defined as "a carefully planned discussion designed to obtain perceptions on a defined area of interest in permissive, non-threatening environment" (Krueger & Casey, 2009, p. 2). According to Adler, Salanterä, and Zumstein-Shaha (2019) focus group are planned discussion and interview with a small group of people from similar backgrounds and experiences conducted by a moderator. This kind of interview and discussion allows participants to tell their own stories and express their opinion in detail. According to Nyumba, Wilson, Derrick and Mukherjee (2018) focus group discussion is perceived to be a cost-effective and promising alternative in participatory research. The focus group discussions not only saved my time, but it also offered a good opportunity to probe issues in depth, as some participants were more comfortable speaking in groups. Members of each focus group were given equal opportunity to share their views and reflections.

Interview protocols and focus group discussion guides were developed for smooth and timely collection of data. Mutually agreed time schedules for interviews in natural settings was prepared, taking into consideration participants' work priorities. As Creswell (2013) suggests, interviewing in a natural setting is the most effective method of data collection because it engages individuals in focused and profound discourses. Both interviews and focus groups were recorded using audiotaping with prior permission of the research participants, because merely depending on note taking during interviews could lead to missing important ideas (O'Toole & Backett, 2010). The recorded interviews and focus groups were transcribed by the researcher. Transcriptions were read carefully before sending back to informants for checking accuracy and ensuring validity of information, thus enhancing the reliability of the research findings.

I interviewed all the research participants once. However, some participants were consulted on more than one occasion, when I felt the need for further clarification or explanation in order to avoid misinterpretation (O'Toole & Beckett, 2010).

3.5.2 Document analysis

Six internationals key ECE frameworks were selected for review. The selected ECE frameworks originate from Australia, New Zealand, Singapore, Finland, the United States, and Pakistan. The selection of the framework was undertaken based on the effectiveness of the ECE services of selected countries. These documents were excellent sources of information for revising the Version 1 of the BSF framework. The analysis of ECE frameworks in Chapter 4 led to the production of Version 2, a revised draft of the BSF framework.

Creswell (2009) believes that document analysis improves the reliability factor of the research in addition to providing valuable additional information for answering research questions. For example, these documents were a key source of information for checking how culturally responsive programs and activities for children's holistic development are being created, implemented and documented in different countries, including Australia and Pakistan (for further details please see Chapter 4).

3.5.3 Recording and transcribing focus groups and interviews

For recording interviews, I used a digital recorder with prior permission from research participants, because merely depending on notetaking during interviews could lead to missing important ideas (O'Toole & Backett, 2010). The recorded interviews in Australia were transcribed verbatim on a daily basis. All interviews and focus groups in Pakistan were conducted in Urdu, which is the national language of Pakistan, and later translated into

English. I read each transcript carefully before sharing it with informants. The informants showed great interest in reading these transcripts in order to see how effectively they talked about children's education, development, learning and teaching. Transcripts were shared in order to avoid any misinterpretation of information on my part. Data transcribing and translation were challenging as well as time-consuming activities, but I realised the importance of accuracy in ensuring the validity of my data, thus enhancing the reliability of my research findings.

3.5.4 Field notes

I took running field notes of school practices, formal and informal talks and teachers' interactions during my visit to the schools in Australia and Pakistan. This helped me to recall important events during my visits to schools for data collection. My field notes allowed me to record "the actions of participants" and "my own reflections" (O'Toole & Beckett, 2010, p. 142). The limitation of taking field notes, I felt, was the inability to keep pace with the proceedings of activities and sessions and note all of the events and talks. For this reason, I could only note the main events.

3.6 Data analysis scheme

This research used mainly manual coding to analyse textual data gathered through interviews, document reviews and focus groups. The first step in data analysis was to become familiar with the data (Creswell, 2013) therefore I listened to all interviews multiple times before transcribing them verbatim. I read the transcriptions and my field notes several times. Data were coded, labelled and organised digitally which led to the development and identification of categories, concepts and themes. According to Bogdan and Biklen (2007), "Analysis involves working with data, organising them, breaking them into manageable units,

synthesising them, searching for patterns, discovering what is important and what is to be learned and deciding what you will tell others" (p. 54).

Coding is a process of organising material into chunks. In my case these chunks were the right-hand marginal notes of transcriptions, field notes and reflective memos. Line-by-line coding helped me in identifying themes from the common and repeated ideas/codes (O'Toole & Beckett, 2010). After coding them, I went through the codes a number of times and found that a number of patterns/themes had emerged. The most repeated themes were taken as separate topics and others were merged within themes (O'Toole & Beckett, 2010). Themes and categories were modified and refined by critical and continuous reading until final themes developed.

The current study adopted the following steps for analysing data gathered from document analysis, interviews and focus group discussions.

3.6.1 Data analysis procedure: Qualitative content analysis (QCA)

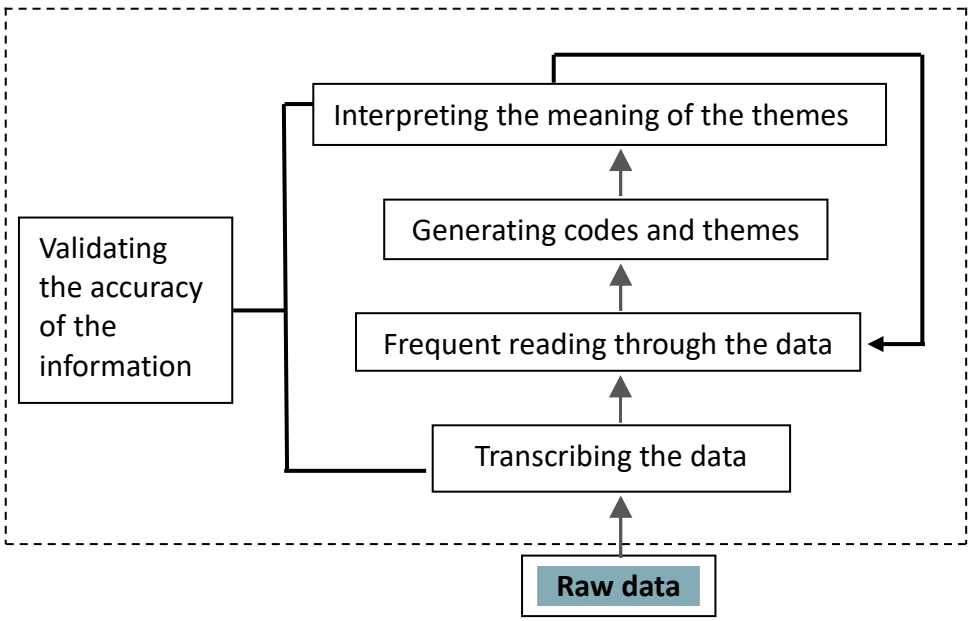


Figure 3.4: Steps of qualitative data analysis (adapted from Creswell 2009, p. 185)

I used manual coding strategy which allowed me to condense raw data into categories and themes based on valid inference, meaning making and interpretation. According to Michael and Wellington (2013), QCA is useful for breaking down the data into component parts to understand how these parts fit together. Yan and Wildemuth (n.d, p. 2) stated that QCA "uses inductive reasoning (button-up approach), by which themes and categories emerge from the data through the researcher's careful examination and constant comparison" and repeated reading.

The analysis was started at the early stage of data collection, allowing me to move back and forth until the end of data analysis. QCA generally follows eight steps in analysing the data:

i. preparing and validating the data
ii. defining the unit of analysis
iii. developing categories and a coding scheme
iv. testing coding scheme on a sample of text
v. coding all the text
vi. assessing coding consistency
vii. interpreting and drawing conclusions from the coded data, and finally
viii. representing the data in statement, tables or figures (Creswell, 2013; Creswell & Plano Clark, 2011; Yan & Wildemuth, n.d).

The second level of analysis of the same data was conducted using NVivo. This was undertaken in order to check if manual coding caused any human bias and if manually identified themes accurately represent the actual data. The transcriptions of interviews and focus group discussions were uploaded to NVivo's text analysis software Word Cloud for the

purpose of analysis. The software created a visual representation of the textual data (see Figure 5.1).

3.7 The development of an ECE framework for Pakistan

After ethics approval, I created core components (a tentative prototype) of the proposed ECE framework for Pakistan in light of the review of contemporary literature. The framework I have developed is responsive to the cultural dynamics and ideological needs of Pakistan and is sensitive to the developmentally appropriate practices of early childhood education. The framework prototype was developed from my own practical knowledge of the context (cultural dynamics and ideological needs of Pakistan) and informed by contemporary empirical literature. The prototype provided a base for further development, leading to the design of a holistic framework for ECE Pakistan. The prototype turned into a complete ECE framework after analysing the collected data through the review of six international ECE framework documents, interviews and focus group discussions in Australia and Pakistan (for further details see Chapters 4, 5 and 6).

3.8 Ethical considerations

This study strictly followed University of Tasmania Human Research Ethics Protocols to undertake the whole study. To comply with these protocols, the study:

- obtained informed consent from all subjects of the study including the Departments of Education in Tasmania and Victoria and Aga Khan Education Services, Pakistan;
- ensured confidentiality of research subjects, participating schools and data at all times;
- communicated transcribed data to informants consistently in order to avoid misinterpretation;

- protected the anonymity of participants and schools (Creswell, 2009) by replacing schools' actual names with pseudonyms, keeping the collected data in a locked cupboard for security and avoiding any private discussions.

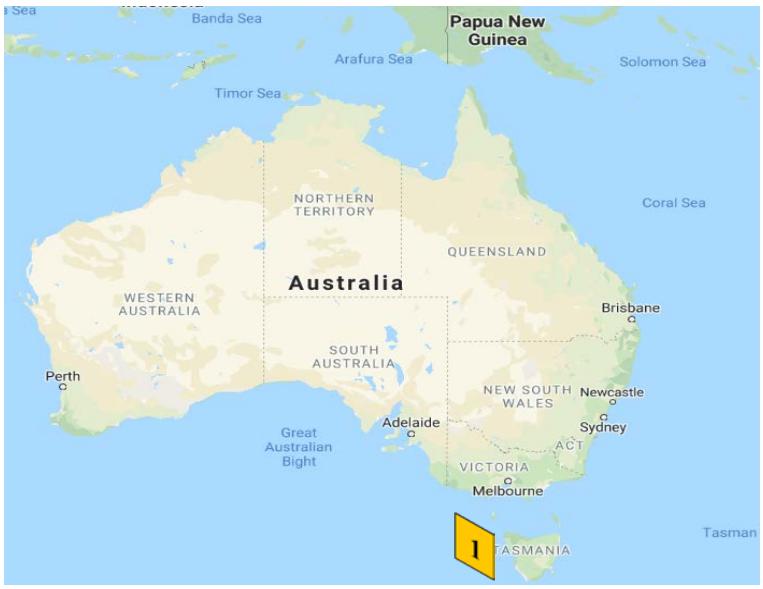
I personally communicated with schools' principals and ECE teachers in Australia and Pakistan to obtain their consent and shared my research information package, the purpose of my research, its benefits and challenges. The participants were assured that they had the right to withdraw from this study at any time without giving any reason(s) and there would not be any negative consequences upon doing so. The participants were told that their participation in this research was voluntary.

To ensure confidentiality, the information obtained from participants was not shared with anyone else, except my supervisors. After the transcription, the interview data were consistently shared with respective informants in order to avoid misinterpretation. To protect anonymity, I replaced the participants' and schools' actual names with pseudonyms. I kept the collected data in a locked cupboard for security. And I avoided any private discussions.

3.9 Limitations

Design-based research is considered to be a relatively new research paradigm in education and therefore criticism in terms of its validity, objectivity and reliability are inevitable. Like all other empirical studies, this research has also many limitations that should be acknowledged. The anticipated limitations of this study revolve around issues of time constraints, lack of funding and distance factors. Due to time commitments, the distance factor and dearth of funding, data for the current research were collected only in Tasmania, a small state of Australia where my university is located and northern areas of Pakistan where my hometown is situated, and could not include samples from other states of Australia and

Pakistan. My research sites are indicated on the maps of Australia and Pakistan below, namely Figures 3.5 and 3.6.



1 Tasmania Australia

Source : https://www.google.com/maps/@-22.9010113,142.4524983,4z

Figure 3.5: My research site in Australia

District Chitral KPK Pakistan

District Ghizer GB Pakistan

Source: https://www.google.com/maps/place/Pakistan/

Figure 3.6: My research sites in Pakistan

I have talked about my prior experiences of using the High/Scope framework of education in Pakistan in Chapter 1 of this thesis. Whilst I have made every effort to reduce cultural bias when analysing and discussing documents/frameworks from other cultures in my thesis, I acknowledge that all research is value laden and as such, I will bring my own cultural lens to the process of analysis**.** While I attempted to no cultural judgements, merely observed the results of ECE frameworks in their contexts. I have looked at selected world recognised ECE frameworks in Chapter 4 through my lens, and so this can be perceived as a limitation to this work.

3.10 Summary

The current study explored contemporary pedagogical approaches and best classroom practices for children's holistic development in the context of Australia and Pakistan for creating a culturally responsive ECE framework for application in the context of Pakistan. Based on the research questions and a review of contemporary literature, it was determined that this study would follow a design-based research approach within interpretive enquiry. This study was carried out in five phases. Data were collected through document analysis, interviews and focus group discussions involving 26 ECE educators, 10 schools' principals and six reviewers. Data were analysed using qualitative content analysis strategy. The current study created an ECE framework with the name of *Building Sound Foundation through Early Childhood Education: a parents' guide and a teachers' guide*.

Chapter 4

Findings from the Review of Key ECE Framework Documents: First Iteration

The main goal of the present investigation was the development of a culturally responsive, contextually relevant, ideologically sensitive and developmentally appropriate ECE framework for Pakistan based on analysis of data collected through review of ECE frameworks, interviews and focus group discussions in Australia and Pakistan. In relation to this, the current Chapter presents findings from the analysis of ECE framework documents. The ultimate aim of this analysis was to review, revise and refine Version 1 (V1) of the proposed ECE framework for Pakistan. It is important to mention here that V1 of the framework was created based on my work experience in the field of ECE in Pakistan, review of contemporary literature and insights gained from my studies in Australia at the Monash University and University of Tasmania.

In this Chapter, six key early childhood education framework documents were analysed in order to compare their salient features and key components. The documents originate from New Zealand, Singapore, Finland, Australia, the US (the High/Scope) and Pakistan. The analysis extracts the common key features, theoretical underpinnings and internal inter-connections of these documents. This comparative analysis led to the production of a revised draft of V1 of the proposed ECE framework for Pakistan.

Creswell (2007) suggested that “it is better to select a few, rather than many sites and participants to study, to provide an in-depth understanding of the phenomenon” (p. 241). So, I selected only six ECE frameworks to review in order to compare their salient features and

key components. Inclusion of only these ECE frameworks into this study was based initially on two criteria: purposiveness (purposiveness is mentioned by Silverman, 2015) and international reputation. Typically, researchers use purposive sampling to identify and select a case, a document, or a participant who possesses relevant qualities and rich information related to the topic under investigation (Etikan, Musa, & Alkassim, 2016; Silverman, 2015).I chose ECE frameworks from Singapore, New Zealand, Australia, USA and Finland because they have received widespread praise and recognition due to their innovative ideas (Ministry of Education New Zealand, 2017); evidence-based practices (Nyland & Ng, 2016); focus on children's holistic development, freedom, and empowerment (DEEWR, 2009; Farquhar, 2015); and importance of family and culture (Navarro-Cruz & Luschei, 2018; Nyland & Ng, 2016).

A review of contemporary literature (i.e., Arvola, Pankakoski, Reunamo, & Kyttälä, 2020; Australian Institute of Health and Welfare, 2015; State Government Victoria, 2018; Ustun & Eryilmaz, 2018; Wilk, 2017) indicated that Singapore, Australia and Finland's ECE frameworks are highly regarded for their emphasis on pedagogical elements such as learning through play, holistic development, developmentally appropriate practices, cultural diversity, gender equity, and inclusiveness. A growing body of literature recognises New Zealand's ECE framework as a model of ECE best practice (Early Childhood Education Taskforce, 2011) because of its strong focus on play pedagogy, wellbeing, learning dispositions (OECD, 2012); and importance of community, culture and languages (Economist Intelligence Unit, 2012). According to the findings of these reports, Te Whāriki puts the community at the centre of the curriculum, ensures age-appropriate contents, emphasises the importance of tolerance and most importantly it aligns the ECE curriculum with primary schooling.

A number of authors consider High/Scope a recognised and progressive curriculum document of ECE because of its special emphasis on the philosophy that children best learn if they: pursue their own choices, use their own language for discussion and use interesting local materials from their own culture (Baker, 2015; Hall, 2013; Rinaldi, 2006; Thomas, 2010): are encouraged to explore things around them and interact with others (Izadpanah & Günçe, 2014), and are free to ask and answer questions and solve problems (OECD, 2004; Schweinhart & Weikart, 1997). Because of its global praise and respect it is used worldwide including Pakistan and some other Asian and African countries in playgroup, childcare, pre-primary schools, and nursery classes for the holistic development of young children (OECD, 2004). According to Hohmann and Weikart[5] (2002), the High/Scope model is valid for groups of children from several different cultures, as is shown by the successful adaptation of the program in many countries all over the world.

The chapter has been divided into two sections. The first section of the chapter briefly introduces, one by one, the identified ECE framework documents and provides a short overview and background details of these framework documents. The second and most important section of the chapter has been devoted to discussing, analysing, comparing and contrasting the identified frameworks under various identified themes. Themes were produced after reading these ECE framework documents several times. So, the document analysis incorporated coding contents into themes similar to how focus group and interview transcripts are analysed in a qualitative inquiry (Bowen, 2009). The current research followed Lichtmna's (2013) three Cs approach of data analysis (codes, categories, and concepts) to identify themes. The process involved careful, extensive and multiple readings of the selected ECE frameworks and making marginal notes of key ideas/words. Line-by-line coding led to

[5] **Weikart** was an American psychologist and founder of the High/Scope Curriculum, an early childhood education program.

the identification of overarching themes from the most common and repeated ideas (O'Toole & Beckett, 2010). The most repeated themes were taken as separate concepts and others were merged within the larger themes. (Creswell, 2013). Identified themes are evidence of quality practices and are common across all selected framework documents.

Using the above given criteria, this research selected six ECE frameworks for review and analysis. The latest copies of all selected ECE frameworks were available online for downloading and reviewing. The purpose of this analysis was to compare salient features and key components of the selected ECE framework documents in order to gain better understanding for refining version 1 of the BSF framework. These documents were rich sources of data which helped me understand the sociocultural, educational and political contexts where these frameworks were implemented. Comparative content analysis and thematic analysis approaches (Bowen, 2009) were used to identify relationships, similarities and differences across the selected ECE frameworks (Creswell, 2013). Details of selected documents are given in Table 4.1. I compared frameworks by asking how and in what ways one document is different from the other and what kinds of ideas are similar in all documents selected.

Section One: Introduction of selected ECE frameworks

4.1 Background information of identified international ECE framework documents

The following table outlines key demographic information of six identified ECE framework documents from seven countries of the world. Here is the list of the identified ECE frameworks that will be discussed in this chapter.

Table 4.1: Background information on selected ECE Frameworks

Country	Title of framework	Authored/published by	Date published	Age range covered
New Zealand	Te Whāriki: Early Childhood Curriculum of New Zealand	Ministry of Education, New Zealand	1996 (revised 2017)	Birth to 5 years
Singapore	Early Years Development Framework for Child Care Centres Singapore	Ministry of Education Singapore (first edition was published in 2003)	2013	2 months to 6 years
Finland	The National Core Curriculum for Early Childhood Education and Care (2016)	Finnish National Agency for Education	2016	Caters for 0–6 years (school entry age is 7 years)
Australia	Early Years Learning Framework for Australia	Council of Australian Governments	2009	Birth to 5 years
USA	High/Scope infant and toddler curriculum, the High/Scope pre-school curriculum	David Weikart and colleagues. Development of the framework began in 1962.	1970 (revised several times)	1–2 years 3–5 years
Pakistan	Curriculum for Early Childhood Care and Education Pakistan	Ministry of Federal Education and Professional Training Pakistan	2017	4–5 years

4.2 Introduction to identified ECE framework documents

The literature (Rogoff, 2003) indicates that the provisions of early childhood education, care and development are dependent on socio-cultural, contextual dynamics and ideological needs of the societies where they are developed. The programs and services for ECE offered in one country are usually different from another country. Generally, even the definition of ECEC is different from country to country. Findings presented in this chapter from the analysis of six well-reputed international ECE frameworks were also consistent with the literature which

showed services and arrangements offered for children aged birth to 8 years differ to a great extent between states and territories of the world.

The following sections provide a brief introduction to all identified ECE framework documents.

4.2.1 Te Whāriki: Early childhood curriculum, New Zealand

This was one of the first national ECE frameworks of the world. It was created in 1996 and revised in 2017. Duhn (2006) reported that Te Whāriki is highly regarded internationally in the field of ECE as it has a strong focus on children's holistic development, empowerment, spontaneous play and the importance of family, community, culture and languages. The framework was created to cater for children from birth to five years. Inspired mainly by socio-cultural theories and an ecological model of human development, it has incorporated local ways of knowing (Māori and Pasifika approaches). According to May (2002) it is considered to be a culturally responsive document for New Zealand context. It has integrated the nation's beliefs and values for children's education and development. The revised version of the framework (2017) has also included evidence from neuroscience brain research. The framework is organised in terms of four key components: principles, goals, strands, and learning outcomes. It has been designed to cover all domains of children's development. According to the framework, the spiritual domain plays a fundamental role in connecting all other aspects of children's life; therefore, special importance has been given to the spiritual dimension of a child's development, education and development across time and space.

4.2.2 Early years development framework (EYDF), Singapore 2003

Singapore has three ECE framework documents (pre-school, childcare centre birth–3 years, and 3–6 years curriculum) in order to cater for two main early childhood services, namely

childcare centres and pre-school education. The pre-school new curriculum called the Early Years Development Framework (EYDF) was revised in 2013 which caters for children from birth through to 8 years. These frameworks provide broad guidelines for planning and delivering culturally responsive experiences to Singapore's young children. The EYDF is a bicultural framework which is comprised of five guiding principles, five desired outcomes and a number of practices. Most importantly, the curriculum was designed based on family-centred approaches to children's education and development (Nyland & Ng, 2016). The framework linked conceptually to the importance of play which acknowledges children as natural and active learners (State Government Victoria, 2008). According to the framework, aesthetic experiences are more fundamental to the entire development of the child as it offers valuable opportunities for holistic child development and education.

4.2.3 National curriculum guidelines on early childhood education and care (NCGECE), Finland

Developed in 2016 by the National Agency for Education Finland, the framework caters for children 0–6 years both in centre- and home-based care. The framework was written in order to introduce uniform principles and to provide guidelines for launching quality ECE programs across the country for the promotion of children's wellbeing, care and education. Overwhelming evidence from neuroscience brain research about the importance of early age rapid learning and development led to the start of discussions in Finland in the late 1990s for designing an ECEC framework for the country. Grounded on Finland's core values of social justice and mutual respect and international pacts on the rights of the child, the development of the framework extensively involved various stakeholders in the country to critique the contents, raise questions and give comments. The Finland framework consists of seven sections including the aims and goals of ECEC, guidelines for implementation of care and education programs, and parents' engagement and ideas for designing local ECEC curricula.

This framework provides a wide range of insights about how children should learn rather than the contents being subjects to learn (Arvola, Pankakoski, Reunamo, & Kyttälä, 2020) The framework pays special attention to children's culture, language and gender equity. Learning through play and providing a rich and safe learning environment are a fundamental part of the framework however there is limited detail pertaining to children's holistic development that is integrated into the framework.

4.2.5 Early years learning framework (EYLF), Australia 2009

The Australian government introduced its first national ECE framework in 2009 for streamlining ECE programs and to raise the status of ECE. Influenced mainly by socio-cultural theories and a post-structural image of competent and powerful children, it provides an innovative vision for building a sound foundation for the nation (Council of Australian Governments, 2009, p. 4). This framework was built based on contemporary evidence from research and good practices from ECE classrooms (Ortlipp et al., 2011). The framework offers guidelines for cognitive, ethical, cultural, physical and social-emotional aspects of children's lives from birth to five years (Cumming et al., 2015). Organised around three main sections, namely principles, practice, and learning outcomes, the EYLF identifies three key interconnected concepts: belonging, being and becoming. The framework explains how children learn, develop, grow, change and create their own identities through their interactions with the environment. The framework identifies five key principles and five learning outcomes (Moss, 2006). The EYLF gives huge emphasis to play-based and culturally responsive ECE.

4.2.7 The High/Scope pre-school curriculum

David Weikart and colleagues created High/Scope at Michigan, USA in the 1960s as a way to educate at-risk children of low-income families. The approach was inspired by theories of various seminal philosophical thinkers, particularly Vygotsky's theory of social development and Jean Piaget's theory of cognitive development (Thomas, 2010). The approach underwent improvement and was upgraded a number of times, informed by research studies and experiences of classroom practices over 50 years (Izadpanah & Günçe, 2014). It is now used worldwide including in Pakistan and some other Asian and African countries in playgroup, childcare, primary schools, and nursery classes for the holistic development of young children (OECD, 2004). The active learning approach is at the heart of High/Scope. In active learning, children have direct hands-on and minds-on experiences with people, objects, events and ideas. The active learning approach provides a multi-directional learning experience for teachers as well as for students (Schweinhart & Weikart, 1997). In this approach the teacher helps children in the completion of their tasks without interrupting them (Schweinhart & Weikart, 1997). At the heart of this approach is plan-do-review approach that builds students' confidence, their capacity for independent learning and their abilities of decision-making and problem-solving skills.

4.2.8 Curriculum for early childhood care and education, Pakistan 2017

Early childhood education is not yet a fully understood sector of education in Pakistan and therefore it is regarded a relatively new field of education (Ahmad, 2011). It is essential to note that the notion of early childhood education in Pakistan is limited to a specific class called Katchi. This is a class before Grade 1 and this curriculum caters only for 4–5 years old children. Katchi means 'not mature' and suggests that children are not ready to learn. Therefore, they are not enrolled, and they are usually accompanied by their older siblings to

school. This class does not have a separate classroom and teacher in the public sector education system. The Teachers Resource Centre[6] Pakistan created a document in 2007 with the name of 'National Curriculum for Early Childhood Education' catering for children 4–5 years old. Afterwards, the Ministry of Federal Education and Professional Training, government of Pakistan developed another document in 2017 with the name of 'Curriculum for Early Childhood Care and Education (ECCE) 2017' which also caters for children aged 4–5 years. The majority of this document is more like a curriculum, which seems to have a focus on subject knowledge, learning areas and specific time frames for education and development of children aged 4–5 years old only.

Section Two: Thematic analysis of identified ECE frameworks

4.3 Similarities and differences across the six ECE frameworks documents

The following section discusses the similarities and differences across ECE frameworks under various identified themes. Themes identified are listed in 4.2 below.

Table 4.2: Manually identified main themes from ECE document analysis

Manually Identified themes
Age range
Purpose/goal of the framework
Vision/values
Background research and theoretical influence
Structure of the framework
Cultural diversity/inclusiveness
Holistic development
Learning environment for play and exploration
Educators and their development
Relationships with parents

[6] Teachers' Resource Centre is a non-profit, non-government organisation, established in 1986 in Pakistan

Continuity (transition)
Assessment for learning

Twelve main themes were discovered from the review of six international ECE framework documents. This section of the chapter presents findings from this literature review by comparing and contrasting salient features and key components of the selected ECE framework documents. It also discusses how this analysis influenced the improvement of the previous version of the proposed ECE framework for Pakistan.

4.3.1 ECE age range

The first identified theme was ‘ECE age range’. Internationally, there is an agreement among researchers, practitioners, educationists and economists that the early childhood age range is from birth to age eight, however, others believe it is the years before school entry. The school entry age varies from country to country and therefore ECE programs around the world have been organised according to their country’s school entry age (United Nations International Children’s Emergency Fund [UNICEF], 2013) and school entry ages have been set in some countries based on philosophical ECE beliefs. This could be 5 years old in some countries but could go up to 7 years old in other countries such as in Finland where the school entry age is 7 years (United Nations Children’s Fund, 2017). It is believed that children within the 0–8 years age range possess characteristics similar to each other and different from older children. The age ranges covered in these selected ECE frameworks also vary from each other. The New Zealand and Australian frameworks cater for children from birth to five years. The ECE frameworks of Singapore and Finland broadly cater for children 0–6 years old. Apparently, the High/Scope ECE framework was designed for use with children aged 0–8 years. However, Hohmann and Weikart (2002) claim that the High/Scope model is valid for all age levels of children across various cultures of the world.

Impact statement

The first draft of the proposed ECE framework for Pakistan was created to cater for children 4–8 years old. This analysis of key ECE framework documents and review of current literature for this study discovered that children within the age range of 0–3 years are characteristically different from children aged 3–8 years. Therefore, the proposed ECE framework for Pakistan will cater for children aged 3–8 years whereas the existing ECEC curriculum of Pakistan has been written to cater only for children aged 4–5 years. Creation of a framework for children aged 3–8 years would add tremendous value to the existing education system of the country.

4.3.2 Stated purpose/goals of the frameworks

For decades there has been debate and discussion about the nature, purpose and scope of ECEC programs for children under eight years old. There is also a vast body of literature that discusses the purpose and quality of early childhood provision. The literature indicates that our belief system, our cultural and traditional ideas and our social image about children influences our thinking about children's education and development (Moss & Petrie, 2005).

The current review of international ECE frameworks for the comparison of purposes across the six ECE framework documents showed that there was wide variation in stated goals and purposes. The Australian and New Zealand ECE frameworks, inspired by socio-cultural and ecological thinking, have a strong focus on the development of physical, social, cognitive and language skills of children, whereas a major emphasis of the Singaporean framework is to plan and deliver culturally sensitive and developmentally appropriate experiences for young people according to their age level. The purpose of the creation of the Finland framework was to ensure educational equality and to provide a national tool for the promotion of children's

wellbeing, education and development and to increase professional awareness among educators. Similarly, the High/Scope framework was created in the US to provide high-quality learning experiences particularly for at-risk children and to promote independence, decision-making, cooperation and problem-solving in children.

The current review of ECE frameworks revealed that the National ECEC Curriculum of Pakistan 2017 (which caters for children aged 4–5 years) aims to provide opportunities for the entire development of the child. However, one of the key objectives of Pakistan's ECEC curriculum is intended to provide children with knowledge of Islam and Islamic society. Pakistan is a multi-faith country and inclusion of a specific objective in a country's curriculum for the promotion of one particular belief system in children may affect other children's learning, rights and development. It may also create confusion in the minds and hearts of young people about the faith of minorities.

Impact statement

The current review of international ECE framework documents for the revision of the proposed ECE framework for Pakistan proved to be a very useful exploration to compare stated purposes, goals and objectives of identified framework documents. The present comparison of purposes was a useful activity for me to better understand stated goals of various framework documents. After this review, I revised and refined the proposed purpose of the BSF framework (see page 6, BSF framework) for making it culturally more relevant to the Pakistani context. The revised purpose statement is aimed at facilitating the holistic development of young children aged 3–8 years and lay a sound foundation for their lifelong learning and all-round development. The current review revealed that the purpose statement of some of the ECE frameworks of successful ECE programs across the world such as New Zealand, Singapore and Finland are culturally and contextually responsive to their country's

needs.

4.3.3 Vision/values for young children

The third theme identified was ‘vision/values for young children’. Great visions and shared values of an ECE program can contribute immensely to improving the status of the program and images of children. They also help to foster raising the standards of provisions, experiences and services of early childhood education, care and development (Huffman, 2003; State Government Victoria, 2008).

The comparison of visions and values across the six frameworks showed, in general, that all of the identified ECE frameworks have a strong focus on children’s holistic development rather than teaching and focusing on stand-alone subject areas. The New Zealand ECE Framework (1996), the Australian EYLF (2008) and Singapore ECE Framework have all set very strong visions for their ECE services and for the development of their young people. In these countries, children are viewed as competent learners, knowledge constructors, effective communicators, knowledgeable contributors and better future creators.

The Pakistan ECEC Curriculum and Finland National Framework have both come up with a strong set of shared values and philosophies instead of visions. Inspired by the UNO’s convention on the ‘rights of the child’, values in ECEC in Finland and Pakistan are substantially based on the human dignity of the child, social justice and mutual respect. The ECE values in Finland are also influenced by national legislation.

Impact statement

This comparative analysis of the visions and values of different ECE frameworks made it possible to create a revised version of values for ECE in Pakistan which has been included in

the proposed ECE framework. The revised purpose of the BSF framework places special emphasis on social equity, justice and independence for promoting democratic thinking and for creating a socially balanced society because there is a dire need to improve the existing system of social justice of the country, equity and high-quality education and education based on life skills for all children.

4.3.4 Background research and theoretical influence of ECE frameworks

The fourth theme identified was 'background research and theoretical influence of ECE frameworks'. Some of the striking findings from international studies led to the start of discussions in many countries around the world for the creation of ECE frameworks for their countries in order to structure their ECE services. The literature indicates that, generally, framework development is a lengthy process as it employs baseline studies, reviews, analysis, observations, discussions and consultative processes in order to inform the development of the frameworks' guidelines.

The New Zealand curriculum was created after a collaborative consultative process with researchers, practitioners and other stakeholders. The framework mainly draws on the biological model of Bronfenbrenner, Kaupapa Maori theory (Maori ways of knowing), Pasifika approaches (drawing on different ethnic specific ways of knowing), critical theories and evidence from neuroscience brain research (State Government Victoria, 2008). In Australia an extensive baseline study was undertaken by Monash University in addition to analysing seven national and 10 international jurisdiction frameworks in order to write the EYLF of Australia. The EYLF challenges the traditional view of children as it is deeply rooted in a post-structural image of powerful and competent children. It also draws on socio-cultural, socio-behaviourist, cultural-historical activity theories, whereas in Singapore an extensive consultation with different stakeholders, review of ECE frameworks from several

countries, observations of real classroom practices and a comprehensive review of neuroscience literature was carried out in order to guide the process of framework development. Inspired by Piaget, Erikson, Dewey, Vygotsky and Malagozyian perspectives it has a strong focus on play-based learning. Additionally, background research was conducted in Singapore on current practices of childcare centres in order to inform the creation of the document.

A very different approach was adopted in Finland to design their framework. Working groups, steering committees and ECE experts worked together to prepare materials and write the framework, and a website was devoted to the input and comments on draft guidelines. Apparently, the framework was influenced by the international Conventions on the rights of the child and therefore has a heavy focus on social justice and rights and responsibilities for all (Halinen, 2018).

It is not clear whether a baseline study and consultations were carried out when designing the ECEC curriculum in Pakistan. However, the Pakistan ECEC Curriculum derived content from the Conventions on 'the Rights of the Child' and from the Finland framework, therefore it seems to be partially dependent on the Finland framework. The High/Scope ECE framework was inspired by theories of Vygotsky's social development and Jean Piaget's cognitive development. The framework underwent enhancements a number of times over 50 years (Izadpanah & Günçe, 2014).

Impact statement

Deeply rooted in socio-cultural and ecological philosophical thinking, there is an agreement across these six jurisdictions that learning, and development occur during social interaction with people, events, places and things. Following this analysis, a section named 'Theories

and philosophical thinking' was added to the proposed framework document (see page 48 of BSF framework).

4.3.5 Structure of the selected ECE frameworks

The structure of selected frameworks varies from jurisdiction to jurisdiction based on their cultural, educational, geographical and ideological needs. For example, Te Whāriki has been organised in terms of principles, strands, goals and learning outcomes and it also has identified examples of several practices that promote learning outcomes for infants, toddlers and young children. Similarly, and deeply influenced by Te Whāriki, the structure of the Australian framework and the Singapore early years development framework are comprised of three major parts: principles, practices, and learning outcomes. Although some of these components (principles, practices, and learning outcomes) are the same across these three frameworks, the way their childhood services are organised creates distinctions among them. The suggested principles across the three jurisdictions are suitable for a wide range of audiences.

There are some similarities between the Finland framework and Pakistan curriculum in terms of structure. Pakistan has structured its curriculum around four chapters whereas Finland's has around seven sections, and both have a strong focus on guidelines for implementation of key learning areas. However, the Finland document is more about how children should learn, and in contrast the majority of sections in the Pakistan document are more like a school curriculum, based on subject knowledge, short-term objectives and specific time frames. The USA's High/Scope is comprised of a mixture of subject areas and domains of development. There are eight content areas in High/Scope which are backed up by 58 indicators, so it is differently structured from all other frameworks but there are some similarities with the Pakistan curriculum as this also has a strong focus on subject areas and active learning.

Impact statement

Following this analysis, it was decided that the structure of the BSF framework would be a blend of the EYLF, Te Whākiri and Finland frameworks as they have been structured around principles, practices and learning outcomes. The BSF framework has no obvious focus on subject areas except basic numeracy and literacy however it is backed up by details of national and international laws and agreements, domains of child's development, and framework implementation strategies. Numeracy and literacy were not included in the first version of the framework. As fluency in language skills and becoming numerate at an early age is also essential for learning and daily life experiences version two (V2) of the BSF framework broadly incorporated early numeracy, basic language skills and importance of mother tongue for children's education and development. After this analysis, V2 of the framework integrated guidelines for easing transition from home to ECE settings and ECE settings to school. Therefore, the structure of V2 of the framework added principles, practices and learning outcomes after analysing these data.

4.3.6 Cultural diversity/inclusiveness

ECE should be culturally responsive and sensitive to the needs of the children and the community (Bondy et al., 2007; Morrison et al., 2008) because culturally responsive ECE programs can enhance children's self-esteem and make them proud of their own identity (Morrison et al., 2008). Nguyen et al. (2006) suggest that the application of Western educational theories, ideas and pedagogical approaches into other contexts of the world, without considering the dynamics of the host culture, creates new challenges for teachers, parents and for the society.

All identified jurisdictions for this analysis were multicultural and multilingual countries.

Apparently, these documents have been created to meet the need of the several cultures of their countries including the needs of indigenous people, children with special needs and the culture of children from other countries by integrating activities, images and content from the history and heritage of different cultures without showing any discrimination of nationality, religion, gender and social status. The fundamental focus of the Finland ECE framework is on the equality of boys and girls whereas New Zealand framework encourages educators to work collaboratively with all families in order to dismantle barriers in the path of children's education and development. The Australian document has a special focus on the promotion of all children's social, cultural and linguistic diversity whereas inclusion and diversity has not been specifically addressed in the High/Scope. The Singaporean framework supports family-centred approaches to children's education and development. In a family-centred approach, everyone loves children with hearts and minds regardless of their colour, cast, religion, affiliation and class.

In contrast, the Pakistan ECE curriculum seems to have a strong focus on one religion and only on Pakistani culture. One of the core objectives of the curriculum is intended to promote knowledge of Islam and Islamic societies. Even Pakistani textbooks have been designed in such a way as to promote the religion of the majority of the population and one of the prescribed textbooks on offer in Pakistan is called Islamiat (Islamic education). Islamiat is a compulsory subject for all students to adopt irrespective of their religion, cast and class which exclusively teaches the religion of the state. There is no other choice for children from minority groups.

The Singaporean framework has several key features which make it a valuable document to follow when designing a culturally responsive, developmentally appropriate and contextually relevant early childhood framework because it strongly inspires educators to be mindful and

respectful of cultural diversity and inclusiveness among children. Therefore, the BSF framework also has a strong emphasis on developing a positive attitude among children with regard to the culture, language, religion and gender of non-Islamic children in the various regions of Pakistan.

4.3.7 Holistic development

According Tran (2013), literature from neuroscience brain research suggests that children learn, grow and develop in holistic ways. Similarly, socio-cultural, ecological and attachment theorists have also placed special emphasis on the development of the entire child by employing holistic approaches rather than focusing on compartmental subject areas or specific dimensions one by one. A holistic approach to child development seeks to address concurrently all dimensions of a child's life including the physical, social, intellectual, spiritual, aesthetic and cultural domains (Tran, 2013). There is mutual consensus among all six jurisdictions except Finland for placing special emphasis on children's holistic development through positive relationships, play and a wide range of interactions whereas for Finland it is the aesthetic, ethical and religious orientations that are more fundamental for the child's entire development. According to the EYLF, connectedness of mind, body and spirit is more vital to children's holistic development. The Singaporean framework has a strong focus on the child's entire development, however it acknowledges that aesthetic experiences are more crucial as they offer valuable opportunities for all aspects of child development whereas the USA High/Scope places special emphasis on social emotional development. Similarly, the Pakistan curriculum for children aged 4–5 years exclusively highlights the importance of physical, social-emotional, cognitive and language development and charts out ideas for the development of all these dimensions. However, some other key domains such as cultural, interpersonal, aesthetic, wellbeing and life skills development are not covered in this

curriculum.

None of these jurisdictions has incorporated dimensions of technological and life skills under early age holistic development. Version 2 of the framework had already integrated life skills development and use of technology for supporting students' learning achievements. Purposeful use of learning devices such cell phones, tablets, computers and some other machines have changed the way children learn, differing from methods that were used in the past. The children who are proficient in the use of learning devices can learn faster. Life skills education programs prepare children to deal effectively with daily life challenges. The framework encourages teachers to prepare children to courageously face life problems and seek solutions rather than escape from them. The framework has identified (on page 22 of the BSF framework) some of the core life's skills to be included in the ECE programs and services in Pakistan.

4.3.8 Stimulating learning environment for play and exploration

The environment is seen as "the third teacher" in the Reggio Emilia approach to pre-primary education that provides stimulating opportunities and spaces for learning (Rinaldi, 2006). Various studies have revealed that children best learn in an environment which is safe, clean, stable and inclusive and enriching and in an environment, which provides enough opportunities for play and exploration. A considerable amount of the published literature on learning environments confirms that a stimulating environment plays a key role in children's education and development. A play-based learning environment fosters children's skills in decision-making, problem-solving, creativity and language.

Inspired by the ecological model of human development by the famous philosopher Bronfenbrenner, the majority of these frameworks have been built based on ideas of play-

based learning. Learning through play is at the heart of EYLF Australia, and the High/Scope. They encourage educators to create a safe and secure environment for uninterrupted long-time play, exploration and experimentation. The Finland framework suggests that a rich, safe, aesthetically good and flexible environment motivates children to learn, experiment, play and explore. Play is also a fundamental activity in the Singaporean framework which is used for children's holistic development and education. Te Whāriki recognises the worth of spontaneous play and encourages parents and teachers to give value to children's play as meaningful learning. The Pakistan curriculum has included limited content on learning through play, and this may be because the majority of public-school teachers and parents in Pakistan still separate playtime from work time and, surprisingly, the outdoor environment is not identified in the Pakistan curriculum as a place for learning. At present, teachers and parents in Pakistan separate playtime from education time.

The learning environment and play-based learning were an integral part of the first version of the BSF framework and therefore they also appear in the second version. This analysis made it possible to add more value to the existing contents of play-based learning and learning environment by integrating additional key details to both sections.

4.3.9 Educators and their ongoing development

Teaching young people is mentally, physically and emotionally challenging work as it requires a high level of energy, knowledge, persistence, professionalism, dedication, academic skills, commitment and sincerity. Teachers can make or break children, and they are the most important and influential people in the child's life. It is well established that teachers' ongoing development is essential for providing better support to children's holistic development. Teachers' engagement in continuing education programs improves students' learning achievements. Teachers play various roles in order to foster children's learning.

Classroom experiences suggest that teachers learn best when they teach their students because teaching involves preparation, reading, reflections, demonstrations and question-and-answer sessions.

The effective implementation of any framework requires professionally sound and academically qualified staff. With the exception of Te Whāriki and Finland, all other identified frameworks from the six different jurisdictions place special emphasis on the educator's continuous professional training for fostering children's holistic development. In Singapore and the US, educators participate in in-service workshops, seminars, professional discussions and visit model centres in order to enhance their learning. Training opportunities within High/Scope in the US are only available on a commercial basis whereas in Singapore it is subsidised by the government. In Australia, the framework encourages educators to become reflective practitioners and critical thinkers.

In Pakistan, opportunities for teachers' professional development are limited as the majority of public schools have very limited or no access to effective training programs, good libraries, stable internet, suitable books and authentic articles. However, the existing curriculum for children aged 4–5 years in Pakistan clearly acknowledges the importance of and need for the professional development of teachers.

The BSF framework also places special emphasis on ECE teachers' continuous professional development. This can be achieved through making them reflective practitioners, critical thinkers, problem solvers, good readers, and active observers. The proposed ECE framework encourages ECE teachers to observe each other's classes and give and receive feedback, visit other settings and undertake good preparation for their teaching. According to the BSF framework, school-based workshops, dialogue, use of media and setting-based short sessions are also important for teachers' development.

Training in the effective use and implementation of the framework also needs to be organised for teachers who are involved in teaching young people.

4.3.10 Relationships with parents, families, communities

The importance of and need for parental, family and community partnership, involvement and engagement in children's education has been well documented in research since the 1960s (Rodd, 1998). Contemporary research also maintains that home-school and community-school true relationships are vital for children's learning, education and development; therefore, ECE frameworks across the world have integrated programs to engage parents, families and communities in children's education and development.

The importance of true relationships with parents, families and communities have been highlighted in five out of six of the selected jurisdictions. Principles four and five of the Singapore framework was specifically designed to strengthen successful collaboration with families and communities. In Finland, parents' engagement is based on mutual trust, equality and respect for fostering children learning, wellbeing and development and the framework acknowledges diversity among parents (Hujala, Turja, Gaspar, Veisson, & Waniganayake, 2009). The New Zealand framework states that children develop and learn best when education programs reflect and correspond to their family and community's ways of living and respectful relationships with families expands children's participation in school-based activities. High/Scope and EYLFA encourage educators to invite parents to the learning centre for participation in several activities. In Australia there is a very strong relationship between family and the centre, therefore the EYLF acknowledges that children bring with them the family's ways of *being, becoming and belonging* to the learning centre. The Pakistan curriculum has not included details related to parents, family and community engagement. There is an agreement across these frameworks that partnership with families

should be based on mutual respect and equality.

Impact statement

Parents are the most influential people in the life of children, so their involvement is essential in their education; therefore, this was already included in the first version of the framework and it has been revised, updated and included in the second version as well. A separate guide for parents' involvement has been written which will be shared with parents in Pakistan after completion of this study. The current analysis of ECE frameworks added more value to the existing contents of the Parents' Guide by integrating additional key details to the guide. Please see Appendix N for the Parents' Guide.

4.3.11 Continuity between ECE and school programs (transition)

Children undergo various stages of transition during their life and in the early years this occurs every day. Home to child care centre and child care to school are considered to be the most exciting and challenging transitions in the life of a child (Margetts, 2002). During their transition, children meet with new faces, new places, face new circumstances and create new relationships. Children who are socially developed and emotionally strong can manage their transitions smoothly. In the early years, the notion of smooth continuity between home and ECE and ECE to school is so crucial that five out of six jurisdictions have identified transition as one the key components in their frameworks.

Overall, there seems to be agreement across these frameworks on the massive impacts of transition on the child's ability to succeed in their initial days of learning. The identified frameworks highlight suggestions to ease the burden of transitions. In New Zealand there are policies and procedures in place for the smooth transition of children. Teachers in ECE settings and schools try to ensure continuity by building on the learning experiences that

children bring with them from home to ECE and from the ECE setting to school. In Singapore there is a visible closeness between the desired outcome for pre-primary and the desired outcomes for primary and secondary education. This was included with the intention of ensuring continuity (State Government Victoria, 2008). Apparently, in High/Scope and the Pakistan curriculum no guidelines for smooth transitions are included, however High/Scope makes explicit links across all levels of education through hands-on experiences.

In Pakistan, no system is in place for easing the transition between settings and schools and no education frameworks are in place for older as well as younger children except the National ECE Curriculum of Pakistan (2017) which caters only for children aged 4–5 years.

Impact statement

In the existing circumstances, public schools and parents in Pakistan seem not to be ready to help children make smooth transitions to schools. This is mostly because of lack of awareness about the significance of smooth transitioning. The theme of transition was not included in the first version of the BSF framework. Now this theme with all relevant details and subthemes has been incorporated into the second version in order to ease transitions for young children.

4.3.12 Assessment for learning

The purpose and use of assessment vary from country to country. Traditionally, assessment has been used to check students' ability to answer specific questions, mostly conducted through paper-and-pencil tests. Contemporary research has given a new and effective shape to students' assessment in early childhood education. Now assessment is a continuous, collaborative, and integral part of learning and about progress in education and development. Assessment is used for creating new teaching and learning experiences as well as providing

useful information for educators about their own teaching.

In New Zealand, the framework provides guidelines in order to determine how a child is progressing and what kind of additional support is required. This is undertaken through systematic observation, taking photographs when children are engaged in activities, making audio and video recordings and collecting examples of children's work and through learning stories (Ministry of Education New Zealand, 2017). In Singapore, assessment is carried out through observation, reflection and documentation for providing objective feedback to parents. In Finland, assessment is collaborative, and parents are involved in the assessment of their children's plans. In Australia, five key learning outcomes of the framework provide key reference points against which children's learning achievements are assessed and reported. In Pakistan, assessment of student learning is also an integral part of the ECE curriculum document. This is undertaken by means of a checklist of the child's progress, portfolio, and progress report for parents. The framework encourages teachers to conduct ongoing observations of individual children throughout the year and document their progress systematically in order to make informed decisions.

Impact statement

Assessment for learning was already integrated into the first version of the BSF framework, however the assessment tool (see Appendix L) had not been designed and therefore had not been included. Creation and inclusion of a culturally responsive, contextually relevant and developmentally appropriate assessment guide and tool added value to the existing version of the framework. The assessment tool has not yet been pilot tested because piloting of the tool was not part of the PhD project. Once tested and validated, the ECE teachers can use this assessment tool for assessment of students' learning.

4.4 Change table

Analysis of international ECE frameworks was undertaken in order to better understand the salient features of the selected ECE documents with the intention of revision the first version (V1) of the BSF framework. Below is a summary of modifications carried out in V1 of the proposed ECE framework after analysing the six ECE frameworks.

Table 4.3: Change table

Themes	Impacts on the version 1 of the framework
Age range	Version 1 of the BSF framework was created in order to cater for children aged 4–8 years old. However, after analysing key ECE frameworks of six different countries it was found that children in the 3–8 years age range are characteristically different from children 0–3 years old. Therefore, I decided to include children aged 3–8 years in this framework. The creation of a framework for children aged 3–8 years would add tremendous value to the existing education system of the country. The existing ECEC curriculum of Pakistan has been written to cater only for children aged 4–5 years.
Purpose/goal of the framework	The comparative analysis of purposes across the six frameworks revealed that there was wide variation in stated goals and purposes of the frameworks. The purposes of these frameworks seem to be mainly influenced by their cultural, ideological and political directions. Version 2 of the BSF framework was intended to follow an early childhood education that fosters children's holistic development through integration of culturally responsive and developmentally appropriate practices rather than focusing on children's specific academic skills.
Vision/values	Version 1 of the the BSF framework already included vision/values. There is a dire need to create a socially balanced society, peaceful environment, prosperity and democratic thinking and to bring about reform in the education system of the country. Therefore the framework highly values honesty, cultural sensitivity, equity, forgiveness, fairness, human dignity, creativity, respect for truth and an education based on life skills development.
Background research and theoretical influence	The analysis indicates that there is visible agreement across these six jurisdictions that children learn and develop when they interact with people, events, places and things. Inspired by Vygotsky's and Bronfenbrenner's philosophical thinking, Version 2 of the BSF framework is deeply rooted in the socio-cultural and ecological model of human development.

Themes	Impacts on the version 1 of the framework
Structure of the frameworks	The structure of Version 2 of the framework is a blend of Australia, New Zealand, Singapore and Finland frameworks. Findings suggest that these frameworks have been structured around principles, practices and learning outcomes. The BSF framework is also comprised of three key components, namely principles, practices, and learning outcomes, but it is also backed up by details of national and international laws and agreements, domains of child's development and framework implementation strategies. However, it has no obvious focus on subject areas except basic numeracy and literacy. It also integrated guidelines for successful transitions, art and craft, life skills development.
Cultural diversity/ inclusiveness	Findings from this analysis indicate that the Singaporean framework has several key features which make it a valuable document to follow when designing a culturally responsive framework. This is mindful and respectful towards cultural diversity and inclusiveness among children. Similarly, the revised version of the BSF framework also has a strong emphasis on developing positive attitudes among children with regard to the culture, language, religion, gender and social status of all children across the regions.
Holistic development	This comparative analysis shows that all selected frameworks have a strong focus on the socio-emotional, physical, intellectual and language development of children, however none of these jurisdictions has covered technological and life skills development. Version 2 of the framework integrates life skills development and use of technology in addition to traditional domains of development.
Emergent literacy, language skills and mathematical thinking	Numeracy and literacy were not included in the first version of the framework. Findings from this analysis suggest that fluency in language skills and becoming numerate at an early age is also essential for learning and daily life experiences, therefore Version 2 of the framework has broadly incorporated early numeracy and basic language skills under the **learning outcome** called 'children are effective communicators'.
Learning environment for play and exploration	The learning environment and play-based learning are an integral part of Version 1 of the framework and therefore these are also in Version 2. This analysis made it possible to add more value to the existing content of play-based learning and learning environment by integrating additional key details into both sections.
Educators and their development	The comparative analysis of educators' development across the six frameworks indicated that educators' ongoing development is crucial for fostering children's learning and development. The BSF framework also places special emphasis on ECE teachers' continuous professional development. After this analysis, Version 1 of the

Themes	Impacts on the version 1 of the framework
	framework was revised by adding some key details to the section on educators and their professional development.
Relationships with parents	Findings from this analysis revealed that parents are the most influential people in the lives of children, therefore their involvement is essential in their education. This was already a vital part of Version 1 of the framework. A separate guide for parents' involvement had already been written. The current analysis of frameworks made it possible to revise the previous version of the parents' guide and to add more value to the existing contents of it by integrating additional key details to the guide. Please see Appendix N for Parents' Guide.
Continuity (transition)	The analysis indicated that all selected frameworks apart from that of Pakistan have highlighted the importance of successful transitions. In the existing circumstances, public schools and parents in Pakistan seem not to be ready to help children make smooth transitions across settings. The theme of transition was not included in the first version of the BSF framework. However, after analysing these frameworks, this theme with all relevant details has been added to Version 2.
Assessment for learning	Assessment for learning was already integrated into Version 1 of the BSF framework, however, an assessment tool had not been designed therefore it was not included. Creation of a developmentally appropriate assessment guide/tool will add value to the existing version of the framework.

4.5 Summary

The existing ECE curriculum of Pakistan caters only for children aged 4–5 years whereas the BSF ('Building Sound Foundation through Early Childhood Education') has been written to provide support to teachers for organising culturally responsive, developmentally appropriate and contextually relevant programs. In addition, it fulfils the ideological needs of the country. It supports all children's holistic development from 3–8 years regardless of their attachment to any religion, cast, gender, class and context. It is respectful to all cultural diversities and acknowledges the inclusion of all ethnic groups.

The identified frameworks from six different jurisdictions that were selected for review all

have a very strong focus on learning through play and the child's entire development rather than focusing only on subject areas or emphasising only certain academic skills. Similarly, the BSF framework also places special emphasis on play-based learning because it has been established that children best learn through play. The core focus of the BSF framework is also on children's physical, social, emotional, spiritual, cultural, aesthetic, academic, life skills, technological and cognitive development. It encourages teachers to use ongoing assessment for fostering children's holistic development. Formative assessment is also a fundamental part of all identified frameworks. Assessment in the BSF framework will be used for making informed decisions related to a child's education and development.

The BSF framework encourages parents, teachers and communities to all work together and to contribute in easing children's transitions between home, ECE settings and schools. The framework highlights the need for the creation of frameworks for upper primary children (above the age of eight) as well as for younger children below the age of three in order to provide continuity and consistency at times of transition. Apart from the ECE curriculum in Pakistan, smooth transition is one of the key components of all other frameworks to ensure links and continuity between settings. The next chapter presents findings from the data gathered in Australia to revise Version 1 of the proposed ECE framework for Pakistan.

The review of ECE frameworks was used to identify evidence of quality ECE practices and pedagogies suitable for ECE in Pakistan by answering Sub-question 2 of this study: 'What kind of culturally sensitive pedagogies and developmentally appropriate practices are suitable for ECE in Pakistan?' In this way, V2 of the BSF framework evolved/appeared from this analysis of key ECEC frameworks. This V2 appears in Appendix J. Refinement of the BSF framework through the analysis of some of the world's effective ECE frameworks in this chapter takes the discussion and consultation to the next level of deliberation with ECE

teachers and school principals in Australia in order to revise Version 2 and produce Version 3 of the BSF framework.

Chapter 5

Findings from Australian Data: Second Iteration (the refinement phase)

In Chapter 4, the first iteration of this design-based research compared and analysed six key ECE frameworks. This comparative analysis extracted the common key features, theoretical underpinnings and internal interconnections of the six international ECE frameworks. Chapter 4 then described how a revised version of the BSF framework was generated by addressing the loopholes and ambiguities of the framework.

The current Chapter draws on ECE educators' and principals' perspectives in the context of Australia in order to identify developmentally appropriate practices with the ultimate aims of refining and revising Version 2 of the BSF framework. This chapter will describe how the second version of the BSF was further revised and refined after analysing Australian interviews and focus group data.

This chapter has been devoted to presenting the research findings from the Australian data. The overall study aimed to create an ECE framework for Pakistan. In this regard, data collection in Australia explored best ECE practices for revising and refining the proposed ECE framework for Pakistan. Data were collected from five Australian schools through principal interviews and ECE educator focus group discussions.

5.1 Demographics

The demographic data sought in the study included the general profile of the study's respondents with regard to gender, age and professional qualification as well as teaching experience in numbers of years.

Table 5.1: Demographics of participants

Demographics	Principal	Educators
Gender		
Female	4	11
Male	1	0
Experience in years working within ECE sector		
1–10	0	2
10–20	1	3
20+	4	6
Affiliation with education sectors		
Public	4	9
Private	1	2

Table 5.1 indicates that almost the entire sample of this study comprised female educators, except for one male principal. The data presented in Table 5.1 also show that the majority of participants (10 out of 16) had teaching experience in early childhood education settings for more than 20 years. The table also reveals that 13 of the principals/educators who participated in interviews and focus groups belonged to public schools and three participants were from the private sector school system in Australia.

5.2 Thematic analysis

All of the interviews and focus group data were transcribed verbatim. Two methods were

used to analyse the textual data. The first method of analysis was a manual coding system. For this purpose, I read the transcriptions thoroughly several times and this careful exploratory analysis of interviews and focus group data led to the identification of nine key categories. NVivo 12's textual analysis tool was employed to organise categories identified from the data. This analysis led to the identification of a number of direct quotations and a representative selection of texts and overarching references from the data (Lichtman, 2010). The focus of data collection in Australia was to explore effective ECE practices in the context of Australia through interviews and focus groups with a goal of revising and refining the BSF framework. Nine distinct themes were identified from the data and these are outlined in Table 5.2 below. The themes are organised in the following table according to the occurrence of frequency of references.

Table 5.2: Manually identified broad themes and subthemes

Main themes (derived from research questions)	**Manually coded subthemes**	# of direct **quotations**
Child-centred education	- play-oriented education/learning	9
	- inquiry-based learning	3
	- family-based centre	4
Factors affecting implementation of ECE programs	- resource management	3
	- catering for the needs of all children	4
	- welcoming and enriching spaces	9
Holistic approaches to education and development		11
Space and arrangement	- groupworks	3
	- working in learning corners	2
	- outdoor experiences	3
Developmentally appropriate practices		8
Culturally responsive ECE	- respect for diversity	7
	- equity	4
	- love for people around them	3

Main themes (derived from research questions)	**Manually coded subthemes**	# of direct **quotations**
Educators' philosophies of teaching and learning	- engaged, competent and capable children	6
Impacts of effective ECE program	- ECE helps to tailor children's sense of individuality	2
	- ECE lays sound foundation for ongoing education	3
Life skills education		4

The second level of analysis of the same data was carried out using the data management and content analysis software called NVivo in order to aid the analysis process. The transcriptions of interviews and focus group discussions were uploaded to NVivo's text analysis software Word Cloud for the purpose of analysis. The software created a visual representation of the textual data, as shown in Figure 5.1.

Figure 5.1: Concept's frequency NVivo word cloud

NVivo's Word Cloud was used to identify any potential human bias arising from the manual coding, to view the data from a different perspective and to check whether manually identified categories truly represent interviews and focus group discussion data and are in line with software-created keywords. When interviews and focus group textual data were uploaded, the Word Cloud software detected a collection of keywords (see Figure 5.1 above) depicted in different sizes occurring within a certain distance from each other. It is worth mentioning here that in Word Cloud's visual representation, the bigger and bolder the word appears, the more it is mentioned within the given text and therefore the more important it is. For example, in Figure 5.1, *children*, *activities* and *education* are the most mentioned words within the current textual data and so these are also important. Similarly, according to the frequency (number) of direct quotations (see Table 5.2), the first manually coded key category was 'child-centred education' from the same data. This shows that Word Cloud's generated visual representation of word frequency query results is actually in line with the manually coded categories and in fact are representing the majority of participants' thoughts and feedback.

The current Chapter presents findings from the Australian interviews and focus groups for making improvements to the proposed ECE framework for Pakistan. As mentioned earlier in this chapter, nine main categories including several subcategories (see Table 5.2 above for details) were identified from both one-on-one interviews and focus group discussions. The identified themes and subthemes, including direct quotations identified from the analysis of Australian data, are presented and explored in the following sections.

5.3 Child-centred education

The first identified theme was 'child-centred education'. Data collected through interviews and focus groups in Australia for the refinement of Version 2 of the proposed ECE

framework of Pakistan suggested that educators believed that education and learning programs in early childhood should be child-centred. A total of 16 comments (see Table 5.2) referring to this category in this data collection reported that in child-centred education, the child comes first, with a focus on the child's holistic development and their well-being. Participants suggested that it is important to ensure that children's educational and developmental needs are fully met and their engagement in activities are meaningful. Conversely, if children are not engaged, their voices are not heard, their expectations are not met, and their interests are not fulfilled, then they are not going to learn.

The literature (Langford, 2010; O'Neill & McMahon, 2005) indicates that in child-centred education children play leading and active roles in their learning and development. In this kind of education, children's education, learning and development are the centre of attention. Reports (Dewey, 1986; Maher, 2002) show that, traditionally, the emphasis of education was on the teacher, teaching and transmission of information, however this traditional approach was increasingly opposed by constructivist thinkers such as Piaget (1973), Vygostky (1978) and contemporary research which has encouraged a shift away from teaching to learning (McCabe & O'Connor, 2014).

Participants interviewed in this data collection pointed out that in a child-centred education setting, the teacher views each child as a source of inspiration and strength. Participant T1.2 asserted that in child-centred education "children are capable learners from birth. So, they are capable of expressing their wants and their needs and [are] very capable [of] exploring new environments. They have the capability to generate knowledge and they have belief in themselves" (T1.2, page 24, transcript 3).

Analysis of the data under the category of child-centred education produced three core subcategories, namely play-oriented education, family-based education, and inquiry-based

education in order to foster young children's learning and education. These are presented in the following sections.

5.3.1 Play-oriented education

The first identified subtheme was 'play-oriented education'. A total of nine comments (see Table 5.2) referring to this category in this data collection reported that education and learning programs in place for young children should be activity-based, based on range of hand-on tasks and self-directed discoveries. Participants reported that play-based education is developmentally appropriate practice, and it is for every child. Play can have incredibly positive impacts on a child's socio-emotional, cognitive and physical development and language skills. Play is also used to keep children fit and healthy. Rogoff (2003) argued that through play young children come to understand their world and learn to function in it. Participant T2.4 stated:

> We have lots of age-appropriate play-based fun activities in the classroom, lots of different activities based on literacy, some based on numeracy, sensory construction, all types of different things. Children learn a lot through play. They are free to play and explore the welcoming environment (T2.4, page 11, transcript 2).

Results of this study are consistent with those of other studies (Jay & Knaus, 2018; Kamerman, 2006; Martlew, Stephen, & Ellis, 2011) and suggest that a lot of learning occurs when children are engaged in play activities and through play children are able to develop their physical and socio-emotional qualities and communication skills. T1.3 also shared a similar view when she said:

> My stuffs [activities] are very much play-based. When you go into my classroom and ask the kids what they are doing, they will say they are playing, and they can actually tell you what they are learning about what they are playing. So, children learn and develop through play if you can make it warm and welcoming for the children (T1.3, page 10, transcript 1).

Data gathering in Australia for the refinement of the proposed ECE framework suggested that the provision of ECE services should be play-based and be based on children's interests, expectations and according to the level of their understanding. By nature, children love to play. Findings of this research revealed that educators in Australia typically use play to transform learning, skills and develop the entire child.

5.3.2. Family-based education (FBE)

A total of four comments (see Table 5.2) referring to this category in this data collection reported that the way teachers interact with young children affects their personal development, growth, personality, way of thinking and education. T5.2 mentioned:

> So, we give considerations to that we provide a family-based sort of centre where children are loved, educated and developed. Families are welcomed [too] so the parents feel comfortable to talk about their child. We encourage children to tell their stories and lead conversions at school (T5.2, page 5, transcript 1).

Analysis of the six international ECE framework documents in Chapter 4 for the improvement of Version 1 of the BSF framework revealed that some of these key ECE frameworks, including the ECE framework of Singapore, have been created with a family-centred approach to a child's education and development.

According to some of the participants (n = 4) interviewed in Australia, in family-oriented education children contribute much to the discussions and activities and ask many questions whereas in a formal school, educators take up much of the time talking, sharing ideas and asking questions. In family-centered education, educators are well aware of children's expectations and their background, actively participate in activities with children, and admire children's' achievements. One research participant stated:

> We make sure that we know our children really well and that we understand their background, some of their strengths, interests ... We understand that there are very strong emotional bonds between a child and her family members, and we are committed to create those sorts of bonds in our school as well (P1, page 36, transcript 1).

A small number of participants in this data collection revealed that in a family-based education system there is a very solid educational attachment between children and their teachers. This strong connection makes children comfortable in contributing to their learning and development with confidence. Another participant stated that the type of interaction that takes place in a traditional school environment differs from a family-oriented education school. She added that in family-oriented schooling, opportunities created for children are culturally sensitive.

> We provide opportunities to children to share information related to their culture, their languages, their foods and traditions … Children are encouraged to take risk[s], explore things around them and we provide uninterrupted but guided opportunities to children to learn new skills, knowledge … essential for their practical life. It is part of their ongoing learning process (P5, page 41, transcript 5).

Some of those participants in the present data collection who taught in an FBE setting reported that in this kind of education, teachers are mindful and respectful of children's culture, their language and way of life and an inquiry-based education helps teachers better understand the key features of family-based education.

5.3.3 Inquiry-based learning

The majority of respondents (n = 9) in this data collection suggested that the final version of the proposed ECE framework for Pakistan (BSF framework) should include inquiry-based learning approaches because inquiry-based learning encourages children to become independent learners, problem solvers, critical thinkers and active investigators. T2.2 asserted that:

> Education in young age is all about discovery and learning through play. Children take [an] interest if they are encouraged to take [an] active part in activities and tasks through inquiry and investigation. Engagement of young children in self-directed inquiry and self-directed discovery helps children to reach a high level of critical thinking. Therefore, it's really important (T2.2, page 13, transcript 2).

In inquiry-based education, children pose questions and seek answers to many questions. P2 stated:

> So, it [early childhood] is a really important time. I think children learn through play and through exploration and through inquiry. And it's [a] really important time to develop concepts and understandings about the world, to develop language skills to communicate. So those things are really important to all future learning and learning through inquiry triggers curiosity,

> generates new learning, promotes taking responsibility and empowers children (P2, page 46, transcript 6).

A small number of participants (n=3) in this data collection indicated that in learning through inquiry, children are able to unpack information and construct new knowledge on their own as inquiry-based learning provides more engaging learning experiences for children and opportunities for sense making in the world around them and develops higher order thinking skills in children. The inquiry-learning approach views children as sources of strength and inspiration.

Impact statement

Through these interactions in Australia, I intended to gain a better understanding of current effective ECE practices for revising V2 of the proposed ECE framework document. The interviewees of this data collection in Australia reported that an ECE framework must go beyond a traditional focus of education to one that is more child-centred and play-based education. Learning through play and family-based education were an integral part of the proposed ECE framework when the first draft/version of the framework was created. Participants' comments in this data collection and review of core ECE frameworks in the previous chapter suggested that maximum learning occurs when the focus of ECE services are on learning through play, family-based and inquiry-based education.

The proposed ECE framework for Pakistan has a strong emphasis on child-centred education and children's active engagement in the process of knowledge construction. Initially, inquiry-based education (IBE) was not included in the framework document, however the current data collection indicated that it was important to incorporate a new section in the framework with the name of 'inquiry-based education'. The review of literature in Chapter 3 also

showed that educators of young children should use this approach to engage students in deeper explorations and for their active and involved participation in learning. Therefore, a new section (see pages 42–43 of the BSF framework) was added to the framework with all relevant details. The approach encourages teachers to actively engage children in exploration of innovative ideas, solving problems and asking questions.

5.4 Factors affecting implementation of ECE programs

The second category identified was ‘factors affecting implementation of ECE programs’. A total of 17 comments (see Table 5.2) in this data collection suggested that addressing the needs of children at a young age can create a strong base for future learning. Harvard University (2007) research discovered that creating conditions for early age development is however a challenging task but is less costly than addressing problems and challenges in adulthood. According to the insights collected in the current study through interviews and focus-group discussions, educating young children is a complex activity as several factors affect their education, learning and development and ECE which does not meet the quality standards of ECE are a waste of time and money. High-quality early experiences occupy a critical role in preparing young children for better use of their skills, knowledge and education at a later age.

Further analysis of the data in this category created three core subthemes: welcoming and enriching spaces, resources management, and education programs for catering for the needs of all learners. These are presented in the following sections.

5.4.1 Safe, welcoming and enriching environment

The first identified subcategory was ‘safe, welcoming and enriching environment’. In order to help children to learn and develop, learning spaces should be welcoming and friendly to

enhance learning and to keep children happy and having fun (T2.2, P5). Findings of this study indicated that the availability of enriching physical environments in schools and classrooms is a key element for effective implementation of ECE programs. Morgan (2011) reported that the type of learning opportunities and environment we provide for our children can have a positive or negative influence on their education and development. According to the teachers interviewed in Australia for the refinement of the BSF framework, easy access to purposefully built and well-equipped classrooms and outdoor spaces can improve children's cognitive, physical and social qualities to a greater extent. T5.2 explained:

> The environment is important as student achievement can be affected either positively or negatively by the school environment. Teachers must make sure that the environment is safe, secure, welcoming, and full of learning resources. So, we give high importance to environment (T5.2, page 6, transcript 1).

Data analysis further revealed that setting up an enabling environment that facilitates learning achievements is vital for the implementation of effective ECE programs. According to educators who attended focus group discussions in this data collection, an environment which provides plenty of opportunities for play and exploration can contribute to the development of children's confidence. One of the participants, who was a principal, asserted:

> We have [a] safe and secure environment where the children feel comfortable, welcoming, happy and probably able to take risks. Our classrooms are big enough to accommodate children where they can easily move and play. [A] safe and attractive environment persuades children's active engagement in learning and developmental activities (T5.1, page 2, transcript 1).

Results of this study revealed that in ECE a lot of sub-spaces are created inside classrooms to facilitate learning and encourage children to carry out several real-life role-plays in those little spaces. T5.2 mentioned:

> They [students] might have a home corner space where children can dress up and pretend, they are cooking and make dinners. That [sometimes] changes into [another] role play area like hospital or dental store or shop and then they have in the classroom a writing area where children can draw and write something and then they have various areas where children go and play and learn (T5.2, page 5, transcript 1).

Therefore, the wise use of learning corners can contribute to children's education and development. According to the participants of this study, the way the classroom environment is set up can have positive as well as negative impacts on children's education and development. Young children are very hands-on; therefore, they need an engaging classroom environment for exploration and interaction for learning. The findings of the current study are also consistent with those discussed in Chapter 4 in that the creation of the right conditions for ECE is essential for children to learn and children learn best when they have easy access to relevant learning materials in a safe and stimulating environment.

5.4.2 Learning materials/resources

The second subcategory identified concerned the importance of learning materials for launching ECE services for the development and education of young children. A total of three comments (see Table 5.2) referring to this subcategory in this data collection suggested that learning materials can significantly increase children's learning achievements if they are used effectively and in a timely fashion. Teachers in some of the schools work together to

collect natural materials and develop good resources in order to cater for the different ways in which children learn and develop. The educators use these learning resources for meaningful engagement of children in their education. T2.2 mentioned: “in ECE we need a lot of learning resources and lots of disposition to learning to being curious, being capable and problem solvers” (T2.2, page 21, transcript 2).

Findings in this data collection indicated that stimulating learning resources persuade children to stay on task for longer periods, provide opportunity to explore knowledge and learn new skills independently.

Regardless of kinds and quality, “learning materials have [a] function in [children’s] education and development. Provision of learning resources attract children’s attention and rise their level of interests in the process of learning” (P3, page 65, transcript 8). According to a number of educators who participated in focus group discussions in Australia, easy access and effective use of learning resources inside and outside classrooms enable teachers to enhance the development of all the faculties of young children (Bose, 2010).

A few interviewees in the present data collection suggested that easy access to sufficient learning resources was crucial for students to work on their new projects and to practise previously learnt skills. Some of the participants in Australia believed that if provision of resources for exploration and experimentation in ECE meet young children’s expectations and needs then that is going to help children’s learning throughout their life. The present findings seem to be consistent with other research which found that when learning resources match with the expectations of children and families then the ECE services can contribute a lot to children’s education and development (Harvard University, 2007).

5.4.3 Education programs for catering for the needs of all learners

The third key subtheme identified was ‘education programs for catering for the needs of all learners’. The insights collected in the interviews and focus group discussions reflected that children have strengths, weaknesses, abilities, and styles of learning different to each other. They learn in different ways and at various speeds. A small number of comments (n = 3) in the current study reported that in ECE classrooms children of varied abilities are taught together considering and addressing each one’s needs, interests, learning styles and expectations.

Researchers have increasingly emphasised the provision of an ECE which has the strength to cater for the needs of all children through mixed-ability learning strategies. This view was shared by some of the participants (n = 3) in this study who believed that not all children are same, and every child has his or her own style of learning. T5.1 was of the opinion that there are several factors that make a classroom mixed ability and teachers must honour those factors. S/he mentioned:

> We have children of quite a few different cultures within our school and they have different abilities. We have children with special needs, slow learners, quick learners, and development delays. They are treated exactly the same as everybody else, but we have plans to help according to their needs. We respect their needs and try to make sure [there is] active engagement of all [children] (T5.1, page 3, transcript 1).

Principals who were interviewed in order to seek their advice for the refinement of the proposed ECE framework for Pakistan reported that children develop in learning in different ways and at a different rate. P3 pointed out that “It's important that we are respectful that

we're inclusive. Early childhood services must be multi-dimensional, of high quality and inclusive, and caters [for the] learning and development needs of all children" (P3, page 69, transcript 8).

Educators who are able to cater for the needs of all learners have the capacity to persuade children to construct their learning through interaction with fellow children and the environment under the guidance of educators. As P2 mentioned:

> So, we have children who might have additional needs in the class and also some children who are quite bright, but we have them together in a group and we do a lot of working. You know they help each other—but the teachers still tailor the program so that the bright children get extended and the ones who might have additional needs get some support as well (P2, pages 46-47, transcript 6).

Several responses of interviewees in this data gathering underscored the need to create early childhood education based on children's interest, developmental needs and rates. Every ECE class has children with abilities different from each other and have diverse strengths and potential areas for improvement.

The findings of this data collection suggested that not all of the children learn in the same way. Children have different styles of learning and our ECE services should have the capacity to cater for the needs of all children and the emphasis of ECE should be how the children learn and not what the teacher knows.

Impact statement

A key theme, ‘learning resources’, was incorporated into the BSF framework (see page 44 of the BSF framework) after analysing data collected in Australia which emphasised the need to provide learning materials to young children for exploration and manipulation. The understandings gained from this data collection suggests that the BSF framework should make it clear that not all the children learn in the same way and that their needs and expectations are different from each other. Therefore, the educators must take care of the needs and expectations of all young children when organising learning programs.

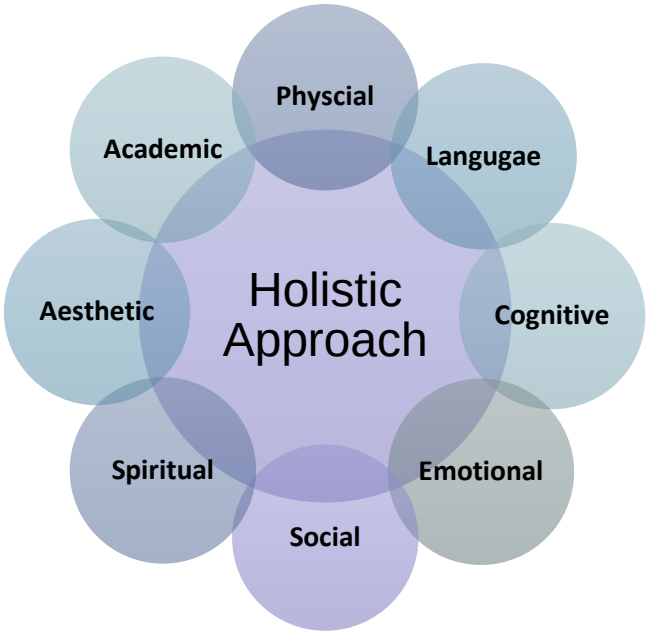
After analysing the current data, some of the existing sections of the BSF framework such as physical environment, developmentally appropriate practices and holistic experience for learning were revised and refined. The upgraded sections provide guidelines for educators in setting up effective learning environments and learning programs which are developmentally appropriate and holistic in nature.

On the basis of key ECE framework documents’ analysis in Chapter 4, the BSF framework integrated strategies for the development and implementation of effective ECE learning programs for young children. The findings of the current data collection in Australia are consistent with those discussed in Chapter 4 that creation of right conditions for ECE is essential for children to learn and children learn best when they have easy access to relevant learning materials in a safe and stimulating environment.

5.5 Holistic approaches to child’s development and education

The fifth identified category was ‘holistic approaches to child’s development and education’. The holistic approach to education and development refers to educating and developing the whole child through effective education and developmental opportunities (Follari, 2015;

Morgan, 2011). Insights gleaned from this data collection showed that a holistic approach to a child's development addresses physical, social-emotional, intellectual, spiritual, cognitive, aesthetic and creative qualities as well as academic skills of children. It creates interconnected opportunities for learning, integrated learning and development and connects the overall development of a child's life. Findings in this data collection suggested that all domains of a child's development and education are interconnected, as shown in Figure 5.2, and improvement or delay in one aspect may in turn affect other dimensions.



Source: Compiled by the author

Figure 5.2: Holisitic approaches to child's development

Participant T1.2 asserted that:

> We work on the development of the whole child here is probably the most succinct way of saying it. We want their social development to be enhanced. We want their mental capacity, their physical capacity. There are five

> domains that we work on … and we work at the whole child (T1.2, page 28, transcript 3).

Data suggested that although spiritual development is part of a holistic approach to a child's development, none of the teachers mentioned spiritual development during interviews and focus group discussions when they were speaking about the child's holistic development. Goldburg (2008) suggests that Australia is a secular country therefore religion is not being taught in public schools across the country. However, a private school in this data collection teaches religion to the majority of children at the school.

All participants interviewed in Australia reported that in Australia social workers, health nurses, speech pathologists, psychologists, educators, parents and educational officers all work together for fostering children's health, well-being, education, nutrition and socio-emotional aspects of their life. Findings suggested that ECE teachers should focus on a wide range of dimensions for education and development of young children. Currently, ECE centres organise a range of successful programs including music, fine arts, movement, songs, excursions and stories for the education of young people.

Participant T5.1 mentioned:

> [We create a] whole range of opportunities [for children's development] in addition to academic skills. When they [children] go out they climb, they ride, they are able to run, they are able to play and just sit down read and write—so there are opportunities for the children at all levels if they just want to sit and attend (T5.1, page5, transcript 1).

Participant P1 further elaborated on holistic approaches to child development in these words:

> There's a lot that goes on as far as catering for the whole child is concerned … we have sensory experiences ... There's a music program, we have times where all the children go and access the community centre here which has gym equipment (P1, transcript 4, page 35).

Several participants identified that the Early Years Learning Framework (EYLF) of Australia has been created based on holistic approaches to the child's development. The EYLF framework encourages educators to organise programs for young children around communication, physical, personal, social and emotional development and the development of language and numeracy skills, understanding of the world and expressing through art and design. They suggested that an important feature of the BSF framework should be a child's holistic development and development of their academic skills.

Impact statement

The present findings seem to be consistent with the results of the review of the ECE framework document presented in the previous chapter in that a holistic approach to child development seeks to address concurrently all dimensions of a child's life which include physical, social, intellectual, spiritual, aesthetic and cultural domains of development. Data collection in Australia reinforced this view when several participants in this data collection reported that all domains of a child's development are interrelated and that an obstacle in one domain may in turn influence other domains. According to the interviewees of this data collection, the proposed ECE framework must provide guidance to ECE teachers in Pakistan about holistic approaches to the child's development. The BSF framework has been created for the development of the entire child, incorporating details related to physical, social, cognitive, and aesthetic dimensions of development. It encourages teachers to make the foundation strong in all areas of development by using developmentally appropriate,

culturally responsive and geographically relevant and ideologically sensitive practices. The information gathered and insights gained through this investigation in Australia showed that in addition to providing guidance about domains of development, the BSF framework must also pay a great deal of attention to numeracy, literacy and some other important concepts.

5.6 Space and arrangement

The sixth identified category was ‘space and arrangement’. Subthemes identified from the analysis of Australian data under this theme are: groupwork, use of learning corners, and outdoor experiences. The following sections present these three key subthemes.

5.6.1 Groupwork

Participants in the focus group discussions reported that ECE educators begin their daily lessons with whole-group time (large circle time) where they present and discuss an overview of the day to the children (T2.4, page 12, transcript 2). For most of the day children work in small groups in learning blocks exploring ideas, playing games, constructing new knowledge, skills and dispositions and practising previously learnt skills and ideas. According to the participants in this study, whole-group times are devoted to giving whole-class instructions and sharing what the children have learnt in small groups. The whole-group time provides opportunities for children to showcase their abilities in front of the whole class (T2.5, page 13, transcript 2).

A few respondents (n = 3) in this data collection stated that while working in groups children can develop their collaborative, social and co-operative skills as when in a group children have more opportunities for interaction to construct each other’s learning. In addition, groupworks are designed to foster children’s academic skills (subject areas) alongside development of their motor skills through their meaningful engagement.

Data collection in Australia suggested that all sorts of groupworks are organised based around play-based activities. ECE educators value play because children learn best through play. T1.2 mentioned:

> They don't have formal books in prep and in playgroups however they do have more structured programs in classes above Kindergarten. So, it is less play-based as you move up through the classes however, it is more play-based in pre-primary classes (T1.2, page 24, transcript 3).

Results of this data collection showed that throughout the day across ECE classes (Playgroup to Grade 2) children are engaged in several small-group activities followed by whole-class sharing, discussions and presentations of learning. Therefore, the small- and whole-group work happens several times during the day (T2.4, page 12, transcript). These small- and whole-group activities occur throughout the day for teaching significant concepts and core academic skills. Children eat as a group. Morning tea and lunch time are also organised in whole and small groups which provide a good opportunity for socialisation and interaction (T5.1, page 1, transcript 1).

5.6.2 Working in learning corners

Several participants interviewed in this data collection reported that ECE classrooms are divided into several block areas in order to provide children with chances to learn through play, either on their own or in groups, something new as well as practical life skills (T1.3, page 23, transcript 3), whereas according to T2.1 "it is more structured, and the focus is mostly on content knowledge when you move up to … lower primary classes. Still … play corners are set up. Children still do lots of hands-on tasks" (T2.1, page 11, transcript 2). In

ECE classes learning areas are also being used for the development of children's early forms of writing, reading and numeracy skills. T5.2 mentioned:

> I had a group of children who [were] very interested in making books in the language corner and they were always drawing and writing and asked me to write a story for them. So, we took that further by talking to children on how we make books (T5.2, page 4, transcript 1).

A similar idea related to the use of learning corners was expressed by T5.1 when she said: "Then I have in my classroom a writing area where they can draw and write something and then we have various areas where children go and play and learn" (T5.1, page 5, transcript 1).

The present data indicated that these little spaces in the classrooms have major roles in the learning of new knowledge and skills, and also to practise previously learnt skills and ideas. T5.1 mentioned that allocating spaces for various purposes inside classrooms provides opportunities for the children to learn about specific subject areas by playing and engaging with interesting and interactive activities. She explained:

> We have lots of little spaces in our classrooms. We might have a home corner space where they [the children] can dress up and pretend they are cooking and make dinners. That sometime changes into other role play area like a hospital or dentist, or a shop (T5.1, page 5, transcript 1).

Results of this study showed that splitting ECE classrooms into several sub-learning spaces allows children to engage in developmentally appropriate activities. In a lively classroom, learning areas keep changing all the time, depending on set goals. The most common learning areas reported by the participants in this data collection are home, public places, farm, technology, art and craft, construction, language and music and movement corners.

5.6.3 Outdoor experiences

Findings in this data collection suggested that provision of outdoor experiences is an integral part of ECE daily routines in schools selected for this study in Australia. Outdoor facilities provide opportunities for children to learn through different forms of play. Almost two-thirds of the participants (65%) in this study said that outdoor spaces are safe, secure and welcoming, and are furnished with essential play and exercise equipment. When the participants were asked about type of outdoor activities, the majority commented that outdoor activities include but are not limited to sand play, water play, climbing, running, dramatic play and ball activities. T2.3 explained:

> We have an extended time outside, once again play-based activities in the environment. Outdoor activities focus on gross motor skills and lots of cognitive development too. So, we do lots of throwing, catching, balancing, hopping so the children can build up their core muscles and their big muscles in their bodies (T2.3, page11, transcript 2).

A few respondents (n = 2) in the current data mentioned that outside play areas are established for the socialisation of children. Outdoor spaces are typically equipped with blocks, tents and exercise equipment for fostering children's physical and mental health and social skills. T1.2 stated:

> The relevance of outside activities is to making children strong physically, emotionally and mentally so that they can concentrate and stay on task for a longer period of time, by the time they get older (T1.2, page, transcript 4).

The current data suggested that outdoor experience has positive impact on the child's entire development and also on the growth of the child's brain. P1 stated that "research has

demonstrated that outdoors play helps children with the development of various skills. It fosters children's decision making, communication, cooperation and imagination skills" (P1, page 35, transcript 4).

Impact statement

On the basis of insights gained from the literature review in Chapter 2 and the review of core ECE framework documents in Chapter 4, the BSF framework incorporated and included key guidelines about the importance of ECE space and arrangements in the proposed ECE framework for Pakistan (see pages 19, 43, 44 of the BSF framework). The framework places special emphasis on the balance of indoor and outdoor experiences and organisation of group instructions to deliver effective lessons. The insights acquired from this data collection suggested that ECE teachers should be more flexible in organising spaces and selecting teaching strategies. They should believe that if one strategy does not work another may work.

This data collection indicated that it was important to revise and refine the physical environment section on page 44 of the BSF framework and include specific details related to ECE learning corners as initially details related to learning corners were not included in the proposed ECE framework. Findings in this data collection suggested that ECE classrooms in Australia were divided into several block areas for providing children chances for deep exploration and close interaction. These little spaces play a pertinent role in the creation of students' new knowledge through engaging with interesting learning resources.

5.7 Developmentally appropriate practices (DAP)

The DAP approach of education was created by the National Association for the Education of Young Children (NAEYC) in order to move childhood educators away from didactic approaches to teaching and towards child-centred learning (Copple & Bredekamp, 2009).

Therefore, this approach contrasts with traditional approaches to teaching and learning. The present data collection showed that in the DAP approach educators adopt child-centred activities suitable to the children's age, need, level, background and interests. In this educational approach, children are able to construct their own knowledge as the approach views children as a source of inspiration.

Participant T2.4 explained:

> We are very fortunate here as we offer various developmentally appropriate activities for our children's development from music to [a] range of other hands-on activities. We cater for the whole child. We offer physical education, dance, computer sessions like ICT—library lessons, so we cater [for] different learning styles (T2.4, page 15, transcript 2).

The results of this data indicated that there are many different things that have to be taken into consideration when adopting DAPs. Most importantly, the educators should know children's existing strengths, their areas for improvement, their interests, expectations, current level of development in all domains and developmental delays if any. T1.2 described:

> Play-based education is [a] developmentally appropriate practice and it's for everybody. I have multi-age play groups and the four-year olds can play next to the five. It doesn't matter whether that five-year-old one [is] working at a four-year-old level. They build [the] language of each other (T1.2, page 26, transcript 3).

Results further showed that it was also significant to consider children's age so that activities can be designed appropriate to that age group. Educators must also understand the concepts that are too difficult for the children to learn and concepts that are too easy to practise.

Impact statement

The review of six ECE framework documents in Chapter 4 indicated that it was important to write and include a new section on DAPs (see page 16 of the BSF framework and pages 45 & 149 of this thesis) in the BSF framework. The inclusion of this new section was undertaken in order to encourage educators to organise and deliver practices which are appropriate for the child's entire development. The results of the current data collection seem to be consistent with previous studies by the Department of Education and Training (2016) and Bhamani and Bhamani (2014), as discussed in Chapter 3, where it was found that the DAP approach encourages teachers to organise activities for young children according to their ability, previous knowledge, interests and expectations and follow age-appropriate developmental milestones to educate and develop children.

The insights collected in the interviews and focus groups in the current study reinforced that the BSF framework must encourage educators to deliver developmentally appropriate education programs for young children. Several participants in this study suggested that the proposed framework should place special attention on developmentally appropriate practices because the DAP approach goes beyond the traditional focus of education to a child-centred learning approach. The approach favours an education system which appreciates that children play a central role in the construction of their own knowledge and skills required for the 21st century.

5.8 Culturally responsive ECE

Another key category identified was 'culturally responsive ECE'. The present study was designed for the creation of an ECE framework for Pakistan using design-based research. Participants interviewed in the second iteration of the DBR reported that Australian ECE

educators are committed to delivering culturally responsive education for the meaningful engagement of all children in learning and development activities. The results of this study showed that multicultural education provides opportunities for children to interact with multiple cultures in their classrooms and to learn from each other's experiences and backgrounds. Talking about the significance of culturally sensitive ECE, participant P3 explained that "research has shown that maximum learning occurs when ECE services and provisions are culturally sensitive for the needs of children who attend those programs" (P3, page 62, transcript 8).

A total of seven comments (see Table 5.2) in this data collection suggested that cultural sensitivity of a classroom, instructional strategies and organisation of a lesson can influence children's ability to learn and their potential for optimal development. One research participant, who had spent a long time in a school of a high-trauma community, mentioned that children can quickly learn that the world is not a safe place to live if the education of children and interactions among children and teachers are based on mistrust. When she moved to her current multicultural school last year, she experienced a different situation. She explained:

> I think the multicultural education brings richness to everyday learning. It enhances what we are already doing. It makes us holistic, worldly thinking, more globally. So, they [children] understand about other cultures … and we need to know about them, about their cultures (T5.1, page 8, transcript 1).

A total of 13 comments (see Table 5.2) in this data collection suggested that ECE programs that are organised in order to keep in mind children's diversity, inclusiveness and their backgrounds are more successful in raising children's interest and enhancing their learning achievements. Participant P5 mentioned:

> We automatically have a very inclusive and respectful community. So, we are respectful of all cultures, of all nationalities and all our families quite naturally therefore all children take good interest in activities (P5, page 40, transcript 5).

Further analysis of the data on cultural responsiveness produced two core subcategories, namely ‘respect for diversity’ and ‘equity’. Respect for diversity was also one of the main themes in Chapter 4 that had been identified from the review of international ECE framework documents.

5.8.1 Respect for diversity

The current data collection further supports the idea that an ECE framework must encourage educators to be mindful and respectful of cultural, religious, ethnic and socio-economic diversity among children. As participant T5.1 said:

> … we have children of quite a few different cultures within our school … they are treated exactly the same as everybody else … but if they have got some special cultural needs or tradition, we honour those and respect those (T5.1, page 3, transcript 1).

Understanding acquired from the discussions with Australian interviewees and focus group participants further reinforced the idea of respect for diversity when a total of seven comments (see Table 5.2) revealed that educators in Australia value differences among students and are committed to making sure that respect for diversity is in their schools. Participant P2 reported that “cultural diversity, different ideologies and believing in each other’s abilities bring a richness to the school, to children and to the community … so yes a lot of things are different”. This data collection showed that ECE educators understand that

young children have different learning styles, abilities, opinions, age, race, class, immigration status and gender and they value their diversities and try to engage all children.

5.8.2 Equity

Equity means provision of opportunities are available for all children without any discrimination according to their needs to learn, develop, and to reach their full potential (United Nations International Children's Emergency Fund [UNICEF], 2010). A total of four comments (see Table 5.2) in this data collection that referred to this subcategory reported that young children learn best if the provisions of education are fair and impartial and the quality of teaching and learning opportunities are easily available and accessible to all children according to their needs. Nearly half of the respondents (48%) were of the opinion that gender, ethnic, religious and social circumstances should not be obstacles to achieving educational and developmental potential and milestones and that children should be supported according to their needs and situation. One of the participating principals stated:

> We have been trying [to] treat every family … with fairness and social justice. So, whether it's one of our local community family, we have a lot of very poor families. It is quite a low socio-economic area. So, we have Indigenous people, the local Aboriginal people and we have children from around the world. So, everyone at this school value[s] uniqueness of everybody (P2, pages 48–49, transcript 6).

Another respondent in this study added a further dimension to equity by highlighting the idea of removing barriers from the path of children's education and development regardless of their affiliations. She mentioned:

> I really understand what equity means and that in order for things to be equitable it doesn't mean that every person is treated exactly the same all the time because in order for equity sometimes we have to support people differently at different times per their needs. We also need to make the process of learning and development very smooth to every child (P4, page 56, transcript 7).

ECE teachers interviewed in Australia reported that all children have capacities and strengths to learn best and to reach to their full potential, therefore the educators in Australia promote inclusion and engagement of all children. P4 opined that “it's actually that idea of equity and responding to the needs of all children no matter wherever they have come from and whatever backgrounds they have. So that this concept of belonging to the wider group applies to everybody” (P4, page 55, transcript 7).

Impact statement

The information gathered and insights acquired in this iteration showed that the BSF framework must encourage and provide guidance for ECE teachers to plan and deliver ECE programs that are sensitive to children’s interests, respectful to their cultural and linguistic needs, responsive to their learning needs and relevant to their contextual realities. The framework must also encourage engagement and inclusion of all children without any discrimination.

The current data collection for the refinement of the proposed ECE framework thoroughly reinforced the idea discussed in the BSF framework that ECE services must be respectful and mindful for cultural diversity and inclusiveness among children and places. The framework has a strong focus on developing a positive attitude among children for cultures, languages,

religions, regions and gender of other children. The review of the ECE framework in Chapter 4 also reported that the ECE framework must meet the needs of children from different cultures, religions, genders, abilities, cast, colour and orientations by integrating activities, images and content from the history and heritage of different cultures.

5.9 Educators' philosophies of teaching and learning

Philosophy can be defined as the values, perceptions, views and knowledge systems human beings possess and live with (Nihat, Hasan, Sıtkı, & Specialist, 2016). Participants interviewed in Australia in order to seek their advice for the refinement of the proposed ECE framework for Pakistan stated that every teacher has her or his own world view and belief system of a child's education and development and have solid reasons for holding a certain philosophy. Their philosophies influence their thinking and way of teaching. Perceptions and ways of thinking and philosophies may transform through ongoing professional and personal development.

Current data gathered from the respondents in Australia suggested that teachers' educational philosophies create certain images of and perceptions about children which influence children's education and development. As T5.1 mentioned:

> Young children are unique individuals, and they all learn at their developmental rate. They require respect. They are curious and capable learners, and we develop their interests and foster their creativity" (T5.1, page 2, transcript 1)

Participant T2.1's world view related to children's education and development was a little different to that of participant T5.1. She wanted to keep children happy, secure and engaged

and to provide inviting, warm and welcoming classrooms for children to learn something new every day through fun education (T2.1, page 13, transcript 2).

The analysis of data under ‘educators’ philosophies’ produced two key subthemes (see Table 5.1), namely ‘engaged, capable and competent learners’ and ‘love for the people around them’. These two key subthemes are presented in the following sections.

5.9.1 Children are engaged, capable and competent learners

The first subcategory identified was ‘children are engaged, capable and competent learners’. The current data collection suggested that children have the capacity to construct their own knowledge, they are a source of inspiration and they possess previous knowledge which they bring to schools to build upon it. Children learn best when they are actively involved in the construction of their own knowledge. A total of seven comments (see Table 5.2) in this data collection suggested that children are effective communicators, confident and engaged learners and they can connect and contribute to their world with limited guidance from educators. Explaining her/his philosophy of teaching and learning, P2 mentioned that children being connected to their world can contribute to their education and development if provided effective ECE opportunities and educators should appreciate children’s strengths and capabilities (P2, pages 46–54, transcript 6). T1.2 explained her philosophy by saying:

> We believe that children are capable learners from birth. So, they are capable of expressing their wants and their needs and [are] very capable [of] exploring new environments, I guess from birth. They have the capability to generate knowledge and they have belief in themselves” (T1.2, page 24, transcript 3).

According to some of the respondents (n = 4 educators and 3 principals) in this data collection, children are hands-on learners, and they know what they can do. They are curious learners and love to explore the world around them. This exploration fosters their learning as their ability to learn is amazing (T2.2, T2.5, T5.2, P1 and P2). T1.3 stated that every "child is intelligent, that the child is strong and full of ideas and has very ambitious desires. They are knowledgeable, rich in potentials and curious learners" (T1.3, page 24, transcript 3).

5.9.2 Creation of love for people around them

The findings of the present data showed that services and programs for young children's education and development should be designed in such a way which could create in children a love for the people around them. A family-based education can play a vital role in designing education programs for this purpose. Participant T2.2's philosophy of teaching and learning was the creation and sustaining of love in the hearts and minds of children for human beings. She asserted:

> Children should start on a really happy solid base that's what I would say and then learning, and development just continues from there. Our ECE programs should be able to instil in children respect and love for people of the world, love [for] their teachers, their families, they love their friends. You can make it warm and welcoming (T2.2, page 13, transcript 2).

Participant T1.4's philosophy was "developing children's self-identity, their connection to the world and building relationships with those around them and making the environment comfortable for children" (T1.4, page 24, transcript 3). Results of data collection in Australia suggested that in order to create love and respect for human beings in the minds of children, educators should talk with children in respectful ways and demonstrate humbleness

throughout their interactions with everyone in the school. Participants interviewed in this data collection reported that provisions of ECE should provide opportunities for children to reflect manners of living in neighbourhoods such as taking care of neighbours by respecting their privacy, routines of life, belongings and avoiding noise pollution and other kinds of disturbance in the neighbourhood.

Impact statement

The interviews of teachers and principals conducted in Australia for the refinement of the BSF framework revealed that the proposed ECE framework should clearly underscore that young children are capable, active, competent, lifelong learners and are co-constructors of their own knowledge. The current data collection in Australia supports the idea discussed in the BSF framework that creation of love and respect in the hearts and minds of children for people, resources, environment, public places and animals is essential at an early age.

It was suggested during interviews in Australia that the ECE framework should focus on the creation of avenues for active engagement of young children in construction of their own knowledge. After this analysis, details related to capable, competent and engaged children were refined and updated (see pages 18, 24, 30 of the BSF framework).

The BSF framework encourages teachers to create love and respect in the minds of children for neighbours, friends, relatives, teachers and for everyone they interact with in their daily life.

5.10 Advantages of an effective early childhood education program

One of the key identified categories in the current data collection was ‘benefits of an effective ECE program’. According to participant P1, “the first few years of a child life are crucial …

children born ready to learn and grow ... I believe that effective support to children in childhood brings long-term benefit to everyone including children, families and the whole country" (P1, page 35, transcript 4).

One of the respondents in the present study who had been teaching in ECE for almost 27 years suggested that the active engagement of young children in the provision of high-quality ECE services contributes to laying a sound foundation for long-term education and quality adult life (T5.1, page, transcript 1).

Participant P2 mentioned that there is compelling evidence suggesting that the quality of childhood experiences have enduring impacts on children's education and development and that early childhood is a really important time of development. She said:

> I can see how really important ECE is for building a strong foundation for all future learning. So, you really need to get that basis right in order for the learning to occur throughout the rest of your life. If you miss things in early childhood, in the future there can be problems that can arise if children don't develop certain concepts early (P2, page 46, transcript 6).

Some of the participants (n = 3) who attended focus groups in this study suggested that effective early childhood education services foster disposition for learning, construct sound foundations of well-being and trust-building among young people. ECE should ensure to improve every dimension of a child's life and should provide opportunities for children to reach their fullest potential. One of the research participants was of the opinion:

> So, the foundation has to be strong first in all areas of development be it a physical, social, ethical, cognitive or academic area. As all dimensions of [a]

> child's life are interconnected and are significant. We actually do children a disservice if we try to break it into subject areas (P4, page 59, transcript 7).

When asked for comments, several participants (n = 12) in the present data collection suggested that ECE should provide children with holistic experiences in order to develop and learn rather than only focusing on compartmental subject areas. Subject areas are also important to learn at an early age, however, as all dimensions of child's life are interconnected, so the participants of this study sought to educate and develop the whole child. This notion of a child's holistic development is also supported by New Zealand's ECE framework which states that holistic child development at an early age may help to grow up as "competent and confident learners and communicators, healthy in mind, body, and spirit, secure in their sense of belonging and in the knowledge that they make a valued contribution to society" (Ministry of Education New Zealand, 2017, p. 5, 6, 51).

Analysis of the data under the category of 'advantages of an effective ECE program' produced two key subcategories, namely 'ECE helps to tailor children's sense of individuality', and 'ECE lays sound foundation for ongoing education' in addition to bringing some other key benefits to the children, communities and to the nations. The following sections present these two key subthemes.

5.10.1 ECE helps to tailor children's sense of individuality

The results of this data collection reflected the view that well-organised early education services play a vital role in developing a child's identity and sense of self (Moore & McDonald, 2013; Morgan, 2011) as they are curious to know who they are and to whom they belong. A total of four comments (n = 4) in this data collection (see Table 5.2) reported that children try to establish a sense of belonging with people around them from a very young

age. Participant T1.4 said that from birth children develop personal characteristics and relationships with others. A strong sense of individuality and a sense of belonging contribute to further bonding positive relationships of self with family, community, country and with the world. T1.3 specified “that it [ECE] is about developing their [children] self-identity, their connection to the world and building relationships with those around them and making the environment comfortable for them (T1.4, page 24, transcript 3).

Analysis of the current data indicated that ECE services should provide opportunities for children to talk about their personal qualities, families, cultures, local foods, local games, events, and cultural spaces. Teachers should encourage children to feel good about their own abilities and teachers must value children’s world views. P2 argued:

> Identity formation starts when as a teacher you promote in children a strong feeling and sense self, … when you encourage them to reflect on their similarities and differences in a respectful manner and encourage children to make decisions and choices. Feeling like they [can] contribute to their world (P2, page 53, transcript 6)

Interviews of teachers and principals in this data collection revealed that effective engagement of children in high-quality ECE services builds a strong foundation for future learning which also leads to improving their life chances.

5.10.2 ECE lays a sound foundation for ongoing education

It is apparent that early childhood education can provide a strong foundation for ongoing learning. Participants in this data collection suggested that ECE programs should have the potential to prepare children as lifelong learners and not just exam passers, grade makers and test takers. Children need to develop a high disposition to learning in order to be curious,

capable and good problem solvers. Participant T2.2 advised that ECE services should provide procedures and practices that help children to be 21st century learners as a 21st century learner never stops learning. A strong foundation in the early years, acquired through the process of positive early experiences, creates roots for lifelong leaning (T2.2, pages 20–21, transcript 2).

Participants who attended focus-group discussions in this data collection reported that the first few years of a child's life are important and acknowledged the long-lasting impact of these years on the child's future learning and development. Skills, disposition and knowledge acquired at an early age lay the basis for children's later-life learning and education. P5 explained that "if we can have concentrated interventions as early as possible with as many resources as possible, then that's going to help their learning in later life" (P5, pages 41–42, transcript 5). Participant P2, who had been a principal for almost nine years in one of the eminent public schools, emphasised:

> I can see how really important ECE is for building a strong foundation for all future learning. So, you really need to get that basis right in order for the learning to occur throughout the rest of your life. If you miss things in early childhood, in the future there can be problems that can arise if children don't develop certain concepts early (P2, page 46, transcript 6).

The analysis of the Australian interviews and focus group data suggested that participants in this study tended to agree that provision of ECE services that do not fulfil quality standards do not meet the requirements of the time, or if the children do not have high-quality ECE services, this increases the probabilities of difficulties in later life.

Impact statement

The insights gained from the data collection in Australia for the refinement of V2 of the proposed ECE framework suggested that first few years of a child's life are extremely important because that is when children are thoroughly ready for learning. Optimum guidance, effective support, improved care and high-quality education during this stage bring numerous long-term benefits to children. Several participants in the current data collection noted that skills and knowledge acquired during this age are durable. The importance and benefits of ECE for children, families, communities and nations are included in the proposed ECE framework with all relevant details. This data collection reinforced what had already been included in the framework document by providing additional evidence related to the benefits of early age education and development.

5.11 Life skills (skill-based) education

The present study results suggested that ECE services which integrate the provision of high-quality life skills education programs play a significant role in preparing children for future practical life. A few respondents (n = 5) in this study tended to agree that education should be based on skills, not solely based on knowledge, because skills are essential for survival. According to participant T2.3, life skills education prepares children for the challenges of everyday life. She mentioned that:

> The best things to start with [are the] child's interests and strengths—just to take them from where they are and prepare them for real-life challenges and to encourage them to acquire skills which they can use in their daily life. I mean life skills education is important for every child (T2.3, page 16, transcript 2).

Participant T5.2 suggested that “your framework should encourage educators … incorporate skills such as problem solving, decision making, creativeness … stress management … all those things are significant. Learning should be fun” (P5.2, page 10, transcript 1).

The World Health Organization (WHO) has also identified core life skills for child development consistent with the point of view highlighted by T5.2 above which include health education, psycho-social life skills, creative thinking, anger management, problem solving, decision making, self-awareness and coping with stress. However, there are many other key life skills which are also important for children to learn in order to live a successful and happy life. The data revealed that the participants in this study ensure that they provide the appropriate learning experiences for students with specific areas of need.

Participant P5 claimed that “we ensure that children are able to learn some solid life skills which they can use for dealing effectively with demands and challenges of everyday life … we do explicit teaching to foster children’s life skills” (P5, page 42, transcript 5).

Participants in this study tended to agree that educators should include interesting and relevant activities in their classroom daily routines for the development of children’s life skills.

Impact statement

The analysis of Australian data suggested that ECE should prepare children to deal effectively with the demands and complications of daily life. The textbooks and other study materials must encourage children to learn skills essential for solving problems and overcoming challenges they face in their day-to-day life. The Australian data indicated that it was important to include a new section in the framework with the name of ‘life skill education’. This new section (see page 20–21 the BSF framework) provides guidelines for

teachers when organising life skills education programs for young children according to their needs and demands. The entire proposed framework document for Pakistan encourages teachers to teach children skills that will enable them to deal effectively with the demands and challenges of everyday life.

5.12 Change table

Through these interactions in Australia the intention was to better understand current effective practices of ECE for the refinement of the BSF framework document. The table below presents a summary of modifications carried out in version two (V2) of the proposed ECE framework for Pakistan after analysing data collected in Australia using design-based research through interviews and focus group discussions. This investigation provided a good opportunity for me to critically review V2 of the framework and refine it based on the suggestions and comments put forward by the participants in this data collection.

Table 5.3: Change table

Themes	Brief summary of impacts on V2 of the framework
Child-centred education	Participants' suggestions indicated that an ECE framework must go beyond a traditional focus of education to one that is more child-centred because in child-centered education children play leading and active roles in their learning and education. There is a dire need in Pakistan to shift approaches from rote learning and teacher-directed to play-based pedagogy and child-centered education. The analysis of Australian data made it possible to enrich, refine and upgrade existing contents of the framework in addition to providing a strong base for the inclusion of a new section on inquiry-based education in the framework. In an inquiry-based approach, children explore innovative ideas, solve problems, contribute much to the discussions and ask many questions.

Themes	Brief summary of impacts on V2 of the framework
Factors affecting implementation of ECE programs	Information gathered in the current data collection revealed that various elements contribute in the implementation of high-quality ECE services. Provision of safe, attractive and relevant learning resources is one of these and effective use of resources plays a leading role in children's learning and development. Therefore, a new section named 'ECE learning resources' was added to the BSF framework document (see page 44). This data collection further indicated that it was important that the ECE framework should provide guidance for educators in catering for the needs of all children because not all children learn in the same way. Therefore, the contents of the framework related to this category were revised and refined during the second iteration of this data collection.
Holistic approaches to education and development	Several participants in this data collection reported that all domains of a child's development are interlinked and that delay and progress in one domain may also influence other domains. Therefore. the BSF framework must encourage educators to make the foundation strong in all areas of education and development. The current investigation in Australia suggested that the BSF framework should pay special attention to the domains of development and important concepts. Therefore. the contents related to this category across the framework document were revised and refined.
Space and arrangement	The current data showed that ECE educators should be more flexible in organising spaces and selecting teaching strategies. Educators should believe that if one strategy does not work, another can. Respondents suggested that the BSF framework should encourage educators to offer a balance of indoor and outdoor experiences for students. They also advised that framework details related to 'ECE learning corners' should be included because ECE classrooms in Australia were divided into several block areas for providing children with opportunities for deep explorations and close interactions. These little spaces play a pertinent role in the creation of students' new knowledge.
Developmentally appropriate practices	The insights collected during the interviews and focus groups in the current data collection reinforced that the BSF framework must encourage educators to deliver developmentally appropriate education programs for young children. Several participants in this study suggested that the proposed framework should place special emphasis on developmentally appropriate practices because the DAP approach goes beyond the traditional focus of

Themes	Brief summary of impacts on V2 of the framework
	education towards knowledge construction and fostering conceptual understanding.
Culturally responsive ECE	The current data suggested that the BSF framework must encourage ECE teachers to plan and deliver ECE programs which are sensitive to children's interests, responsive to their cultural and linguistic needs, respectful of their traditions, relevant to their learning needs, and relevant to their contextual realities. This data collection reinforced the idea discussed in the previous chapter that the ECE framework must meet the needs of children from several cultures, religions, genders, abilities, cast, colour and orientations.
Educators' philosophies of teaching and learning	The information collected in this data collection showed that the ECE framework should make it clear to ECE teachers that young children are capable, active, competent, and lifelong learners. Participants in the current data collection supported the idea discussed in the BSF framework that children are co-constructors of their own knowledge and are proficient learners. In addition, contents related to the 'creation of love and respect in the minds of children for neighbours, friends, relatives, teachers and for everyone they interact with in their daily life' was revised and refined after analysing the Australian data in this chapter.
Benefits of an effective ECE program	Findings suggested that the first few years of a child's life are extremely important because children are thoroughly ready for learning during this period. Several participants in this study pointed out that skills and knowledge acquired during this age are for the child's whole life. From a very young age, children try to establish a sense of belonging with people around them. The importance and benefits of ECE for children, families, communities and nations are included in the proposed ECE framework for Pakistan along with all their relevant details. This data collection reinforced what had already been discussed in the framework document by providing additional evidence related to early age education and development.
Life skills education	The data collection suggested that ECE should prepare children to deal effectively with the demands, opportunities and complexities of daily life. The Australian data indicated that it was important to include a new section in the framework with the name of 'life skills education'. This new section provides

Themes	Brief summary of impacts on V2 of the framework
	guidelines for teachers when organising life skills education programs for young children according to their needs and demands.

5.13 Summary

In the second iteration of the current design-based investigation, data were collected in Australia involving ECE educators in focus group discussions and school principals through one-on-one interviews. The aim of data gathering in Australia was to refine the second version of the BSF framework and create a revised framework document based on the suggestions of ECE professionals working in high-quality ECE programs in Australia as well as on current research.

Based on the current analysis, a summary of which has been provided in the change table above, a number of significant sections were added to V2 of the framework document in addition to improving the existing contents of the document. The current investigation in Australia led me to speak to Australian ECE professionals who have been implementing the Early Years Learning Framework of Australia in their early childhood centres. Using design-based research, this interaction was helpful in listening to my research participants' ideas, interpretations and perceptions and build a better understanding of framework development and improvement.

The Australian data were used to inform development of a culturally responsive ECE framework for Pakistan that has answered Sub-question 1 and 3 of this study. Sub-question 1 investigated how Australian participants' design and implement developmentally and culturally responsive ECE pedagogies for the holistic development of young children whereas Sub-question 3 examined the ways in which exploration of developmentally

appropriate ECE practice in Australia inform development of the proposed ECE framework for Pakistan. Version 3 of the BSF framework evolved from the analysis of data gathered in Australia and was then further revised and finalised after the next level of discussion, consultation and deliberation with ECE teachers and school principals in Pakistan. The next chapter presents findings from the data collected in Pakistan in order to finalise the proposed ECE framework for Pakistan.

Chapter 6

Findings from the Data Collection in Pakistan: Third Iteration (refinement and creation phase)

The current Chapter draws on the perspectives of Pakistani ECE teachers, principals and educators as well as the framework reviewers' comments in order to identify culturally responsive, contextually applicable and ideologically sensitive practices in the context of Pakistan. The ultimate aim of data collection in Pakistan in the third iteration of this research was to review and refine Version 3 (V3) of the proposed ECE framework for Pakistan. Following this iteration, a final draft of the proposed ECE framework document was created. The interactions in Pakistan with ECE teachers provided a good opportunity for me to better understand the participants' perceptions and beliefs about existing practices of ECE in Pakistan. Data collected through interviews, reviewers' comments and focus group discussions in Pakistan were translated into written English and eight themes were identified through a manual coding system. NVivo 12's textual analysis tool was employed in order to organise themes that had been manually identified from the data. The NVivo analysis led to the identification of a number of direct quotations and a representative selection of texts and overarching references from the data (Lichtman, 2010).

6.1 Demographics

Table 6.1 below summarises how this study was comprised of both male and female participants. The results revealed that all principals who participated in this study were male and all teachers were female. All participants mentioned that they had undertaken mandatory training courses required for teaching in early childhood education. These mandatory courses

included a certificate or diploma in ECE and at least a bachelor's degree. Details are as shown in the table.

Table 6.1: Demographics of participants

Demographics	Principals	Educators	Reviewers
Gender			
Female	0	16	3
Male	6	0	3
Experience in years working within ECE			
1–10	5	13	6
10–20	0	3	0
Qualification			
PhD	0	0	2
Master's degree	4	10	4
Bachelor's degree	1	6	0
Affiliation with education providers			
Public	0	0	2
Private	5	16	4

6.2 Data analysis

The current chapter presents findings from the data collected in Pakistan. Based on the analysis of Pakistan's data, V3 of BSF framework was further revised and refined in order to create the final draft. Eight diverse themes were discovered from the manual coding of one-on-one interviews, reviewers' comments and focus group discussion and these are as outlined

in Table 6.2. The themes are organised in the following table according to their importance not frequencies.

Table 6.2: Manually identified broad themes

Main themes	# of direct **quotations**
1. A contextually and culturally relevant framework	11
2. Educating parents to support children	10
3. Existing dominant ECE practices for children's engagement in learning in Pakistan	12
4. Discovering children's main talents (learning styles)	5
5. ECE prepares generations to become global citizens	7
6. Pluralistic culture for learning	9
7. Factors which may influence the implementation of this kind of framework in the Pakistani context	6
8. Critical challenges ECE teachers face in Pakistan	5

The overall aim of the entire investigation was the creation of a culturally relevant, contextually responsive, ideologically sensitive and developmentally appropriate ECE framework for Pakistan. In this connection, the current chapter has been specifically devoted to analysing the Pakistani data with the ultimate aim of producing the final draft of the proposed ECE framework for Pakistan. Under each theme, the Chapter 6 analyses findings and briefly discusses how this analysis has impacted the refinement and finalisation of the proposed ECE framework.

6.2.1 A contextually and culturally relevant framework

The first identified theme was 'a contextually and culturally relevant framework'. Data collection in Pakistan reinforced the idea that ECE should be culturally responsive,

developmentally appropriate and ideologically sensitive to context and children's needs. After reviewing V3 of the proposed ECE framework for Pakistan, all reviewers (n = 6) tended to agree that the BSF framework has been created considering cultural, geographical and emerging needs of Pakistan and its young generation. One of the reviewers who reviewed the framework through a SWOT analysis session mentioned:

> Maximum efforts have been made to make the framework [the BSF] contextualised for [the] Pakistani context … contents included in this framework are developmentally appropriate, culturally sensitive and contextually relevant for the development of young children (R1, page 15, transcript 15).

Nguyen et al. (2006) suggested that the application of foreign philosophical thinking into other contexts of the world without considering the host country's dynamics may create new challenges for teachers and parents. A total of six comments (see Table 6.2) referring to this category in this data collection reported that the proposed framework is culturally shaped and has been written with a family-centred approach to children's education and development. Participant R3, who was a senior head of regional ECE programs, reported:

> Making families and society a part of the children's development is one of the good essences of this document … and very futuristic … Families become nuclear in [the] future which is a threat to the shared values in the extended families. This document has addressed the issue proactively (R3, page 20, transcript 16).

According to the focus group respondents, young children love to play despite not knowing its advantages. The proposed ECE framework for Pakistan has been created based on the

contemporary view that play is vital for children's learning, education, development, health, well-being and growth. Participant R2 stated:

> The framework [BSF framework] provides opportunities for learning through play. Children take good interest in activities which involve children in various forms of play. The proposed framework encourages students to take part in independent learning through meaningful activities and it provides guidance to ECE teachers to organise education programs in [an] interesting and creative way (R2, page 14, transcript 14).

Another reviewer stated that:

> The framework gives opportunities for explorations … [it] encourages teachers to provide plenty of opportunities to students for exploration. A classroom should have enough attractive, safe and good-quality learning resources to play with (R4, page 21, transcript 17).

Respondents in Pakistan reported that young children are at the highest level of readiness to learn, develop and grow holistically. The results of this study revealed that the proposed ECE framework promotes children's cognitive, social, emotional, spiritual and physical domains of development by providing opportunities for constructive play and socialisation rather than concentrating only on basic language and numeracy abilities.

> The framework provides contextually relevant guidelines for the holistic development of young children. Usually, children in our context are educated focusing only academic skills such as basic numeracy and literacy whereas this framework provides opportunities for [the] entire child development

> rather than focusing on only a few academic areas (R3, page 19, transcript 16).

Data suggested that the proposed ECE framework for Pakistan has clearly accentuated the need to bring up peaceful, responsible, honest, well-informed and law-obeying citizens of the world. Reviewers' comments confirmed that the proposed framework encourages teachers and parents to promote cultural diversity and inclusiveness among children. Participant R1 pointed out that "pluralism and diversity have been the core value of this document as these are the important areas to be inculcated in future generations to make the world a peaceful planet" (R1, page 15, transcript 15).

Impact statement

The insights gained from this data collection revealed that an ECE framework must place special emphasis on an ECE which is culturally sensitive and developmentally appropriate to the needs of children. The proposed ECE framework for Pakistan provides guidance for teachers when organising ECE programs that are culturally and contextually sensitive to the needs of children. The framework had already incorporated contents related to diversity and inclusiveness across the framework document. Promotion of existing cultures of the country, creation of respect in the minds of children for cultures of other countries and preparing generations for peaceful global life are some of the main objectives of the proposed ECE framework.

6.2.2 Educating parents to support children

The second theme identified was 'educating parents to support children'. A wealth of literature (Hakyemez-Paul, Pihlaja, & Silvennoinen, 2018; Hujala et al., 2009; Ma, Shen, Krenn, Hu, & Yuan, 2016) has highlighted the importance of parents' engagement in

children's education for better learning achievements. Studies (Mendez, 2010) have discovered that parents' awareness about the importance of early age education and their maximum involvement in their children's education and development activities is essential for providing effective support to children. The proposed ECE framework for Pakistan encourages teachers and parents to work together for ensuring that parents are aware of the importance of their meaningful involvement in their children's education.

Participants interviewed in Pakistan in order to seek their advice for the refinement of the proposed ECE framework for Pakistan reported that parenting is a challenging as well as a very important job and in the Pakistani context it is not being given the necessary consideration. The participants mentioned that no formal training is in place in Pakistan to educate parents about effective child-rearing practices and the majority of current parenting practices are completely dependent on the way the parents themselves had been parented (Shallwani, 2015). Respondents in this study reported that a wide number of parents are not aware of the importance of early age education and development. This could be because they are educated to only a low level, have no opportunity to attend parental education programs or are illiterate. One of the research participants stated:

> Neither parents are educated enough to carry out this task [ECE related support], even most parents in our context are illiterate or low literate, nor can they afford the ECE specialised resources which an ECD centre can provide. School must provide [a] platform to parents where they can learn effective strategies to support their children's education and development at home as well as at school (P8, page 2, transcript 10).

According to teachers in Pakistan, parents are key contributors in their children's education and development. Participants stated that if parents are not well-informed about effective

child-rearing, education and development practices, they may not be able to provide a supportive environment for their children. According to the participants, a lack of parental education and dearth of interest in their children's education may have negative impacts on children's learning, growth and future development. The majority of respondents indicated the need to organise regular parenting programs and meetings in order to educate parents and to help them become aware of the importance of early education and a supportive educational environment. A significant number of the participants agreed that children raised in a supportive home environment have more potential to become better human beings and have a meaningful life ahead. Participants reported that parental education is a continuing process as R1 mentioned:

> Parental involvement is a process which becomes highly challenging if the parents are illiterate and busy, however, frequent and focused parental education and engagement will be valuable for generations' education and development. To get parents' support we have to offer very simple programs [for parents] of less time and duration so that they would not feel burdened, and their domestic activities should not be disturbed (R1, page 16, transcript 15).

In the context where data were gathered for this chapter, participants reported during informal discussions that a large number of families with low literacy levels are engaged in farming and agriculture-related work throughout the year and therefore cannot manage time for parental education programs on a regular basis. Thus, respondents in this study believed they should arrange short, simple, innovative and informative sessions for parents so that they could get maximum advantage from those programs without compromising their full-time agricultural work. The data revealed that children of illiterate and less-aware parents are less

likely to be ready to start school when they enter ECE settings, as one of the respondents reported that:

> Some students come to classroom, they don't know any numeracy, any language skills and with these academic aspects, even some students of those illiterate families, they are not social. When they're getting admission in school for the first time, the first two [or] three weeks are really challenging for ECE teachers. Some students don't sit in the class, they weep. They worry because they are not social, their parents have not provided an opportunity for children to mix with other children before they come to this school, so they are isolated children (P6, page 7, transcript 12).

Participants explained that sending young children to ECE centres is not a priority for those parents who are of low literacy and are unaware of the impacts of early quality education on children's future life chances. Respondents in this study reported that parents believe that farming work can be done without attending any school and one day their children would also end up doing the same farming work. The data revealed that children of illiterate parents, when coming to ECE settings, demonstrate less-developed social skills compared to other children in the classroom. They prefer to stay away from other children and work in isolation. They gravitate more towards solo activities and avoid mixing with other children.

The results of this study showed that some of the sample schools organise parenting programs concentrating on the importance of a supportive home environment, significance of early age education, balanced diet, health and hygiene, social issues, key factors influencing child learning and development in early age and best child-rearing practices and so on.

Much of the recent literature (Epstein, 2010, 2018; Epstein & Salinas, 2004) showed that parents are key contributors in children's education, development and learning. They can influence children's overall development more than anyone else can do. Parents in the Pakistani context are not fully prepared to play their part in this role for their children's education and development due to low literacy, unawareness, and dearth of socio-economic activities. The majority of parents have no visible source of income except small-scale farming and are therefore unable to pay for their children's education in a quality ECE setting.

Impact statement

The significance of meaningful parents' engagement in children's education and development had already been highlighted throughout the proposed ECE framework for Pakistan. However, based on this data analysis the 'Parents Guide' was further revised and updated through inclusion of a section with the name of 'Educating parents to support children'. The current analysis of data collected in Pakistan made it possible to add more cultural, contextual and ideological value to the existing contents of the 'Parents' Guide' by integrating additional key details into the guide. Please see Appendix N for the 'Parents' Guide'.

6.2.3 Existing dominant ECE practices for children's engagement in learning in Pakistan

Another key theme emerged from the analysis of data collected in Pakistan was 'existing dominant ECE practices for children's engagement in learning in Pakistan'. The BSF framework encourages ECE teachers to engage young children in a rich range of activity-based, play-based, active learning and hands-on experiences for their holistic development. The literature (Cochran-Smith, 2003) has suggested that high-quality effective teaching and learning approaches play a vital role in building a sound foundation for ongoing learning and

life chances. The participants interviewed in Pakistan specifically pointed out a few approaches of teaching and learning they have been using for children's meaningful engagement in education and maximising their learning achievements. The findings revealed that 26 out of 28 respondents use play-based learning approaches to deliver their lessons and to enhance children's learning outcomes. They also use this method of education for the development of their students in all aspects of their life as one of the respondents reported:

> In our school the curriculum is such that it focuses [on] every aspect of a kid's life ensuring learning through play and games plus physical education as well as teaching basic numeracy and literacy using purposefully designed resources (P8, page 2, transcript 10).

Teachers and principals interviewed in Pakistan reported that play-based learning is used to teach basic language and numeracy skills to young children as play-based learning occupies a vital role in language and numeracy development. Play-based learning is employed for the development of the entire child. It ensures children's active participation in the construction of their new knowledge through the provision of an environment which is full of resources for exploration, manipulation, discovery, negotiation and problem-solving activities (DEEWR, 2009). Another participant, who was the principal in one of the sample schools, mentioned:

> All the available resources in place are used to actively engage children in their education and development. I know children learn best when they are fully engaged and are provided with learning resources. Children love and really enjoy watching interesting videos, cartoons, listening and playing music, participating in dance and playing games. All these sorts of activities give them pleasure in class (P10, page 5, transcript 11).

Studies (Barblett, 2010) have indicated that play is pleasurable, active in a physical, verbal and mental sense, and self-motivating; therefore' teachers who plan their lessons employing a learning through play approach can better ensure students' participation in learning.

A small number of participants interviewed in Pakistan in this data collection confirmed the availability of musical instruments in their schools. ECE teachers in Pakistan reported that children of those schools with musical instruments are also encouraged to take part in music lessons. The results further revealed that the sample schools encourage children to take part in physical education as well as independent learning opportunities.

The data suggested that the participants in this study provide ongoing opportunities to children to learn through engagement in various play-based activities. Participant P8 stated:

> Pre-primary teachers plan for their classes on [a] daily basis and, through play and games, they deliver their lessons which include basic numeracy, literacy, physical education, poems etc. (P8, page 2, transcript 9).

The present study results indicated that in addition to teaching traditional subjects such as science, literacy, numeracy and Islamic education, a small number of participants (n = 12) in this study place special emphasis on children's character building through hands-on experiences. Activities are being designed to enhance their social skills and reinforce good manners. As P9 narrated:

> Children are also taught manners and socialised through practical ways such as washing hands, eating together, sharing each other's food items and thanking God through prayer. They are also taught rules such as taking turns, waiting for their turn, and following rules of games etc. (P9, page 1, transcript 9).

The current study findings revealed that children are given opportunities to carry out practical activities and learn skills, attitudes and the disposition essential to behaving appropriately in different situations. They follow classroom routines and take turns; therefore, children are patient enough to wait and listen to each other. The data further showed that young children have fun time in their classrooms and are therefore happy to participate in hands-on and minds-on practical activities. One of the participants in this study reported an interesting pedagogical approach to character building when he mentioned:

> They [teachers] show video clips of good and bad children and good and bad behaviour in the classroom to young children … and ask them to reflect on socially and culturally acceptable and annoying behaviours … They [students] set rules through democratic decisions … for instance a child has to raise a poster [with] "I am angry" etc. written on it to make the next person realise that he or she must stop annoying him or her anymore instead of fighting back (P8, page 3, transcript 2).

The results depicted that teaching and learning practices that encourage democratic values help children to respect others' opinions, make their own choices and become independent learners.

Impact statement

The proposed ECE framework already incorporated details related to learning through play, project work, field trips and skill-based education as well as appreciation of children's meaningful engagement in their learning. Learning through play was one of the most common themes that had emerged across three levels of data collection and analysis (please see Chapters 4, 5 and 6 for further details related to play-based learning). Participants in this

study tended to agree that teachers should regularly provide interesting, relevant and high-quality education and development experiences for their students in order to enhance their learning and education outcomes.

6.2.4 Discovering children's main talents

The third theme identified was 'discovering children's main talents. The proposed ECE framework encourages teachers to ensure that ECE programs in place in their schools provide better and high-quality opportunities for children to showcase their talents. The respondents in this study tended to agree that schools should provide ample opportunities for students to pursue a wide range of contemporary studies including but not limited to nature, music, sport, and creative art in order to showcase their key talents. Participants reported that talent shows and some other co-curricular activities were an integral part of the majority of those schools that participated in this study as one of the participants explained:

> Usually, we organise different nature programs and extra-curricular activities for children across the academic year. Of them [the] most important is our talent shows. Yesterday was a talent show in our school. So, students were provided with opportunities to show their talents. In the talent shows, students dance, they sing songs, they come in front of people to show their talent of public speaking skills etc. (P6, page 5, transcript 12).

There are many different types of intelligence, talents, and many different ways in which children can demonstrate their abilities. Participants interviewed in Pakistan in order to seek their advice for the refinement of the previous version of the proposed ECE framework for Pakistan stressed the need to arrange a wide range of programs for ECE children to learn self-defence skills, volunteer work, agriculture and livestock management skills. The findings of

present study suggested that participants employ a variety of techniques in order to unearth and explore children's hidden talents and abilities. For example, they talk to their students about what they like to do and what they think they are good at. They observe children at play and in different types of extracurricular situations in addition to organising talent shows to discover their different types of intelligence. One of the participants in this study, who was a principal in one of the high-quality private schools, asserted that there should be a mechanism for identifying students' main talents and learning styles.

> Students come to school even with some basic and very prominent talents and with their interests. If a teacher identifies their talent in their early year[s] then it will provide a chance to the child where the child should go in future. And for that in ECE there should be different materials, lots of materials about science, about computer[s], about language, about music and poetry (P7, page 11, transcript 13).

Participants revealed that children's easy access to learning materials, opportunities and a friendly environment can play a vital role in determining and improving young children's main talents.

> We have a student-friendly environment in our school and plenty of learning materials to help teachers to identify what is the learning style and main ability of each child. So, some of our students are very interested in music, others are good in designing things, socialisation, creating model[s] and good in maths etc. Unfortunately, in our context music is ignored and there is no schooling for music education (P10, page 5, transcript 11).

Respondents reported that if teachers did not consider the needs of each child and if they are unable to discover students' core competencies, they may not be able to help and guide them properly. Therefore, understanding each individual child, their interests and expectations is essential for the teachers otherwise they may not be able to figure out the children's hidden potential and facilitate their learning and development to the next level of improvement. The results of the present study further revealed that schools should have precise and comprehensive plans in place to unearth children's hidden talents and help nurture them into certain career paths in which they can excel and be very successful in the future.

In general, current early childhood education approaches in public schools across Pakistan are largely old-fashioned in nature, however, the majority of private schools that participated in this investigation encourage teachers to go beyond traditional schooling and try to help children to discover their strengths at an early age.

Impact statement

The proposed ECE framework for Pakistan already incorporated relevant content on building strong foundations, holistic development, play-based learning and life skills education programs across the document. However, Howard Gardener's (2011) 'multiple intelligence' theory was not included in the previous version of the framework. After this analysis, a section on Howard Gardener's multiple intelligence with all relevant details was added to V3 of the proposed ECE framework so that teachers as well as parents will be able to understand how they are going and to include interesting and relevant activities in their classroom and homes for discovering children's core talents in an environment that is friendly and supportive to children's holistic development.

6.2.5 ECE prepares generations to become global citizens

The fifth identified theme was ‘ECE prepares generations to become global citizens’. The proposed ECE framework for Pakistan aims to nurture in children a respect for diversity, develop critical thinking, problem solving, decision making and effective communication skills which are necessary for becoming a global citizen. Much of the recent literature (Bell, Jean-Sigur, & Kim, 2015; Council of Australian Governments, 2009) revealed that a child’s future life success has its roots in quality experiences in early childhood. The participants who were interviewed in Pakistan for the refinement of V3 of the proposed ECE framework reported that young children’s participation in high-quality ECE programs can be extremely beneficial for their long-term education and development. Skills, knowledge, behaviour and disposition acquired during early years are long-lasting and for the whole of life. Participants in the current study claimed that children who attend effective early childhood education services display competencies higher than those who participate in low-quality ECE programs. A participant (P9) who has been teaching young children in a Pakistani well-respected private school for almost 18 years mentioned:

> ECE students are confident, lifelong learners and most of the students have gone abroad for higher education. They have curiosity of learning and have the courage to strive … ECD prepares generation[s] for global citizenship (P9, page 1, transcript).

Data gathering in Pakistan revealed that ECE classrooms which are equipped with information technology and access to the internet provide opportunities for ECE children’s classroom-to-classroom connections and transformative educational experiences across cultures, contexts and countries and this exposure to other cultures at an early age may help them in becoming global citizens. This experience may also help them to respect the cultures of other people and nations. As R3 explained:

> ECE prepares students as active participants of local, national and global activities. Participatory pedagogy used in ECED [settings] are making them [students] active participants of the world (R3, page 18, transcript 16).

According to the participants consulted in Pakistan through interviews and focus group discussions for the finalisation of the proposed ECE framework for Pakistan, participation of young children in high-quality ECE services prepares them to become peaceful citizens of the world as well as encourages them to feel pride being a Pakistani citizen.

The present study findings suggested that early age education plays a vital role in making children lifelong learners and in developing skills required for success at school as well as for overcoming life challenges. Another participant claimed that children who attend ECE are good at following social skills, policies, procedures and rules and regulations, and they are critical thinkers and confident learners.

> They [ECE children] are socially better than other students. They have sound academic [ability] and perform better as they grow up. They think differently, they are more friendly and sociable. They are confident and active. They are creative types (P10, page 5, transcript 11).

Participants interviewed in Pakistan reported that children who participate in high-quality early learning services are more likely to develop the social skills and manners which are socially and contextually acceptable. A similar idea was expressed by one of the school principals when he stated:

> They [ECE children] say good morning or good afternoon, etc. ... They behave [towards] people with great respect … they ask different questions … and look clean and tidy. These things reflect that the children are getting

> education and that ECD education has some positive effects on them (P6, page, 9, transcript 12).

Impact statement

The proposed ECE framework for Pakistan already incorporated guidelines and content to encourage students to respect each other's culture, traditions, language, history and heritage. The entire framework has been designed for preparing children to become peaceful, democratic, respectful, competent and mindful citizens of Pakistan who are eager to contribute for the betterment of the entire world through their actions and education.

6.2.6 Pluralistic culture for learning

The sixth identified theme was 'pluralistic culture for learning'. A pluralistic culture for learning refers to an environment that is full of opportunities for the construction of children's wide-ranging knowledge and several significant skills essential for future lives. Data collection in Pakistan revealed that in a pluralistic culture for learning, teachers value students' multiple talents, background and previous knowledge.

> Children come [to school] from different backgrounds and in the early days of school it is very difficult to understand children's hidden talents … we provide maximum opportunities to all ECE children to acquire education, skills and knowledge essential for successful life. Children even don't know how to use washrooms and take time to get used to the pluralistic culture of the school (P6, page 7, transcript 12).

The proposed ECE framework for Pakistan encourages students to value differences within themselves as well as between themselves and others and it educates teachers to create pluralistic culture for learning for the child's entire development.

According to the participants who were consulted in Pakistan in order to seek their advice, a pluralistic approach to learning educates children for personal effectiveness, promotes their conceptual understanding and critical thinking, and maximises their freedom of expression. In this kind of context, children are involved in multiple interesting activities in order to learn tolerance, self-identity and respect. As P10 explained:

> All the available resources in place are used to actively engage children in their education and development ... Children love and really enjoy watching interesting videos, cartoons, music, dance, games which students really enjoy, and it gives them pleasure in class (P 10, page 5, transcript 12).

Interviewees in Pakistan suggested that a pluralistic culture for learning environment provides culturally valued multiple opportunities such as educational videos and extra-curricular activities for students in order to galvanise their talents, intelligence and competencies. According to the present study respondents, a pluralistic learning environment also promotes children's decision-making skills, respect for diversity, love for humanity and respect for resources. As P7 mentioned:

> We believe that each child has capacities in all eight intelligence[s], so, we try to develop children holistically. At the same time, we also understand that some of our students are very good at public speaking, using tools, others are good at music, science, fashion designing and languages. So, we try to promote their specific skills as well (P7, page 10, transcript 13).

The literature (Nores & Barnett, 2010; OECD, 2016) has suggested that if appropriate guidance, opportunities, encouragement and enrichment are provided for every child, they will then have the capacity to develop every aspect of their life.

Impact statement

The importance of a pluralistic learning environment had already been integrated throughout the proposed ECE framework for Pakistan in order to ensure that the opportunities on offer in ECE settings in Pakistan fulfil the needs of all children. The whole of the sections on holistic experiences for learning and conducive learning environments specifically discuss the importance of a pluralistic culture for learning (see pages 20–21 the proposed ECE framework for Pakistan). The proposed ECE framework aims to nurture holistically developed children and therefore it encourages teachers to focus on the child's entire development through the provision of a pluralistic learning environment.

6.2.7 Factors which may influence the implementation of this kind of framework in the Pakistani context

Academics in Pakistan who reviewed the proposed ECE framework reported that lack of parents' engagement (financial constraints, lack of awareness related to early education, lack of parents' education), dearth of political will, overcrowded classrooms, harsh weather conditions and a shortage of investment (shortage of suitable teaching and learning resources) may hinder effective implementation of the proposed ECE framework in the context of Pakistan. Studies (Hakyemez-Paul et al., 2018; Lau, Li, & Rao, 2012; Ma et al., 2016) have shown that parents are the key contributors in children's education, development and learning. Lack of parents' interest in early childhood education may make it somewhat

challenging for teachers to implement the framework in the context of Pakistan[7] in its true spirit. Most of the respondents mentioned that parents can influence children's overall education and development more than anyone else can do. As R2 explained:

> Parents in our context are not fully prepared to play their part of support for their children's development due to low literacy, unawareness and poverty. This may have negative impacts on reforms agendas including framework implementation. Majority of parents have no source of income therefore cannot enrol their children in a quality ECE setting (R 2, page 14, transcript 14).

Another respondent stated:

> Most of the parents do not send their children to ECD centres due to financial constraints and this document does not discuss this aspect (R1, page 17, transcript 15).

Framework reviewers' comments in Pakistan showed that the proposed ECE framework is a comprehensive document which has been designed considering cultural, contextual and other needs of children. Pakistan is a multi-cultural, multi-lingual, multi-climate and multi-religion country with a weak economy. Currently, Pakistan is facing hard economic times. Effective implementation of this kind of document needs money to purchase learning resources, organise effective training courses for teachers and to build purposeful classrooms. Probably,

[7] To increase parents' interest in their children's education and development, a 'Parents' Guide' has been developed so that parents of young children can be provided with a reference guide. (An Urdu translation of this guide can be provided to parents to better understand it). In addition, the proposed ECE framework encourages teachers to develop a respectful partnership with parents and conduct regular meetings for sharing their children's progress and highlighting their roles and responsibilities towards their children's education.

lack of funds may make it somewhat harder to reach every child of the country. One of the participants in this study highlighted that considering the current economic crises:

> It is a costly program for [the] Pakistani context and needs money which could be gradually implemented. [The] Pakistani economy, population, geographical landscape (mountainous, extreme weather conditions), cultural and religious diversity will make it challenging in some parts of the country (R1, page 16, transcript 15).

During formal discussions with participants, I also came to know that lack of purposefully built classrooms and harsh weather conditions may hinder BSF framework implementation in some parts of the country. The proposed ECE framework has been created considering the cultural and religious diversity of the country which encourages children to promote religious and cultural harmony. It also facilitates the development of appropriate understanding of other traditions, religions and respect for cultural differences. It promotes values of pluralism and inclusiveness among children. It also encourages children to show courtesy and deep respect towards individual differences. It is believed that the current education system in Pakistan is less successful in promoting religious harmony and tolerance among its youth, due to outdated learning materials in the public schools' curriculum.

The literature (Kugelman, 2011; Zahid & Khan, 2016) demonstrates that Pakistan is among the most populated countries of the world and its population is growing at a very high rate. Therefore, the classrooms are also overcrowded and the participants in this study believed that it would be quite challenging to implement the proposed teacher-student ratios in the context of Pakistan. As one of the reviewers pointed out:

> HR management such as teacher-student ratio could not be easily justified and implemented in Pakistan in [the] near future because of congested classrooms. However, funded program[s] and private institutions may opt for it (R1, page 16, transcript 15).

Reviewers of the proposed ECE framework in Pakistan reported that lack of political commitment may also impact implementation of a framework which has been created for providing high-quality early childhood education due to non-availability of funds and other financial constraints. Another participant of this study explained:

> Political leaders may not accept this framework easily. They will favour [a] cheaper program for mass education due to [the] over-population rate in Pakistan. They have usually been seen to support strict religious policies for political gains (R2, page 17, transcript 15).

Formal discussions with framework reviewers revealed that political people in Pakistan have a lack of commitment for educational reforms. A dearth of political determination may also influence the framework's implementation process. For the masses, religion is a way of life therefore they want to adhere to it, taking guidance from religion in every part of their lives. They are perceived to be against modernisation and Western education. They believe that modern approaches are Western-made and presents a threat to their religion and culture. Therefore, this perception may influence the parents' decisions to send their children to a modern ECE centre.

Impact statement

The proposed ECE framework has been designed for bringing up healthy, happy, peaceful and caring children committed to religious harmony and respectful of diversity. It encourages

teachers and parents to nurture in children the values, skills and disposition of tolerance, harmonious living, democratic thinking, peaceful global co-existence, and the promotion of environmental sustainability. Based on the framework reviewers' feedback, the teacher-student ratio and proposed teachers' support system have now been revised. The general thinking was that because of overcrowded classrooms and the downgraded economy, the proposed teacher-student ratio and teachers' support system were not justifiable.

6.2.8 Critical challenges ECE teachers face in Pakistan

The seventh theme identified was 'critical challenges ECE teachers face in Pakistan'. Participants consulted in Pakistan for the refinement of the proposed ECE framework reported that Pakistan ECE teachers face several challenges that may hamper students' learning outcomes. One of the key challenges identified by the respondents was overcrowded classes, as one of the principals reported:

> Overcrowded classes are difficult to manage for a single teacher … [A large] number of students in one class creates enormous challenges for teachers to handle. Overcrowded classes negatively influence learner's performance whereas students [can] learn better in smaller classes therefore [the] number of students should be reduced or there should be two teachers in a class (page 4, P10, transcript 11).

Predominantly overcrowded classrooms are a major problem in the majority of public schools in Pakistan. In overcrowded schools many students are packed into small classrooms. Studies (Khan & Iqbal, 2012) in Pakistan have discovered that effective teaching and learning is not possible in classroom with a large number of children. Teachers in congested classrooms

cannot offer individual attention, organise purposeful group work, provide easy access to learning resources and are unable to carry out ongoing assessment.

The findings of this study indicated that another key issue that ECE teachers usually face in the context of Pakistan was a dearth of teaching and learning resources, and schools have been facing this problem for decades. So far, no concrete steps have been taken by the state to overcome this key issue. In addition, the budget allocation for the provision of teaching and learning resources is not encouraging. As P7 mentioned:

> ECE teachers have been facing [a] shortage of facilities … including learning resource[s]. If that [teaching and learning resources] is not available there [in school] then how can the teacher get them and from where. It can be a problem. It can be challenging for teachers (P7, page 11, transcript 13).

According to teachers interviewed for this study in Pakistan, the lack of resources such as teaching and learning aids makes the process of teaching and learning more challenging for teachers and less exiting for young children. As P8 stated:

> Lessons cannot be exciting because classrooms are so overcrowded and resources are not enough, you just lose hope (P8, page 2, transcript 10)

Easy access to and effective use of teaching and learning resources play a vital role in children's education and development. The results of this study revealed that in the absence of learning resources, teachers use the chalk-and-talk method of teaching which cannot attract young children's interest. The respondents believed that the shortage of learning resources demotivated students and teachers alike in learning and teaching.

> We don't have enough resources/materials in the classroom … and due to [the] unavailability of learning resources, teachers have been facing problems while dealing with differently able and disable[d] children. How can a teacher teach, and [how can] students learn properly if there are no teaching aids? (P9, page 1, transcript 9).

Respondents in this study reported that children learn best when they are fully engaged and are provided with learning resources. Children love and enjoy watching interesting videos, cartoons, listening to music, participating in dance and playing games and all of these sorts of activities give them pleasure in class.

Data collection in Pakistan for the refinement of the proposed ECE framework revealed that heavy workload was another key issue ECE teachers face in the context of Pakistan. Workload is a problem for all ECE teachers, and it has profound impacts on the quality of teaching and learning in ECE in Pakistan. The majority of respondents reported that their current workload has profound impacts on the quality of teaching and learning. As P9 mentioned:

> The teachers face burden of work all over the year. Teachers' workload certainly hinders [the] quality of teachers' work. The stress of workload is always there. A teacher has to teach a number of subject areas in addition to record keeping. Believe me, record keeping is rigorous work, and it is never-ending (P9, page 1, transcript 9).

The results revealed that teachers are under pressure throughout the year because of the workload. In addition to classroom teaching, they are engaged in documentation (data collection, analysis and report writing). They assess students' learning on a regular basis and

prepare reports for remedial teaching, sharing with parents and supervisors. They have to maintain portfolios for each student. One of the research participants, who was a principal in one of the sample schools, expressed his concern:

> Workload has increased significantly in recent years. Teachers spend most of their time writing paperwork. They have to do the most important work of lesson planning for teaching, writing reports and checking students' work on [a] regular basis which negatively impacts on their work-life balance (P7, page 13, transcript 13).

The present study's participants reported that teaching young children is a challenging, rigorous and difficult task. It needs enough preparation, good knowledge of students' ongoing assessment, record keeping, reporting and data handling. Therefore, the heavy workload is hindering their private life as well, as they have been spending a significant amount of time on preparation of lessons plans, completing paperwork and engaging in classroom teaching.

6.3 Change table

The change table below briefly discusses how the analysis of data collected in Pakistan influenced the refinement and finalisation of the proposed ECE framework for Pakistan. The analysis of Pakistan data added more cultural, contextual, theoretical and ideological value to the existing contents of the proposed ECE framework, answering Research Question 1: 'What does culturally responsive and developmentally appropriate ECE framework for Pakistan look like in practice?'

Table 6.3: Change table

Themes	Impacts on version 3 of the framework
A contextually and culturally relevant framework	The majority of respondents in this study tended to agree that the proposed framework is culturally and contextually sensitive to the needs of Pakistani children. Contents related to diversity and inclusiveness had already been integrated across the framework document. The framework promotes the existing culture of the country, and also gives high value to the culture of other countries as well as helping to prepare generations for peaceful local and global life.
Educating parents to support children	Based on this analysis, a section with the name "Educating parents to support children" has been added to the 'Parents' Guide'. Please see Appendix N for the 'Parents' Guide'. The significance of a meaningful home-school partnership had already been integrated across the framework.
Existing dominant ECE practices for children's engagement in learning	Current classroom practices in Pakistan are struggling to move away from didactic teaching practices. Some of the key sections of the proposed ECE framework such as learning through play, project work, field trips and skill-based education might help teachers to move away from traditional teaching towards a child-centered approach to education.
Discovering children's main talents	Participants in this study have underscored the importance of Howard Gardener's 'multiple intelligence theory' for discovering students' hidden talents. Therefore, a section on this theory has now been added to the framework document. Integration of this theory into the document may enable teachers to organise interesting and relevant activities in order to discover students' key talents and help nurture students into certain career paths. Life skills education programs, holistic development and play-based learning had already been included in the framework document.
ECE prepares generations to become global citizens	Guidelines and contents to prepare students for respecting each other's culture, history and beliefs had already been included in the framework. The framework places huge emphasis on the need to educate students to become peaceful, democratic, respectful and competent contributors for the betterment of the entire world.
Pluralistic culture for learning	The theme of 'pluralistic learning environment' had already been included in the framework. A detailed section on holistic experiences for learning and

Themes	Impacts on version 3 of the framework
	conducive learning environments precisely discusses the high value of a pluralistic culture for learning (see pages 20–21 of the BSF framework).
Factors which may influence the implementation of this kind of framework in the Pakistani context	Based on the framework reviewers' feedback, teacher-student ratio and proposed teachers' support system have now been revised. There was a general perception among reviewers that because of overcrowded classrooms and the downgraded economy of the country the proposed teacher-student ratio and teachers' support system was not fully justifiable. The importance of parents' involvement and religious and cultural harmony had already been discussed in the framework.

6.4 Summary

In the fourth and last iteration of the design-based investigation, data were collected in Pakistan involving ECE teachers, school principals, teacher educators and university academics through interviews, focus groups and reviewers' comments. The aim of data gathering in Pakistan was to revise the BSF framework and create a final framework document which is contextually relevant, culturally responsive, developmentally appropriate and ideologically sensitive to the Pakistani context. The proposed ECE framework promotes cultural diversity, religious harmony and democratic values.

The data collection in Pakistan explored teachers' and principals' perceptions about culturally responsive and developmentally appropriate practices with the intention of finalising the BSF framework. In this way, the Pakistani data were used to inform the finalisation of a culturally sensitive and developmentally appropriate ECE framework for Pakistan, answering Research Question of the study: 'What does culturally responsive and developmentally appropriate ECE framework for Pakistan look like in practice?'.

The analysis of the Pakistani data added more value to the existing contents of the proposed

ECE framework and proved to be helpful in making improvements and enhancing the existing contents through suggestions made by the ECE professionals in Pakistan. The final version of the BSF framework evolved from this analysis of data collected in Pakistan. This final version appears in Appendix K.

The following chapter discusses and compares the development processes of the BSF framework with the processes used by other international ECE frameworks, discusses the merit of the proposed ECE framework for Pakistani context, presents implications and limitations and recommendations.

Chapter 7

Discussion and Conclusion

The main purpose of this investigation was the creation of an ECE framework through exploration of developmentally appropriate and culturally responsive practices in the contexts of Pakistan and Australia. The current chapter discusses and compares the development process of the BSF framework with the processes used by other international ECE frameworks in order to determine where the BSF framework stands in comparison to other ECE framework documents in relation to similarities as well as differences. It also briefly discusses the merit of the proposed ECE framework for Pakistani context, presents implications and limitations of this research and offers recommendations for stakeholders.

7.1 Comparing the development process of the BSF framework with development processes used by other ECE frameworks.

The development of an ECE framework is a rigorous and challenging process. A comparative review of ECE frameworks in Chapter 4 of this research revealed that there is not a single way in which to create an ECE framework. There are similarities as well as differences among the processes of frameworks' development across the countries and the process of the BSF framework's development.

7.1.1 The process stages comparison of ECE frameworks

The development process of the BSF framework was planned, systematic, ongoing and iterative, comprising four phases and four iterations. Spread over three and half years, the development process of the BSF framework began with an analysis of the situation of the

host context (which is Pakistan) in order to identify the research problem. This analysis was carried out in collaboration with concerned ECE teachers in the predesign phase of framework development. The process then included a review of the most recent empirical, philosophical and theoretical literature (see Chapter 2) so that an understanding of the depth of the problem under investigation could be achieved. During the process, four versions/drafts of the BSF framework were created and refined based on a review of six international ECE frameworks as well as data collection in Australia and Pakistan.

Review of ECE frameworks in Chapter 4 revealed that the development processes of other ECE frameworks across countries were also consultative, cyclic and lengthy. The design of frameworks in Australia, Singapore, Finland and the US were initiated with an extensive review of contemporary literature followed by a wide-ranging analysis of national and international ECE frameworks and background research. The review in Chapter 4 further indicated that over a period of time, in Finland, Australia and Singapore several drafts of the framework documents were created and published for stakeholders' input, suggestions and feedback.

May (2002) reported that the development process of Te Whāriki was completed in six rounds which commenced with an extensive review of the literature in order to identify ECE best practices and exploration of new knowledge of young people's education, development and learning. Chan (2019) utilised a process of document analysis to interrogate how the New Zealand curriculum responds to complex diversities. Chan reported that Te Whāriki responds well to its superdiverse demographics because it was created after a broad consultation with several stakeholders from various cultural backgrounds. The framework development process in Singapore lasted for five major rounds. Findings of this study as discussed in Chapter 4 depicted that the process in Singapore integrated a review of literature from brain research

and neuroscience and created an open website for stakeholders' feedback from all walks of life.

Table 7.1: The process stages comparison

BSF framework	EYLF Australia	Te Whāriki, NZ	Singapore framework	Finland framework
Comprised of 5 phases: - preliminary phase (context analysis and review of literature) - creation phase (development of framework prototype) - revision and refinement phase (analysis of 8 international frameworks, data collection in two countries) - finalisation phase (SWOT analysis, reviewers' comments) - evaluation phase - no trial and implementation	Involved four stages: - review of ECE frameworks - background research paper outlining possible directions for EYLF. A discussion paper was released for national consultation. - actual development of EYLF - actual trial of the framework and support documents – national implementation July 2009	Followed six rounds: - review of current knowledge of child's education and development - exploration of international ECE best practices - analysis of ECE contexts - choosing a model for the framework out of 4 available models and creation of draft guidelines - broad consultations (several stakeholders gave feedback on all documents throughout the process) - trial of the final draft - the framework document was refined and finalised based on implementers' feedback	Involved 5 steps: - started with a baseline study on current ECE practices in Singapore - review of brain research literature and review of international frameworks - extensive consultation with stakeholders - online feedback system, - created several drafts after consultation with several stakeholders	Consisted of 6 stages: - commenced with preparation of framework's contents - preparation of material for the steering group reviews and write the framework guidelines - invited ECE experts to comment on draft guidelines at different stages - opened website for input - created final draft based on stakeholders' input - national implementation

7.1.2 Stakeholder comparison of ECE frameworks

The development process of the BSF framework was exploratory and phase-based and involved ECE teachers, school principals, teacher educators, university academics and

researchers[8]. Results of the reviews reported in Chapter demonstrated that in New Zealand and Australia, the frameworks were created working closely with parents, ECE practitioners, various cultural groups, universities, research and training institutions and ECE providers including programs in hospitals through lively debates, focus group discussions, symposia and case study trials. Findings of this study suggested that in Finland, the process of design was participatory where representatives from various ministries, the municipal workers, teachers' unions, labour unions, industry groups, students, parents' associations and textbook publishers, different ethnic groups and drafting experts were invited to participate at various stages of framework development and give their suggestions. Textbook publishers and professional curricula writers (drafting experts) were key contributors in the process of curriculum development in Finland. The review of various frameworks conducted for ~~during~~ this study revealed that the involvement of textbook publishers and expert writers seems to be overlooked in many countries during the process of frameworks' development. Apart from Finland, none of the frameworks (including the BSF framework development) sought input and comments from students during the process of framework development. However, the High/Scope project followed a group of children through a longitudinal study to determine the impacts of the program on their future life.

The developer of the BSF framework (researcher) engaged ECE professionals from Australia and Pakistan in the formulation of the proposed ECE framework through interviews, focus group, SWOT analysis and reviews. The researcher explored developmentally appropriate and culturally sensitive ECE practices in the context of Australia and Pakistan in order to revise and refine the various drafts of the BSF framework. Although the development of the BSF framework was planned, systematic and ongoing, due to time limitations, lack of

[8] As discussed in Methodology Chapter six participants reviewed the BSF framework. Two of them were university academics and four were researchers and teacher educators from a renowned non-governmental organisation.

funding and a dearth of human resources, the process could not reach out to several core stakeholders including students, parents, community members, textbook developers and ECE providers for obtaining their input. The development of the BSF framework, therefore, was confined to ECE teachers, school principals, researchers, academics and ECE teacher educators.

Table 7.2: Stakeholder comparison of ECE frameworks

BSF framework	**EYLF**	**Te Whāriki, NZ**	**Singapore**	**Finland**
Engaged ECE teachers, principals, teacher educators, university academics and researchers in Pakistan and Australia	Involved territory, state and Australian governments, researchers, ECE educators, reviewers	Engaged practitioners and representatives from Kindergarten, Montessori, church and home-based ECE and programs in hospitals, trainers, representatives from cultural and ethnic groups, ECE providers, government agencies, universities, research and training institutions.	Not clear	Involved 30 working groups, representatives from various ministries, municipal workers, teachers, labour unions, industry groups, parents' associations and textbook publishers, different ethnic groups, researchers and students

7.1.3 Comparison of methods

The development process of the BSF framework used focus group discussions, semi-structured interviews, literature review, and framework analysis for collecting data, stakeholders' feedback and input in order to revise various drafts of the BSF framework. Results of this study suggested that the framework's developers in Finland and Australia also conducted focus group discussions in addition to several other methods as summarised in Table 7.3 for seeking suggestions from school heads, parents and educators. Results of this study as presented in Chapter 4 suggested that one of the inimitable processes of Te Whāriki was pilot testing of a trial version of the framework by all ECE providers across New Zealand

to obtain comments and input from actual implementers (Chan, 2019) whereas none of the other framework documents was officially piloted before sending them for actual implementation. Another common method used across the BSF, Finland and Singaporean development processes was involvement of educationists in order to review the final drafts of the framework documents. The EYLF of Australia was reviewed by many educational experts. This was a very useful method for the refinement of the ECE frameworks.

One of the very worthwhile methods used to refine the BSF framework during the development phase of the process was SWOT analysis. During SWOT analysis the reviewers systematically read the BSF framework document several times in order to identify its strong components, areas for further improvements, effective opportunities this framework can provide for organising ECE services for children aged 3–8 years and components of this framework which may cause problems for the Pakistani context, culture and ideology. This was a very useful exercise for the refinement of the BSF framework because recognition was given to experts from the host country in the field of ECE who provided critical judgment, cultural and contextual perspectives and expert opinions on the contents and components of the BSF framework.

Table 7.3: Methods comparison of ECE frameworks

BSF framework	**EYLF**	**Te Whāriki, NZ**	**Singapore**	**Finland**
Review of literature, interviews, reviewers' comments, document analysis, focus groups, analysis	National symposia, public consultation forums, focus groups, online forums and case study trials and review of literature, analysis	Small and cohesive working groups, partnership with Kohanga Reo Trust, consultation seminars, lively debates, feedback sessions, review of	Review of literature, analysis of several frameworks, sought guidance from contemporary philosophical thinking, reflections, documentations, observation of real	Expert hearing, digital platform for feedback, collection of results of various research and evaluations, focus groups, consultation

BSF framework	EYLF	Te Whāriki, NZ	Singapore	Finland
of several frameworks, SWOT analysis	of ECE frameworks	literature, discussions, trials	classroom practices, digital feedback by reviewers	seminars, reviewers' comments

7.1.4 Influence of philosophical thinking comparison of ECE frameworks

The study's findings from the review of ECE frameworks demonstrated that the process of preparation of the Singaporean, Australian, Finnish and BSF frameworks all sought guidance from several examples of philosophical thinking. The process of the BSF framework development sought guidance from theories such as the ecological model of human development (Bronfenbrenner, 2005), multiple intelligences (Howard Gardener, 2011), learning through play (Fleer, 2010) and developmentally appropriate practices (Copple & Bredekamp, 2009). As findings indicated in Chapter 4, the processes across the frameworks of Finland, New Zealand, Australia, and the US took guidance and influence from learning through play, socio-cultural, socio-behaviourist, and cultural-historical activity theories.

Table 7.4: Philosophical thinking comparison of ECE frameworks

BSF framework	EYLF	Te Whāriki	Singapore	Finland
Ecological model of human development, learning through play, socio-cultural theories, constructivist approach of education, cooperative learning and children's holistic development	Play-based learning, socio-cultural, socio-behaviourist, cultural-historical activity theories	Piaget, Erikson, Vygotsky and Bruner, socio-cultural theories and ecological model of human development, brain research, spontaneous play, Kaupapa Maori theory, Pasifika approaches, critical theories and evidence from neuroscience research	Took guidance from Piagetian, Vygotskian and Malagozian philosophical thinking	International conventions on the rights of the child, social justice, rights and responsibilities

ECE frameworks, including the BSF framework, are evolving documents; therefore, they

have the flexibility of upgradation, refinement and modernisation according to the changing and emerging needs of the host countries. Processes of framework development so far discussed in this Chapter, including the development of the BSF framework, seem to differ from one context to another depending on the availability of financial and human resources, contextual dynamics and technical expertise. Findings of the present study in Chapter 4 revealed that framework developers in New Zealand, Australia, the US, Finland and Singapore worked in special working groups and teams throughout the development process and used multiple methods for obtaining feedback and advice from a wide range of stakeholders.

A review of the BSF framework by academics in Pakistan (see Chapter 6: findings from data collection in Pakistan) suggests that the BSF framework is culturally responsive and ideologically sensitive to the context of Pakistan which makes it special and different from other frameworks. The reviewers in Pakistan further reported that the BSF framework will encourage students to develop an understanding and appreciation of their culture, language, dress, traditions, ways of life, local events and festivals. The framework aims to nurture in children a strong sense of identity and pride in being Pakistani. The reviewers' comments in the current study further indicated that the BSF framework is intended to develop in children a positive attitude towards the cultures, faiths and ethnicities of minorities present in the country and worldwide. It encourages teachers to start with local cultures and link them to the national and global cultures. The framework suggests a number of culturally appropriate practices, instructional strategies and teaching techniques.

Most of the countries across the world have created education frameworks in order to provide guidelines for planning and delivering culturally responsive and contextually relevant experiences for young children and to achieve worthwhile learning outcomes for students.

The development process of frameworks mainly follows publicly known cycles of framework development such as planning, developing, implementing and evaluating. Most of the development processes of the selected ECE frameworks discussed so far seemed to adhere to these publicly known processes although some missed a few key steps within the broader cycle of framework development. Literature (Haider, 2016; McLachlan, Fleer & Edwards, 2013; Stabback, 2016; Soukainen, 2018) suggests that the process of framework development should be well planned, systematic and spiral. The development process should thoroughly assess the needs and issues of the context and include expert input, specialist drafting, and the voices of several stakeholders including voices of students, parents, teachers, cultural groups, textbook publishers, and ECE service providers. The process should use several methods including focus groups, public consultations, online forums, observations of real classrooms and lively debates in order to obtain feedback from a wide range of stakeholders. Interviews of ECE educators in Australia suggested that the development process should also take guidance from ideas of influential theorists and from the best classroom practices beyond geographical borders, but the priority areas of the frameworks should vary from country to country.

7.2 The merit of the BSF framework for Pakistani context

According to the National Institute of Population Studies (2019) there are approximately 35.195 million children aged 4–9 years in Pakistan. Out of these, 29.135 million children are enrolled in the pre-primary and primary stages of education in Pakistan. As mentioned earlier in this chapter, the BSF framework is a research based, developmentally appropriate and culturally responsive ECE framework. If implemented, it may influence and improve the learning level of young children across several stages (ages 3-8) in Pakistan. The National ECE Curriculum of Pakistan developed in 2017 caters only for children aged 4-5 years,

whereas the proposed BSF ECE framework can be used for the holistic development of children aged 3-8 years; therefore, it has the potential to impact a wide array of students and improve learning achievements of many young children in Pakistan. Farooq and Kai (2017) suggested that many millions of children in Pakistan might be better educated by streamlining the current education system of the country.

A dominant perception among researchers, practitioners and academics (Gul & Shah, 2019; Parveen, Mahmood, Chuadhry, & Iqbal, 2019; Yasin, Batool, & Ajmal, 2019) indicates that textbooks, syllabuses, curricula and other study materials currently on offer in Pakistan are outmoded; therefore, the current education system does not fulfil the requirements and address the emerging challenges of the country in 21st century. The BSF framework is a research-based document which has been created after lengthy consultations with teachers, principals, researchers and academics in Australia and Pakistan. The main purpose of creation of the proposed ECE framework was making a difference for children, making a difference for families and making a difference for teachers and the community. A general perception prevails that, due to the mismatch between Pakistan's existing curricula and the needs of a changing world, the conditions of lives across the nation are not improving (Ahmad et al., 2014; Farooq, 2011). The proposed ECE framework (see Appendix K) is a culturally responsive and ideologically relevant document for the context of Pakistan; therefore, it may positively impact the learning achievements of young children of the country. The existing government of Pakistan, Tehrik-e-Insaaf (movement for justice) party, can use the findings of this research and the BSF framework for launching effective ECE programmes in Pakistan as it is committed to introduce reforms in various sectors, including transforming the education system of the country.

The students of Pakistan do not get the quality of education for which the government of Pakistan is paying (Farooq & Kai, 2017). The government has been spending huge funds every year on teachers' salaries, and other administrative expenditures, but no significant improvement has yet occurred. Nawaz and Sultana (2019) explored educational problems and challenges in the Pakistani context. They believe that one of the main reasons for this failure is outdated curriculum documents and textbooks. It seems that until the government fixes the traditional curriculum frameworks, including textbooks, Pakistan's education system will not improve (Farooq & Kai, 2017). .

The children of Pakistan deserve the best quality of ECE in order to build a solid and broad foundation for lifelong learning and wellbeing. According to the UN Convention on the Rights of the Child (1989, p. 1), "the child should be fully prepared to live an individual life in society" and every child is entitled to get the best possible quality of education regardless of their race, religion, colour, sex and geographical location. Including Australia and Pakistan, 181 countriesof the world have ratified the UN Convention on the Rights of Child. The proposed ECE framework might be a useful document for preparing children for further education and for a better future life in the Pakistani context.

7.3 Implications of the study

Every year educational research generates a large amount of new knowledge and increases the stock of knowledge by explaining and disseminating how to use existing knowledge in creative and innovative ways. The proposed ECE framework is one of the major contributions of this research. It is a comprehensive document for launching effective ECE programmes for the holistic development of the young children of Pakistan. Policy makers, educators and researchers may use the findings of this research in Pakistan for creation of new ECE frameworks for all level of education, for the improvement of existing education

frameworks, and the construction of new policies, pedagogies and understanding. The existing process of curriculum development in Pakistan is based on a centre-periphery approach or top-down approach (Haider, 2016; Mahmood & Aziz, 2018). Mahmood and Aziz reported that in a centre-periphery approach in Pakistan, bureaucrats based at the Federal Curriculum Wing and Provincial Bureau of Curriculum write objectives and goals and formulate drafts of curriculum guidelines without involving teachers, head teachers, and subject experts. In some cases, the radical Islamic political parties of Pakistan and overseas donor agencies also influence this process and try to include certain concepts and topics in the curriculum that are aligned with their interests (Ashraf, 2018).

As this thesis has argued in Chapter 2, imported models of education curricula create certain challenges for teachers and parents of the host countries and have little impact on students' learning achievements. The data collection in the present study in Australia and Pakistan indicated that full participation of representative bodies of grassroots stakeholders including teachers, parents, students, community members, private sector education providers and other key shareholders in the process of framework development is indispensable and essential. In the current scenarios of the top-down approach of curriculum development in Pakistan, grassroots stakeholders' voices in the curriculum creation process seems to be absent and neglected (Mahmood & Aziz, 2018). Interviews of academics in Pakistan in this study revealed that Inclusion of voices from several stakeholders is vital for the development of an effective and shared curriculum framework and for the successful implementation of an existing framework document across the country.

A process for the construction of the BSF framework was developed (see Figure 7.1) which may assist future framework developers and investigators to construct new curriculum

frameworks and as such is a key contribution of this research. The process model is illustrated below in Figure 7.1.

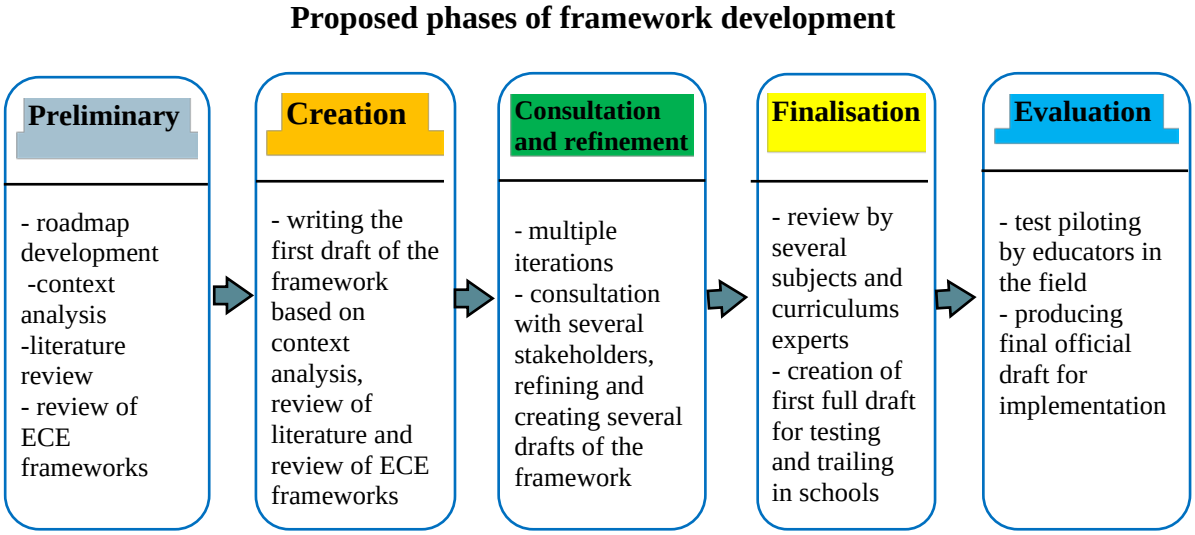


Figure 7.1: Phases of design-based research for framework development

The findings of this study may assist policy makers, curriculum developers and relevant governing bodies in developing culturally responsive, contextually sensitive and developmentally appropriate education frameworks for the education and development of all students. This study suggests adopting culturally and contextually viable educational policies, frameworks and pedagogies rather than importing models and curriculum frameworks from other countries and in this regard the above model can better guide curriculum developers to create education frameworks that are pertinent to their country's needs.

7.4 Limitations and suggestions for future research

This study explored developmentally appropriate and culturally responsive practices for creating an ECE framework for the Pakistani context. The current research does, however, have some limitations.

According to Creswell (2014) research is value laden; the researcher is biased by world views, cultural experiences and upbringings. These affect research findings. Whilst researchers may attempt to eliminate the effect of bias, they are unlikely to eradicate it totally. Thus, it is not possible to remove all cultural bias. It is, however, important to acknowledge its existence and the potential influence it may have on information gathered, analysed and reported. I have made every effort to reduce my cultural bias and world views when analysing documents from other cultures in my thesis. I have analysed selected ECE frameworks (to learn from them) through my lens, and so this can be perceived as a limitation to this work.

Data for this study were collected in selected geographical locations in Australia and Pakistan; therefore, those locations do not necessarily represent the entirety of Australia and Pakistan. All ECE educators who participated in this study in both countries and all of the participating principals in Australia were female; in contrast all principals who participated in this study in Pakistan were male. Some may consider this disparity of gender to be a weakness of this study as it excludes voices of male ECE educators and female principals in Pakistan. The voices of parents, students, curriculum developers, policy makers, textbook publishers and professionals from the Curriculum Development Wing and Ministry of Education Pakistan were also not included due to lack of financial resources and time constraints. However, the insights gained from this study can be useful for other researchers, curriculum developers, teachers, politicians and policy makers. More research will be required for including voices and seeking advice from a wide range of stakeholders.

Interviews, focus group discussions and SWOT analysis were the main methods of consultation and source of data collection for this research. Due to time and budget constraints and ethical agreement it was not possible to observe real classroom teaching and

learning. Further research using multiple methods of data collection could be carried out to validate and triangulate information from various sources.

The current development process could not include a trial of the BSF framework again due to budget constraints and time limitations. To determine whether the framework is useful, relevant, responsive and reliable, there is a need to have a field testing of the new framework and curriculum documents by the actual implementers. Further research is required for pilot testing the BSF framework and suggesting modifications if needed.

As mentioned earlier that the voices of parents, students, and officials at the Curriculum Wing government of Pakistan were not included due to time and budget constraints. Additional research involving all key stakeholders using multiple methods such as classroom observations, public consultation, online forums, consultation seminars, feedback sessions and expert hearing is likely to contribute to responding to the actual needs and expectations of young children and families and enhance community confidence.

7.5 Recommendations

According to the results of this study, the following recommendations can be made.

Recommendations for curriculum developers

This study suggests that developers of ECE frameworks require thorough and meaningful consultation with several key stakeholders. Interviews of teachers in Australia and Pakistan in this study demonstrated that extensive consultations and collaborations with grassroots-level stakeholders including parents, students and teachers is essential for the creation of a high-quality shared education framework. The construction process of the current National ECE Curriculum of Pakistan seems to have overlooked voices of parents, teachers, students and

ECE service providers (Jumani & Saeed, 2019). As mentioned previously, the current conventional educational curriculum development system of Pakistan uses a top-down approach of framework development for building frameworks, curricula, textbooks and syllabuses. According to Haider (2016) and Wentzell (2006) in a top-down approach, grassroots stakeholders and actual implementers have very little or no say in the selection of the curriculum's contents and components. To ensure all voices are heard and included, this study recommends a participatory model for framework development. As discussed in Chapters 4, 5 and 6 the participatory approach allows students, parents, teachers, employers, community members and all other stakeholders to participate and express their needs, expectations and contribute innovative ideas. Education transforms lives - an education framework which drives the education system has the power to influence education, behaviour, thinking and learning of all children; therefore, representation and involvement of stakeholders from all walks of life in the development process must be ensured (UNESCO, 2013).

Recommendations for schools

In every country, ECE teachers/educators play a significant role in the implementation of national education frameworks, policies, and curriculums. During data collection for this research in Pakistan it was revealed that none of the respondents of this research (ECE teachers and principals) had seen the National ECE Curriculum (2017) of Pakistan which is not an encouraging finding.

Schools need to make sure that a support system is in place in the ECE settings to help new students to adjust smoothly to the new environment. Children undergo various stages of transition during their studies. Findings of document analysis in Chapter 4 and interviews with ECE teachers in Pakistan suggested that children meet with new faces, interact with new

places, face new challenges and create new relationships during their ECE and over their study life. This finding is consistent with Miller, (2015), Perry, Dockett and Petriwskyj, (2013) and Shallwani, (2016). They suggested that the start of pre-primary schooling is one of the most important transitions in a child's life, and a major challenge for parents and teachers because the extent to which they feel successful in the first transition is likely to influence subsequent experiences. Focus group discussions in Pakistan indicated that there is no system in place in Pakistan for easing students' transitions to early childhood centres, primary schools and even from one class to another class. Review of ECE curriculum in Chapter 4 of this thesis depicted that policy makers and curriculum writers seem not to be mentally ready to accept the importance of this issue; therefore, the existing regular school curricula in Pakistan have no emphasis on the various types of transitions, including the continuity between ECE and school programs. The teachers and principals interviewed in Pakistan for this research suggested that the education system in Pakistan must prepare schools and families to help children make transitions to new places, classes, and settings easy and enjoyable. ECE practitioners need to design policies and procedures for the smooth transitions of young children. There should be a system in place where ECE educators actively work with fellow teachers and parents to ensure the effective transition of children to different settings. In this connection, the BSF framework and Chapter 4 of this thesis present innovative ideas for variety of smooth transitions (see Chapter 4 of this theses and pages 45-46 of BSF framework).

Recommendations for policymakers

Reviewers of the BSF framework in Pakistan suggested that the policymakers in Pakistan need to ensure that the education frameworks, curriculum and the overall education system of the country are up-to-date, fulfil the emerging needs of the country and are consistent with

and responsive to the local culture. Colonial influence significantly affected Pakistan's education system and still has a very strong impact on the education system of the country (Jhatial, Cornelius, & Wallace, 2014). The success of imported educational pedagogies, frameworks, curricula, approaches and models in a country such as Pakistan is nominal because of cultural, contextual and ideological differences. Based on the evidence from the literature (Bondy, Ross, Gallingane, & Hambacher, 2007; Morrison, Robbins, & Rose, 2008), the current study reinforced that imported curriculum approaches sometimes negatively influence cultural values, belief systems and practices of children of the host countries and this was also pointed out by Chowdhury (2017). It is estimated that the current education system of Pakistan is more than 70 years old; therefore, it does not fulfil the needs of a changing world (Jhatial, Cornelius, & Wallace, 2014). Participants interviewed in Pakistan and Australia in this study suggested that a home-grown curriculum approach based on relevant influential ECE theories can better accommodate the socio-cultural needs, expectations and interests of local communities. This finding corroborates the ideas of Miller and Pound (2011) who suggested that curricula and frameworks are "undoubtedly culturally shaped and cannot always be readily transferred from one environment to another" (p. 5). However, the insights acquired from good practices may be transferred to another context for designing developmentally appropriate programs for students' development.

Recommendations for teachers

In the current education system, teachers occupy a central position and are considered to be a source of knowledge and information (Rana, Saeed, & Shafiqur, 2015). Teachers in the public sector in Pakistan need to shift their perceptions about children and about their roles. As discussed in Chapter 1 and 2 of this thesis the current system of education in public sector schooling treats students as needy creatures. During focus group discussions in Pakistan, it

was noted that this approach to education is a major hurdle in the process of teaching and learning. Teachers and principals interviewed in Australia believed that children have the capacity to construct their own knowledge, and they are a source of inspiration. The participants further suggested that children learn best when they are actively involved in the construction of their own knowledge. Private schools' teachers in Pakistan stated that children learn best when they are fully engaged in learning through respect and appreciation. This view is supported by Fleer and Van (2017) who argued that learning through play can better ensure children's active participation in the construction of new knowledge. The study recommends that all curriculum frameworks, including textbooks and teacher training courses, should reflect children as competent, capable and strong human beings. Based on the discussions with ECE teachers in Pakistan and Australia, the current study suggests the teachers should consider themselves to be guides, mediators and facilitators rather than sources and transmitters of knowledge.

7.6 Concluding remarks

The major aim of this study was the creation of an ECE framework for the context of Pakistan. The framework development process used a design-based research approach for constructing the ECE framework, and the study successfully developed this framework which can be used in the context of Pakistan for restructuring and transforming the existing system of ECE. As mentioned previously, the current system of education in public schools in Pakistan follows didactic approaches to learning and encourages rote memorisation. The BSF framework has a strong focus on child-centred and learning oriented education and independent ongoing learning. The framework encourages teachers to actively engage students in critical thinking, problem solving, self-directed discoveries and play-based education. Participants in this study stated that play-based education has incredible power to

develop a child's socio-emotional qualities, physical capabilities, and communication and cognitive skills.

. The findings of this study suggest that the process and model of framework development used to construct the BSF framework is transferable to other countries of the world which may assist future framework developers in the generation of culturally responsive, developmentally appropriate and ideologically sensitive education frameworks for their jurisdictions. The BSF framework is a research-based document which represent views of teachers, school heads, teacher educators, other ECE professionals and university academics in two continents of the world.

The country has a very long history of disputes with multiple actors due to conflicts of interest and religious extremism. To overcome this situation, it is important to teach children to become democratic thinkers and peacemakers. After winning the general election in 2018, the government of Pakistan Tehrik-e-Insaaf led by the then cricketer turned politician Imran Khan has been doing sincere efforts to transform the existing education system which is commendable. However, due to the current global pandemic of Corona Virus (Covid-19) the country has been facing several challenges. As of today, June 8, 2020, Pakistan's Covid -19 tally topped 101,000 cases. Since its outbreak in February 2020 Pakistan has suffered up to Rs2.5 trillion economic loss and the pandemic would have overflow impacts in the next fiscal year as well.

The findings of this study would allow me to work with other academics in the field of education in Pakistan to design relevant programs for the promotion of democratic values and child rights once I return to my home country after completion of this study. The insights gained throughout the whole process of framework development has well prepared me to lead framework development processes for other areas of society, other countries of the world,

and other spaces of education as well as other parts of the economy. This is the end of my thesis, but the story is not yet finished - there is more that needs to be done in the years ahead.

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List of Appendices

Appendix A
Ethics Approval letter to conduct the research

Social Science Ethics Officer
Private Bag 01 Hobart
Tasmania 7001 Australia
Tel: (03) 6226 2763
Fax: (03) 6226 7148
Katherine.Shaw@utas.edu.au

HUMAN RESEARCH ETHICS COMMITTEE (TASMANIA) NETWORK

UTAS

13 February 2018

Dr Jennifer Masters
School of Education
University of Tasmania

Student Researcher: Mohammad Afzal Khan

Sent via email

Dear Dr Masters

Re: MINIMAL RISK ETHICS APPLICATION APPROVAL
Ethics Ref: **H0017036 - Exploring developmentally appropriate practices in the context of Australia for creating culturally responsive Early Childhood Education (ECE) framework for Pakistan**

We are pleased to advise that acting on a mandate from the Tasmania Social Sciences HREC, the Chair of the committee considered and approved the above project on 09 February 2018.

This approval constitutes ethical clearance by the Tasmania Social Sciences Human Research Ethics Committee. The decision and authority to commence the associated research may be dependent on factors beyond the remit of the ethics review process. For example, your research may need ethics clearance from other organisations or review by your research governance coordinator or Head of Department. It is your responsibility to find out if the approval of other bodies or authorities is required. It is recommended that the proposed research should not commence until you have satisfied these requirements.

Please note that this approval is for four years and is conditional upon receipt of an annual Progress Report. Ethics approval for this project will lapse if a Progress Report is not submitted.

The following conditions apply to this approval. Failure to abide by these conditions may result in suspension or discontinuation of approval.

1. It is the responsibility of the Chief Investigator to ensure that all investigators are aware of the terms of approval, to ensure the project is conducted as approved by the Ethics

Committee, and to notify the Committee if any investigators are added to, or cease involvement with, the project.

2. Complaints: If any complaints are received or ethical issues arise during the course of the project, investigators should advise the Executive Officer of the Ethics Committee on 03 6226 7479 or human.ethics@utas.edu.au.

3. Incidents or adverse effects: Investigators should notify the Ethics Committee immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.

4. Amendments to Project: Modifications to the project must not proceed until approval is obtained from the Ethics Committee. Please submit an Amendment Form (available on our website) to notify the Ethics Committee of the proposed modifications.

5. Annual Report: Continued approval for this project is dependent on the submission of a Progress Report by the anniversary date of your approval. You will be sent a courtesy reminder closer to this date. **Failure to submit a Progress Report will mean that ethics approval for this project will lapse.**

6. Final Report: A Final Report and a copy of any published material arising from the project, either in full or abstract, must be provided at the end of the project.

Yours sincerely

Katherine Shaw
Executive Officer
Tasmania Social Sciences HREC

Appendix B
Department of Education, Tasmania approval letter to access public schools for data collection

Department of Education
EDUCATION PERFORMANCE AND REVIEW

3/75 Campbell Street, Hobart
GPO Box 169, Hobart, TAS 7001 Australia

Tasmania

13 JUNE 2018

Mr. Mohammad Afzal Khan
School of Education, University of Tasmania
Locked Bag 1345
Launceston Tasmania

Dear Mr Khan

Exploring developmentally appropriate practices in the context of Australia for creating a culturally responsive Early Childhood Education (ECE) framework for Pakistan

The Research Assessment and Approval Committee reviewed your research application on 7 June 2018. The committee has agreed that your application is approved to proceed with the condition that a list of schools you wish approach is forwarded to EPR prior to them being contacted.

Please note that you have been given permission to proceed at a general level, and not at individual school level. You will still need to seek permission from the principal of the school to be involved in the study. Please provide them with the File number or a copy of this letter when approaching them for assistance.

A list of schools who have agreed to participate in the Research needs to be forwarded to EPR, prior to, or soon after the commencement of the proposed activity. A copy of your final report should be forwarded to Education Performance and Review, Department of Education, GPO Box 169, Hobart, 7001 at your earliest convenience and within six months of the completion of the research phase.

Should you have any questions about this determination please do not hesitate to email EPR at research@education.tas.gov.au or phone Jonathan Moritz on (03) 6165 5699

Yours sincerely

Shane Frost

Director, Education Performance and Review

Appendix C
Information letter to principals

UNIVERSITY of TASMANIA

College of Arts, Law & Education

Information sheet (The information sheet is for the principals to keep for records)

Title of the project: A design-based research to inform the creation of an Early Childhood Education Framework for Pakistan

Information sheet for semi-structured interviews of principals

1. **Invitation**

My name is Mohammad Afzal Khan. This study is being conducted in partial fulfilment of my doctoral degree in Early Childhood Education at University of Tasmania. I am conducting this research project under the supervision of Dr. Jennifer Masters and Dr. Elspeth Stephenson from the School of Education.

You are invited to take part in this study. Please read this explanatory statement in full before making a decision of participation.

2. **What is the purpose of this study?**

The proposed research project aims to create a developmentally appropriate early childhood/primary education framework for 4-8 years old children based on contemporary ideas and evidences from research and responsive to Pakistani cultural dynamics and sensitive to Pakistan's ideological needs.

3. **Why have I been invited to participate?**

Since, your school offers relevant education programs in early primary education, I am writing to invite you to participate in a semi-structured interview. You are being asked to participate in the study because of your leadership at the school. The Department of Education has given

permission to approach you to conduct research at your school. 12th to the 20th of June 2018 is a tentative date of data collection. Please note that your participation in this research is voluntary and there is no consequence for declining this invitation. Nevertheless, your participation is valued for the completion of this study as you have relevant expertise and experience of work in the area of this study. Should you choose to participate, you may withdraw at any stage or avoid answering any particular question.

4. What will I be asked to do?

As a participant of this research, you will be interviewed and recorded. The semi-structured interview is expected to take approximately 30-45 minutes. The transcript of the interview will be returned to you for review and your approval. You will also be able to amend and modify your transcripts if you wish to do so. To protect anonymity, participants' and schools' actual names will be replaced with the pseudonyms in any published materials and presentations. The interview will be conducted between -- to -- in 201-. The topic of the interview will be seeking your expertise about early primary education in order to create a culturally responsive and developmentally appropriate early primary/childhood framework for 4-8 years old children of Pakistan.

5. Are there any possible benefits from participation in this study?

This research may have no direct benefits to you, but your advice will be valued as a positive contribution for the development of the early childhood/primary framework for 4-8 years old children of Pakistan. In addition, your useful views will help in shaping the new framework for Pakistan and will make a positive contribution to the broader field of ECE in general. Your participation in this study will provide an opportunity to reflect on developmentally appropriate practices and culturally responsive education programs for 4-8 years old children which may increase your insights regarding the topic under investigation. The interview will also provide a chance to reflect on the key early primary/ECE practices and policy.

6. Are there any possible risks from participation in this study?

There are no any foreseeable risks of harm or side-effects, but should you feel at any time that you are uncomfortable with the questions, feel free to end your involvement in the interview.

7. **What if I change my mind during or after the study?**

Your participation is voluntary, and you are free to withdraw at any time without mentioning any reason(s). Upon your withdrawal, any data relevant to your participation in the shape of soft and hard copies will be destroyed immediately. It is expected to complete data analysis by the end of August 201- and you can choose to withdraw your participation before this date at any time, if you think to do so.

8. **What will happen to the information when this study is over?**

All data will be accessed only by the researchers. Digital copies of all interview data will be kept in the password protected electronic folder on the laptop of the researchers and backed-up into the password secured UTAS server-based folder. Any paper-based data will be kept in the locked filing cabinet provided to researchers by the University of Tasmania.

The researchers will securely keep the data for a minimum of 5 years from the date of the first publication. Afterwards, all electronic files will be deleted from the laptop, backup servers and from the electronic recycle bins and all hard copy paper-based documents will be shredded.

9. **How will the results of the study be published?**

This research will be published in the form of a Doctoral thesis. The plan is also to publish two to three articles in an educational journal in addition to designing an early childhood/primary education framework for Pakistan. There is a plan to present findings of this study at 1-2 conferences. Please note that the participants of this research will not be identifiable in the publication and presentation of the results.

10. **What if I have questions about this study?**

Interviewees can contact the research team, Jennifer Masters, Elspeth Stephenson and Mohammad Afzal Khan. If you have question(s) using the email address and phone number given below.

Email: jennifer.masters@utas.edu.au

elspeth.stephenson@utas.edu.au

MA.Khan@utas.edu.au

Phone Australia: +61 3 6324 3506

This study has been approved by the Tasmanian Social Sciences Human Research Ethics Committee. If you have concerns or complaints about the conduct of this study, please contact the Executive Officer of the HREC (Tasmania) Network on +61 3 6226 6254 or email human.ethics@utas.edu.au. The Executive Officer is the person nominated to receive complaints from research participants. Please quote ethics reference number H0017036."

Please note that this information sheet is for you to keep.

If you choose to volunteer for this study, please return the attached informed consent form according to the instructions on the form. I will contact you shortly after receiving your consent to make arrangements for the interview at a mutually convenient time and place.

Kind Regards

MOHAMMAD AFZAL KHAN

Doctoral Candidate University of Tasmania Australia

Appendix D
Information letter to ECE teachers for focus group

UNIVERSITY of TASMANIA

College of Arts, Law & Education

Information sheet (The information sheet is for focus group participant (teachers) to keep for records)

Title of the project: A design-based research to inform the creation of an Early Childhood Education Framework for Pakistan

Information sheet for focus-group meetings

1. **Invitation**

My name is Mohammad Afzal Khan. This study is being conducted in partial fulfilment of my doctoral degree in Early Childhood Education at University of Tasmania. I am conducting this research project under the supervision of Dr. Jennifer Masters and Dr. Elspeth Stephenson from the School of Education.

You are invited to take part in this study. Please read this explanatory statement in full before making a decision of participation.

2. **What is the purpose of this study?**

The proposed research project aims to create a developmentally appropriate early primary/childhood education framework for children aged 4-8 based on contemporary ideas and evidences from research, responsive to Pakistani cultural dynamics and sensitive to Pakistan's ideological needs.

3. **Why have I been invited to participate?**

Since, your school offers relevant programs in early primary education, I am writing to invite you to participate in a focus-group. Data will be collected between -- to – 201- from Victorian schools. All other early primary teachers at your school have also been invited to participate in the same focus group. Please note that your participation in this research is voluntary and there is no consequence for declining this invitation. Nevertheless, your participation is valued for the completion of this study as you have relevant expertise and experience of work in the area

of this study. Should you choose to participate, you may withdraw at any stage or avoid answering any particular question.

4. What will I be asked to do?

As a participant of this research you will take part in the focus group with other early primary teachers of your school. The focus group discussion is expected to take approximately 45-60 minutes. The transcript of the discussion will be returned to you for review and your approval. You will also be able to amend and modify your transcripts if you wish to do so. To protect anonymity, participants' and schools' actual names will be replaced with the pseudonyms in any published materials and presentations. The focus group discussion will be conducted between -- to -- in 201-. The topic of the focus group will be seeking your expertise for the creation of a culturally responsive and developmentally appropriate early childhood/primary education framework for children aged 4-8 of Pakistan by exploring developmentally appropriate practices in the context of Australia.

5. Are there any possible benefits from participation in this study?

This research may have no direct benefits to you, but your advice will be valued as a positive contribution for the development of the Early childhood/primary education framework for children aged 4-8 of Pakistan. In addition, your useful views will help in shaping the new framework for Pakistan and will make a positive contribution to the broader field of ECE in general. Your participation in this study will provide an opportunity to reflect on developmentally appropriate practices and culturally responsive education programs for 4-8 years old children which may increase your insights regarding the topic under investigation. The Focus group will also provide a chance to reflect on the key early primary education practices and to envision your learning from the process of your classroom teaching.

6. Are there any possible risks from participation in this study?

There are no any foreseeable risks of harm or side-effects, but should you feel at any time that you are uncomfortable with the questions, feel free to end your involvement in the focus group.

of this study. Should you choose to participate, you may withdraw at any stage or avoid answering any particular question.

4. **What will I be asked to do?**

As a participant of this research you will take part in the focus group with other early primary teachers of your school. The focus group discussion is expected to take approximately 45-60 minutes. The transcript of the discussion will be returned to you for review and your approval. You will also be able to amend and modify your transcripts if you wish to do so. To protect anonymity, participants' and schools' actual names will be replaced with the pseudonyms in any published materials and presentations. The focus group discussion will be conducted between -- to -- in 201-. The topic of the focus group will be seeking your expertise for the creation of a culturally responsive and developmentally appropriate early childhood/primary education framework for children aged 4-8 of Pakistan by exploring developmentally appropriate practices in the context of Australia.

5. **Are there any possible benefits from participation in this study?**

This research may have no direct benefits to you, but your advice will be valued as a positive contribution for the development of the Early childhood/primary education framework for children aged 4-8 of Pakistan**.** In addition, your useful views will help in shaping the new framework for Pakistan and will make a positive contribution to the broader field of ECE in general. Your participation in this study will provide an opportunity to reflect on developmentally appropriate practices and culturally responsive education programs for 4-8 years old children which may increase your insights regarding the topic under investigation. The Focus group will also provide a chance to reflect on the key early primary education practices and to envision your learning from the process of your classroom teaching.

6. **Are there any possible risks from participation in this study?**

There are no any foreseeable risks of harm or side-effects, but should you feel at any time that you are uncomfortable with the questions, feel free to end your involvement in the focus group.

The researchers will assign pseudonyms and/or research codes to the data from the focus group discussion to ensure the confidentiality and anonymity of individual

participants/schools in the publication or dissemination of any findings from this research. Participants in focus groups will be asked maintain confidence and not to discuss the comments of others outside of the focus group

7. **What if I change my mind during or after the study?**

Your participation is voluntary, and you are free to withdraw at any time without mentioning any reason(s). Upon your withdrawal, any data relevant to your participation in the shape of soft and hard copies will be destroyed immediately. It is expected to complete data analysis by the end of August 201- and you can choose to withdraw your participation before this date at any time, if you think to do so.

8. **What will happen to the information when this study is over?**

All data will be accessed only by the researchers. Digital copies of all focus group data will be kept in the password protected electronic folder on the laptop of the researchers and backed-up into the password secured UTAS server-based folder. Any paper-based data will be kept in the locked filing cabinet provided to researchers by the University of Tasmania. The researchers will securely keep the data for a minimum of 5 years from the date of the first publication. Afterwards, all electronic files will be deleted from the laptop, backup servers and from the electronic recycle bins and all hard copy paper-based documents will be shredded.

9. **How will the results of the study be published?**

This research will be published in the form of a Doctoral thesis. The plan is also to publish two to three articles in an educational journal in addition to designing a early childhood/primary education framework for Pakistan. There is a plan to present findings of this study at 1-2 conferences Please note that the participants of this research will not be identifiable in the publication and presentation of the results.

10. What if I have questions about this study?

The members of a focus group can contact the research team, Jennifer Masters, Elspeth Stephenson and Mohammad Afzal Khan. If you have question(s) using the email address and phone number given below

Email: jennifer.masters@utas.edu.au

elspeth.stephenson@utas.edu.au

MA.Khan@utas.edu.au

Phone Australia: +61 3 6324 3506

This study has been approved by the Tasmanian Social Sciences Human Research Ethics Committee. If you have concerns or complaints about the conduct of this study, please contact the Executive Officer of the HREC (Tasmania) Network on +61 3 6226 6254 or email human.ethics@utas.edu.au. The Executive Officer is the person nominated to receive complaints from research participants. Please quote ethics reference number H0017036.

Please note that this information sheet is for you to keep.

If you choose to volunteer for this study, please return the attached informed consent form according to the instructions on the form. I will contact you shortly after receiving your consent to make arrangements for the interview at a mutually convenient time and place.

Kind Regards

MOHAMMAD AFZAL KHAN

Doctoral Candidate University of Tasmania Australia

Appendix E
Permission letter to access schools in Pakistan for data collection

004027

For General Correspondence Only

Aga Khan Education Service, Pakistan

A company set up under section 42 of the Companies Ordinance, 1984

Date: November 21, 2018

Re: Permission for research

Dear Mohammad Afzal Khan,

This is with reference to your request for conducting research at Aga Khan Schools in Gilgit-Baltistan and Chitral regon. We are pleased to allow you to collect data for your proposed research from selected Aga Khan Schools.

We understand that the proposed research project aims to create a developmentally appropriate Early Childhood Education (ECE) framework based on contemporary ideas and evidences from research, responsive to Pakistani cultural dynamics and sensitive to Pakistan's ideological needs. We assume that you will take of the all the relevant ethical considerations in the entire process and will not publish any sensitive data without our formal consent.

If you have any questions, please feel free to contact.

Aien Shah

Head of Education,

Aga Khan Education Service, Pakistan

Level 8, Serena Business Complex, Khayaban-e-Suharwardy, G-5/1,

Islamabad. Email: aien.shah@akesp.org

Tel:+92-51-111-253-254, Cell: +92-302-8270042

Appendix F
Focus-group discussion protocols

Name of Participants 1. _____ 2. _____

1. _____. 4. _____ 5. _____

School: _____ Date: _____

Focus Group start time: _____ End time: _____

Thank you very much for participating in this interview and thanks for your time I appreciate it.

Semi-structured interview protocol for focus-group

1. Please describe what a typical day in your classroom looks like.

Principles

2. What is your philosophy of teaching and learning for 0-8 years old children?
3. How do you address and nurture diversity in your classroom?

Practice

4. How developmentally appropriate opportunities are created in your classroom for the holistic development of young children?
5. How do you create safe and enriching environment which is conducive for the development of young children?
6. What are the factors teacher need to consider for the holistic development of th e child?
7. How are families involved in the education, care and development of their children?
8. What skills and competences are needed by the educators in order to organize ECE?

Learning outcomes/desired outcomes

9. What effect has the ECE on your students?

10. How do teachers assess children's holistic development in early childhood?
11. In your opinion, what kind of measures can be taken to ease various stages of t ransitions for young children?
12. Is there anything you would like to add or other advice that you might be able to give me for designing a curriculum framework to meet the needs of early childhood education in Pakistan?

Appendix G
Principals Interview guide

Name of Participant: _____ School: _____

Interview start time: _____ End time: _____ Date: _____

Thank you very much for participating in this interview and thanks for your time, I appreciate it.

Principles

1. Why is early childhood education important and how it is implemented in your school?
2. How does your school ensure that early childhood education in place reflects the holistic way children learn and grow?

Practices

3. How does your school work with parents to deliver high-quality ECE programs for their children?
4. What are some of the challenges a teacher can face in ECE setting? And how can teachers solve those challenges?
5. How does your school cater for the needs of children of different learning styles?

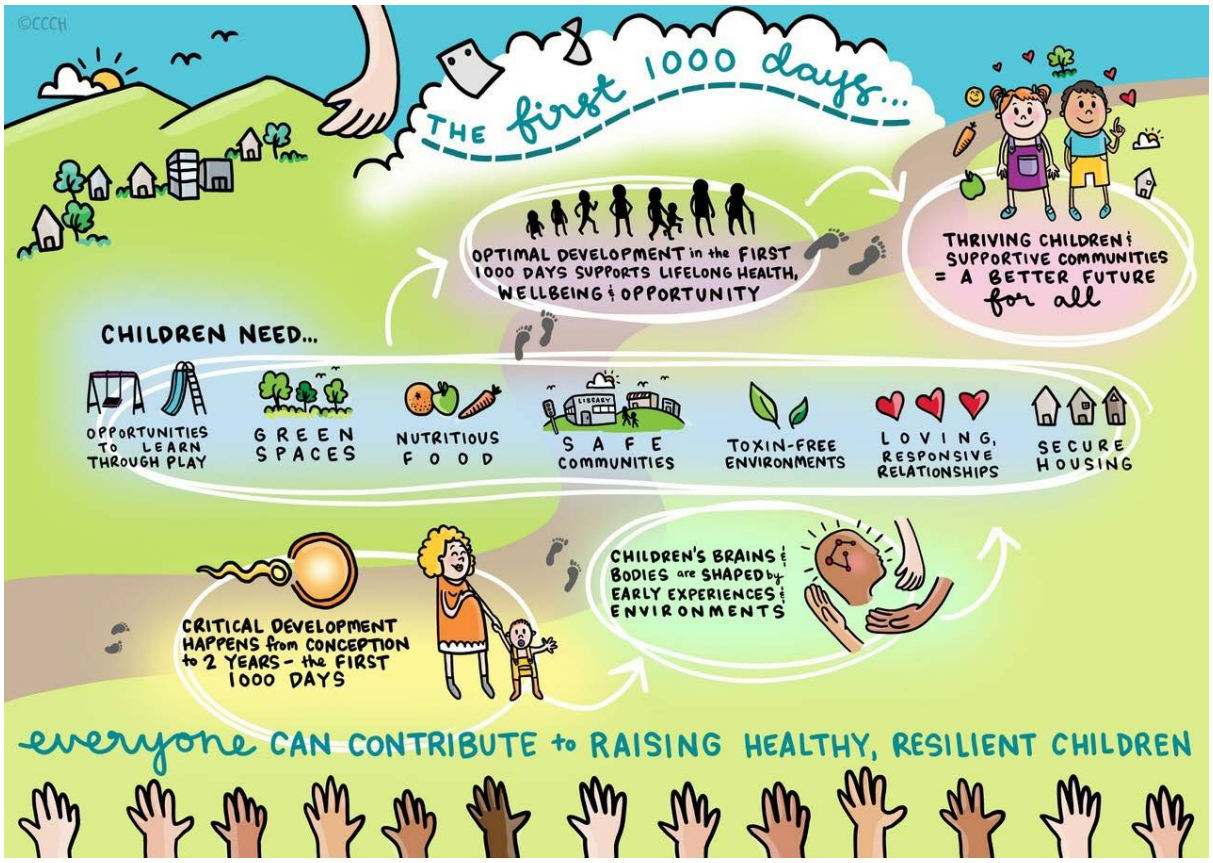
Learning outcomes

6. What do you think young children need to know and learn in early childhood phase of development?
7. What effect has the existing ECE programs on your students?

8. In your opinion, what kind of measures can be taken to ease various stages of transitions for young children?
9. Is there anything you would like to add or other advice that you might be able to give me for designing a curriculum framework to meet the needs of early childhood education in Pakistan?

Appendix H
Version 1 of the proposed ECE framework

Early Childhood Education (ECE) Framework for Pakistani context



It takes a village to raise a child

African proverb

The ECE Framework for Pakistani context

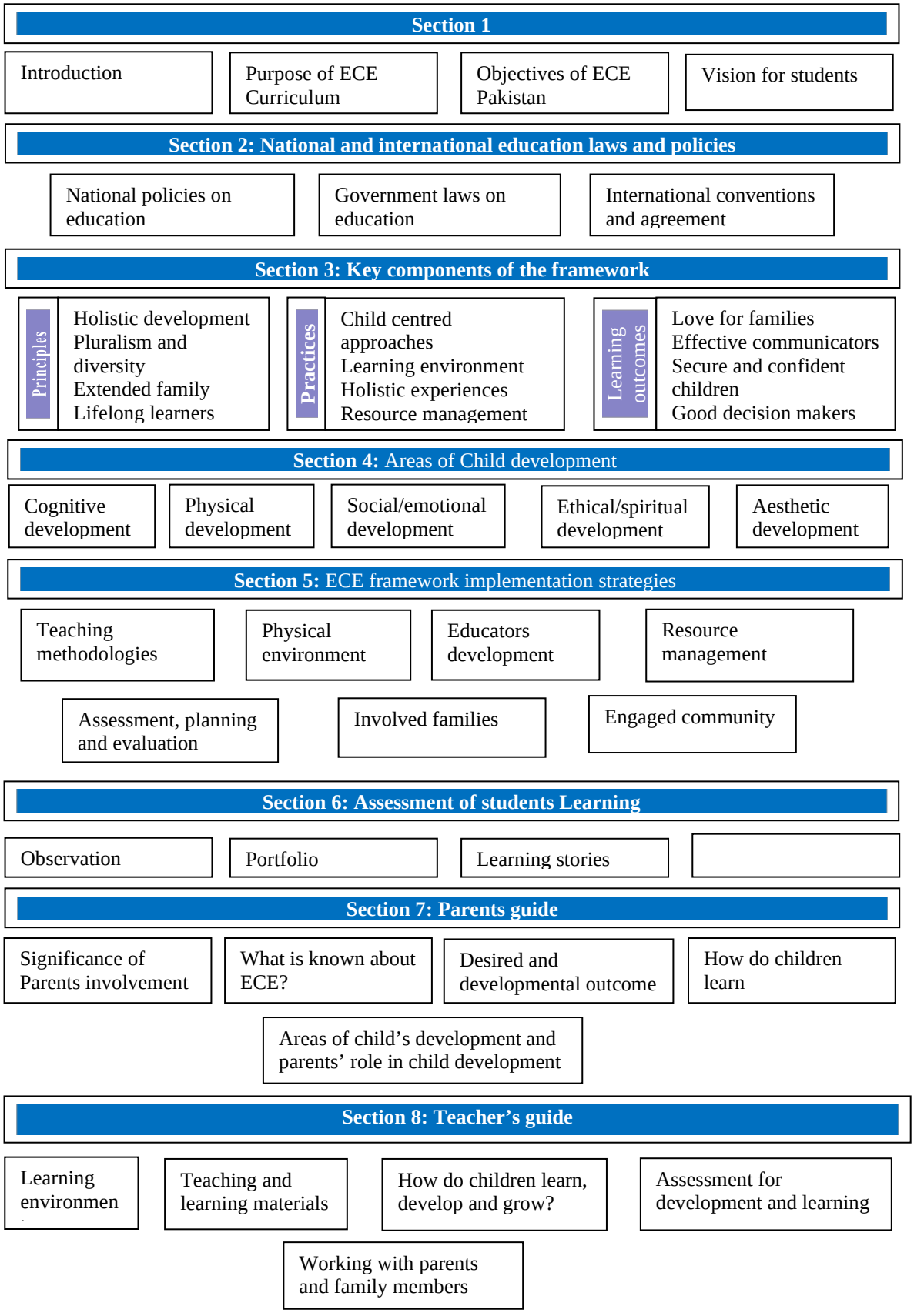
Section 1: Introduction

The main purpose of the development of this framework is to promote quality, access, uniformity and distinction in early childhood education Pakistan. Public schools in Pakistan largely follow traditional rote-oriented curriculum (usually Urdu, English, Maths and Science books) for the education of 3-8 years old children. Pakistan being signatory of various international key treaties such education for all and Millennium development goals etc, no serious efforts have been made to launch authentic early childhood education with true spirit despite producing numerous national ECE policies and five-year strategic plans (Mahmud & Mckay, 2006). Overwhelming evidences from research depict that the first eight years are critical years of human life since children during this age are at the high state of readiness for learning than at any other stage of development. Quality early years education in the foundation stage of development and growth is crucial for making a positive contribution to children's long-term development and learning.

Reports indicate that most of the ECE programmes currently on offer in Pakistan do not have developmentally appropriate and culturally responsive programmes for the young children. To ensure optimal development of Pakistani children, there is a dire need to create a research based ECE framework, encompassing developmentally appropriate knowledge and culturally responsive programmes. The current ECE framework aims to engage children in meaningful, challenging and productive learning experience in safe, supportive, enabling and active learning environment. It will facilitate to inculcate the values of pluralism so that children develop appropriate perceptions and understandings of other traditions and respect for cultural differences. Effective provision of ECE programmes can play very significant role in contributing to the spiritual, ethical, intellectual, emotional, social, aesthetic, physical development of young children.

This framework is a dynamic document and would be continually reviewed and evolved in the light of emerging educational, societal, technological needs of the country as with the passage of time national and global needs change and knowledge expands. Also, from time to time, learning from case studies of emerging best practices in Pakistan and elsewhere in the world would further strengthen the framework.

Conceptual framework for formulation of ECE Framework for Pakistan



Purpose of the ECE framework

The main purpose of this framework is to provide a structure around which ECE providers in Pakistan can build high quality early years education programmes to meet the holistic needs of children aged 3-8 years old. This framework is informed by contemporary research studies, authentic theories, best classroom practices and is influenced by early years learning framework of Australia and New Zeeland.

Objectives for early childhood education Pakistan

The general aim of ECE is to facilitate holistic development of 3-8 years old young children and lay sound foundation for their lifelong learning and all-round development. The objectives of ECE Pakistan can be:

1. Nurturing in children a sense of identity and pride in being Pakistani.
2. Developing children holistically encompassing their physical, social, emotional, cognitive and moral development and aesthetic and artistic skills
3. Developing critical thinking skills
4. Enabling ECE children enjoy living and learning through play and active learning opportunities
5. Develop the child's self-esteem and self-confidence
6. Enabling children to develop understanding and appreciation of their culture and environment

Framing a vision for early year learning

Educating the child holistically for a peaceful, prosperous and safe Pakistan and secure world

Vision for the students

To produce holistically developed children who are

- creative, innovative and productive
- connected to family, community, national and global developments
- capable of learning and living with others
- life-long learners

Purpose of education

The country has been confronting numerous grave challenges for more than 3 decades after America's creation of rigid religious schools in Pakistan and weaponization of the country to fight against USSR invasion in Afghanistan. It is believed that education system including textbooks and other study materials are more inflexible as they are influenced by these orthodox religious groups supported by likeminded political parties.

So, the major purpose of education in Pakistan should be bringing-up healthy, happy, peaceful and caring children committed to religious harmony and respectful to diversity. The education system must nurture in children tolerance, harmonious living, democratic thinking, global co-existence, and the promotion of environmental sustainability.

Purpose of ECE

The early childhood education Pakistan should provide children with an environment that will promote their holistic development. After implementation of this ECE framework students attending ECE programmes in Pakistan will be informed, creative, responsible and productive citizens contributing to a peaceful, prosperous and just society in Pakistan and around the world.

Studies around the world revealed that good quality ECE contributes to the spiritual, intellectual, cultural, social, emotional, aesthetic and physical dimensions of students' life. So ECE of Pakistan must foster the child's:

- cultural, aesthetic and creative development
- intellectual or cognitive development
- language development
- moral and spiritual development
- physical development, health and well-being, and
- social and emotional development.

Education values

Education values help children foster their academic achievements and relationship skills that last throughout their life. The following are ECE values for Pakistan to serve the society well as our values inform our thoughts, words and action.

- Forgiveness
- Creativity
- Cultural understanding, empathy and tolerance
- Environmental sustainability
- Flexibility
- Honesty, fairness and respect for truth and justice

Section 2: National and international education laws, policies and agreements National education laws

After 18th amendment of the constitution of Pakistan in 2009 article 25A assures that free and compulsory education to children (aged 5-16 years) regardless of sex and race is the prime right of all the citizens and is the fundamental responsibility of the state.

According to the Article-9 of the constitution of Pakistan the appropriate government may make necessary arrangements for providing free pre-school education and early childhood care for children above the age of 3 years until they join formal schools.

Article 3 of the constitutions states that children's best interests must be a primary consideration in all decisions affecting them whereas article 12 highlights that children have the right to express themselves freely on matters that affect them, and to have their views taken seriously.

Articles 6 is about children life, survival and development. According to this article all children have a right to life, and to survive and develop physically, mentally, spiritually, morally, psychologically and socially to their full potential.

National Education Policy Pakistan 1972-1980

The importance of ECE was not widely known in Pakistan when this policy was developed. The focus of this policy was traditional elementary education and adult literacy programme. The policy announced recommendations for universalization of primary education. In order to prepare children to participate in nation building activities the government will be responsible to provide free fundamental education to all young children. Up to grade 10 education will be free and will be accessible for all children across the country irrespective of their sect, faith, cast and creed. The policy further announced to train 150,000 traditional

primary teachers, to construct 61,000 new class-rooms for primary classes and recruit an additional 75,000 primary teachers across the regions.

National education policy 1992-2000

The government of Pakistan for the first-time announced tax exemptions and some other incentives for private sector to investing in education sector and to launch schools on non-profit basis all over the country. The policy proposed 100% participation of children in primary education by the year 2002 (Haq, 2014). The policy announced establishment of the National Education Testing Service to design and administer standardized tests for admission to professional institutions and a comprehensive monitoring and evaluation system to improving quality of teaching and learning and to enhance teachers' attendance in public sector school system (Ali, 2006). Another key recommendation was to raising education budget from to 4% of GDP by the year 2002-03. This policy also could not be implemented due to the change of government.

Education Policy 2017-2025

Basically, this policy is a continuation of and a duplication of previous education policies and the Key features of this policy are;

- A fresh commitment to institutionalise ECE and promotion of early childhood education t o next stage of expansions
- Expansion, strengthening and promotion of universal, comprehensive Early Childhood Ed ucation with an objective to ensure holistic development of children and to prepare them f or formal schooling.
- Re-assurance for the achievement of universal quality primary education covering all the t hree dimensions of universalization i.e. universal access/enrolment; universal retention; a nd universal achievement by 2020.
- Development, approval and implementation of a National Curriculum for harmonization o f standards and national integration.

INTERNATIONAL CONVENTIONS AND AGREEMENT ON CHILDREN EDUCATION AND RIGHTS

Universal Declaration of Human Rights (1948)

It was declared that primary education is basic human right for all people (Majoka & Khan, 2017). Education shall be free and compulsory in the fundamental stages and in a good quality for all the citizens of the world without any discrimination of race, religion, geography, gender, nationality and colour of skin. Education shall be organised for helping children to reach their full potentials and it must promote good relationships, tolerance, respect and friendship among all nations, religious and racial groups (Laurence, 2015).

The United Nations Convention for the Right of the Child 1989

This convention has been signed by 191 countries including Pakistan. The convention was adopted in 1989. According to this convention education should develop each child's personality and talents to the full. It should encourage children to respect their parents, their cultures and other cultures. The convention declared that schools must ensure that all the children are treated respectfully according to the human dignity. Primary education should be free for all and it is the responsibility of respective government to ensure that every child has access to primary education near to their homes and wealthier countries should help poorer countries to achieve this.

Education for All and Millennium Development Goals (2000) on Education

In 2002 at the world education forum at Dakar, the representatives of 165 countries of international community agreed to expand early childhood care and education, to ensure every child of the world complete full course of primary education and to massively reduce illiteracy from the world by 2015. It was agreed that education for all should be free, compulsory, culturally responsive, developmentally appropriate and of good quality.

Declaration on the Rights of Indigenous Peoples 2007

The declaration was adopted by the general assembly in 2007 which addresses individual and collective rights, cultural rights and identity, rights to education, health, employment, language, and others. According to the declarations all the human beings are equal and they have the right to education, right to protect their culture and right to expression.

Section 3: Key components of the ECE framework

The following section of the framework will discuss principals, practice and learning outcome in detail.

Early Childhood Education Principals

The following six principals construct the foundation of this framework and will guide teaching and learning in a way that will be best suited to young children and ensure that a firm foundation will be built for the next stage of learning and development.

1. **Developmentally appropriate practices are in place for children's holistic development**

The ECE framework seek to promote all aspects of a child's life. Children are born with the capabilities of learning, development and growth. Schools across the country in Pakistan teach standalone subject areas and certain academic skills rather than focusing children's optimal development. Comprehensive child's development programmes focus the entire child by fostering their cognitive, social, emotional, cultural, aesthetic, spiritual and physical dimensions of life. So, the focus of current and future ECE programmes should be the holistic development of young children rather teaching textbooks as currently in place textbooks of Pakistan encourage rote-oriented learning which does not prepare children for adult life.

2. **Inculcating the values of pluralism and diversity – culturally responsiveness**

The ECE programmes that will be developed for the children of Pakistan will inculcate the values of pluralism and diversity so that children develop appropriate perceptions and understandings of other traditions, cultures, faiths and ethnic groups. "It is striking that modern neuro-sciences have demonstrated that long before the age of 6, children are aware of the different cultural backgrounds amongst each other in their classes. It is thus before that age that pluralism can be instilled as a life value" (MHI, 2007).

3. **The concept of extended family - respect for elders and love for children**

Parents and siblings including grandparents are the key people in the life of children. The concept of extended family is an important aspect of human life in Pakistani society where children live with large number of family members and they love each other. All the members of the family have fundamental role in child's optimal development. Positive adult

and sibling relationship support smooth transition from home to school and one class to another and childhood centre to formal schools. Involving families as a partner in the education and development of children will promote children holistic development and will enhances their chances of better performance throughout their education life. ECE programmes across the country will educate children and their families for becoming proud members of the extended family setup.

4. **Children construct their own knowledge – lifelong learning**

Various research studies demonstrated that learning takes place everywhere. It can occur in a classroom, on a playground, at home and even inside worship places, cinema halls, in a shopping centre and at a sport centre. Children learn through their interaction with the context and with the people they are living with. They also learn through observation. Some research studies suggest that learning starts before birth and continues until death. ECE framework Pakistan seek to foster that formal learning among other things is a starting point for continued lifelong learning (Teacher Education Services Section Zambia, 2013). Children best construct their own knowledge if provided opportunities for exploration and investigation. To nurture children as life-long learners, we need to build their self-confidence, encourage them to explore the world around them and teach them how to regulate their behaviour and emotions, express themselves and get along with others (Ministry of Eucation Singapore, 2013).

5. **Knowledgeable, responsive and committed early childhood professionals**

Teachers have the most substantial role in children learning, wellbeing and development. Well-developed teachers can create well organised education and effective development programmes for young children. Early childhood teachers in Pakistan are well-aware of programmes and strategies for children's learning and development. A teacher of young children must be trained on regular basis and in a holistic manner. Only having command over content knowledge or curriculum is not enough for an ECE teachers rather the ECE teacher must be able to create a conducive environment which is safe, secure, enabling and full of provisions for learning.

Suggested Practices

The ECE framework Pakistan will put the following six practices in place.

1. Child centered approaches (learning through play, exploration, reflection, experimentation, learning by doing, project work etc)
2. Creating conducive learning environment (displaying children work, comfortable sitting arrangements, safe, secure, resourceful, attractive and colorful classrooms, age appropriate, child friendly and safe furniture etc.)
3. School/Curriculum offers holistic experiences for learning (creating opportunities for the development of social, emotional, aesthetic, spiritual and physical dimensions of children life)
4. Planning and resource management (establishing learning areas, integrated lessons, use of technology, parents' expectations, displays, easy access to learning resources, physical, social and emotional environment)
5. Assessment for learning and development (portfolio, observation, learning stories)

Desired Learning Outcomes

The following six learning outcomes have been designed for the development of children across 3-8 age range.

1. Children love their families, friends, neighbors, teachers, school and public places
2. Express feelings/emotions socially acceptable manners
3. Children are secure and confident
4. Children are good decision makers
5. Children are independent and lifelong learners
6. Children communicate effectively[9]
7. Children have a strong sense of identity and belonging[10]

Section 4: Areas of Child's development

1. Social development
2. Physical development

[9] Children communicate right from the birth. They use multimodal forms of communication to convey their messages. They use body language, smile, cry, silence and various other modes of interaction to get others attention.

[10] From birth, children develop; a sense of who they are: personal identity, social identity and relationships with others
Personal characteristics and behaviour. A sense of individuality and a sense of belonging contribute to positive identities
Understanding of self, family and others (Australian Governement Department of Education Employment and Workplace Relations, 2009).

3. Language development
4. Moral/spiritual development
5. Cognitive development
6. Aesthetic development

Section 5: ECE Framework Implementation Strategies

1. Teaching methodologies

This framework adopts active and cooperative learning approaches for the education of young children. Research has demonstrated that children are co-constructors of their own knowledge. They bring with them previous knowledge to learning centres and a good teacher knows effective ways to help students to construct and promote their knowledge and experience to the next level of understanding. Some of the key methodologies to follow for children education and development are given below;

i. Project work

Students will be engaged in purposeful projects in and outside of the learning centres. The centres will provide sufficient time and resources for children to work on their projects and to present/discuss the process and the product. Parents will also be involved in take-home projects with their children. Parents will be given full awareness and instructions for helping their children at home to complete their projects. Children project works will be displayed in their classroom at the appropriate height/level so that other students can also read and see each other works. Completed project work of students will be kept in their learning portfolios. Please see appendix A for examples of some the key projects to children 3-8 years old.

ii. Field trips

Studies depict that learning and development occur everywhere and at any time. Safe and secure field trips provide excellent outdoor opportunities of learning, socialisation and prospects for physical development. Children learn from the interaction with the nature and gain practical experiences as nature is the best teacher of children. Schools will organise field trips for children during the academic year. Some schools and parents in Pakistan believe that outdoor activities including field trips are waste of students and teachers time therefore

children are discouraged to interact with the nature. However overwhelming research findings suggest that engagement of young children in field trips activities promote their development and growth.

iii. Play-based learning

In play-based learning children are actively engaged with their immediate context, adults and objects. Children learn best when they are engaged in various form of play. Play should be purposeful, interesting and according to the age level. Usually two types of play i.e. free play and supervised play are very common in ECE around the world. (more details have been included in literature review chapter)

2. Physical environment

The physical environment has a key role in child's holistic development and wellbeing as "the physical environment of a classroom can directly affect the quality and quantity of play, which in turn affects child's development" (Guerin, n.d.). Classrooms should be organised in such a manner where children could feel safe and well protected. Classrooms must be clean, attractive, comfortable and colourful to attract children attention and interests. Environment should have plenty of various materials which are developmentally and age appropriate to arouse and sustain students' curiosity and interests. The materials should be according to the age level of students, sufficient, in a good condition/quality and easily accessible for children to play and explore.

3. Educators' professional development

Research suggest that ongoing professional development is essential to update teachers knowledge and skill for designing and implementing effective learning activities. Professional development can occur anywhere and anytime. It can happen during discussion with work colleagues, independent reading and during observation of others work. Formally it can occur when teachers attend organised workshop, conference, seminar and courses at a teacher's college (Mizell, 2010). Classroom experiences suggest that teachers learn a lot when they teach to their students because teaching involves preparation, reading and reflections. Teachers engagement in continuing education programmes improves students learning and achievements. On the other hand, students learning suffers if teachers have no

access to in-service training programmes consequently they do not improve their skills. Teachers needs to be knowledgeable about how children learn and develop. They should also know how the early childhood curriculum works and should be skilled at implementing the framework.

Section 6. Assessment for learning and development

Currently in place assessment practices in the public schools in Pakistan still follow traditional paper pencil test to check students' memorisation skills. Students good in reproduction of prescribed textbooks contents and learning by heart can score high in this type of assessment. Reports indicate that the current assessment practices of the country cannot contribute in showing a complete picture of students learning and development.

Fundamentally, assessment in ECE is used to discover whether children are ready to learn and how they can be supported. Types of assessment suggested in this framework can provide a holistic view of learning and development if used wisely. Assessment in ECE will be used to finding out children's strengths and areas for further improvement in all domains of development.

The framework in hand suggests conducting evaluation as well to check early childhood settings and the implementation of the ECE framework and to identify the impact of the ECE programmes. ECE teachers must be trained to conduct assessment and evaluation. In the field of ECE, worldwide various forms of checks and supports are in place in the shape of assessment for learning, assessment in learning and assessment of learning. Most common forms of assessment are systematic observations, portfolio, project works, learning stories and use of technology.

1. **Assessment through observation** (Assessment tool will be attached - ages and stages of development)

Observation is a powerful tool to assess students learning. Through observation teachers can discover how well the children are making progress or if there is anything to improve further. Systematic observation helps teachers to identify children's academic, social, physical and emotional strengths and areas for remedial help. Having assessment data ready about children can guide teachers identify children with special needs for providing additional support. Most common methods to record observation are:

- Anecdotal records
- Running notes
- Checklists and questionnaires
- Event samples
- Photographs, painting, artefacts and work samples (Ministry of Eucation Singapore, 2013)

ECE teachers understand that parents are key partners in their children education and development, so teachers provide parents with information about their children's progress and strengths instead telling them weak areas every time and also let them know if the teacher may have any concern. Teachers are encouraged to observe children on daily basis and keep proper record of their observations. Teachers must maintain learning portfolio of each students to keep record of samples of students' progress and achievements.

2. Portfolio assessment

The physical form of a portfolio may be a book or a folder. Some creative teachers create learning portfolio folders and books for children at schools from locally available materials whereas other teachers prefer to buy folders from the market. Schools with IT facilities can create online e-portfolios and upload contents to each child e-portfolios.

Portfolio is an authentic tool of assessment of students learning and development. Basically, learning portfolio is a compilation of students' works, records of their academic achievements, learning progress, their painting, artefacts, drawing, writings and photographs. It is also used to record children developing skills, dispositions, knowledge and family and other events. It is a developmentally appropriate form of assessment because it includes samples of child's achievements and evidences of their holistic development throughout the year (Peters, Hartley, Rogers, Smith, & Carr, 2009). Portfolio is not only an assessment tool, but it also is a comprehensive record keeping for future use for the optimal development of young children.

3. Learning stories

Learning stories are created by ECE teachers with the collaboration of parents. Learning stories are descriptions of what a child can do rather than what she cannot do. Generated by

adults learning stories may be as short as a paragraph. Usually it is a description of what is the child doing and can do. Learning story is not merely a description of a child's strengths but it also allows teacher to add his careful interpretation to the description and avoiding incorrect assumptions. The focus of learning stories may be a specific event, a particular group work or any key engagement of a child to any particular activity. Adding an image or two to the story is always a good idea to make the story more meaningful and valuable for the families.

Learning stories cannot provide a holistic view of child's development and education so it is recommended to use learning stories in conjunction of other forms of formative assessment to create a complete picture of students learning and achievement.

4. Use of technology

Public schools in Pakistan have no access to the equipment of information and communication technology whereas schools in developed countries are equipped with technological facilities which has enabled increased and faster communication between school and home. Access to IT at schools has also improved process of assessment. Digital technology is used for faster and more reliable collection and documentation of children progress and achievements. ECE teachers are discovering creative ways of student's assessment using their cell phones. They use their cell phones to document student works and record their progress and areas for improvement (Scornavacca, Huff, & Marshall, 2009). Reports suggest that there is a growing trend to use mobile phones for communicate with parents and families.

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Appendix I
Version 2 of the proposed ECE framework

Building sound foundation: Early Childhood Education and development (ECED) Framework for Pakistani context

It takes a village to raise a child

African proverb

1

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The ECED Framework for Pakistani context

Preface

This is the first time, this type of document has been produced for Pakistan after extensive literature review, comparative ECE frameworks analysis and data collection and analysis in Australia and Pakistan using designed based research. Feedbacks from practitioners, researchers and ECE programmes organisers on its useability and contents will be taken widely in Pakistan in the last iteration of the research.

Section 1: Introduction

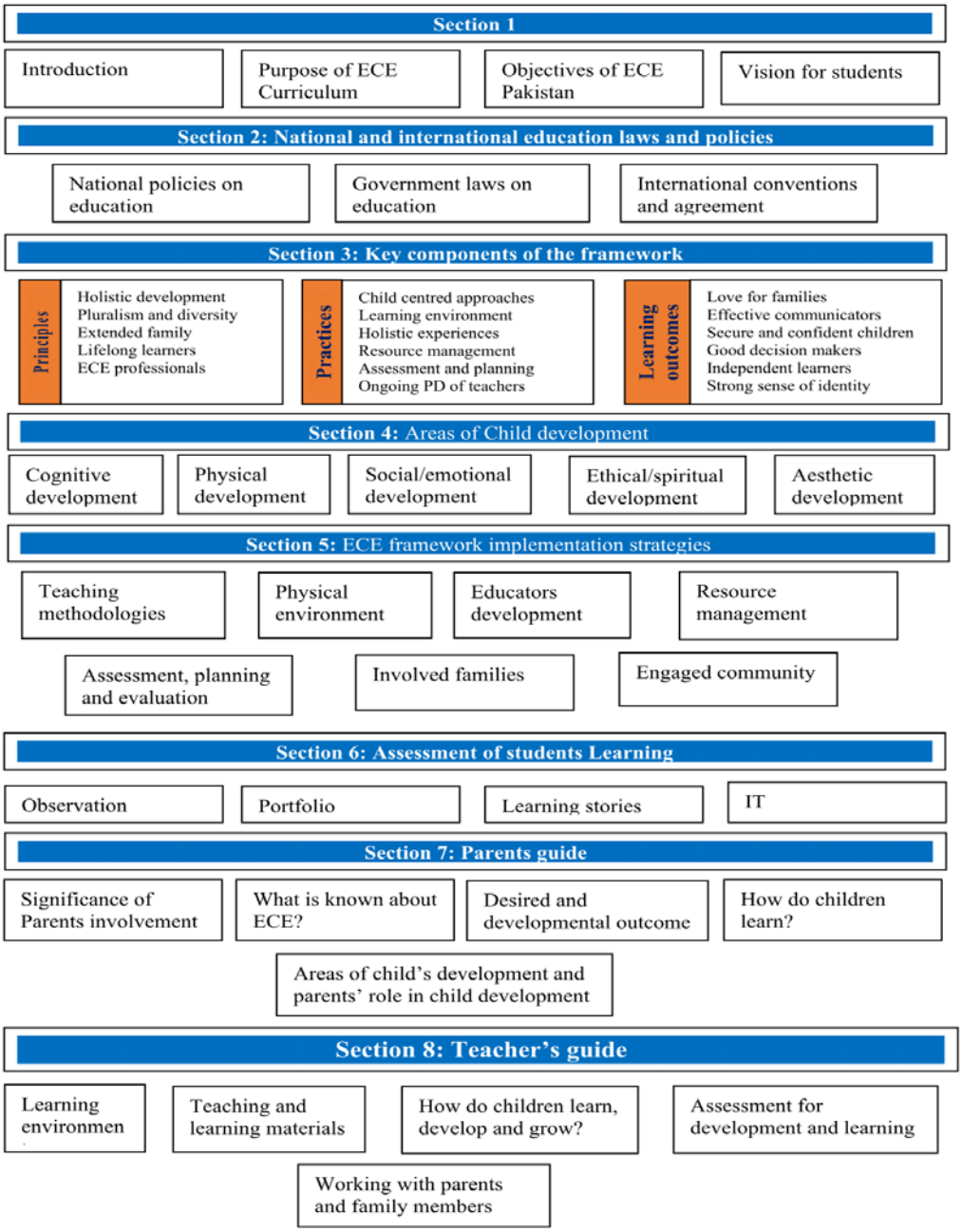
The main purpose of the development of this framework is to improve quality, access and uniformity in early childhood education in Pakistan. Public schools in Pakistan largely follow traditional rote-oriented textbooks (usually Urdu, English, Maths, Islamiat, and Science textbooks) for the education of 3-8 years old children. Pakistan being signatory of various international key treaties such Education For All and Millennium Development Goals etc, no serious efforts have been made to launch authentic early childhood education services with true spirit despite producing numerous national ECE policies and five-year strategic plans (Mahmud & Mckay, 2006). Overwhelming evidences from research depict that the first eight years are critical years of human life since children during this age are at the high state of readiness for learning than at any other stage of development. Quality early years education in the foundation stage of development and growth is crucial for making a positive contribution to children's long-term development and learning.

Reports indicate that most of the ECED programmes currently on offer in Pakistan do not have developmentally appropriate and culturally responsive programmes for the young children because most of these programmes have been imported either from Europe or America. To ensure optimal development of Pakistani children, there is a dire need to create a research based ECE framework, encompassing developmentally appropriate knowledge and culturally responsive programmes. The current ECE framework aims to engage children in meaningful, challenging and productive learning experience in safe, supportive, enabling and active learning environment. For the development of appropriate understanding of other traditions, religions and respect for cultural differences the framework will facilitate to instil the values of pluralism and inclusiveness. Effective provisions of ECE services can play very

significant role in contributing to the spiritual, ethical, intellectual, emotional, social, aesthetic, physical development of young children.

This framework is a dynamic document and would be continually reviewed and evolved in the light of emerging educational, societal, technological needs of the country as we all know that with the passage of time national and global needs keep changing while knowledge expands. Also, from time to time, learning from case studies of emerging best practices in Pakistan and elsewhere in the world would further strengthen the framework. A comprehensive review of research and literature was carried out from various field of human development for creating this framework. Literature suggest that the way children learn and develop in early age particularly before reaching to eight year is unparalleled (Ministry of Education Singapore, 2013).

Conceptual framework for formulation of ECE Framework for Pakistan



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Purpose of the early childhood education framework Pakistan

The main purpose of the creation of this framework is to provide a structure around which ECE providers in Pakistan can build high quality early years education and development programmes to meet the holistic needs of children aged 3-8 years old. This framework is informed by contemporary research studies, influential theories, best classroom practices and is inspired by early years learning framework of Australia, Singapore and New Zeeland.

Objectives for ECE Pakistan

The general aim of ECE Pakistan is to facilitate holistic development of 3-8 years old young children and lay sound foundation for their lifelong learning and all-round development. The objectives of ECE Pakistan can be:

1. Nurturing in children a sense of identity and pride in being Pakistani.
2. Developing children holistically encompassing their physical, social, emotional, cognitive and moral development and aesthetic and artistic skills
3. Developing critical thinking skills
4. Enabling ECE children enjoy living and learning through play and active learning opportunities
5. Develop the child's self-esteem and self-confidence
6. Enabling children to develop understanding and appreciation of their culture and environment
7. Fostering children's exploration skills, creativity, self-expression and discovery
8. Identifying children with special needs and align them with existing services if there is one such service available
9. Fostering children's civic sense
10. Improving the status of the child's health, care and nutritional needs by conducting awareness sessions for parents
11. Preparing children for lifelong learning opportunities and for smooth transition to further school education

Framing a vision for early year learning

Educating the children of Pakistan holistically for a peaceful, prosperous and safe Pakistan and secure world.

Vision for the ECE Pakistan students/children

To produce holistically developed children who are

- creative, innovative and productive
- connected to family, community, national and global developments
- capable of living with others
- life-long learners
- confident and effective communicators
- responsible, ethical, successful and resilient
- responsible and peaceful citizens
- co-contractor of their own knowledge and a key contributor of their own development

Purpose of Pakistan education

The country has been confronting numerous grave challenges for more than 3 decades after America's creation of rigid religious schools in Pakistan and weaponization of the country to fight against USSR invasion in Afghanistan. It is believed that education system including textbooks and other study materials are more inflexible as they are influenced by these orthodox religious groups supported by likeminded political parties.

So, the major purpose of education in Pakistan should be bringing-up healthy, happy, peaceful and caring children committed to religious harmony and respectful to diversity. The education system must nurture in children tolerance, harmonious living, democratic thinking, global co-existence, and the promotion of environmental sustainability.

Purpose of Pakistan ECE

The early childhood education Pakistan should provide children with an environment that will promote their holistic development. After implementation of this ECE framework students attending ECE programmes in Pakistan will be informed, creative, responsible and productive citizens contributing to a peaceful, prosperous and just society in Pakistan and around the world.

Studies around the world revealed that good quality ECE contributes to the spiritual, intellectual, cultural, social, emotional, aesthetic and physical dimensions of students' life

(Australian Institute of Health and Welfare, 2015; Barrueco, Wall, Mayer, & Blinka, 2016; Didonet, 2008). So ECE Pakistan must foster the child's:

- cultural, aesthetic and creative development
- intellectual or cognitive development
- language development
- moral and spiritual development
- physical development, health and well-being, and
- social and emotional development.

Early childhood education Pakistan's values

Education values help children foster their academic achievements and relationship skills that last throughout their life. The following are ECE values for Pakistan to serve the society well as our values inform our thoughts, words and action. Some of these key values are based on international conventions on the rights of the child.

- Social justice for everyone and forgiveness
- Equity for all children
- High quality education and education based on life skills
- Creativity
- Cultural understanding, empathy and tolerance
- Environmental sustainability
- Flexibility
- Honesty, fairness and respect for truth and justice
- Human rights, human dignity and responsibility
- Integrity
- Lifelong learning
- Peace and prosperity
- Safety and security for all citizens (especially for the children)
- Sense of family and community

Section 2: National and international education laws, policies and agreements

National education laws

After 18th amendment of the constitution of Pakistan in 2009 article 25A assures that free and compulsory education to children (aged 5-16 years) regardless of sex and race is the prime right of all the citizens and is the fundamental responsibility of the state.

According to the Article-9 of the constitution of Pakistan the appropriate government may make necessary arrangements for providing free pre-school education and early childhood care for children above the age of 3 years until they join formal schools.

Article 3 of the constitutions states that children's best interests must be a primary consideration in all decisions affecting them whereas article 12 highlights that children have the right to express themselves freely on matters that affect them, and to have their views taken seriously.

Articles 6 is about children life, survival and development. According to this article all children have a right to life, and to survive and develop physically, mentally, spiritually, morally, psychologically and socially to their full potential.

National Education Policy Pakistan 1972-1980

The importance of ECE was not widely known in Pakistan when this policy was developed therefore the focus of this policy was traditional primary education and adult literacy programme. The policy announced recommendations for universalization of primary education. It was recommended that in order to prepare children to participate in nation building activities the government will be responsible to provide free fundamental education to all young children. Up to grade 10 education will be free and will be accessible for all children across the country irrespective of their sect, faith, cast and creed. Traditionally, teachers capacity development programmes were not in place so the policy announced to train 150,000 traditional primary teachers across the country for making teaching and learning more meaningful for young children. It was also declared to construct 61,000 new class-rooms for primary classes and to recruit additional 75,000 primary teachers across the provinces.

Adult literacy rate in seventies was below 24% therefore to eradicate illiteracy within shortest possible time the policy announced a massive adult literacy program to educate approximately 11 million adults (Haq, 2014).

This education policy was a key step for educating the citizens of Pakistan and to raise literacy rate but unfortunately this could not be implemented according to its true spirit because of lack of political will, limitation of financial resources and ill planning. However, it provided a base for future policy making endeavours.

National education policy 1992-2000

There was a general feeling among policy makers and political figures that education is the key tool to eradicate poverty and to bring prosperity. So, the policy proposed 100% participation of children in primary education by the year 2002 (Haq, 2014).

The policy announced establishment of the National Education Testing Service to design and administer standardized tests for admission to professional institutions and a comprehensive monitoring and evaluation system to improving quality of teaching and learning and to enhance teachers' attendance in public sector school system (Ali, 2006).

Another key recommendation was to raising education budget from to 4% of GDP by the year 2002-03. This policy also could not be implemented due to the change of government.

The government of Pakistan for the first-time announced tax exemptions and some other incentives for private sector to investing in education sector and to launch schools on non-profit basis all over the country.

National education policy 1998 – 2010 and education sector reforms 2000-2010

Salient features

- For the first time the government of Pakistan recognized Kachi class (a class before class one) as a part of formal system in public schools and identified early education as the foundation stone for the entire education system. According to this policy initiation of Kachi classes across the country is a legal obligation of the state (Ali & Tahir, 2009).
- The policy has specially highlighted Pakistan's commitment to international education's treaties and conventions. Government of Pakistan created a comprehensive National Plan of Action (NPA) in 2001 for Education for All (EFA) and formulated a long-term

framework (2001-15) with ECE as one of its three focus areas. Two other focus areas were primary education and adult literacy. According to the action plan, over 40,000 ECE centres would be established over the period of ten years and a total of 51,000 preprimary teachers would be recruited and trained in the public sector (Government of Pakistan, 2003).

- Some concrete and key recommendations were made to improve quality and access of primary education
- It was proposed to maximize the role and participation of family, community, schools, non-government organizations and the media in the provision of pre-primary education (Rashid, 2004, p. 106)
- For the first time of policy making it was recommended to ensure adequate financial allocations for ECE.

Reports suggest that besides the funds released by the Federal Government under the Education Sector Reforms (ESR) action plan to the provinces for establishment of Kachi classes, no specific official measures took place in the provincial action plans. So, another policy was failed to implement.

Education Policy 2017-2025

Basically, this policy is a continuation of and a duplication of previous education policies and the Key features of this policy are;

- A fresh commitment was made to institutionalise ECE and promotion of early childhood education to next stage of expansions
- A new commitment was added for expansion, strengthening and promotion of universal, comprehensive Early Childhood Education with an objective to ensure holistic development of children and to prepare them for formal schooling.
- Re-assurance was made for the achievement of universal quality primary education covering all the three dimensions of universalization i.e. universal access/enrolment; universal retention; and universal achievement by 2020.
- Announced development, approval and implementation of a National Curriculum for harmonization of standards and national integration.

In the recent years in Pakistan there has been an increase in recognition and spending to support the importance of early childhood offerings. The new Govt of Prime Minister Imran Khan (Pakistan Tehrik Insaaf) is committed to improve the quality of education across

sectors therefore budget allocation for education sectors reforms is appreciable. Political commitment of the new Govt for promotion of education and health is high and their targets are achievable, so the people of the country are expecting to see some tangible and real on ground reforms in the education sector of the country in near future.

International Conventions and Agreement on Children Education and Rights

Universal Declaration of Human Rights (1948)

It was declared that primary education is basic human right for all people (Majoka & Khan, 2017). Education shall be free and compulsory in the fundamental stages and in a good quality for all the citizens of the world without any discrimination of race, religion, geography, gender, nationality and colour of skin. Education shall be organised for helping children to reach their full potentials and it must promote good relationships, tolerance, respect and friendship among all nations, religions and racial groups (Laurence, 2015).

The United Nations Convention for the Right of the Child 1989

This convention has been signed by 191 countries including Pakistan. The convention was adopted in 1989. According to this convention education should develop each child's personality and talents to the full. It should encourage children to respect their parents, their cultures and other cultures. The convention declared that schools must ensure that all the children are treated respectfully according to the human dignity. Primary education should be free for all and it is the responsibility of respective government to ensure that every child has access to primary education near to their homes and wealthier countries should help poorer countries to achieve this.

Education for All and Millennium Development Goals (2000) on Education

In 2002 at the world education forum at Dakar, the representatives of 165 countries of international community agreed to expand early childhood care and education, to ensure every child of the world complete full course of primary education and to massively reduce illiteracy from the world by 2015. It was agreed that education for all should be free, compulsory, culturally responsive, developmentally appropriate and of good quality.

Declaration on the Rights of Indigenous Peoples 2007

The declaration was adopted by the general assembly in 2007 which addresses individual and collective rights, cultural rights and identity, rights to education, health, employment,

language, and others. According to the declarations all the human beings are equal and they have the right to education, right to protect their culture and right to expression.

Section 3: Key components of the ECE framework

The following section of the framework will discuss principals, practice and learning outcome in detail.

Early Childhood Education Principles

The following six principals construct the foundation of this framework and will guide teaching and learning in a way that will be best suited to young children and ensure that a firm foundation will be built for the next stage of learning and development.

1. **Developmentally appropriate practices are in place for children's holistic development**

The ECE framework seek to promote all aspects of a child's life. Children are born with the capabilities of learning, development and growth. Currently public schools across the country in Pakistan teach standalone subject areas and certain academic skills rather than focusing children's optimal development. Comprehensive child's development programmes in Australia and other developed countries focus the entire child by fostering their cognitive, social, emotional, cultural, aesthetic, spiritual and physical dimensions of life. The ECE teachers in Pakistan must demonstrate holistic approaches to child development. For laying sound foundation, the current and future ECE programmes in Pakistan should pay attention to the holistic development of young children rather teaching standalone textbooks. Currently in place textbooks of Pakistan encourage rote-oriented learning which does not prepare children for adult life.

2. **Instilling the values of pluralism and diversity – cultural responsiveness**

Pakistan is a country of various languages, cultures, traditions, religions and ethnic groups. Teachers of young people across the country are mindful and humble to cultural, socio-economical, class and gender differences of all students. The strong focus is on children's holistic development regardless of their religion, colour, cast, diversity of ability, class and sexual orientation. The ECE programmes that will be developed for the children of Pakistan will incorporate the values of pluralism and diversity so that children develop appropriate perceptions and understandings of other traditions, cultures, languages, celebrations, cast, faiths and ethnic groups.

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seek to foster that formal learning among other things is a starting point for continued lifelong learning (Teacher Education Services Section Zambia, 2013). Children best construct their own knowledge if provided opportunities for exploration and investigation. To nurture children as life-long learners, we need to build their self-confidence, encourage them to explore the world around them and teach them how to regulate their behaviour and emotions, express themselves and get along with others (Ministry of Eucation Singapore, 2013).

5. Knowledgeable, responsive and committed early childhood professionals

Teachers have the most substantial role in children learning, wellbeing and development. Well-developed teachers can create well organised education and effective development programmes for young children. Early childhood teachers in Pakistan are well-aware of programmes and strategies for children's learning and development. A teacher of young children must be trained on regular basis and in a holistic manner. Only having command over content knowledge or curriculum is not enough for an ECE teachers rather the ECE teacher must be able to create a conducive environment which is safe, secure, enabling and full of provisions for learning.

Suggested Practices

The suggested practices in this section are not exhaustive and teachers may add other creative and appropriate ideas to facilitate children learning, development, growth and to foster quality relationship with parents and the communities. Using locally available resources teachers will use a variety of developmentally and culturally appropriate practices, instructional strategies and teaching techniques to foster children developmental needs. The current ECE framework of Pakistan will put the following six practices in place.

1. Child centered approaches/family-based approach to child's development

Children will be at the heart of teaching and learning. Children are capable learners, so all the activities will be designed based on children interests and their expectations. They will be given central role in their development and education. Children will be provided the opportunities to explore things around them. Children learn best when they are engaged in play, exploration, reflection, experimentation, learning by doing and in project works. Children learn through all their senses so a competent and effective ECE teacher makes sure that activities in place in the classroom are student friendly and promotes children holistic

development. In a family-based approach of education children are being loved with heart and minds by all adults involved in their education and development.

2. Creating conducive learning climate and physical environment

The environment or learning spaces have their own significance for children education and development. Children need good food and safe environment for becoming lifelong learners. Appropriate infrastructure such as classrooms, playground, sand pit, kitchen, sleeping room and resource room are prerequisite for running an effective ECE center or a school for young children. Children spend most of their time in their classrooms when they come to school for education. A safe, secure, resourceful, attractive and colorful classroom motivate students to come to school every day and play with their classmates in an attractive learning space (Ministry of Eucation Singapore, 2013). Children feel proud and happy when their paintings and other works are properly displayed in their classrooms which gives them further encouragement to complete more projects. Comfortable sitting arrangements, age appropriate, child friendly and safe furniture are vital for making the process of learning enjoyable for them whereas lack of facilities inside and outside classrooms may hinder their process of learning. Easy access to use of technology is also important for making the process of learning enjoyable for the children.

3. Holistic experiences for learning

Children are provided with programmes which are holistic in nature and give opportunities for their holistic development. Teachers and other adults will create opportunities for the development of social, emotional, aesthetic, spiritual and physical dimensions of children life. Children will be encouraged to take active part in outside and inside the classroom activities. The environment of the school/centre will provide opportunities for the development of the entire child in an integrated and interconnected manner. Children need fear free, respectful, full of learning and supportive environment to grow to their full potentials.

4. Life skills education programmes

Existing provisions of lower-primary education programmes do not fully meet the needs of many families in Pakistan. Textbooks and instructional strategies do not teach life skills

eventually do not prepare children to compete future life challenges. In Pakistan and elsewhere around the world children encounter various challenges in their daily life. ECE centres and schools must prepare children to deal effectively with the demands and complications of their practical life. In Pakistani public schools' instructional strategies encourage children to spend most of their time in learning contents of the textbooks by heart to pass annual exams and to produce good grades. Therefore, children are dependent in their thinking. They are passive recipient of knowledge and weak in critical thinking, reflective practice and problem solving skills (Jafari, 2009). Health related knowledge and education, psychosocial life skills, creative thinking, anger management, problem solving, decision making, self-awareness and coping with stress are the core life skills laid down by WHO however there are many other key life skills which are also important for the children to learn for living successful and happy life. For example, Anwar-ul-Islam (2017) has identified some of the pertinent areas of life skills for integration to national curriculum of the country. Some of the key areas from his list of life skills include knowledge of basic first aid including CPR and information about basic life saving medicine, recognising diseases, family management with a focus on good parenting and family structures, labour rights, duties and workmanship, self-defence skills, agriculture and livestock management skills specially for rural children, community and volunteer works, public speaking and awareness about international education system. We can also include information related to intellectual property rights and the importance of religious harmony in areas of life skills development.

5. Play-based learning/learning through play

Children usually play for the sake of playing and they do not play in order to learn. Literature suggest that children learn best and majority of their development occur when they are engaged in various forms of play (Ministry of Education Singapore, 2013). Previous studies have discovered that play has enormous influence on children holistic development. The ultimate aim of engaging children in play situation should be providing joyful opportunity for children to learn and develop (Heikkilä, Ihalainen, & Välimäki, 2004).

In play-based learning children are being actively engaged with their immediate context, adults and objects. Play should be purposeful, interesting and according to the age level of children. New Zealand (1996) and Australian (2009) ECE frameworks recognise the wealth of spontaneous and uninterrupted long time play and encourages teachers and parents to give value to children's play as meaningful learning activity. Usually two types of play i.e. free

play and supervised play and more specifically object play, sensory motor play, social play and dramatic play are common in early childhood education across the world.

ECE teachers in Pakistan will create safe, stimulating and secure and caring environment for children to play, solve problems, explore and construct their knowledge (Australian Governement Department of Education Employment and Workplace Relations, 2009). Research around the world has recognised the importance of play in children education, development and growth. So, the young children in our centres in Pakistan will be involved in both independent, uninterrupted and guided play throughout the day. Even textbooks if there are any will be taught using play way method of teaching and learning.

6. ECE teachers' professional development and support system

Educators play various key roles Research suggest that ongoing professional development is essential to update teachers' knowledge and skill for designing and implementing effective learning activities. Professional development can occur anywhere and anytime. It can happen during discussion with work colleagues, independent reading and during observation of others work. Formally it can occur when teachers attend organised workshop, conference, seminar and courses at a teacher's college (Mizell, 2010). Classroom experiences suggest that teachers learn a lot when they teach to their students because teaching involves preparation, reading, reflections, demonstrations and question answer sessions.

Teachers engagement in continuing education programmes improves students learning and achievements. On the other hand, students learning suffers if teachers have no access to in-service training programmes consequently they do not improve their skills. Teachers needs to be knowledgeable about how children learn and develop. They should also know how the early childhood curriculum works and should be skilled at implementing the framework. Most importantly teachers of young children must be trained in first aid to administer CPR etc.

There is a dire need to change existing image, roles and dominancy of teachers from imparter of knowledge to learning mediator, nurturer, monitor, documenter, planner and evaluator.

Teachers are encouraged to become reflective practitioners, critical thinkers and good readers. Ongoing professional development will also include but not limited to school based

ongoing workshops, seminars, professional discussion and course for teachers, visit to other centres, effective use and easy access to technology and media for continuous development.

a. Suggested family support system for teachers

Child's age	Support system for parent teachers
0-3 months	Maternity leave three months with full salary for up to 2 children including paternity leave 3 weeks
4-12 months	9 months parental leave with maximum 60% salary
1- 3 years	Child home care leave to take care children at home with 50% salary
3-8 years	Partial child care without salary leave if required

b. Proposed Child - adult ratios for ECE Pakistan

- 1 adult to 4 children for children under 3 years
- 1 adult to 10 children for 3-6-year-old
- 1 adult to 15 children for 6-8 years old

c. ECE Teacher's qualification

Class	Required entry qualification for teachers
Pre-primary (3-6 year children)	• At least intermediate in second division • A diploma in ECE from reputed University/Institution • Below 25 years of age
Primary class 1-2	• At least Bachelor's degree with second division • A diploma in ECE from reputed University/Institution • Below 30 years of age

Learning Outcomes

The following core learning outcomes have been designed for the development of children across 3-8 age range. So, the examples of activities given in this section are age-specific and have been designed catering children aged 3-8 years. These examples are not exhaustive therefore teachers have the flexibility to add more developmentally appropriate and culturally responsive opportunities for children's development.

Outcome 1. Children love their families, friends, neighbours, teachers, school and public places

Examples of activities for promotion of this area of development and education	Learning Outcomes	Domains of development
Start with family and local culture and link it with the world. Teachers; • ask children in a respectful manner to talk about self, family and community. • encourage them to bring family photographs and discuss about them • provide opportunity for making family trees • invite parents to discuss children progress and achievements • organise family day, parent's day and grandparent's day and provide opportunities for sharing foods • organize family role play to show helping, sharing and caring in family • Poem -Family comes together -I love you, you love me -Here is daddy • talk with children in respectful ways about similarities and differences in people • establish respectful and humble relationship with children • provide opportunities to discuss manners of living in neighborhoods such as taking care of neighbors by respecting their privacy, routines of life, belongings and avoiding noise pollutions etc in the neighborhoods • ensure that children are engaged in planning and setting up inside and outside environment of their classrooms and schools • organise tours to local parks, banks, colleges, super markets, worship places and other public places for children and practically demonstrate love and respect to these places by ensuring cleanliness, safety and security all the time	Children; • develop strong foundation of attachment with their family members • understand importance of the family and joint family set up • are aware about positive relations among family members • know that their family members love each other • respect their parents, grandparents and elders • feel that their family members take good care of them and love them • know that respect, love, sharing and caring are integral part of joint family system • participate and celebrate local festivals and rituals • take care of properties and equipment of public places •	• Cultural development • identity formation • social and emotional development

Add your own examples from your context

Outcome 2. Express feelings/emotions socially acceptable manners

Teachers are encouraged to teach children how to regulate and manage their feelings, emotions, thoughts and behaviour. Children learn effective social and emotional skills

through interaction and observation of their teachers when they demonstrate their feelings and behaviours in positive and humble way.

Examples of activities for promotion of this area of development and learning	Learning Outcomes	Domains of development
Teachers; • talk about how children's words and actions have impacts on others and on themselves • label out their feelings of joy, fear, anger and sadness etc • demonstrate self-calming techniques for anger and frustration management by using the technique of "stop and walk out before reacting to the situation". • teach how to react when there is a disagreement or a difference of opinions – using the technique of disagreeing with agreeable manner • encourage children to resolve conflicts through dialogue instead hitting and shouting on each other • encourage children to; take turns, keep quite when others are talking, speak in respectful way and respect others point of views, offer help to people in need	Children; • express their emotions and feelings in an acceptable manner • demonstrate appropriate behavior when working with others • Show tolerance and respect for opinions of others • Show respect to the people • Not laughing when someone makes mistakes • Show appreciation for others • Follow rules and regulations •	• Development of social and emotional skills, • Teamwork skills • Negotiation skills • Positive behavior

Outcome 3. Children feel secure and confident

By nature, children are curious leaners. They try to do new experiments, try out new ideas and always remain in search of new trials. They make mistakes and learn from their mistakes. A sense of security gives children the confidence to take risk, try new ideas and make mistakes without the fear of disregard.

Examples of activities for promotion of this outcome	Learning Outcomes	Domains of development
Teachers; • Know that all the children are different from each other and their learning needs are too different from each other • Compliment the child on their good behaviour and accomplishments • Encourage the children to talk about their activities, feelings etc • Provide realistic positive feedback • Remind children that they are loved	Overtime and with persistent guidance children; • confidence development • self-esteem development • development of speaking skills • taking responsibilities • failure/anger management skills • love for getting education	•

• Provide warm and safe spaces to children to move, interact, experiment, explore and manipulate things around them • Provide opportunities to play with peers, friends and fellows	•	

Outcome 4. Children make good decision

Examples of activities for promotion of this outcome	Learning Outcomes	Domains of development
Teachers; •	Children; •	•

Outcome 5. Children are independent and lifelong learners

Examples of activities for promotion of this outcome	Learning Outcomes	Domains of development
Teachers; •	Children; •	•

Outcome 6. Children communicate effectively[1]

Examples of activities for promotion of this outcome	Learning Outcomes	Domains of development
Teachers; • provide opportunities to children to learn numbers, mathematical concepts and numeric symbols • introduce various forms of communication such as verbal communication, communication through writing, symbols, body language and other forms of it • encourage children to learn letters of alphabets and write their names in Urdu and English and read and write sentences in both English and Urdu • provide ample opportunities for body moments, art, drama and music • create environment for sharing jokes, creative ideas and humors	Children; •	•

[1] Children communicate right from the birth. They use multimodal forms of communication to convey their messages. They use body language, smile, cry, silence and various other modes of interaction to get others attention.

Outcome 7. Children have a strong sense of identity[2]

Examples of activities for promotion of this outcome	Learning Outcomes	Domains of development
Teachers; • encourage children to talk about their like and dislike, personal qualities and strengths in front of other children • provide opportunities to children to o reflect on their similarities and differences in a respectful manner o talk about various local events such as Eid, Christmas, Diwali, Pathak, Chilim Josh and actively participate in them o feel good about their own abilities o show a positive view of themselves •	Children; •	•

Transitions – Smooth continuity between ECE settings and school programmes

A considerable amount of literature has been published to create awareness among teachers and parents on the importance of transitions and for easing transitions across contexts but until now little importance has been given to this in Pakistani context. In the existing circumstances, public schools and parents in Pakistan seems to be not fully aware and ready to help children make smooth transitions to settings. It is mostly because of lack of awareness about the significance of smooth transitioning. Currently, in Pakistan, no education frameworks, policies and procedure are in place for older as well as younger children for smooth continuity between settings.

Literature suggest that children undergo various stages of transition during their school life whereas in early childhood it occurs every day with young children. Home to child care centre and child centre to school are considered to be the most exciting and challenging transitions for children (Margetts, 2002). During their transition children meet with new

[2] From birth, children develop; a sense of who they are: personal identity, social identity and relationships with others Personal characteristics and behavior A sense of individuality and a sense of belonging contribute to positive identities Understanding of self, family and others (Australian Governement Department of Education Employment and Workplace Relations, 2009).

faces, new places, face new challenges and create new relationships. Much of the recent literature highlight impacts of transitions on child ability to succeed in their initial days of learning. Children who well supported by their parents and teachers and are socially developed and emotionally strong can manage their transitions smoothly.

In Pakistan, ECE settings needs to design policies and procedures for smooth transitions of young children and educators must give respect to children previous experiences and try to build on the knowledge that children bring with them from homes to ECE and from ECE settings to school. There should be a system in place where ECE educators actively work with school teachers and parents to ensure smooth and effective transition of children to different settings.

Section 4: Continuum of Child's development and development of the whole child

1. Social development

The idea of social development refers to behaving with others in an acceptable manner, mixing with other children and society, following acceptable social skills, being cooperative, making friends, knowing how to live well, and sharing belongings.

Young children need to learn social skills and associated behaviour as early as possible and in this respect, they need an environment with special care. Research illustrates that young children with social competence are ready to early school entry, show positive attitudes toward learning programmes, achieve better grades and successful in later life endeavours.

2. Physical development

Physical development refers to the functions of different body parts and internal changes of the central nervous system, bones, brain and muscles. It also includes appropriate increase in size and weight of the human body and the body parts. Research suggests that physically fit, active, sharp and healthy children can learn more effectively and quickly as compared to unhealthy children. Children who get nutritious food, unconditional love from parents, have a clean environment, have access to medication and have proper exercise remain active and learn better (McDevitt & Ormrod, 2010). Children need proper physical movement to keep their body active and healthy.

3. Language development

The most significant area of development is language development. Early childhood is a period of immense brain development and learning therefore it is regarded to be the most critical period for language learning. Children start learning language after birth through listening, observation and interaction. Language becomes a tool for learning soon after children learn to speaking. Children with effective language skills can become effective communicators. Research has found that children at their early age are at the high state of readiness to learn more than one language. The children who speak more than one languages are better prepared for future opportunities. Language experts believe that language skills are learnt and improved through practice. Some of the recent studies depict that children living in joint family system have greater opportunities to excel in language skills as they interact with more people.

4. **spiritual/religious/philosophical development** (Finland framework also discusses about this dimension)

Children are provided opportunities to ask questions and ponder over issues. In an effective ECE programme children are not forced to learn religious contents which they are not interested to know about. The content of the religious and spiritual dimensions is agreed on with each child's parents. Child's own religion and beliefs are respected, supported and strengthened in a friendly, safe and supportive environment without putting any pressure. Their traditions, customs and practices are valued and respected without any discrimination. None of the spiritual and religious orientation and school of thoughts are given priority over others and an atmosphere of equality are created to increase children confidence and improve their self-esteem. Young children are taught to love nature and take care of environment sustainability.

Fear of God is converted to love of God and love to God. Children are encouraged to discuss the beauty of the earth and other creations of God such as flowers, fountains, mountains, rivers, forests and oceans. A positive image of God is being given to children to remove the unnecessary fear from God from the minds and hearts of Children and to build their confidence. Children are encouraged to investigate, research and explore creation of God around them in early age.

It is believed that the education system in Pakistan is less successful in promoting religious harmony and tolerance among its youth, due to outdated learning materials in the public schools' curriculum.

ECE settings and homes must demonstrate ethical practices. Literature suggests that children should be exposed as early as possible with ethical values, religious harmony and cultural diversity. Early childhood settings should follow norms, rules and values and teachers and other adults must model appropriate behaviour, and appreciate children for behaving in a similarly appropriate manner.

5. Aesthetic development

Aesthetic dimension is another key area of development. This dimension is developed I children through imagination and intuition. It is also fostered through providing children with the opportunity to observe, feel and experience beauty, harmony, style and melody. It is further promoted by engaging children in painting work and creative art activities. Literature suggest that some of the children are borne with strong aesthetic senses and other children's aesthetic dimension are developed by involving children in pre-planned activities.

Section 5. Assessment for learning and development

Currently in place assessment practices in the public schools in Pakistan still follow traditional paper pencil test to check students' memorisation skills. Students good in reproduction of prescribed textbooks contents and learning by heart can score high in this type of assessment. Reports indicate that the current assessment practices of the country cannot contribute in showing a complete picture of students learning and development.

Primarily, assessment in ECE is used to discover whether children are ready to learn and how they can be supported. Types of assessment suggested in this framework can provide a holistic view of learning and development if used wisely. Assessment in ECE will be used to figure out children's strengths and areas for further improvement in all domains of development.

The framework in hand suggests conducting evaluation as well to check early childhood settings, programmes and the implementation of the ECE framework and to identify the impact of the ECE programmes on children development. ECE teachers must be trained to

conduct assessment and evaluation. In the field of ECE, worldwide various forms of checks and supports are in place in the shape of assessment for learning, assessment in learning and assessment of learning. Most common forms of assessment are systematic observations, portfolio, project works, learning stories and use of technology.

a. **Assessment through observation** (Assessment tool ages and stages of development)

Observation is a powerful tool to assess students learning. Through observation teachers can discover how well the children are making progress or if there is anything to improve further. Systematic observation helps teachers to identify children's academic, social, physical and emotional strengths and areas for remedial help. Having assessment data ready about children can guide teachers identify children with special needs for providing additional support. Most common methods to record observation are:

- Anecdotal records
- Running notes
- Checklists and questionnaires
- Event samples
- Photographs, painting, artefacts and work samples (Ministry of Eucation Singapore, 2013)

ECE teachers understand that parents are key partners in their children education and development, so teachers provide parents with information about their children's progress and strengths instead telling them weak areas every time and also let them know if the teacher may have any concern. Teachers are encouraged to observe children on daily basis and keep proper record of their observations. Teachers must maintain learning portfolio of each students to keep record of samples of students' progress and achievements.

b. **Portfolio assessment**

The physical form of a portfolio may be a book or a folder. Some creative teachers create learning portfolio folders and books for children at schools from locally available materials whereas other teachers prefer to buy folders from the market. Schools with IT facilities can create online e-portfolios and upload contents to each child e-portfolios.

Portfolio is an authentic tool of assessment of students learning and development. Basically, learning portfolio is a compilation of students' works, records of their academic achievements, learning progress, their painting, artefacts, drawing, writings and photographs. It is also used to record children developing skills, dispositions, knowledge and family and other events. It is a developmentally appropriate form of assessment because it includes samples of child's achievements and evidences of their holistic development throughout the year (Peters, Hartley, Rogers, Smith, & Carr, 2009). Portfolio is not only an assessment tool, but it also is a comprehensive record keeping for future use for the optimal development of young children.

c. Learning stories

Innately, children enjoy stories. Story telling by children themselves and stories told by teachers increase children confidence and promote their language skills (Heikkilä et al., 2004). Learning stories are created by ECE teachers with the collaboration of parents and students. Learning stories are descriptions of what a child can do rather than what she cannot do. Generated by adults and children learning stories may be as short as a paragraph or two. Learning story is not merely a description of a child's strengths but it also allows teacher to add his careful interpretation to the description and avoiding incorrect assumptions. The focus of learning stories may be a specific event, a particular group work or any key engagement of a child to any particular activity. Adding an image or two to the story is always a good idea to make the story more meaningful, attractive and valuable for the families.

Learning stories cannot provide a holistic view of child's development and education so it is recommended to use learning stories in conjunction of other forms of formative assessment to create a complete picture of students learning and achievement.

d. Use of technology

Public schools in Pakistan have no access to the equipment of information and communication technology whereas schools in developed countries are equipped with technological facilities which has enabled increased and faster communication between school and home. Access to IT at schools has also improved process of assessment. Digital technology is used for faster and more reliable collection and documentation of children

progress and achievements. ECE teachers are discovering creative ways of student's assessment using their cell phones. They use their cell phones to document student works and record their progress and areas for improvement (Scornavacca, Huff, & Marshall, 2009). Reports suggest that there is a growing trend to use mobile phones for communicate with parents and families.

Section 6. ECE Framework Implementation Strategies

a. Teaching methodologies

This framework adopts active and cooperative learning approaches for the education of young children. Research has demonstrated that children are co-constructors of their own knowledge. They bring with them previous knowledge to learning centres and a good teacher knows effective ways to help students to construct and promote their knowledge and experience to the next level of understanding. Some of the core methodologies to follow for children education and development are given below;

b. Project work

Students will be engaged in purposeful projects in and outside of their learning centres. The centres will provide sufficient time and resources for children to work on their projects and to present/discuss the process and the product. Parents will also be involved in take-home projects with their children. Parents will be given full awareness and instructions for helping their children at home to complete their projects. Children project works will be displayed in their classroom at the appropriate height/level so that other students can also read and see each other works. Completed project work of students will be kept in their learning portfolios. Please see appendix A for examples of some of the key projects to children 3-8 years old.

c. Field trips

Studies depict that learning and development occur everywhere and at any time. Safe and secure field trips provide excellent outdoor opportunities of learning, socialisation and prospects for physical development. Children learn from the interaction with the nature and gain practical experiences as nature is the best teacher of children. Schools will organise field trips for children during the academic year. Some schools and parents in Pakistan believe that

outdoor activities including field trips are waste of students and teachers time therefore children are discouraged to interact with the nature. However overwhelming research findings suggest that engagement of young children in field trips activities promote their development and growth.

d. ECE/Physical environment

Research demonstrates that the physical environment has a key role in child's optimal development, health and wellbeing as "the physical environment inside and outside classroom can directly affect the quality and quantity of play, which in turn affects child's development" (Guerin, n.d.). Stimulating play environment is being built up taking into account children's interests and expectations. In and outdoor spaces should be organised in such a manner where children could feel safe and well protected. Classrooms and other play spaces must be clean, attractive, comfortable and colourful to attract children attention, curiosity and interests. Environment should have plenty of various materials which are developmentally and age appropriate to arouse and sustain students' curiosity and interests (Heikkilä et al., 2004). The materials should be according to the age level of students, sufficient, in a good condition and easily accessible for children to play, experiment and explore. A well designed ECE environment is vital for small group discussion where every child has the opportunity to take part in discussion to construct their learning and develop physically, socially and emotionally.

Traditional furniture such as dull wooden desk, big benches and colourless mats and daris (usually called taat) are not advisable for young people. Light weight, colourful, culturally sensitive, developmentally appropriate tables, chair, beautiful carpets are recommended for ECE centres. According to Bronfenbrenner's ecological model children's interaction with the environment influences their development, confidence, education, growth, wellbeing and personality (Bronfenbrenner, 2005). In Finland ECE aesthetic aspect of environment is more fundamental for children engagement as it attracts children attention and arise curiosity among children. In HighScope the learning environment is basically comprised on resources from the local context of natural environment. We encourage our teachers to create natural physical environment both inside and outside classrooms and to use learning resources from the local context and relevant to cultural dynamics rather buying substandard toys from commercial markets.

Summary of philosophical thinking and contemporary research studies that informed the development of this framework

Key components of the framework	Researcher(s)	Key ideas
Holistic development		
Learning through play	Vygotsky (date) and Marilyn Fleer (2011)	
Children are co-constructor of their knowledge		

Glossary of Terms used in this framework

Early Childhood Education

Children: refers to young people aged between to 3-8 years

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Appendix J
Final Version of the proposed ECE framework

Building Sound Foundation through Early Childhood Education

A Proposed Early Childhood Education and Development (ECED) Framework for Children 3-8 years old of Pakistani Context

It takes a village to raise a child

African proverb

MAY 1, 2020

MOHAMMAD AFZAL KHAN
UNIVERSITY OF TASMANIA AUSTRALIA

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A proposed Early Childhood Education and Development (ECED) Framework for Pakistani Context

Preface

This is the first time this type of document has been produced and proposed for the Pakistani education system which caters for children 3-8 years. The framework was developed using design-based research. An extensive literature review, comparative ECE frameworks analysis, and data collection and analysis in Australia and Pakistan, were undertaken. Feedback was sought in Pakistan from practitioners, researchers and ECE programme organisers on the useability of the framework and its contents.

Whilst this framework was being developed, the Govt of Pakistan introduced a curriculum for Early Childhood Care and Education for Pakistan in 2017 which caters 4-5 years children which was subsequently available online for download in the beginning of 2018

1. Introduction

The main purpose of the development of this proposed ECE framework is to improve quality, access and uniformity in early childhood education models in Pakistan. Pakistan being signatory of various international key treaties such as Education For All and Millennium Development Goals and others, no serious efforts have been made to launch authentic early childhood education services with true spirit despite producing numerous national ECE policies and five-year strategic plans (Mahmud & Mckay, 2006). Overwhelming evidence from research depict that the first eight years are critical years of human life, since children during this age are at a higher state of readiness for learning than at any other stage of their development. Quality education in the foundation stage of development and growth is crucial for making a positive contribution to children's long-term development and learning.

Public schools in Pakistan largely follow traditional rote-oriented textbooks (usually Urdu, English, Maths, Social Studies, Islamic education, and Science textbooks) for the education of children 4-8 years of age. Educational reports indicate that most of the ECED programmes currently on offer in Pakistan do not have developmentally appropriate and culturally responsive and contextually relevant programmes and educational frameworks for young children because most of these programmes and models have been imported either from Europe or America. According to Miller and Pound (2011) curricula and frameworks are culturally shaped and cannot always be readily transferred from one context to another. Studies also show that students of host countries often face challenges in an education model that does not relate to their cultures, needs of communities and homes. One-size-fits-all curriculum and instructions cannot fulfil needs of all children of the world. To ensure optimal development of Pakistani children at an early age, there is a dire need to create a research based ECE framework, encompassing developmentally appropriate knowledge and culturally

responsive and contextually relevant programmes. This gap in theoretical framework at the ECED level provides a strong justification for this theoretical framework.

This proposed ECE framework aims to engage children in meaningful, challenging and productive learning experiences in safe, supportive, enabling and active classroom learning environments. The broader contextual changes demand a new kind of education potential to develop students' global perspectives and prepare them for the globalized world of cultural diversity and contacts. This is where the framework becomes relevant. For example, for the development of appropriate understanding of other traditions, religions and respect for cultural differences, the framework ought to facilitate to instil the values of pluralism and inclusiveness among children even at early age of education. The rationale is that the effective provisions of ECE services can play a very significant role in contributing to the spiritual, ethical, intellectual, emotional, social, aesthetic, and physical development of young children at this crucial stage of their development.

We know that educational models are influenced by broader contextual changes, therefore, this framework is a dynamic document and would be continually reviewed and evolving in the light of emerging educational, societal and technological needs of the country and the world as well. Also, from time to time, learning from case studies of emerging best practices in Pakistan and elsewhere in the world would further strengthen the framework. The way children learn and develop in early age particularly before reaching eight year is unparalleled (Ministry of Education Singapore, 2013).

1.1. Proposed purpose of BSF framework development

The main purpose of the creation of this framework was to provide a broader structural and theoretical framework around which ECE service providers in Pakistan can build high quality early years education and development programmes to meet the holistic needs of children aged 3-8 years. This framework is informed by contemporary research studies, influential theories, best classroom practices and is inspired by early years learning frameworks of Australia, Singapore and New Zealand.

1.2. Proposed objectives for ECE Pakistan

The aim is to provide high quality Early Childhood Education through culturally responsive, contextually relevant and developmentally appropriate knowledge and world best classroom practices. A proposed aim of ECE Pakistan is to facilitate holistic development of 3-8 year old young children and lay sound foundation for their lifelong learning and all-round development. Proposed objectives of ECE Pakistan are:

1. Nurturing in children a sense of identity, pride in being Pakistani and global citizenship.
2. Developing children holistically encompassing their physical, social, emotional, cognitive and moral development and aesthetic and artistic skills
3. Developing critical thinking skills
4. Enabling ECE children enjoy living and learning through play and active learning opportunities
5. Develop the child's self-esteem and self-confidence
6. Enabling children to develop understanding and appreciation of their culture and environment and respect for resources
7. Fostering children's exploration skills, creativity, self-expression and discovery

8. Identifying children with special needs and align them with existing services if there is one such service available
9. Fostering children's civic sense and respect for diversity and love for humanity
10. Improving the status of the child's health, care and nutritional needs through awareness sessions for parents
11. Preparing children for lifelong learning opportunities and for smooth transition to further school education

1.3. A Proposed vision for Early Childhood Education Pakistan

Educating the children of Pakistan holistically for a peaceful, prosperous and safe Pakistan and secure world. Children who attend high quality ECE services based on this ECE framework might be able to contribute towards peaceful, prosperous and safe and secure Pakistan, world and safe planet for supporting life.

To produce holistically developed children who are:

- creative, innovative and productive
- connected to family, community, nation and global world as a citizen of Pakistan and world at the same time
- capable of living with others specially others who are significantly different
- life-long learners
- confident and effective communicators
- responsible, ethical, successful and resilient
- responsible and peaceful citizens
- co-constructor of their own knowledge and a key contributor of their own development

- tolerant and accommodative
- open minded in their outlook
- showing respect for planet earth, its resources and its environment

1.4. A proposed purpose of Pakistan's education

The country has been confronting numerous grave challenges for more than 3 decades after America's creation of rigid religious schools in Pakistan and weaponization of the country to fight against USSR invasion in Afghanistan. It is believed that the education system including textbooks and other learning materials are more inflexible as they are influenced by these orthodox religious groups supported by likeminded political parties.

So, in the given situation, the major purpose of education in Pakistan should be bringing-up healthy, happy, peaceful and caring children committed to religious harmony and respectful of diversity. The education system ought to nurture in children the values, skills and dispositions of tolerance, harmonious living, democratic thinking, peaceful global co-existence, and the promotion of environmental sustainability.

1.5. A proposed purpose of ECE Pakistan

Early childhood education in Pakistan should provide children with an enabling environment for their holistic development. It is intended that students attending ECE programmes in Pakistan should be informed, creative, responsible, active and productive citizens of Pakistan and the world. They can contribute to the creation of a peaceful, prosperous and just society in Pakistan and around the world. Realisation of this can be achieved through successful implementation of this framework.

Studies around the world revealed that good quality ECE contributes to the spiritual, intellectual, cultural, social, emotional, aesthetic and physical aspects of students' life (Australian Institute of Health and Welfare, 2015; Barrueco, Wall, Mayer, & Blinka, 2016; Didonet, 2008). So ECE Pakistan should foster a child's:

- cultural, aesthetic and creative development
- intellectual or cognitive development
- language development
- moral and spiritual development
- physical development, health and well-being, and
- social and emotional development.

1.6. Proposed Values of Early Childhood Education Pakistan

- Education values help children foster their academic achievements and relationship skills that last throughout their life. The following are ECE values for Pakistan to serve the society well as our values inform our thoughts, words and action. Some of these key values are based on international conventions on the rights of the child. Social justice for everyone and forgiveness
- Equity for all children
- High quality education which is potential for developing life skills
- Independent and critical thinking contributing towards creativity
- Cultural understanding, ability to empathize with others and tolerance
- Respect resources, planet and wise consumption habits for environmental protection and sustainability
- Flexibility and adaptability

- Honesty, fairness and respect for truth and justice
- Respect for human rights, human dignity and responsibility
- Showing integrity
- Lifelong learning attitude
- Promoting peace and prosperity
- Making the social context safe and secure for all citizens (especially for the children)
- Sense of family and community

2. National and international education laws, policies and agreements

2.1. National education laws

After 18th amendment of the constitution of Pakistan in 2009 article 25A assures that free and compulsory education to children (aged 5-16 years) regardless of sex and race is the prime right of all the citizens and is the fundamental responsibility of the state.

According to the Article-9 of the constitution of Pakistan the appropriate government may make necessary arrangements for providing free pre-school education and early childhood care for children above the age of 3 years until they join formal schools.

Article 3 of the constitution states that children's best interests must be a primary consideration in all decisions affecting them whereas article 12 highlights that children have the right to express themselves freely on matters that affect them, and to have their views taken seriously.

Articles 6 is about children's life, survival and development. According to this article all children have a right to life, and to survive and develop physically, mentally, spiritually, morally, psychologically and socially to their full potential.

Government of Pakistan to date has created several laws and policies for the promotion of entire education system of the country. The importance of ECE was not widely known in Pakistan until the end of 20th century. For the first time the government of Pakistan recognized critical importance of early age education and development in the year 2000 when announced Education Sector Reforms.

2.1.1. Education Sector Reforms 2000-2010

Salient features

- The government of Pakistan officially accepted Kachi class (a class before class one) as a part of the formal system in public schools and identified early education as the foundation stone for the entire education system. According to this policy, launching Kachi classes across the country in public schools was a legal responsibility of the Government of Pakistan.
- The policy has specially highlighted Pakistan's commitment to international education's treaties and conventions. The Government of Pakistan created a comprehensive National Plan of Action (NPA) in 2001 for Education for All (EFA) and formulated a long-term framework (2001-15) with ECE as one of its three focus areas. Two other focus areas were primary education and adult literacy. According to the action plan, over 40,000 ECE centres were to establish over the period of ten years and a total of 51,000 preprimary teachers were recruited and trained in the public sector (Government of Pakistan, 2003).
- Several concrete recommendations were made to improve quality and access of primary education
- It was proposed to maximize the role and participation of family, community, schools, non-government organizations and the media in the provision of pre-primary education (Rashid, 2004, p. 106)
- For the first time there was a recommendation to ensure adequate financial allocation for ECE.

Despite the funds released by the Federal Government under the Education Sector Reforms (ESR) action plan to the provinces for establishment of Kachi classes, no specific official measures took place in the provincial action plans. So, implementation failed.

2.1.2. Education Policy 2017-2025

Basically, this policy is a continuation of and a duplication of previous education policies and the Key features of this policy are;

- A fresh commitment was made to institutionalise ECE and promotion of early childhood education to next stage of expansions
- A new commitment was added for expansion, strengthening and promotion of universal, comprehensive Early Childhood Education with an objective to ensure holistic development of children and to prepare them for formal schooling.
- Re-assurance was made for the achievement of universal quality primary education covering all the three dimensions of universalization i.e. universal access/enrolment; universal retention; and universal achievement by 2020.
- Announced development, approval and implementation of a National Curriculum for harmonization of standards and national integration.

The new Govt of Prime Minister Imran Khan (Pakistan Tehrik Insaaf) is committed to improve the quality of education across sectors. In the recent years there has been an increase in recognition to support the importance of Early Childhood Education. Political commitment of the new Govt for promotion of education and health is high so, the people of the country are expecting to see some tangible on ground reforms in the education sector of the country in the future.

2.2. International conventions and agreements on children education and rights

Pakistan is a signatory of several key international treaties including Universal Declaration of Human Rights, the United Nations Convention for the Right of the Child, Education for All and Millennium Development Goals and Declaration on the Rights of Indigenous Peoples.

All these treaties underline the importance of early age education. So, it is the legal obligation of the state of Pakistan to fully ensure that young children have easy access to high quality childhood services near to their homes. The following section presents key specific details of international conventions applicable to childhood education only.

2.2.1. Universal Declaration of Human Rights (1948)

According to this declaration, primary education is a basic human right and it shall be free and compulsory and good quality for all young children of the world without any discrimination of race, religion, geography, gender, nationality and colour of skin. The declaration underscored that education shall be organised for helping children to reach their full potential (Laurence, 2015).

2.2.2. The United Nations Convention for the Right of the Child 1989

This convention has been signed by 191 countries including Pakistan. The convention was adopted in 1989. According to this convention, education should develop each child's personality and talents to the full. It should encourage children to respect their parents, their cultures and other cultures. The convention declared that schools must ensure that all the children are treated respectfully according to human dignity. Primary education should be free for all and it is the responsibility of respective governments to ensure that every child has access to primary education near to their homes and wealthier countries should help poorer countries to achieve this.

2.2.3. Education for All and Millennium Development Goals (2000) on Education

In 2002 at the world education forum at Dakar, the representatives of 165 countries of international community agreed to expand early childhood care and education, to ensure

every child of the world complete full course of primary education and to massively reduce illiteracy from the world by 2015. It was agreed that education for all should be free, compulsory, culturally responsive, developmentally appropriate and of good quality.

2.2.4. Declaration on the Rights of Indigenous Peoples 2007

The declaration was adopted by the general assembly in 2007 which addresses individual and collective rights, cultural rights and identity, rights to education, health, employment, language, and others. It was declared that all the human beings are equal, and they have the right to education, right to protect their culture and right to expression.

3. Key components of the proposed ECE framework

The following section of the framework discusses Principles, Practices and learning outcomes in detail.

3.1. Proposed Principles for Early Childhood Education Pakistan

The following six principals construct the foundation of this framework and should guide teaching and learning in a way that will be best suited to young children and ensure that a sound foundation will be built for the next stage of learning and development.

3.1.1. Developmentally appropriate practices are in place for children's holistic development

The ECE framework seeks to promote all aspects of a child's life. Children are born with the capabilities of learning, development and growth. Currently public schools across the country in Pakistan teach standalone subject areas and certain academic skills rather than focusing children's optimal development. Comprehensive child's development programmes in Australia and other developed countries focus the entire child by fostering their cognitive, social, emotional, cultural, aesthetic, academic, spiritual and physical dimensions of life. The ECE teachers in Pakistan should demonstrate holistic approaches to child development. For laying sound foundation, the current and future ECE programmes in Pakistan should pay attention to the holistic development of young children rather teaching standalone textbooks. Currently in place textbooks of Pakistan encourage rote-oriented learning which does not prepare children for adult life and for courageously facing challenges of 21st century.

3.1.2. Instilling the values of pluralism and diversity – cultural responsiveness

Pakistan is a country of various languages, cultures, traditions, religions and ethnic groups. Teachers of young people across the country are mindful and humble to cultural, socio-economical, class and gender differences of all students. The strong focus is on children's holistic development regardless of their religion, sect, colour, cast, diversity of ability, class and sexual orientation. The ECE programmes that will be developed for the children of Pakistan should incorporate the values of pluralism and diversity so that children develop appropriate perspective and understandings of other traditions, cultures, languages, celebrations, cast, faiths and ethnic groups.

> "It is striking that modern neuro-sciences have demonstrated that long before the age of 6, children are aware of the different cultural backgrounds amongst each other in their classes. It is thus before that age that pluralism can be instilled as a life value" (MHI, 2007).

ECE centres/schools should make sure that children have developed positive attitude towards cultural, faith and ethnic differences of each other and they have the required skills to interact across cultures, traditions and religions (Australian Governement Department of Education Employment and Workplace Relations, 2009).

3.1.3. The concept of extended family - respect for elders and love for children

Parents and siblings including grandparents are the key people in the life of children. They can have lots of influence on children learning, growth and development. The concept of extended family is an important aspect of human life in Pakistani society where children live with large number of family members and they love each other. They share happy and difficult moments of their lives together and help each other in times of worries. All the

members of the family play fundamental role in child's optimal development through their interaction, talks and behaviours. Positive adult and sibling relationship is not only significant for promotion of confidence, self-esteem, wellbeing, lifelong learning and democratic thinking of children but it also helps in easing transition from home to school and one class to another and childhood centre to formal schools. The current family lifestyles in Pakistan support continuation of extended family setups as very large number of families across the country don't have access to any formal and informal care arrangements for their young children and old family members. In extended family system significant number of grandparents provide care to young people whose parents are full time workers. Similarly, members of extended family setup take care of their parents and grandparents when they are old and need care and close attention. ECE programmes across the country should educate children and their families for becoming proud members of the extended family setup. Describe what this framework proposes in terms of inculcating values of collectivist/groupist culture prevalent in Pakistan. Some of the significant values ought to be highlighted which will be included in the curriculum as per this framework. I think this aspect is missing

3.1.4. Children construct their own knowledge – lifelong learners

Learning takes place everywhere and it occurs more rapidly before the age of eight. It can occur in a classroom, on a playground, at home, cinema halls, in a sport centre, in a shopping mall and even inside worship places. Children learn through their interaction with the context and with the people they are living with. They also learn through observation and communication. Learning starts before birth and continues until death. Building Sound Foundation framework seeks to foster that formal learning among other things is a starting point for continued lifelong learning (Teacher Education Services Section Zambia, 2013). Children best construct their own knowledge if provided opportunities for exploration,

observation, communication and investigation. To nurture children as life-long learners, we need to build their self-confidence as an independent learner, encourage them to explore the world around them and teach them how to regulate their behaviour and emotions, express themselves and get along with others (Ministry of Eucation Singapore, 2013).

3.1.5. Knowledgeable, responsive and committed early childhood professionals

Teachers have the most substantial role in children's learning, wellbeing and development. Well-developed teachers can create well organised education and effective development programmes for young children. Early childhood teachers in Pakistan are well-aware of programmes and strategies for children's learning and development. A teacher of young children must be trained on regular basis and in a holistic manner. Only having command over content knowledge or curriculum is not enough for an ECE teachers rather the ECE teacher must be able to create a conducive environment which is safe, secure, enabling and full of provisions for learning. Suggestions to develop knowledgeable, responsive, and committed professionals have been highlighted in the 'Teachers Guide'. Please also read 3.2.6. professional development of ECE teachers on page 22.

3.2. Proposed Practices

The suggested practices in this section are not exhaustive and teachers may add other creative and appropriate ideas to facilitate children's learning, development, growth and to foster quality relationship with parents and the communities. Using locally available resources teachers should use a variety of developmentally and culturally appropriate practices, instructional strategies and teaching techniques to foster children's developmental needs. The proposed ECE framework puts the following six practices in place.

3.2.1. Family-based approach to child's development

Children are at the heart of teaching and learning. Children are capable learners, so all the activities designed are based on children interests and their expectations. They will be given central role in their development and education. Children should be provided the opportunities to explore things around them. Children learn best when they are engaged in play, exploration, reflection, experimentation, learning by doing and in project works. Children learn through all their senses so a competent and effective ECE teacher makes sure that activities in place in the classroom are student friendly and promotes children holistic development. In a family-based approach of education, in addition to providing good quality education, children are being loved with heart and minds by all adults involved in their education and development.

3.2.2. Creating conducive learning climate and physical environment

The environment or learning spaces have their own significance for children education and development. Children need good food and safe environment for becoming lifelong learners. Appropriate infrastructure such as classrooms, playground, sandpit, kitchen, rest room and resource room are prerequisite for running an effective ECE center or a school for young

children. Children spend most of their time in their classrooms when they come to school for education. A safe, secure, resourceful, attractive and colourful classroom motivate students to come to school every day and play with their classmates in an attractive learning space (Ministry of Eucation Singapore, 2013).

Children feel proud and happy when their paintings and other works are properly displayed in their classrooms which gives them further encouragement to complete more projects. Comfortable sitting arrangements, age appropriate, child friendly and safe furniture are vital for making the process of learning enjoyable for them whereas lack of facilities inside and outside classrooms may hinder their process of learning. Easy access to use of technology is also important for making the process of learning enjoyable for the children. Teachers of young children should make it sure that technological devices in place in schools are used purposefully for improving children learning achievements and for providing the most up-to-dated knowledge and skills to young people. Schools are responsible to provide provisions of technological tools to young children for connecting them with classroom across the world through Skype, WhatsApp etc for learning from each other experiences. Exposure to other cultures at early age may help them in becoming global citizen and respecting the culture of other people and nations

3.2.3. Holistic experiences for learning

Children are provided with programmes which are holistic in nature and give opportunities for their holistic development. Teachers and other adults will try to create opportunities for the development of social, emotional, aesthetic, spiritual and physical dimensions of children life. Children are encouraged to take active part in outside and inside classroom activities. The environment of the school/centre provides opportunities for the development of the entire

child in an integrated and interconnected manner. Children need fear free, respectful, full of learning and supportive environment to grow to their full potentials.

3.2.4. Life skills education programmes

The existing provisions of lower-primary education programmes do not fully meet the needs of many families in Pakistan. The current textbooks and instructional strategies do not teach life skills eventually there are lack of programmes which prepare children to compete future life challenges. In Pakistan and elsewhere around the world children encounter various challenges in their daily life. In Pakistani public schools' instructional strategies encourage children to spend most of their time in learning contents of the textbooks by heart to pass annual exams and to produce good grades. According to Jafari (2009) in this kind of education system children are dependent in their thinking. They are passive recipient of knowledge and weak in critical thinking, reflective practice and problem-solving skills. ECE centres and schools must prepare children to deal effectively with the demands and complications of their practical life.

Health education, psychosocial life skills, creative thinking, anger management, problem solving, decision making, self-awareness and coping with stress are the core life skills laid down by WHO however there are many other key life skills which are also important for the children to learn for living successful and happy life. For example, Anwar-ul-Islam (2017) has identified some of the pertinent areas of life skills for integration to national curriculum of the country. Some of the key areas from his list of life skills include knowledge of basic first aid including Cardiopulmonary Resuscitation (CPR) and information about basic lifesaving medicines, recognising diseases, family management with a focus on good parenting and family structures, labour rights, duties and workmanship, self-defence skills, agriculture and livestock management skills specially for rural children, community and

volunteer works, public speaking and awareness about international education system. We can also include information related to intellectual property rights and the importance of religious harmony in areas of life skills development. Knowledge related to infant massage is also important for good parenting skills.

3.2.5. Play-based learning/learning through play

Children usually play for the sake of playing and they do not play in order to learn. Children learn best and majority of their development occurs when they are engaged in various forms of play (Ministry of Education Singapore, 2013). Previous studies have discovered that play has enormous influence on children holistic development. The ultimate aim of engaging children in play situation should be providing joyful opportunity for children to learn and develop (Heikkilä, Ihalainen, & Välimäki, 2004).

In play-based learning children are being actively engaged with their immediate context, adults and objects. Play should be purposeful, interesting and according to the age level of children. New Zealand (1996) and Australian (2009) ECE frameworks recognise the wealth of spontaneous and uninterrupted long time play and encourages teachers and parents to give value to children's play as meaningful learning activity. Usually two types of play i.e. free play and supervised play and more specifically object play, sensory motor play, social play and dramatic play are common in early childhood education across the world.

ECE teachers in Pakistan create safe, stimulating, secure and caring environment for children to play, solve problems, explore and construct their knowledge (Australian Governement Department of Education Employment and Workplace Relations, 2009). Research around the world has recognised the importance of play in children education, development and growth. So, the young children in our centres in Pakistan should be involved in both independent,

uninterrupted and guided play throughout the day. Even textbooks if there are any should be taught using play way method of teaching and learning.

3.2.6. ECE teachers' professional development and proposed support system

Ongoing professional development is essential to update teachers' knowledge and skill for designing and implementing effective learning activities. Professional development can occur anywhere and anytime. It can happen during discussion with work colleagues, independent reading and during observation of others work. Formally it can occur when teachers attend organised workshop, conference, seminar and courses (Mizell, 2010). Classroom experiences suggest that teachers learn a lot when they teach to their students because teaching involves preparation, reading, reflections, demonstrations and question answer sessions.

Teachers engagement in continuing education programmes improves students learning and achievements. On the other hand, students learning suffers if teachers have no access to in-service training programmes consequently, they do not improve their skills. Teachers needs to be knowledgeable about how children learn and develop. They should also know how the early childhood curriculum works and should be skilled at implementing the framework. Most importantly teachers of young children must be trained in first aid to administer CPR etc. There is a dire need to change existing image, roles and dominancy of teachers from imparter of knowledge to learning mediator, nurturer, monitor, documenter, planner and evaluator.

Teachers are encouraged to become reflective practitioners, critical thinkers and good readers. Ongoing professional development will also include but not limited to school based ongoing workshops, seminars, professional discussion and course for teachers, visit to other centres, effective use and easy access to technology and media for continuous development.

Table 1. Proposed Child-adult ratios for ECE Pakistan

No of teachers	No of children	Child's age
One	Four	children under 3 years
One	twelve	children for 3-6-year-old
One	sixteen	children for 6-8 years old

Table 2. ECE Teacher's qualification

Class	Required entry qualification for teachers
Pre-primary (3-6 year children)	• At least intermediate in second division • A diploma in ECE from reputed University/Institution • Below 25 years of age
Primary class 1-2	• At least Bachelor's degree with second division • A diploma in ECE from reputed University/Institution • Below 30 years of age

Table 3. Suggested family support system for teachers

Child's age	Support system for parent teachers
0-3 months	Maternity leave three months with full salary for up to 2 children including paternity leave 3 weeks (due to generous parental leave arrangements in Finland children under 1 year of age are cared for at homes)
4-12 months	9 months parental leave with maximum 60% salary or free childcare facility at school within school hours
1- 3 years	Child home care leave to take care children at home with 20% salary
3-8 years	No carer leaves for parents of children aged 3-8 years old

3.3. Proposed Learning Outcomes

The following core learning outcomes have been designed to describe 3-8 years old children's learning and development over time. So, the examples of activities given in this section are age-specific and have been designed catering children aged 3-8 years. These examples are not exhaustive therefore teachers have the flexibility to add more developmentally appropriate and culturally responsive opportunities for children's development.

Outcome 1. Children love their families, friends, neighbours, teachers, school and public places

Examples of activities for promotion of this area of development and education	Learning Outcomes	Domains of development
Start with family and local culture and link it with the world. Teachers; • ask children in a respectful manner to talk about self, family and community. • encourage them to bring family photographs and discuss about them • provide opportunity for making family trees • invite parents to discuss children progress and achievements • organise family day, parent's day and grandparent's day and provide opportunities for sharing foods • organize family role play to show helping, sharing and caring in family • Poem -Family comes together -I love you, you love me -Here is daddy • talk with children in respectful ways about similarities and differences in people • establish respectful and humble relationship with children • provide opportunities to discuss manners of living in neighborhoods such as taking care of neighbors by	Children; • develop strong foundation of attachment with their family members • understand importance of the family and joint family set up • are aware about positive relations among family members • know that their family members love each other • respect their parents, grandparents and elders • feel that their family members take good care of them and love them • know that respect, love, sharing and caring are integral part of joint family system • participate and celebrate	• Cultural development • identity formation • social and emotional development

respecting their privacy, routines of life, belongings and avoiding noise pollutions etc in the neighborhoods • ensure that children are engaged in planning and setting up inside and outside environment of their classrooms and schools • organise tours to local parks, banks, colleges, super markets, worship places and other public places for children and practically demonstrate love and respect to these places by ensuring cleanliness, safety and security all the time	local festivals and rituals • take care of properties and equipment of public places •	

Add your own examples here

Outcome 2. Express feelings/emotions socially acceptable manners

Teachers are encouraged to teach children how to regulate and manage their feelings, emotions, thoughts and behaviour. Children learn effective social and emotional skills through interaction and observation of their teachers when they demonstrate their feelings and behaviours in positive and humble way.

Examples of activities for promotion of this area of development and learning	Learning Outcomes	Domains of development
Teachers; • talk about how children's words and actions have impacts on others and on themselves • label out their feelings of joy, fear, anger and sadness etc • demonstrate self-calming techniques for anger and frustration management by using the technique of "stop and walk out before reacting to the situation". • teach how to react when there is a disagreement or a difference of opinions – using the technique of disagreeing with agreeable manner • encourage children to resolve conflicts through dialogue instead hitting and shouting on each other • encourage children to; take turns, keep quite when others are talking, speak in respectful way and respect others point of views, offer help to people in need • teach and demonstrate how to address others respectfully and show concern for others if they are unwell or sad or in trouble • build team work and negotiation skills • encourage children and demonstrate themselves ways to establish friendship by sharing food items, smiling and helping others etc • provide opportunities to children and guide them in solving their problems, conflicts and differences through discussion and talks	Children; • express their emotions and feelings in an acceptable manner • demonstrate appropriate behavior when working with others • Show tolerance and respect for opinions of others • Show respect to the people • Not laughing when someone makes mistakes • Show appreciation for others • Follow rules and regulations • Help people if someone is in trouble or unwell • Develop attitudes for sharing Respect for diversity Respect for resources Respect for planet, environment	• Development of social and emotional skills, • Teamwork skills • Negotiation skills • Positive behavior

Add your own examples here

Outcome 3. Children feel secure and confident

By nature, children are curious leaners. They try to do new experiments, try out new ideas and always remain in search of new trials. They make mistakes and learn from their mistakes. A sense of security gives children the confidence to take risk, try new ideas and make mistakes without the fear of disregard.

Examples of activities for promotion of this outcome	Learning Outcomes	Domains of development
Teachers; • Know that all the children are different from each other and their learning needs are too different from each other • Compliment the child on their good behaviour and accomplishments • Encourage the children to talk about their activities, feelings etc • Provide realistic positive feedback • Remind children that they are loved • Provide warm and safe spaces to children to move, interact, experiment, explore and manipulate things around them • Provide opportunities to play with peers, friends and fellows • Assign responsibilities to carryout tasks individually and in group with proper guidance and support • Plan activities that promote success instead catching them while making mistakes • encourage them to learn from their mistakes • foster cooperation not competition • focus on process not on final product • construct on children's previous knowledge and build on the learning, knowledge and language which they bring with them from their families • include their family and community experiences in classroom daily routines	Overtime and with persistent guidance children should be able to develop; • confidence • self-esteem • speaking skills • a good sense of taking responsibilities • failure/anger management skills • love for getting higher education • feel proud of becoming part of their family • feel comfortable as learner • value his/her own knowledge, perspective and take • think of other ways/perspectives/solutions	• Development of positive behavior • Social and emotional development • Risk taking skills

Add your examples

Outcome 4. Children are independent and lifelong learners

Examples of activities for promotion of this outcome	Learning Outcomes	Domains of development
Teachers; • provide time and plenty of opportunities for independent as well as teachers-guided and structured play • make children engagement meaningful and joyful in teaching, learning and development activities • read different books for children and encourage them to read at home with their parents and other family members • are polite, supportive, relaxed and unhurried while interacting to children and their parents • play with children to make them feel the importance of learning through play • provide plenty of opportunities to children to explore and learn from the natural environment • engage children in mini research, project work and small small leadership roles • emphasis on conceptual understanding rather focusing grades • involve children in volunteer work • turn mistakes into opportunities • don't force children blindly follow teachers without asking questions. Try to make them critical thinker and problem solvers • value children' uniqueness • model lifelong learning by reading books, doing research, project work and playing leadership and voluntary roles in schools and in the community • Develop love for learning and make learning fun for children rather making them feel overburden •	Children; • Develop love for books and all print • Enhance their understanding of the world around us • Show deep interests in learning and education • Develop friendly attachment with their educators and parents • Take risks and try new things for learning new ideas • Develop basic skills of conducting research and project work • Take leadership roles • Love to engage in voluntary works • Don't afraid making mistake and can become critical thinkers • Take ownership of their learning and their actions • Develop higher self-esteem • can help others • become confident individuals • try out new ideas • solve problem and face challenges courageously • become independent learners	Cognitive development, development of reading skills, social and emotional development, development of volunteerism, development of critical thinking and problem-solving skills, development of love for learning

Add your examples

Outcome 5. Children communicate effectively[1]

Examples of activities for promotion of this outcome	Learning Outcomes	Domains of development
Teachers; • provide opportunities to children to learn numbers, mathematical concepts and numeric symbols • introduce various forms of communication such as verbal communication, communication through writing, symbols, body language and other forms of it • encourage children to learn letters of alphabets and write their names in Urdu and English and read and write sentences in both English and Urdu • provide ample opportunities for body moments, art, drama and music • create environment for sharing jokes, creative ideas and humors • involve children in pretend play • give respect to children mother tongue and their local languages • engage children in play with words, numbers and sounds • Ask and answer question during discussion and reading of texts • encourage children to practice symbols and patterns in their environment and create their own symbols • engage children in discussion about money, time, and numbers etc • encourage children to use technologies to explore information and ideas	Children; • tell stories • Share jokes and humors • develop basic language skills • learn basic numbers, symbols and • learn letters of English and Urdu alphabets • use body language and facial expressions to communicate feelings • present and express their thoughts in front of people • use information and communication technology to search for information • increase their vocabulary in their mother tongue and other languages	Check and add domains of development here

Add your examples

[1] Children communicate right from the birth. They use multimodal forms of communication to convey their messages. They use body language, smile, cry, silence and various other modes of interaction to get others attention.

Outcome 6. Children have a strong sense of identity2

Examples of activities for promotion of this outcome	Learning Outcomes	Domains of development
Teachers; • encourage children to talk about their like and dislike, personal qualities and strengths in front of other children and teachers • engage children in cultural and local celebrations • value children language, family culture and their world views • provide opportunities to children to o reflect on their similarities and differences in a respectful manner o talk about various local events such as Eid, Christmas, Diwali, Pathak, Chilim Josh and actively participate in them o feel good about their own abilities o show a positive view of themselves • encourage children to make decisions and choices • promote in children a strong feeling and sense of a proud citizen of Pakistan • appreciate children uniqueness and their attachment to certain place, cast, gender and ethnic groups • share children progress and achievements with their families and give appreciation and encouragement to them • respect cultural values of all children • encourage children to talk about their family culture, local foods, local games, events, and cultural spaces	Children; • are confident learners • follow respect, care and empathy when interacting with others • develop a sense of belonging and self-esteem • are open to new challenges • ask questions an try new things • feel proud to become a citizen of their country and a member of their family and a proud follower of their cultures • what about his/her association with the world as world citizen • are good decision makers and risk takers • Respect values of their cultures and cultures of other children/people • Feel safe, secure and supported • Participate in social gathering and learn from interaction with people	Add domains of development here

Add your examples

[2] From birth, children develop; a sense of who they are: personal identity, social identity and relationships with others Personal characteristics and behavior A sense of individuality and a sense of belonging contribute to positive identities Understanding of self, family and others (Australian Governement Department of Education Employment and Workplace Relations, 2009).

4. Continuum of Child's development and development of the whole child

A child's education and development are a complex task. Traditional schools give more importance to child's content knowledge, subject areas and certain academic skills whereas contemporary approaches of education encourage the development of entire child including social, emotional, physical, language, spiritual, cognitive and aesthetic dimensions of development in addition to the promotion of academic education. It is important for teachers to understand dimension of child's development for providing better support in the early age.

4.1. Social and emotional development

The idea of social development refers to behaving with others in an acceptable manner, mixing with other children and society, following acceptable social skills, being cooperative, making friends, knowing how to live well, and sharing belongings and gaining knowledge and skills required for successful interaction with others.

Young children need to learn social skills and associated behaviour as early as possible and, in this respect, they need an environment with special care. Research illustrates that young children with social competence are ready to early school entry, show positive attitudes toward learning programmes, achieve better grades and successful in later life endeavours.

Examples of activities for social development: Create events in the classroom for children to speak and present in front of the class. Encourage children to take part in events, celebrations, parties, festivals and social gathering organised by school or community. Assign different tasks and give responsibilities to students and guide them for completion of the assigned tasks. Appreciate children on completion of their tasks.

4.2. Physical development

Physical development refers to the functions of different body parts and internal changes of the central nervous system, bones, brain and muscles. It also includes appropriate increase in size and weight of the human body and the body parts. Physically fit, active, sharp and healthy children can learn more effectively and quickly as compared to unhealthy children. Children who get nutritious food, unconditional love from parents, have a clean environment, have access to medication and have proper exercise remain active and learn better (McDevitt & Ormrod, 2010). Children need proper physical movement to keep their body active and healthy.

Example of activities: Assign housekeeping tasks and help the child to successfully complete those tasks. Encourage children to participate in play, walk and exercise. Provide opportunities of indoor and outdoor games, planting and plenty of exercise and physical education.

4.3. Language development

The most significant area of development is language development. Early childhood is a period of immense brain development and learning therefore it is regarded to be the most critical period for language learning. Children start learning language after birth through listening, observation and interaction. Language becomes a tool for learning soon after children learn to speaking. Children with effective language skills can become effective communicators. Research (reference) has found that children at their early age are at the high state of readiness to learn more than one language. The children who speak more than one language are better prepared for future opportunities. Language experts believe that language skills are learnt and improved through practice. Some of the recent studies depict that

children living in joint family system have greater opportunities to excel in language skills as they interact with more people.

Examples of activities: Storytelling, poems in local languages, involve children in discussion, ask many questions, watch educational videos, online communication with friends and class fellows, reading books, exploring world around etc

4.4. Spiritual/religious/philosophical development

Spirituality is about peace, respect, happiness, satisfaction, gratitude and acceptance. It is a relationship with self, others and with the universe. Children are provided opportunities to ask questions and ponder over issues. In an effective ECE programme children are not forced to learn religious contents which they are not interested to know about. The content of the religious and spiritual dimensions is agreed on with each child's parents. Child's own religion and beliefs are respected, supported and strengthened in a friendly, safe and supportive environment without putting any pressure. Their traditions, customs and practices are valued and respected without any discrimination. None of the spiritual and religious orientation and school of thoughts are given priority over others and an atmosphere of equality are created to increase children confidence and improve their self-esteem. Young children are taught to love nature and take care of environment sustainability.

Fear of God is converted to love of God and love to God. Children are encouraged to discuss the beauty of the earth and other creations of God such as flowers, fountains, mountains, rivers, forests and oceans. A positive image of God is being given to children to remove the unnecessary fear of God from the minds and hearts of children and to build their confidence. Children are encouraged to investigate, research and explore creation of God around them in early age.

More activities: Tell stories ending with good lessons, talk about good things in your culture and traditions, sets norms, rules, and values, model appropriate behaviour, and appreciate children for behaving in a similarly appropriate manner.

4.5. Cognitive development

Cognitive or intellectual development refers to the ability of reasoning, problem solving, critical thinking and learning and organising new ideas. Experiences, environment, interactions and inherited skills play vital role in children' intellectual development. It is also related to the physical growth of the brain.

Examples of activities: Provide puzzles according to the age level, involve children in colouring activities, art and crafts, storytelling, artwork. Ask questions and let them ask questions. Provide good nutrition and exposure to activities such as problem solving, playing musical instruments, stimulation and involving children in discussion can foster the development of cognitive abilities (Morgan, 2011).

4.6. Aesthetic development

Aesthetic dimension is another key area of development. This dimension can refer to love for natural environment, human creations, cultures, arts, beauty and to value individual integrity. Aesthetic education helps children to achieve happiness and enjoyment through visual arts, music and drama. Some of the children are born with strong aesthetic senses and other children's aesthetic dimension are developed by involving them in pre-planned activities.

Examples of activities for Aesthetic development: This dimension is developed in children through imagination and intuition. It is also fostered through providing children with the opportunity to observe, feel and experience beauty of surroundings, harmony, style and

melody. It is further promoted by engaging children in painting work and creative art activities.

5. Assessment for learning and development

Currently in place assessment practices in the public schools in Pakistan follow traditional paper pencil test to check students' memorisation skills. Students good in learning by heart and reproduction of textbooks contents can score high marks and grades in this type of assessment. Reports (reference) indicate that the current assessment practices of the country cannot contribute in showing a complete picture of students learning and development.

Primarily, contemporary practices of assessment in ECE is used to discover whether children are ready to learn and how they can be supported. Types of assessment suggested in this framework can provide a holistic view of learning and development. Assessment in ECE Pakistan might be used to figure out children's strengths and areas for further improvement in all domains of development.

The framework in hand suggests conducting evaluation as well to check early childhood settings, programmes and the implementation of the ECE framework and to identify the impact of the ECE programmes on children development.

ECE teachers should be trained to conduct assessment and evaluation. In the field of ECE, worldwide various forms of checks and supports are in place in the shape of assessment for learning, assessment in learning and assessment of learning. Most common forms of assessment are systematic observations, portfolio, project works, learning stories and use of technology.

5.1. Assessment through observation (Assessment tool ages and stages of development)

Observation is a powerful tool to assess students learning. Through observation teachers can discover how well the children are making progress or if there is anything to improve further. Systematic observation helps teachers to identify children's academic, social, physical and emotional strengths and areas for remedial help. Having assessment data ready about children can guide teachers identify children with special needs for providing additional support. Most common methods to record observation are:

- Anecdotal records
- Running notes
- Checklists and questionnaires
- Event samples
- Photographs, painting, artefacts and work samples (Ministry of Eucation Singapore, 2013)
- Role play

Teachers are encouraged to observe children on daily basis and keep proper record of their observations. ECE teachers understand that parents are key partners in their children education and development, so teachers provide parents with information about their children's progress and strengths instead telling them weak areas every time and also let them know if the teacher may have any concern. Teachers must maintain learning portfolio of each students to keep record of samples of students' progress and achievements.

5.2. Portfolio assessment

The physical form of a portfolio may be a book or a folder. Some creative teachers create learning portfolio folders and books for children at schools from locally available materials whereas other teachers prefer to buy folders from the market. Schools with IT facilities can create online e-portfolios and upload contents to each child e-portfolios.

Portfolio is an authentic tool of assessment of students learning and development. Basically, learning portfolio is a compilation of students' works, records of their academic achievements, learning progress, their painting, artefacts, drawing, writings and photographs. It is also used to record children developing skills, dispositions, knowledge and family and other events. It is a developmentally appropriate form of assessment because it includes samples of child's achievements and evidences of their holistic development throughout the year (Peters, Hartley, Rogers, Smith, & Carr, 2009). Portfolio is not only an assessment tool, but it also is a comprehensive record keeping for future use for the optimal development of young children.

5.3. Learning stories

Innately, children enjoy stories. Story telling by children themselves and stories told by teachers increase children confidence and promote their language skills (Heikkilä et al., 2004). Learning stories are created by ECE teachers with the collaboration of parents and students. Learning stories are descriptions of what a child can do rather than what she cannot do. Generated by adults and children learning stories may be as short as a paragraph or two. Learning story is not merely a description of a child's strengths but it also allows teacher to add his careful interpretation to the description and avoiding incorrect assumptions. The focus of learning stories may be a specific event, a particular group work or any key

engagement of a child to any particular activity. Adding an image or two to the story is always a good idea to make the story more meaningful, attractive and valuable for the families.

Learning stories cannot provide a holistic view of child's development and education, so it is recommended to use learning stories in conjunction of other forms of formative assessment to create a complete picture of students learning and achievement.

5.4. Use of technology

Public schools in Pakistan have no access to the equipment of information and communication technology whereas schools in developed countries are equipped with technological facilities which has enabled increased and faster communication between school and home. Access to IT at schools has also improved process of assessment. Digital technology is used for faster and more reliable collection and documentation of children progress and achievements. ECE teachers are discovering creative ways of student's assessment using their cell phones. They use their cell phones to document student works and record their progress and areas for improvement (Scornavacca, Huff, & Marshall, 2009). There is a growing trend to use mobile phones for communicate with parents and families.

6. ECE Framework Implementation Strategies

6.1. Teaching methodologies

This framework adopts active and cooperative learning approaches for the education of young children. Research has demonstrated that children are co-constructors of their own knowledge. They bring with them previous knowledge to learning centres and a good teacher knows effective ways to help students to construct and promote their knowledge and experience to the next level of improvements. There is no only one way of teaching so ECE teachers use several methods to engage children in learning. It is believed that the best ways of teaching are backed up by research. Example of some of the core methodologies to follow for children education and development are given below.

6.1.1. Inquiry based education

Students' previous knowledge and current opportunities for exploration are foundation of inquiry-based learning (Touhill, 2012). In this approach, children are regarded as sources of strengths and inspiration rather a needy recipient of knowledge. Being culturally responsive pedagogy, the approach encourages students to ask and answer many questions to constructing their learning. By nature, young children are curious; they use questions as powerful tool to learn from others and explore world around them. They love to give answer to questions as well. Teachers use this approach to engage students in deeper explorations and for their active and involved participation (Ministry of Education New Zealand, 1996)

Inquiry based learning allows children practice and learn concepts and ideas over a period of time through many experiences. They need more practice to understand new concepts as a single experience is not enough for building sound understanding of concepts (Touhill, 2012).

It is believed that young children can better learn from trials, errors and mistakes (Nightingale, & Pyne, 2005).

6.1.2. Trial and error methods

ECE teachers encourage students to explore with materials freely. Teachers will provide plenty of resources and time for practice and ask leading question to solve problems. Learning take place by trial and error. In this method of teaching teachers avoid giving readymade solutions to problems.

6.1.3. Situational teaching and small group instructions

Not all children learn same way. Some children can learn best when they are taught in the whole class. Others may learn best in small groups or in one on one interaction. Depending on children needs ECE teachers will organise the process of teaching and learning. ECE teachers are more flexible while selecting teaching strategies because they believe if one strategy does not work another may work. Learning in small group can be very helpful to young children rather than teaching them in the whole class because children can get individual attention when they are taught in small groups. So, teachers are encouraged to organise small group instructions to deliver their lessons.

6.1.4. Project work

Students might be engaged in purposeful projects in and outside of their learning centres. The centres should provide sufficient time and resources for children to work on their projects and to present/discuss the process and the product. Parents should also be involved in take-home projects with their children. Parents will be given full awareness and instructions for helping their children at home to complete their projects. Children project works should be displayed

in their classroom at the appropriate height/level so that other students can also read and see each other works. Completed project work of students might be kept in their learning portfolios. Please see appendix B for examples of some of the key projects to children 3-8 years old.

6.1.5. Outdoor experiences and field trips

Studies depict that learning and development occur everywhere and at any time. Safe and secure outside classroom experience and field trips provide excellent outdoor opportunities of learning, socialisation and prospects for physical development. Children learn from the interaction with the nature and gain practical experiences as nature is the best teacher of children. Schools should organise field trips for children during the academic year. Some schools and parents in Pakistan believe that outdoor activities including field trips are waste of students and teachers time therefore children are discouraged to interact with the nature. Engagement of young children in field trips activities promote their development and growth.

6.2. ECE learning resources

Easy access to learning resources is vital to enhance children's education and development. The ECE classrooms should have plenty of developmentally and age appropriate resources to arouse and sustain students' curiosity and interests (Heikkilä et al., 2004). The materials should be according to the age level of students, sufficient, in a good condition and easily accessible for children to play, experiment and explore. Teachers are encouraged to use resources from the local context of natural environment and relevant to cultural dynamics rather buying substandard toys from commercial markets. Learning materials should be clean, attractive, safe and colourful to attract children attention, curiosity and interests. (see Appendix D for list of learning resources)

6.3. Physical environment

Research demonstrates that the physical environment has a key role in child's optimal development, health and wellbeing as "the physical environment inside and outside classroom can directly affect the quality and quantity of play, which in turn affects child's development" (Guerin, n.d.). A well designed, safe and friendly environment is vital for small group discussion where every child has the opportunity to take part in discussion to construct their learning and develop physically, socially and emotionally.

Traditional furniture such as dull wooden desk, big benches and colourless mats and daris (usually called taat) are not advisable for young people. Light weight, colourful, culturally sensitive, developmentally appropriate tables, chair, beautiful carpets are recommended for ECE centres. According to Bronfenbrenner's ecological model children's interaction with the environment influences their development, confidence, education, growth, wellbeing and personality (Bronfenbrenner, 2005). In Finland ECE aesthetic aspect of environment is more fundamental for children engagement as it attracts children attention and arise curiosity among children. Learning corners, classrooms and other play spaces should be clean, full of resources, attractive, comfortable and colourful to attract children attention, curiosity and interests.

6.4. Transitions – Smooth continuity between ECE settings and school programmes

A considerable amount of literature has been published to create awareness among teachers and parents on the importance of transitions and for easing transitions across contexts but until now little importance has been given to this in Pakistani context. In the existing circumstances, public schools and parents in Pakistan seems to be not fully aware and ready

to help children make smooth transitions to settings. It is mostly because of lack of awareness about the significance of smooth transitioning. Currently, in Pakistan, no education frameworks, policies and procedure are in place for older as well as younger children for smooth continuity between settings.

Children undergo various stages of transition during their school life whereas in early childhood it occurs every day with young children. Home to child care centre and child centre to school are considered to be the most exciting and challenging transitions for children (Margetts, 2002). During their transition children meet with new faces, new places, face new challenges and create new relationships. Much of the recent literature highlight impacts of transitions on child ability to succeed in their initial days of learning. Children who well supported by their parents and teachers and are socially developed and emotionally strong can manage their transitions smoothly.

In Pakistan, ECE settings needs to design policies and procedures for smooth transitions of young children and educators should give respect to children previous experiences and try to build on the knowledge that children bring with them from homes to ECE and from ECE settings to school. There should be a system in place where ECE educators actively work with school teachers and parents to ensure smooth and effective transition of children to different settings.

7. Proposed Early Childhood Education and Development Levels for Pakistan

ECE level	Age range of children	Provisions/facilities
Childcare centres	3 months to 3 years	The centre provides care, education, development, affection, love, foods, sleeping, exercises and developmentally appropriate facilities to the young children
Reception	3-4 years	This is a preparatory class for entry to Nursery class. Reception class helps children to develop their social, emotional, academic, aesthetic, spiritual, cognitive qualities. Provides opportunities for social interaction through play with children of different social and cultural backgrounds. Engages children in uninterrupted long time guided and free play, athletic, life skills programmes
Kindergarten	4-5 years	A full package of Kindergarten should be offered to 4-5 years children. Developed by Friedrich Froebel (1782-1852), Kindergarten underpins the importance of play in developing children's holistic qualities. It highlights the negative impact of putting unnecessary pressure on children, which in his view could destroy a child's natural order of learning.
Nursery	5-6 years	At this stage of intervention teachers prepare children for their successful and smooth transition to formal schooling. Teachers begin formal teaching to certain academic learning in this class including expressive arts, ICT and media education, world around us, cultural activities for children, health hygiene and safety however a large amount of time should be spent on children optimal development and informal learning through play.
Grade 1 and 2	6-8years	Curriculum for this grade incudes, ICT, Art and craft (Expressive Arts), Social Studies, athletics, basic religion, Environmental Science, Numeracy, Literacy and Language in addition to the continuation of children's holistic development. Teachers in grade one should try to build on children previous knowledge, skills and dispositions alongside focusing on their holistic development

8. Theories and philosophical thinking

Here is the summary of philosophical thinking and contemporary research studies that informed the development of this framework.

Philosophical thinking	Researcher(s)	Key ideas
Holistic development	Abraham Maslow's self-actualisation, Piaget personal, social and emotional development, Rogoff cultural nature of human development	- realisation that children develop and learn in holistic manner, - learning by doing, - taking care of child's rights to quality education, health, nutrition and protection, - providing opportunities to children for cognitive, physical, spiritual, technological, emotional, aesthetical and psychosocial development - preparing children to use their skills and knowledge for greater good in later life
Learning through play	Friedrich Froebel, Vygotsky and Marilyn Fleer	By nature, children love to play and in this method of education teachers inspire young children's learning through engaging them in playful activities in a child-friendly environment.
Discovering children main talents	Howard Gardener's multiple intelligence	He suggested that all people have different kind of intelligences. People don't have just an intellectual capacity. The focus of this theory is human abilities and intelligences including musical, spatial-visual, linguistic, interpersonal, kinaesthetic intelligences. A person might be extremely strong in a specific area or might possess a range of intelligences. For example, a person might be good at music, sport and public speaking.
Children are co-constructor of their knowledge	Developmental theorist such Piaget, Vygotsky, Howard Gardner etc	According to this approach children are born ready to learn and grow. During first eight years of their life they are at the highest stage of readiness to learn, develop and grow and they have the abilities to construct their learning with limited guidance.
Impacts of environment	Bronfenbrenner	Ecological system theory and ecological model of human development – context in which families live have profound impacts on child's education, development, learning and growth.
Socio-cultural theories	Various philosophers	Children learn and develop in multiple ways that are socially and culturally constructed. Children learn through interaction with the environment, society, religion, culture, history and people around them. They learn through observation, formal education, discussions, listening others and reading.

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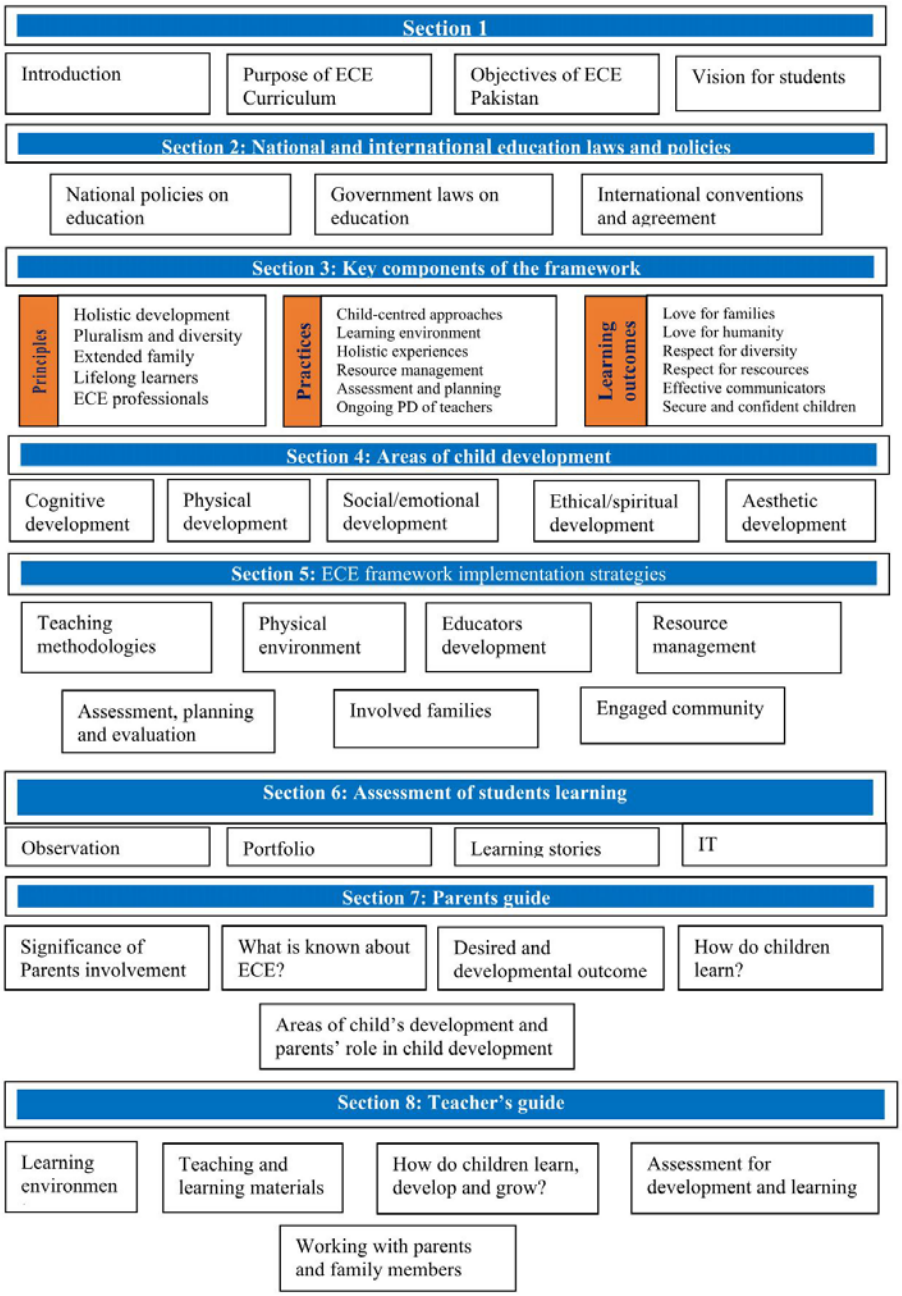
Appendix A: Conceptual framework for formulation of ECE Framework for Pakistan



Appendix K
Assessment tool

Class Assessment Sheet Class _____ Teacher _____ Date _____ Term ☐ 1 ☐ 2

Rating codes: 2 = Achieved 1 = Needs further support 0 = Not achieved

Students' names																				
Physical Milestones																				
Run, hop, skip, and jump																				
Throw and kick a ball, and catch it																				
Copy shapes and letters																				
Getting handwriting neater to read																				
Ask questions																				
Improved hand-eye coordination																				
Use utensils the right way																				
Ride a bike without training wheels																				
Cognitive Milestones																				

Think and reason logically																				
Think before making decisions																				
Want to do everything at once																				
Can read several sight words																				
Begin to have a better sense of time, days, weeks, months, and seasons																				
Predict what comes next in a pattern																				
Count to 100 by ones, twos, fives, and tens																				
Write the numerals 0 to 100, and the words for numbers from one to twenty																				
Do basic addition and subtraction up to 20																				
Language Milestones																				
Start sounding out words																				
Understand the relationship between letters and sounds																				
Use words to convince people																				
Tell jokes and riddles																				
Tell little lies about everyday things																				
Social and Emotional Milestones																				
Is more independent, but less secure																				
Form and break friendships easily																				
Get feelings hurt more easily																				
Want to “be first” and win																				
Understand right from wrong																				

Is more aware of how others see her/him																				
Practice social cues (greeting)																				

Appendix L
Consent form for Principals and ECE teachers

Research Title: A design-based research to inform the creation of an ECE framework for Pakistan

NOTE: This consent form will remain with the researcher for records

1. I agree that I will take part in the University of Tasmania research project specified above.
2. I have read the information sheet, which I will keep for my records.
3. I agree to be interviewed by the researchers.
4. I agree to allow the interview to be recorded and transcribed. I understand that the interviews will last approximately 60 minutes and the interviews will be conducted in mutually convenient place and time.
5. I understand that I will be able to access and amend transcriptions before the data is analysed.
6. I understand that there is no any foreseeable risk in participation in this research.
7. I understand that the data from the interview/focus group will be kept in a secure storage and accessible to the research team only. I also understand that the data will be destroyed after a 5 year from the publication of the study results.
8. I understand that the researcher(s) will maintain confidentiality and that any information I supply to the researcher(s) will be used only for the purposes of the research.
9. I understand that any data that the researchers extracts from the interview/focus group for use in reports or published findings will not, under any circumstances, contain names or identifying characteristics. I understand that I will be able to review the transcript before it is analysed.
10. I understand that my and my school's participation is voluntary and that I may withdraw at any time without any effect. If I so wish, I may request that any data I have supplied be withdrawn from the research until 31 October 2019.
11. The nature and possible effects of the study have been explained to me.

Participant's name: _____

Participant's signature: _____

Date: _____

Statement by Investigator

☐ I have explained the project and the implications of participation in it to this volunteer and I believe that the consent is informed and that he/she understands the implications of participation.

If the Investigator has not had an opportunity to talk to participants prior to them participating, the following must be ticked.

☐ The participant has received the Information Sheet where my details have been provided so participants have had the opportunity to contact me prior to consenting to participate in this project.

Investigator's name:

Investigator's signature : _____

Date : _____

Appendix M
Parents' Guide

Parents' Guide

Building Sound Foundation through Early Childhood Education: A Proposed Guide for Pakistan Early Childhood parents

Children are born ready to learn …They are wired from the beginning to learn, and they're wired to experience and to master the world around them" (Shonkoff, 2005).

Why parents' involvement in child's development is necessary?

Children under eight years old spend most of their time at home with parents, siblings and other family members. In country like Pakistan children of age between 3-8 years do also spend and play enough time with same age (coeval) children every day. Overwhelming research findings depict that much of the early learning occurs through child's day to day interactions with people in their homes and in the neighbourhoods. Immediate caregivers can play major role in the development of their children, much beyond merely providing food and other basic needs. Parents should note that early years are important in building a strong foundation for life-long learning. Providing a conducive and welcoming environment at home for children optimal development is a prime responsibility of parents/care givers.

The ECE framework Pakistan has been created to use for the development of children across the country. Children in remote rural areas of the country have close interaction with natural world whereas children in congested cities and urban areas are close to the digital world. According to Economic Survey of Pakistan 2015-16 four out of ten Pakistanis live in multidimensional poverty (Khan, 2016); therefore, majority of parents do not know much about the importance of early childhood education, development and growth.

This parents' guide is part of the early childhood education framework for Pakistan which has been created primarily based on contemporary best practices in the field of ECE in Australia and elsewhere in the world. This guide will be a useful reference for parents to nurture holistic development of young children in addition to instilling greater linkages and confidence between home and school interactions. Home school collaborative partnership is vital for the holistic development of young children. To nurture children's optimal development parents, need to:

- Spend quality time with their children at home and provide learning friendly spaces and environment for children.
- Encourage exploration, experimentation and play at home. Children learn through play with friends and family members. Encouraging children to explore things arround them and involvment of parents in children play activities can help children a lot in becoming life long and confident learners.

This guide book has been created for parents to understand the learning standards of ECE framework Pakistan and involving them in their children's education in harmonies way.

Educating parents to support children

We know that parents are key contributors in children education, development and learning. They can influence children overall development more than anyone else can do.
Parenting is a challenging as well as a very important job and in Pakistani context it is not being given necessary consideration. No formal trainings are in place in Pakistan to educate parents on effective child-rearing practices. Parenting practices are completely dependent on the way the parents were parented. A wide number of parents are not aware of the importance of education in early age as either they are low educated, have no opportunity to attend parental education programmes or illiterate.

Parent's awareness about the importance of early age education and their maximum involvement in their children education and development activities is essential for providing effective support to children. If parents are not well-informed about effective child-rearing, education and development practices, they may not be able to provide proper supportive environment to their children. So, lack of parental education and dearth of interest in their children's education may place negative impacts on children's learning, growth and future

development. Children raised in supportive and affectionate homes may become better human being and spend meaningful life ahead.

Literature suggests that parents who give less attention to their children demonstrate less developed social skills compare to other children in the classroom. They prefer to stay away from other children and work in isolation. They are more gravitate towards solo activities therefore they are weak in socialization and mixing with other children.

What do parents know about young children learning and development?

Parents of 21st century are more aware than ever before about the needs of children and about how children learn and develop. They also know much than ever before about how to best support their young children in their development and education. Now parents know that

1. Learning begins before birth and continues throughout the life
2. During the first eight years of life children are at the high state of learning which is critical for laying sound foundation for lifelong learning, wellbeing, growth and development
3. Children's day to day life experiences and exposures influence their brain development in either way as brain development and growth is most rapid during this period of life. Stressful life, lack of balance diet, dearth of proper exercise and lack of opportunities for stimulation can seriously disrupt and damage developing brain architecture (Fox, Levitt, Nelson III, & Charles, 2010).
4. The environment plays critical role in child's education, growth, learning and development. Parents and other family members including immediate neighbours' way of interactions and relationships can have long lasting influences on child's life, behavior, growth and development.

5. Lack of appropriate opportunities for early childhood socioemotional, intellectual, physical, spiritual and language stimulation can have negative impacts on children's early years holistic development (Harvard University, 2007)

What are the proposed outcomes of education for Pakistani children?

At early childhood level, the holistic development of children is most important. Following are the learning outcomes of education for children of Pakistan.

8. Children love their families, friends, teachers, neighbours, school and keep their public places clean and green
9. Children express feelings/emotions socially acceptable manners
10. Children are secure and confident and follow safety rules and regulations
11. Children are good decision makers
12. Children are independent and lifelong learners
13. Children communicate effectively
14. Children are concerned, peaceful, responsible, productive and proud citizens of the country

Developmental outcomes of Pakistan ECE

By the end of their ECE (Grade 2 when they are eight years old) children should be able to

- Develop relationships with others and to understand and to cope with feelings (team work and living with harmony and peace)
- Develop an understanding of balanced diet, importance of exercise and significance of healthy food for healthy body and mind (move large and small muscles)
- Solve problems in daily life
- Use creative ways to build speech and language (communication and language

development)

- differentiate what is wrong and what is right (moral development)

How do children learn, develop and grow?

Learning and development opportunities are everywhere therefore children learn and develop anywhere. Learning occurs even beyond school boundaries. Mostly children learn through:

1. Respect
2. Love
3. Play
4. Interaction with the context, adult and peers
5. Exploration
6. Manipulation
7. Watching videos
8. Observation
9. Online interaction with other children
10. Using social media platforms

Areas of child's holistic development and examples of activities for development

Areas of child's development	Care giving guidelines
Cognitive development This type of development refers to development of the mind. It is the ability to think, reason, solve problems, think critically, use effective language and form ideas.	Provide puzzles according to the age level, involve children in colouring activities, art and crafts, storytelling, artwork. Ask questions and let them ask questions. Provide good nutrition and exposure to activities such as simple problem solving, playing musical instruments, stimulation and involving children in discussion can foster the development of cognitive abilities (Morgan, 2011)

Areas of child's development	Care giving guidelines
Physical development Physical development refers to internal changes and increased ability of the central nervous system, bones, brain and muscles and physical health and body growth.	Assign household tasks and help the child to successfully complete assigned tasks. Encourage children to participate in play, walk and exercise. Provide healthy and balanced diet.
Social/emotional development It refers to behaving in an acceptable manner, mixing with other children, following acceptable social skills, being cooperative, making friends, knowing how to live well, and sharing belongings.	By playing and learning together children learn social skills. Encourage children to try new things and work on hard tasks for their emotional development. Encourage children to take part in social events, celebrations and parties,
Moral/Spiritual/ethical development Spirituality is though close to religion, but it is not a religion. This refers to child's ability to learn the difference between what is considered right and wrong in their society, acceptable or unacceptable behaviour and, most importantly, good or bad deeds.	Spirituality is about peace, respect, happiness, satisfaction, gratitude and acceptance. It is a relationship with self, others and with the universe. Tell stories ending with good lessons, talk about good things in your culture and traditions, sets norms, rules, and values, model appropriate behaviour, and appreciate children for behaving in a similarly appropriate manner.
Language development Refers to improvement in use of words, verbal ability, thinking and understanding ability, intelligence and reasoning, ability to effective use of reading, writing, listening and speaking skills	Storytelling, poems in local languages, involve children in discussion, ask many questions, watch educational videos, online communication with friends and class fellows, reading books,
Technological development This refers to the ability of effective use of technological equipment and digital platforms for increased and faster communication, better understanding of concepts and faster access to reliable knowledge and ideas	Provide technological equipment to children, guide them how to use these facilities, teach them how to prepare projects and presentation using these equipment, restrict excessive use of screens as frequently use may harm children eyes.

Multiple Intelligences

Famed scholar professor Howard Gardner for the first time developed his theory of multiple intelligences in 1983 when he was working at Harvard University USA as a professor of education. He proposed eight different intelligences. He believes that each person owns certain skills and special potentials. Currently, majority of our schools and our society give more value and special attention to linguistic and logical-mathematical intelligence only whereas our needs are more than that. His multiple intelligence are as under.

Visual-spatial ability. Children with great visual and spatial ability do shine on activities that are very visual, but they might not demonstrate excellence in traditional subjects such as Urdu, English or Islamiyat. Check if your child likes to design things, look at maps, draw or doodle? Your child might enjoy activities that enable them to create models or charts. Your child might have a promising career as an architect or graphic designer.

I**nterpersonal ability.** Children with this type of intelligence are good at socialization with people. If your child has strong interpersonal abilities enrol him/her in programs that nurture their interpersonal abilities. Children with this kind of abilities take good interests in extracurricular activities. They might be successful in leading or organizing efforts. They might have a career in sales, leadership, or politics.

I**ntrapersonal intelligence.** Children with this ability might be more introverted rather than extroverted. They don't talk much and may not be interested in group activities or socialization with other children. They might be interested in independent learning, reading, and writing. Engage them in writing program or encouraging them in various writing activities.

Logical or mathematical intelligence. Children with this ability are often very deliberate in their thinking and reasoning. You should nurture and reinforce their abstract senses and thinking. These type of children are good at exploring the connections between things and people and problem solving. They might have a career as a scientist or mathematician

bodily-kinaesthetic intelligence. They have a high level of control over their body, hand-eye coordination, and their range of motion. They can handle tools and objects with precision and skill. Observe if your child like to build things by hand, and can they use their hands with precision. Children with this intelligence might be good at things where they can use their hands or physically build things. They might be great surgeons, mechanics, or sculptors.

Linguistic intelligence. Children having this ability demonstrate a high command of language and words. They can articulate ideas well, can learn by listening and reading, and often enjoy communicating with others. Linguistic intelligence is different from talks back. They are good at writing and reciting poetry, public speaking, or reading. They might be successful in leading or organizing efforts. They might have a career in leadership or politics or as a poet. Nurture this ability through enrolling them in activities in which they write, read, and perform.

Musical intelligence. They are enormously sensitive to sound, rhythms and all things aural. They are interested in music and musical instrument. You can reinforce this ability by enrolling them in music lessons or have them join chorus or band at school. They might have a brilliant career in music industry and can become popular singer.

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Appendix N
Participants profiles

Profiles of interview participants

Pseudonyms	Experience and relevance
P1	This participant is Acting Principal of a public primary school and alongside is looking after the academic matters of a Child and Family Centre (CFC) situated in the close vicinity of her school. She has been working in Australia in the current role for almost seven years. She has served as ECE educator for more than nine years therefore has good knowledge of the basic essentials and harsh realities of education to young people. She has very good knowledge of current research and contemporary literature in the field of ECE.
P2	This participant is currently working as Head of a public primary school in Australia. She has been attached to the current centre since 2014. As an Advanced Skills Teacher she provides staff leadership and supervision; counselling and administrative duties in addition to looking after the academic matters of the school. She has been teaching young children since her graduation with a Diploma of Teaching (ECE) for almost 20 years. She has delivered in-service training and workshops to teachers for primary schools, childcare centres, kindergartens, family day care centres and maternal and child health centres. She also worked as a pre-school field officer and early intervention teacher for five years.
P3	This participant is a young and energetic man who has been working as leader at one of the Child and Family Centres for almost six years. He has completed his Masters in ECE and is planning to undertake a PhD in the same field. He has had experience of teaching young children for almost nine years in Australia. He looks after a small CFC where they have only one other early years specialist teacher on the staff. The CFC is situated in a regional area so only a manageable number of students attend this centre.

Pseudonyms	Experience and relevance
P4	This participant is a Vice-Principal at a primary school in Australia. She has recently joined this primary school. She has been working with young children for almost 26 years and she loves to teach and spend time with children. She has completed a Diploma in Children's Services and Advanced Diploma in Infant Care and Parent Support. She possesses leadership qualities and therefore works as educational leader in her school. She has also worked in privately run childcare centres for many years previously.
P5	This participant has been working as a principal in a progressive private school in Australia for almost 10 years. She joined the teaching profession 29 years previously after obtaining a Bachelor's degree. She has worked in a few private schools in Australia and overseas during her service. She has successful experience in leading schools and staff management. Apart from her professional commitments she has been working as volunteer camp leader for children living with cancer and children with additional needs.
P6	This participant has been working as School Head in one of the renowned private school in Pakistan. He looks after one of the overcrowded schools of the region. He leads a large group of educators and teachers across three different sections of the same school as a school head. Of his 22 years attachment with teaching and learning he has served almost 11 years in the current school. His qualifications include a two-year Master of Arts and a two-year Master of education. He has attended capacity building programs in Pakistan so is well aware of current research and updates in the field of education. His school enrolls over 650 students across three sections.
P7	This participant is currently working as School head of one of the private schools managed by an international NGO in Pakistan. He holds 19 years' teaching and school head experience. After successfully completing his undergraduate qualification as a private candidate, he commenced his career as a primary school teacher. With the passage of time he has improved not only his qualifications but has also enhanced his teaching and leadership skills. He is a well-qualified person, having the qualifications of Master of Arts and a Bachelor of Education. His school enrols 585 students across primary, middle and secondary sections.

Pseudonyms	Experience and relevance
P8	This participant joined the teaching profession in 2006 as a primary school teacher in a prestigious private school in Pakistan. Currently he is working as Head of School and he has been in this position since 2016. As head of the school, he is looking after the academic matters of the early childhood section of the school as well. He has completed a Diploma of Teaching in ECE and a Master's in Leadership and Management.
P9	This participant proudly calls himself an ECE teacher, however he leads a large group of educators and teachers as a Principal of a private school in the Northern Areas of Pakistan. He has been working as a principal across three different sections of the same school. He has served almost 12 years in the current school in several positions. His qualifications include a diploma in ECE and Master in Education. He has conducted a number of short training courses for English teachers. He speaks advanced-level English.
P10	This participant has been working with a private NGO as Head of schools since 2008 after completing his Bachelor of Education from a renowned teacher training institute in Pakistan. In his current role he is responsible for looking after the academic matters of the schools, including teachers' performance appraisal, school-based teachers' capacity building, liaising with parents and school management committees. He has been working as a core team member of an English language teacher training program for almost 13 years.

Profiles of focus group participants – Australia

Pseudonyms	Experience and relevance
T1.1	Currently, this participant is a Prep teacher in one of the public CFCs and has seven years of teaching experience. She has completed a Bachelor of Education in addition to a number of in-service training sessions including First Aid and Child Protection courses. She holds a Diploma of Teaching in ECE.
T1.2	This participant is an Education Officer and an exemplary teacher. In addition, she is responsible for teaching 35+ students in total from two different classes. She

Pseudonyms	Experience and relevance
	holds a Bachelor of Education degree as well as having a post graduate qualification. She is a specialist in developing low- and no-cost teaching and learning resources for young children. She has established a resource room where she houses resources from the natural environment. Her colleagues believe that she is an effective and creative educator.
T1.3	This participant has over 33 years of teaching experience and currently is looking after Kinder and Grade 1 students in one of the progressive CFCs in Australia. Her qualifications include a Bachelor's degree in EC Studies. She also has some skills and experience in staff management. She has frequently participated in centre-based staff development sessions.
T1.4	This participant works with a renowned CFC in Australia and in her current role she teaches 26 students in Kinder and Prep classes. Her qualifications included a Bachelor of Education and a post graduate qualification. She holds 18 years' teaching experience in total.
T2.1	This participant is a Kindergarten teacher with 12 years of teaching experience. She completed a Bachelor of Education qualification before joining teaching. There are 26 students in her class.
T2.2	This participant is a Literacy Support Teacher with 21 years of teaching experience in one of the exemplary public primary school in Australia. She holds a Bachelor of Education degree. In her current role she provides literacy support to 25/26 students of the school.
T2.3	This participant is a Prep teacher in one of the public schools in Australia. She has 18 years of teaching experience with young children. Her highest qualification is a Bachelor of Education. There are 26 students in her class.
T2.4	This participant is a Years One and Two teacher in one of the prestigious public schools in a small town of Australia. Her highest qualification is Bachelor of Education. There are 23 students in her classes.
T2.5	This participant is an English as an Additional Language Teacher and works across different classes of the school. She has been attached to public sector education for more than 30 years. She holds a Bachelor of Education degree.

Pseudonyms	Experience and relevance
T5.1	This participant is currently working as Deputy Head Teacher and Coordinator Educational Support and is therefore responsible for looking after the academic matters of the entire junior section of one of the prestigious private schools in Australia. She holds a Diploma of Teaching and a Tasmanian Teaching Certificate and has over 30 years of teaching and section head experience.
T5.2	This participant has been working as an educator for almost 36 years with several education providers in Australia. Her qualifications include a Bachelor of Education and a Diploma of Teaching. As a classroom teacher currently, she is teaching a group of 20 Kindergarten students in a private school. Apart from her professional commitments she has been working as volunteer camp leader for children living with cancer and children with additional needs.

Profiles of focus group participants – Pakistan

Pseudonyms	Experience and relevance
6.1	This participant is a Senior Teacher[11] ECE in one of the private schools in Pakistan. She completed a Bachelor of Education qualification before starting teaching in her current school in 2014. She is teaching in a multigrade situation where students of different grades sit in one class. She teaches 37 students of Prep and Kinder together in one room. She has earned a Diploma in ECED.
T6.2	This participant is a new teacher in a private school in Pakistan who has only two years' experience of teaching young children, however she has regularly attended short courses and school-based sessions in order to update her knowledge and skills. She teaches in a multigrade situation where she is responsible for teaching 48 students in Classes One and Two together in one room. Her highest qualification is a Bachelor of Education with a Certificate in ECE.

[11] Senior Teacher is a title given to teachers who have at least a Bachelor of Education or higher qualification.

Pseudonyms	Experience and relevance
T7.1	This participant is a well-qualified teacher of a private NGO school in Pakistan. Her qualification is Master of Science with Master of Education major in ECE. She has 15 years' teaching experience and currently she is responsible for teaching 26 students in Grade One. She has attended several short courses out of school in order to enrich her knowledge of teaching and learning.
T7.2	This participant is a new teacher who has only two years' teaching experience with young children in the context of Pakistan where she works in a private school. Her highest qualification is Bachelor of Science. She has attended short courses during her two years of teaching experience. In her class there 45 students.
T8.1	This participant is a well-qualified Senior Teacher of a private school in Pakistan with seven years' teaching experience in her current school. Her highest qualification is Master of Science and she also has a Bachelor of Education. She is a young and energetic teacher. There are 31 students in her class. She spends most her after-school time planning for her next lesson.
T8.2	This participant is a Senior Teacher in one of the remote schools in Pakistan. She has nine years' teaching experience with young children. In her school she is responsible for teaching more than one class in one classroom. In addition to her teaching responsibilities she takes care of her two young children and sometimes she brings them to school with her when there is no one at home to look after them.
T9.1	This participant is an experienced teacher. She started her career as a teacher in a private school in 2008 after completing her Master of Education in Teaching from a reputable university in Pakistan. Currently, she is working in an overcrowded private school where she is responsible for teaching Grade One students.
T9.2	This participant's highest qualification is a Bachelor of Science. She has seven years' successful experience of teaching in a private school. She is young, energetic and committed to helping improve access and quality of

Pseudonyms	Experience and relevance
	education in her school. She is responsible for teaching 45 Kindergarten students in her current role. She has attended several ECE short courses during her seven years of teaching.
T9.3	This participant is a new teacher with two years' teaching experience, however she has brilliant ideas and an up-to-date knowledge of ECE. Her highest qualification is Bachelor of Science and she also has a diploma in ECE as well. Her school is situated in a marginalised area of Pakistan where most of the people live below the poverty line.
T9.4	This participant is a well-qualified teacher. Her qualifications are Master of Science and Bachelor of Education. She has two years' teaching experience. She is responsible for teaching Grade One students in an over-populated private school in Pakistan.
T10.1	This participant has seven years' teaching experience in a small private school run by a non-governmental organisation. She completed a Master of Arts degree before joining this private school in 2003. She teaches in a multigrade situation where she is responsible for teaching more than one class in one room. She has attended a number of short courses during her seven years' attachment to this organisation.
T10.2	This participant is a Senior Teacher in one of the remote schools of the country where she is responsible for teaching two classes in one room in a multigrade situation. She is trained in Multigrade Education. She holds nine years' teaching experience. Her highest qualification is Master of Science.
T10.3	This participant has 10 years' teaching experience with an NGO in Pakistan. She works in a small primary school as a Senior Teacher. Her highest qualification is Master of Science and she also has a Bachelor of Education. She has attended a number of ECE short courses during her teaching with this NGO in three different schools.
T10.4	This participant is a well-qualified teacher. She has completed a Master of Science. She has five years' teaching experience with a private school.

Profiles of the BSF framework reviewers in Pakistan

Pseudonyms	Experience and relevance
R1	Currently, this participant is working as a Senior Coordinator of ECED and leads academic matters of the NGO in one of the districts of Pakistan. He started his career as a science teacher in one of the schools run by this NGO. He has experience of running teacher training programs, curriculum development and enrichment initiatives and annual development plans. His highest qualification is Master of Education. Under his supervision there are hundreds of teachers in 51 schools.
R2	This participant is serving as an ECED educator in an NGO. She has been attached to this NGO since 2014. She completed a Master of Education before joining this organisation. She had a wonderful experience of teaching in rural areas in Pakistan for a couple of years. She has delivered in-service training and workshops to teachers for Prep and Kindergartens. During her career she has been involved in planning, delivering and implementation of ECE programs for teachers and parents.
R3	This participant is working as an ECE teacher educator with a private education provider in Pakistan. She taught young children in another private school before joining this organisation as a teacher educator. Currently, she is responsible for organising teachers' training, curriculum development and enrichment and designing the school's improvement plans. Her qualifications include a diploma in ECE and a two-year Master of Education. She has conducted a number of short training courses for ECE teachers and parents of young children.
R4	This participant is serving as an ECE teacher educator in Pakistan. She taught young children before becoming a teacher educator. Currently, she leads a large group of ECE teachers in one region of the country. Her qualifications include a two-year diploma in ECE, a four-year Bachelor of Teaching and she is currently undertaking a Master of Education as an off-campus student. She has conducted a number of short training courses for teachers and

Pseudonyms	Experience and relevance
	parents.
R5	This participant has a PhD in Education, a Master of Arts in English Literature, a Master of Education in Educational Leadership & Management and a Master of Education in Teacher Education and is currently working as an Associate Professor in a renowned public university in Pakistan. He has 16 years' experience of working in various capacities with renowned national and international organisations and institutes. He has vast experience of designing and implementing capacity building programs for teachers and schools, leading and managing educational institutes, evaluating management and teaching practices in schools as external evaluator, teaching young and adult learners and supervising research projects of students. He has published several articles in peer-reviewed international journals as well as book chapters.
R6	This participant is serving as an Assistant Professor of Education at one of the public universities in Pakistan. He has earned a Master of Political Science, a Master of Education and a PhD in Education with specialisation in global education. His areas of research interest are teacher education, curriculum development, global education, and qualitative research. He has experience in conducting professional development courses and workshops for primary, elementary and secondary school teachers and leadership and management courses for school leadership. He has published various research papers in national journals, and he has presented papers at several international conferences.