

Deep Exploration of Student Attainment and Retention: Keeping Students in Education Beyond Year 10 in Tasmania

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Abstract

Tasmanian levels of student retention and attainment in education beyond Year 10 are the lowest of any Australian state or territory. Attainment is characterised as a wicked and seemingly intransigent problem, for which there are no quick fixes and simple solutions. Navigation of wicked problems such as attainment requires interdisciplinary, multidisciplinary and transdisciplinary approaches. This paper presents two frameworks derived from Integral Theory (IT) and Causal Layered Analysis (CLA), which provide useful tools for exploring the 'attainment space'. These provide from deeper and more nuanced perspectives, which have the potential to open up new spaces for considering retention and attainment in the context of 21st century education.

Integral Theory proposes four irreducible *perspectives* of reality, two of which have almost entirely been excluded from academic discourse. Exclusion of any perspective results in only partial and fragmented understandings, and ineffective solutions and policy. CLA contends there are four levels of *reality* and ways of knowing: the litany and the systemic; the deeper intersubjective cultural dimensions of worldview/paradigmatic commitments and myths and metaphors that frame the way sense is made of the issue, often unconsciously. The IT framework has been applied to review reports, documents and academic literature on attainment to reveal hidden or unanticipated factors, which have a bearing on attainment, particularly at the worldview and mythic levels.

The paper concludes that by using both frameworks, a tool can be developed that reveals paradoxes, gaps and dilemmas that may open up potential new directions for creating deeper transformative spaces for addressing the achievement of educational attainment.

Introduction

In the rapidly changing and challenging world of the 21st century, it is accepted that staying in meaningful education beyond Year 10 is not only highly desirable, but essential (Cranston, Watson, Allen *et. al.*, 2016). The Organisation for Economic Co-operation and Development (OECD) (2013) sees an instrumental purpose for education:

Graduating from upper secondary education has become increasingly important in all countries, as the skills needed in the labour market are becoming more knowledge-based and as workers are progressively required to adapt to the uncertainties of a rapidly changing economy (Cranston et. al., 2016, p. 42).

Others see that education has a broader purpose beyond the economic; it is also critical to social cohesion and prosperity, health and well-being of citizens (Ramsay & Rowan, 2014). The Tasmanian Department of Education's Retention and Attainment Strategy (2011) states that:

The cost to young people of early engagement from education is far-reaching and may have lifelong consequences. Early disengagement can affect young people's relationships with family, friends and community as well as their perceptions about

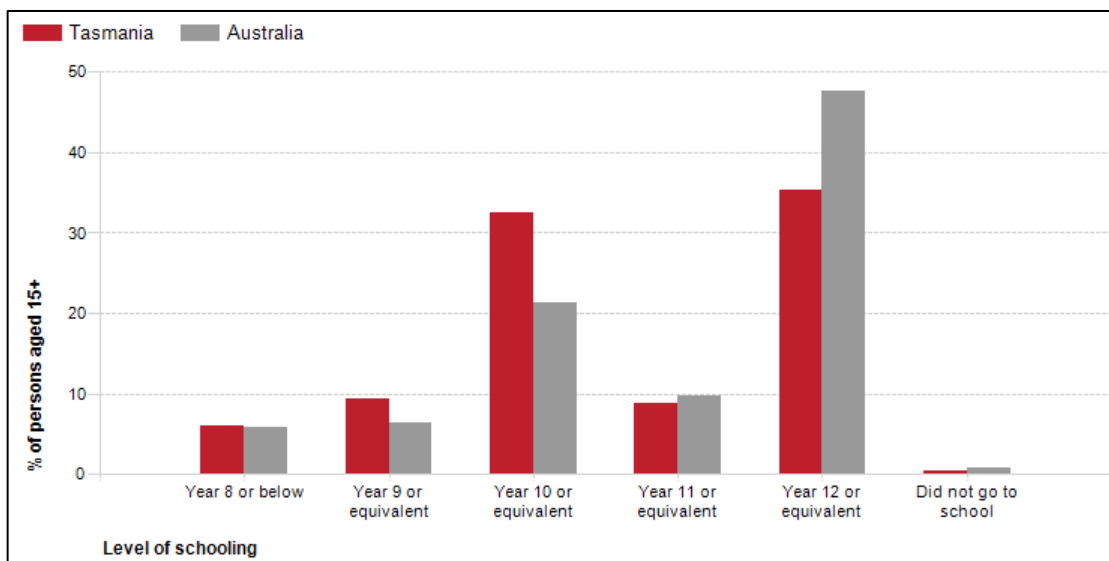
themselves, their confidence and mental health. The costs to the community are potentially significant in terms of lost productivity, ongoing skills shortages and demands on the health, justice and welfare systems.

An increase in retention rates, while a critical precursor to attainment, is a quantitative measure of attendance and not the same as an increase in attainment, which relates to educational performance. High attainment levels can exist alongside low retention rates and *vice versa*. The Tasmanian Department of Education's document *Learners first, connected and inspired* (2012) notes retention depends on the interaction of three factors - transition, engagement and attainment. These factors are discussed as key to 'keeping students in education beyond Year 10'.

The Tasmanian education system

Tasmania is the only state in Australia where the majority of students aiming at studying Years 10 and 11 need to move to a separate institution¹, since most high schools terminate at the end of Year 10. The majority of those wishing to continue to Years 11 and 12 need to move to a regional urban-based college (with the exception of some district schools, which offer limited programs at Years 11 and 12). In Tasmania, levels of student attainment and the related concept of retention are the lowest of any Australian state, as shown in Figure 1 (ABS, 2011). It should be noted the Tasmanian school Year 11-12 expansion project, which is now in its second year and includes 12 schools; 17 more schools are planned for next year.

Figure 1. Highest level of schooling completed Tasmania and Australia, 2011 (percentage persons aged 15+ years). Source: RDA Tasmania Regional Plan, July 2013–June 2.



Educational attainment refers to the highest formal educational qualifications realised by an individual or group, denoting a particular level of knowledge, skills and competencies. The term 'achievement' is taken to mean the same as 'attainment' in this context. In Tasmania, levels of student attainment and the related concept of retention are the lowest of any Australian state or territory; however, Ramsay and Rowan (2014) argue statistics need to be approached with caution, as part-time students are not always factored into the data. As well, many Tasmanian students move from high school after Year 10 to VET programs or relocate interstate and these post-Year 10 transitions are not recorded.

¹ This also takes place in the ACT as well but it is not a state, and sociocultural conditions there are very different from Tasmania, so direct comparisons are not possible.

Keeping students in education in Tasmania

The notion of poor attainment levels in Tasmania is not new. Abbott-Chapman investigated the very same issue in the 1980s, noting in her 1987 paper that rurality and isolation, material disadvantage and poor transition processes impacted retention rates for Tasmanian students. Low numbers of student retention beyond Year 10 are essentially an artifact of disadvantage for those who find themselves outside the normative patterns and frameworks that inscribe education in late modernity.

In other words, people who are educationally disadvantaged are less able to participate fully in a rapidly changing economy where the old order of job stability has all but vanished. In Tasmania, this has been particularly devastating for local rural communities with the demise of the legacy logging and mining industries, the loss of agricultural employment (due to mechanisation), and manufacturing as the price of labour became uncompetitive. Previously, high levels of education were not deemed necessary for unskilled jobs.

The groups that remain disadvantaged and therefore under-represented in post-compulsory education in Tasmania and beyond (across those countries that have compulsory education) include students from rural and remote areas, indigenous students and students from low SES backgrounds. As the most rural of all Australian states, Tasmania has a high proportion of students from rural communities (Abbott-Chapman, 2011). Additional factors include the availability of family resources such as family structure, income and parental education; level of locational disadvantage; and school and institutional resources such as teacher quality and access to digital and other resources that enhance learning. As Abbott-Chapman puts it, studies of post-school education and training both in Australia and internationally have revealed what she calls a ‘mosaic of students’ education and employment experiences, with a multiplicity of nonlinear pathways’ (p. 1).

More recently, Cranston *et. al.* (2016) have provided one analysis of factors relating to keeping students in education beyond Year 10, and categorise these in three overarching themes:

Sociocultural: issues such as those relating to views about education held by some parents, community members and teachers including aspiration for continuing education and views about what forms of employment are valued;

Structural: includes issues such as physical and geographical separation of high schools and colleges and operational barriers such as college time-tabling; school and institutional resources, (teacher quality, access to digital and resources to enhance learning); and

Curriculum, teaching and learning: overall coherence and understanding of curriculum from a K-12 perspective, pedagogy, teachers and the curriculum.

Keeping students in education – a wicked problem

The complexity of interrelationships and factors that underpin keeping students in education is characterised as a ‘wicked problem’ (Churchman, 1967; Rittel & Webber, 1973). Wicked problems are complex and seemingly intransigent where there are no quick fixes and simple solutions, and hence are beyond the capacity of a single organisation to address adequately.

Wicked problems differ from “tame” problems that are essentially technical in nature. Wicked problems concern the complexity of human relations, the multiple variables involved in such human problems and the ultimately political nature of their formulation and address.

Rittel and Webber (1973) identify ten characteristics of wicked problems that illustrate how the very definition of what the problem is in the first place, how it can be solved, and when we can say that it is solved. Navigation of wicked problems calls for interdisciplinary, multidisciplinary and transdisciplinary approaches that match the complexity of the problems themselves.

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Cranston, Watson, Allen *et. al.* (2016) note wicked problems in education are not easily resolved by consideration of the facts or even agreement on what are the facts; a situation which emanates from underlying paradigmatic disputes among key stakeholders. 'Fixing' one issue has been the default position of many stakeholder agencies for far too long and has at best been only partially successful. Examples in Tasmania include the attempt to provide Years 11 and 12 in some high schools (which normally finish at end of Year 10, after which students must often travel to a college for the final two years of study) and the highly contested lowering and raising of the school leaving age.

Instead, the issue of keeping students in education needs to be considered in the context of its characterisation as a complex and contradictory issue where values, solutions, expectations and aspirations are likely to be seen through different lenses. What can be understood is that problems that are in part embedded in social and cultural contexts 'are never solved, they are simply resolved over and over again' (Cranston *et. al.*, 2016, p. 15). In this sense, wicked problems relate to political and philosophical debates about what counts as the good life, how resources should be distributed, how we deal with disagreement, the role of government in supporting individuals and collectives, and how we should live together as citizens. Accepting the wickedness of such issues does not mean they are totally intractable. Rather, exposing their complex nature allows stakeholders to consider new perspectives and more nuanced and flexible ways forward. As Cranston *et. al.* (2016) put it, "addressing and trying to manage wicked problems is rarely a matter of 'fixing' a problem, rather one of ameliorating it." (p. 15).

In their work with small rural school closures in Atlantic Canada, Corbett & Tinkham (2014) used post-structural social theory to consider this as a wicked problem, as a common framing of the problem was inherently difficult because of the different foundational assumptions and worldviews of the different players in the school closure drama. They were able to identify the processes through which reciprocity and bridging becomes possible and people become able to recognise perspective, framing and complexity rather than simple truths. New conceptual language is also required to support the bridging of different worldviews that can lead to genuine democratic negotiations across difference. So, in spite of the wickedness of problems, some agreed-on ways forward can be identified that have significant implications for policy. Frameworks to explore keeping students in education beyond Year 10

The above discussion highlights the complexity and wickedness of the issue of keeping students in education beyond year 10 in Tasmania. This research employs two frameworks - Integral Theory (IT) (Riedy, 2016) and Causal Layered Analysis (CLA) (Inayatullah, 2004, 2005; Riedy, 2008) as useful tools for exploring and understanding the complexity of the attainment/retention space from deeper and more nuanced perspectives that go beyond the usual deficit approaches. By using both frameworks, paradoxes, gaps and dilemmas are revealed that open up potential other directions for creating deeper transformative spaces for addressing the issue of keeping students in education.

Framework 1: Integral Theory (IT)

An integral approach attempts to include multiple perspectives within a coherent view of the issue. Integral Theory (Wilber, 1996) is complex theory that proposes four irreducible perspectives, two of which have (until fairly recently) been almost entirely excluded from education policy-making. Exclusion of any perspective results in only partial, and fragmented understandings and ineffective solutions and policy.

Esbjorn-Hagens and Zimmerman (2009) provide a useful approach, drawn from Integral Theory which unites multiple perspectives of an issue. Although writing to explore the complexities of ecology, Esbjorn-Hagens and Zimmerman's work can inform the exploration of wicked educational issues such as attainment. They note growing recognition of the complexity of problematic and intransigent issues has led leaders in a range of stakeholder organisations

(government, regulator agencies, policy makers, academics, industry and so on) to call for greater interdisciplinary, multidisciplinary and even transdisciplinary models to describe, address and work to resolving wicked problems.

Esbjorn-Hagens and Zimmerman (2009) advocate integral approaches are ‘meta-paradigms’, or ways in which already existing separate paradigms may be drawn together ‘into an interrelated network of approaches that are mutually enriching’ (p. 5). The four perspectives are the objective, interobjective, subjective and intersubjective. It is the latter two that are generally poorly investigated across much of academia. Some issues pertaining to keeping students in education are mapped to the four dimensions in Tables 1a and 1b, drawing from ABS (2011) data and the work of a range of authors such as Abbot-Chapman (1987, 2011); Corbett (2007); Cranston *et. al.*, (2016); Ramsay & Rowan (2014) and Robinson, Young & Lamb (2011).

Table 1a. Integral Mapping of Multiple Factors Pertaining to Keeping Students in Education Beyond Year 10: Individual

	First person 'I' - personal experience (subjective)	First person 'it' - data: measurement, monitoring, tracking and observation (objective)
	<p>Beliefs/values/attitudes to education Perceived purpose of education Dislike of school, school seen as irrelevant Awareness of opportunities Parents' poor school experiences Valuing of work over schooling</p> <p>Health Physical and mental health Drug use Nutrition status TV/social media engagement</p> <p>Personal attributes Identity Resilience, confidence, competence, aspiration, communication skills, age, maturity, deferment of gratification Fear - travel, isolation, insecurity, loneliness Low expectations Decision-making skills</p> <p>Relationships/stereotyping Encouragement & support Role modeling Bullying Domestic violence Othering/racism Gender discrimination Social media</p> <p>Learning Engagement Teacher PCK Quality teaching and effective pedagogies Assessment Teacher professional learning Differentiation in pedagogy Building communication skills Individual learning plans and pathways Mentoring Relevant of curriculum Student voice re school</p>	<p>International level PISA, TIMSS</p> <p>National level NAPLAN Attainment/retention statistics Cost of early dropout to national economy</p> <p>Tasmanian level TCE completion Attainment/retention Comparison with other states Launching into Learning longitudinal data (literacy and numeracy) Attendance rates Unemployment Cost of early dropout to state economy</p> <p>School/community level MySchool Attainment Retention rates Transition Year 10-11, Year 11-12 SES, ICSEA Attendance rates School, curriculum, teaching and learning data – qualitative and qualitative Cost of early dropout - personal, family, community</p> <p>Targets</p>

Table 1b. Integral Mapping of Multiple Factors Pertaining to Keeping Students in Education Beyond Year 10: Collective

Collective	Second person 'we' - cultural/community experience (intersubjective)	Third person 'its' - social systems (interobjective)
	<p>Beliefs/values/attitudes to education Perceived importance of education in 21st century Value of education vs. employment Parents' and wider community views of education</p> <p>Cultural identity Recognition Belonging Emplacement/sense of place Fear of travel, loss of community Responses to modernity - learning to leave vs holding on to the children Leavers' events at Year 10 Contradictions within the college culture – adult learning environment but still the need to engage with parents</p> <p>Cultural history 'Blue collar' community – class Elitist views of Tasmania as 'basket case'</p> <p>Relationships Social exclusion, becoming the 'other' through being educated Networks Role models – family, other students etc. Indigenous students support Peer pressure Trust</p> <p>Community cultural factors Home background & context Community support Student as carer</p> <p>School Leadership – students, community, school Support for 'at risk' students Parent-teacher communication Quality teaching and effective pedagogies Transition issues Students' voice re school</p>	<p>Structural Historical school leaving age High school finishes at Year 10 College system for Years 11,12 Weak curriculum and pedagogy links between Year 10 to Year 11 Level of rural and community development</p> <p>Physical factors Rurality Geographic location - access to school Weather Transport availability</p> <p>School facilities Boarding facilities and accommodation Timetables, free time Resources Relevant educational programs Partnerships – Colleges, schools, University, TAFE Providing for academic students At risk students Parent-teacher communication systems</p> <p>Financial/economic constraints Families in poverty Employment availability</p> <p>Examples of interventions Big Picture Schools Australia Dual enrolment (school and VET) Flexible enrolment Guaranteeing Futures and pathway planning Transition programs from Year 10-11 Indigenous programs Launching into Learning (early childhood) Dream Big Trade Training Centres Sport and other extra-curricula activities Youth Futures Industry support Child and family centres and other referral mechanisms Home visits</p>

Much government policy strategy in the past designed to ameliorate poor attainment and retention levels has derived from a consideration of the issue from the objective and interobjective quadrants, as can be seen in Tables 1a and 1b, with scant attention paid to the subjective and intersubjective quadrants. The assumption seems to be that if issues in the objective quadrants are somehow addressed, the subjective issues will also be 'solved', that is, structural 'tinkering' from a distance will be able to effect change. This is essentially an assumption of 'tameness' that cannot hope to solve a wicked problem.

A pertinent example is the recent moves in Tasmania to lower the school entry age (as well as raise the school leaving age). The lowering of the school entry age as government decree has angered the community of parents and teachers to the extent that the state government has retracted and made it voluntary rather than compulsory. Little discussion or appreciation of subjective community and cultural perspectives is evident in the development of this policy.

Using IT to analyse the Tasmanian Department of Education's document 'Retention and Attainment Strategy for Years 10 - 12 (2011)' reveals that the strategy clearly demonstrates that this document pays attention to both the interior and exterior dimensions of keeping students in education and is comprehensive in its scope and consideration. The strategy acknowledges:

The [document] covers[s] in detail the whole domain of what happens in those institutions, how it is taught and how they interact with associate institutions with the community at large ... given the range of barriers associated with non-completion, there is no single approach that will work with all students. Individuals who do not complete Year 12 come from diverse backgrounds and contexts and therefore need access to programs which respond to their individual needs and circumstances.

Table 2 outlines an integral reading of the strategy.

Table 2 Integral reading of the Tasmanian Department of Education's Retention and Attainment Strategy for Years 10-12 (2011)

Individual	First person 'I' - personal experience (subjective)	First person 'it' - data: measurement, monitoring, tracking and observation (objective)
	Reasons for disengagement; follow up Tailor transition to individual needs Individual pathway planning Makings student feel comfortable and at ease in college setting Knowing a student's needs Understanding enrolment processes Case management of attendance Support for academic students Helping students to bond with education and training to keep engaged	Collecting data on: Retention Attainment Attendance Tracking and monitoring progress and disengaged students Destinations Mapping enrolments Transition profiles TCE results and completions Certificate 11 completions Literacy and numeracy outcomes SES, ICSEA data
Collective	Second person 'we' - cultural/community experience (intersubjective)	Third person 'its' - social systems (interobjective)
	Encouraging students to stay in education School and communities as agents of change in students' educational expectations. Recognising pressure to get work and add to family finances Develop community engagement strategy Maintain strong relationships from the early years School principals visit TAFE, Colleges and vice-versa Teachers from all sectors become familiar with programs at years 10 and 11/12 through planning meetings Visits to receiving institutions Collaborative projects - responsibility of all to encourage retention Develop effective transition processes Community and industry partnerships Prioritise teacher professional development for quality teaching and learning	Deliver high quality education Flexible and relevant programs Develop process for data collection Develop pathway planning with destination instructions (Colleges, Tafe) Understand coordination between institutions - TQA and VET programs Mechanism to track absenteeism Access to facilities and resources Clear enrolment information and processes Design timetables to enable access and flexibility Colleges operate as enrolment broker Bus timetables especially for remote students in winter Extra-curricula programs Development of Year 11 and 12 programs at some high schools. Literacy and numeracy outcomes as priority Programs: mentoring, social skills, targeted assistance Development of collaborative projects with UTAS Development of student services model Partnerships and articulation into apprenticeships Linking programs to low SES communities

Unfortunately since the change of government in 2014, this document has been superseded and the extent to which its scope remains intact and its purpose enacted is still to be seen.

Framework 2: Causal Layered Analysis

The second, related framework is Causal Layered Analysis (CLA), which is described as a 'futures method' and has been applied to consider multiple futures across multiple content areas. It is not merely about predicting the future; but rather a process for creating deeper transformative spaces, for considering alternative futures in the complex networks that characterise both the subjective and objective spaces involves a structured layered deconstruction of social issues (Inayatullah, 2004). CLA has a way of drawing attention to these and to uncover the deeper frames that shape the litany and systemic levels (Inayatullah, 2004, 2005; Riedy, 2008, 2016). Considering the issue of keeping students in education, CLA can open up new spaces for inquiry, understanding and action in neglected or under-researched intersubjective cultural dimensions, and stimulate a richer imagination of desired futures for these students, their families and their communities.

CLA levels

The CLA methodology assumes four levels of interpretation from surface to deep, from simple and linear to complex, wicked and chaotic.

Level 1: Litany

The first level, the litany, focuses on the surface or cosmetic level or way of knowing about an issue and is often expressed in newspaper headlines, in the knee jerk commentary of the 'shock jock' or around the water cooler. Its impact is generally the most direct and immediate, and demands little analysis. The litany is often taken for granted and remains unquestioned and unproblematised, as summarised by the well-known axiom that there are simple solutions to complex issues but they are usually wrong.

Level 2: Systemic

The second is the systemic level which analyses social causation of the litany by examining quantitative data, social norms, laws, rules, and other institutional structures that give rise to it. Discourse at the systemic level is typically promoted by think tanks and academic inquiry, and is generally the level from which policy is developed.

Level 3: Worldview

The third, deeper level that underpins the litany and systemic levels is the worldview - the deep cultural paradigmatic commitments and discourses that frame the way people make sense of the issue, consciously and unconsciously. These are the cultural discourses based in the values people hold. This is the level of ideology, where issues are reinterpreted and reconstituted through the ideological lenses of economic and social power, gender relations, social norms and economic security. Bishop, Dzidic and Breen (2013) argue that contending with the social issues that are relevant to policy settings requires an articulation of the worldview and cultural context from which they arise, but consideration of a multiplicities of epistemologies, in particular a contextualist epistemology, however, is often missing from policy frameworks, which may then have limited impact. This level of thinking about social policy outside the academy is largely absent and even unconsciously ideological in that it represents how worldviews are guarded and defended by political actors. It would seem that it is less a lack of knowledge than political positioning that causes this to occur.

Level 4: Myth and Metaphor

Drawing from Joseph Campbell's generative work on myth (Moyers & Campbell, 1988), the fourth, deepest level identified by Inayatullah is that of the myths and metaphors that cultures hold. These are the often unconscious, unexamined but persistent stories, cultural archetypes and emotive aspects, some of which arise from our evolutionary history, such as fear and the need for safety. They are rarely if ever considered by policy makers.

The CLA framework allows an interrogation of reports, documents and academic literature which may reveal hidden or unanticipated factors which have a bearing on the issue of attainment, particularly at the worldview and mythic levels, which may open gaps, paradoxes and dilemmas as new directions for inquiry. A CLA analysis, drawing from range of relevant

literature pertaining to keeping students in school, including ABS (2011) and the work of Abbot-Chapman (1987, 2011); Corbett (2007); Cranston *et. al.*, (2016); Ramsay & Rowan (2014) and Robinson, Young & Lamb (2011) is provided in Tables 2a-d. Included are questions for inquiry at each level, contributing to opportunities to explore novel or overlooked issues, which can be developed into different scenarios for the future (see for example similar analyses by Riedy, 2016 and by Rhemann, 2016).

Table 2a. CLA analysis of the issue: Tasmania has low levels of students staying in education beyond Year 10: Litany level

Level	Examples of interpretations/ways of knowing	Questions for inquiry
Litany	Surface reading of state and national statistics 'Knee-jerk' reactions: students/families/communities in deficit - underperformance, students are lazy, don't like school, don't know how to make sensible choices, just want to go on the dole, eat rubbish, no motivation, families not supportive, girls get pregnant, teachers are no good etc.	Where does this litany come from? Who is promoting it? Who benefits by promoting this litany? What impact does this litany have on young people, their families and communities?

Table 2b. CLA analysis of the issue: Tasmania has low levels of students staying in education beyond Year 10: Systemic level

Level	Examples of interpretations/ways of knowing	Questions for inquiry
Systemic	Students and their families value income over education Poverty, rurality and transport are all barriers Parents don't want their children to leave the area Access to education - class, gender, economic power, 'hard to reach' families Need programs to 'fix the problem' eg Launching into Learning (literacy and numeracy), Dream Big, create partnerships with industry The change-over in government from state Labor to Liberal meant that education seen less as a social concern and more in economic terms More spending is needed on education Curriculum not relevant Keeping students at school longer will address the problem	What interventions are in place? Who has developed them? How might the effectiveness of the various interventions be evaluated in a systematic and comprehensive manner, and over time? What specific programs or activities would stakeholders like to be evaluated and how? What might be done through further stakeholder engagement?

Table 2c. CLA analysis of the issue: Tasmania has low levels of students staying in education beyond Year 10: Worldview level

Level	Examples of interpretations/ways of knowing	Questions for inquiry
Worldview	<p>Different discourses (economic, social, cultural, spatial) both cause and constitute the issue.</p> <p>Identity – from egocentric, ethnocentric, socio-centric, world-centric to planet-centric</p> <p>Foundational views of education, its relevance and its purpose</p> <p>Meaning attached to social and cultural capital</p> <p>Conventional education no longer fits the job market and students' experience of the world they might get from community associations, social media etc.</p> <p>Clash of traditional/modern/post modern values in city/rural areas</p> <p>Neoliberal dominant discourses of late modernity: autonomous individuals/global nomads vs. individuals nested in community</p> <p>Trust/distrust of outsiders/teachers and school authorities from a different class</p>	<p>How can the values and the structure of educational institutions be re-visioned and restructured to accommodate cultural values and needs?</p> <p>Is staying in education beyond Year 10 attainment a 'given good' that all aspire to or is there a range of perspectives about what constitutes attainment and retention within different communities? If so, what are they?</p> <p>What are different views of the value and purpose of education?</p> <p>How do students and their families and communities negotiate the pressure to leave to an education and the need to maintain cohesive community?</p> <p>What is the impact of rurality on staying in education and should retention be reframed within rural and remote settings?</p> <p>How do young people balance education with other life goals?</p> <p>Who are the dissenting, missing and critical voices and what are they saying about education beyond Year 10?</p> <p>Should education still be based on the Newtonian/Fordist industrial model modernism or is education about transcendence and widening ways of being in the world?</p> <p>What are useful theoretical and epistemological frameworks within which to inform and investigate the issue? Eg feminist, post-colonial, Marxist etc.</p> <p>By whom, and using what measure/s?</p>

Table 2d. CLA analysis of the issue: Tasmania has low levels of students staying in education beyond Year 10: Myth and metaphor level

Level	Examples of interpretations/ways of knowing	Questions for inquiry
Myth and metaphor	<p>Discourses around the purpose of education as cultural transmission and control or critical transformation.</p> <p>Metaphor of school as prison versus school as garden of knowledge.</p> <p>Identity and recognition.</p> <p>Sense of place/emplacement, belonging, unwillingness to leave/education as fragmentation – ‘we all need to stick together, them and us’, ‘born and bred’, our land, wild and free</p> <p>The ‘free market’ neoliberal global identities vs. communitarian local of community</p> <p>Fear of loss of community, family, connections to land, Origin stories and experience of Elders</p> <p>Historical links and cultural stories</p> <p>Suspicion, distrust and fear - of The Other, of losing community</p> <p>‘Opportunities’ provided by education vs. disruption of community</p> <p>The internet/NBN will solve all our problems</p>	<p>How do communities in Tasmania view themselves? (Disadvantaged, successful etc.)</p> <p>How strong is the sense of place/belonging?</p> <p>How does sense of place influence people’s identities?</p> <p>Emplacement vs. global nomad identity</p> <p>Who has this information? (Elders, Indigenous people)</p> <p>What do communities see as the purpose of education?</p> <p>How do communities negotiate the opportunities afforded by education and young people needing to leave the community (‘learning to leave’)</p> <p>What are advantages and disadvantages of staying in education as viewed by the communities?</p> <p>Why do some young people resist schooling?</p> <p>How do community members think about learning?</p> <p>Do parents/communities think their young people are good learners? Why/why not?</p> <p>How has the history of education in the region influenced communities’ views of education?</p> <p>What are the communities’ hopes for their young people?</p> <p>What are their fears?</p> <p>What are the communities’ views of the future?</p> <p>What sort of future do communities envisage for their young people?</p> <p>What do communities do well and would like their young people to continue doing?</p> <p>What is valued?</p> <p>What values are shared?</p> <p>What has changed? (eg the cyberworld particularly social media)</p> <p>What is done well?</p>

Conclusion

This paper has discussed the wicked problem of keeping Tasmanian students in education beyond Year 10. Two frameworks drawn from Integral Theory (IT) and Causal Layered Analysis (CLA) have been brought to this problem to reveal the perspectives and levels of reality that underpin it. These two frameworks offer possibilities for a more comprehensive and nuanced framing of the issues that take into account both interior and exterior dimensions as well as the deeper worldviews and myths that unconsciously lead to how these issues are framed by those affected.

An IT analysis of the Tasmanian Department of Education Attainment and Retention Strategy report (2011) shows that it appears successfully to have considered all four the integral dimensions in its scope.

The deep layers exposed through the CLA analysis reveal possible worldviews, myths and metaphors that stakeholders may bring to enable a deeper understanding and more comprehensive ways forward to understand and address the issue. While an application of CLA

to specific documents is beyond the scope of this paper, our intention is to bring the two frameworks together to develop a tool for education departments, schools and other actors interested in policy development that can provide authentic pathways in which to explore the seemingly intractable, wicked problem of keeping students in education. It is hoped that this tool can open up new spaces for inquiry by revealing paradoxes, gaps and dilemmas which may lead to deeper understanding and action in neglected or under-researched intersubjective cultural dimensions, and stimulate a richer imagination of desired educational futures for students, their families and their communities.

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