The Education Industry as a Tourism Attractor: an Instrumental Case Study of a University and its Induced Visitors

by Jaehee Pillai

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This thesis contains no material which has been accepted for the award of any other higher degree or graduate diploma in any other tertiary institutions. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the text of this thesis.

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Abstract

This study identifies the education industry's role as a prominent attractor within the tourism system model (TSM) by examining a university's role in bringing visitors to the state through a variety of activities. The study is based on the assumption that these visitors are engaged in tourism activities and also create additional value in VFR (Visiting Friends and Relatives) segment.

Since 1980, much research has been undertaken on the development of tourism system models. However, an attractor element has not been identified clearly within these models. An attractor is a 'non-tourism feature or service whose core role is non-tourism focused and this core role induces people who would not otherwise come to the destination to travel there'.

Utilising the example of the University of Tasmania (UTAS), two surveys were conducted over a two-year period (2002-2003) at UTAS, Australia in order to demonstrate the education industry's ability to act as an attractor. Moreover, it demonstrates its ability to attract a substantial amount of visitors through a range of activities that are not traditionally recognised as tourism, but make a significant contribution to the tourism industry in the region.

For the academic year 2001, the University of Tasmania attracted over 4000 international and interstate visitors to the State for academic activities and other events. Of these, students comprised a large portion of the visitors attracted to the university. The international student segment is particularly important in terms of its ability to earn foreign dollars. The higher education sector of Australia's international student population has also grown steadily over the last 6 years, thus mirroring the tourism industry's growth. Currently more than 157,000 international students are enrolled in over 40 Australian Universities. Therefore, in this study, special attention is paid to this key segment of international students by exploring their value to the tourism industry and whether they should be recognised as tourists in terms of their travel impact, VFR and future return travel potential.

Consequently, this research examines the attractor role of the education industry within the wider context of the tourism system to a given destination.

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My soul, give thanks to the Lord, all my being bless His holy name
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Abbreviations

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
AEI	Australian Education International
ATC	Australian Tourist Commission
AV-CC	Australian Vice-Chancellors' Committee
B&B	Bed and Breakfast Accommodation
BDA	Brian Dermott Associates
CODES	Centre for Ore Deposit Research
CRC	Cooperative Research Centres
ELICOS	English Language Intensive Course for Overseas Students
GDP	Gross Domestic Product
GSP	Gross State Product
ICOMOS	International Commission on Monuments and Sites
IDP	International Development Program Education Australia
ISS	International Student Society
NSW	New South Wales
NT	Northern Territory
NZ	New Zealand
PATA	Pacific Asia Travel Association
QLD	Queensland
SA	South Australia
SAR	Special Administrative Region
SDI	Sustainable Development International
SPSS	Statistical Package for Social Science
STA	Student Travel Australia
TSA	Tourism Satellite Account
TSM	Tourism System Model
UK	United Kingdom
US	United States
UTAS	University of Tasmania
VFR	Visiting Friends and Relatives
VIC	Victoria
WA	Western Australia
WTO	World Tourism Organisation
WTTC	World Travel and Tourism Council

CHAPTER ONE INTRODUCTION

1.1 Chapter overview

This chapter provides an overview of the thesis by addressing the background to the research, the research aims, objectives and definitions of the key concepts and indicating the overall evolution of the thesis. The relevance of the thesis is presented and foreshadows the conclusions that are reached in this study. This chapter also outlines how this thesis is structured and attempts to reflect the overall theme, arguments and the methodology of the thesis.

1.2 Background to the research

Since the 1970s, system studies of tourism have been applied in order to overcome the difficulties of conceptualising the distinct nature of tourism. However, complexities still exist in tourism definitions and concepts related to the tourism industry. In particular, there is a gap in recognising the actual scope of the tourism market which is arguably much wider than current limited industry definitions may suggest. Given this complexity, this study attempts to identify the concept of an attractor (defined in Chapter Two, as a non-tourism feature which creates the pull factor within the destination) and to review how it has evolved in relation to current tourism system studies. In doing so, the concept of the tourism market can be broadened through understanding the 'invisible' role of an attractor and the value of induced visitors.

In addition to system studies of tourism, moves have been made to access prominent 'attractors' within the tourism industry. One such industry is the 'education industry' which contributes to the tourism industry by generating visitation to a given destination. In recent years, the growth in the educational export industry has been significant. In 2000 there were an estimated 1.8 million international students in

higher education institutions around the world, and of these approximately 200,000 students were studying in Australian institutions, contributing over AUD$4 billion to the Australian economy annually (IDP, 2002a). Consequently, it has been apparent that a significant numbers of visitors, including students, are attracted to educational institutions for various purposes and thus have naturally contributed to the tourism industry in the region through tourism related activities.

The identified problem for the industry and for the various models of the tourism system is that some attractors, like educational institutions, are invisible. To illustrate the paradigm of an invisible but valuable attractor role of the educational institution, the various roles of the education industry are explained within the context of tourism. In particular, within the education industry a university is a significant case for developing the research and will form the basis for clarifying the attractor concept. It illustrated the various segments of the induced visitors to the university in order to define the attractor role of education for the tourism industry. Attention is also given to the key segment - international students - in terms of its value and potential to give further insights into university visitors' travel impacts on the tourist environment.

1.3 Objectives of the thesis

1.3.1 Aims

Over the past few decades, it has become apparent that tourism is the world's fastest growing industry as an export earner, job creator and tax provider (Beeston, 1995; Chamberlain, 1995). The current global findings indicate that in 2003, the travel and tourism industry constituted 3.7 per cent of global GDP and supported over 67 million jobs worldwide (WTTC, 2003). However, this trend has resulted in an increase in market competition within the tourism industry and has led to the need to develop new market opportunities and niche market segments for given destinations. Identifying an attractor element has been particularly important in responding to this situation, in terms of identifying the potential visitor segments, which are as yet little

known but significant. However, the attractor element has received far less attention than other topics in tourism system studies. Thus, the underlying aim of the thesis is to provide a framework in identifying an attractor element within a tourism system model (TSM) and to illustrate tourism's interactions with other non-tourism industries. It is hoped that by doing this, the identified attractor concept can be applied to the development of the tourism industry and therefore respond to competitive market situations.

In spite of the importance of these ideas, the concepts of an attractor have yet to be extensively empirically examined. As mentioned, the education industry has been determined as a prominent attractor to the tourism industry. However, it is ascertained that there has not been any clear discussion of the education industry being an 'attractor' to the tourism industry. Therefore, the secondary purpose of this thesis is directed towards understanding the tourism value of visits made within the education industry (especially a university) and therefore its induced role as an attractor for the tourism industry. To achieve these aims a combination of a theoretical framework and primary/secondary research has been conducted. In particular the thesis clarifies the concept of an 'attractor' within a TSM and reflects on the case of a university in order to test the model implications.

1.3.2. Objectives

The objectives of this study are to provide further insights into the value and potential of the educational industry and specifically university visitors in the context of tourism. It attempted to investigate the visitor numbers and segments who visit universities for their own purposes other than holiday travel. Furthermore, it attempted to identify current data accessibility and usability through the investigation and thus assess the industry awareness of the link between tourism and the university potential in relation to those visitors. Therefore, the study attempted to:

- assess university current secondary data availability in order to identify the number of visitors, visitor segments; and

- assess university departments and organisations to find out the number of events held and details on participants.

Furthermore, the study also investigated the tourism benefits international students bring in order to highlight the tourism value of visitors to a university. In doing so the study also attempted to:

- identify international students' travel characteristics
- investigate international students' VFR (Visiting Friends and Relatives) profile
- identify international students' tourism value in regard to their return travel intentions and their perceptions on the destination

Thus, it is intended that the research results will define an attractor potential and provide detailed information of a key segment for the future development of a niche market in tourism.

1.4 Relevance of the thesis

Ultimately, this thesis assesses how a systemic approach can be applied to a niche market development for tourism. In addition, while focusing on a theoretical framework the outcomes of the research are expected to be relevant to marketers within the tourism and the education industries. Moreover, it is expected to further explore mutual relationships which may exist within the systemic approach to tourism. In this way, the proposed model seeks to be of value to various interlinked relationships between tourism and other non-tourism industries (referred to as attractors in this study) in sharing a potential market. Therefore, the relevance of the thesis lies primarily in informing tourism industries. More specifically, it advocates the potential of partnerships between tourism and the education industry in developing their market.

1.5 Thesis structure

This thesis is composed of seven chapters which can be grouped into four stages which will involve two related processes: theory construction and theory testing (Babbie, 1999:11-12).

Stage one: Chapter One is primarily an introduction which consists of the background to the study, the aims and objectives, relevance of the thesis, structure of the thesis, outlines of the methodology and definitions used.

Stage two: Chapters Two and Three lay down the theoretical basis of the study. This stage begins with the literature review of 'tourism as a system' focusing on the complexity of the phenomena of tourism in order to give a proper justification to this study. Based on this, an attractor element is defined and this element is illustrated in the reconstructed TSM. This involves an observed event of existing visitors to the educational institution (the non-tourism industry as an attractor) who are not generally recognised as tourists, yet act as tourists in transition. The detailed outlines of stage two are below:

Chapter Two discusses the importance of systemic approaches in tourism studies and the evolution of various TSMs that have been developed to identify an attractor element within a suggested model framework. It also argues that a research gap exists in terms of the tourism industry's awareness of systemic interactions of tourism and the existence of attractors. It ultimately discusses an attractor element in terms of its definition and value to the tourism industry.

Chapter Three examines the role of the education industry within the tourism context in order to clarify its attractor role. It proposes that there are three visible roles: a hard-core role, a soft-core role and a non-core role. Based upon these three roles, the invisible attractor role of the education industry is identified. The hard-core, soft-core and non-core role are explained in the broader context of the education industry. However, to make the explanation clear, the induced attractor role is explained on a single institution (a university) level. This section concludes with a case study of the

University of Tasmania (UTAS).

Stage three consisting of Chapters Four, Five and Six, is the central part of the thesis in which the major findings of two empirical surveys are discussed assessing the observed concept, as a result of which a TSM was reconstructed from stage two. In this stage, research questions of 'a university as a tourism attractor' and 'tourism value of induced visitors by a university' are addressed through two quantitative surveys. The detailed outlines of stage three are as below:

Chapter Four outlines the methodology for stage three of this thesis by examining the significance of the university as a prominent attractor for the tourism industry in attracting a variety of visitors through its core role (hard and soft core). The main questions, data collection methods, sample size and analyses of the two research approaches are discussed along with the research boundaries and limitations. The results and findings are outlined in Chapters Five and Six.

Chapter Five contains the analysis of the survey on visitors to the University of Tasmania. It summarises the estimated number of visitors and segments. In doing so, the attractor role of UTAS can be clarified. The observed research problems are discussed in regard to the collection of secondary information about university visitors.

Chapter Six focuses on an analysis of the survey for the key segment: international students' travel and tourism profile. It examines the significance of international students as a segment, their travel characteristics, their visitors' profile, international students' return travel intentions, and their perception of travel within Tasmania.

Stage four, the final stage of this thesis: Chapter Seven includes a summary of research findings and outlines the main conclusion of this thesis. The discussion is highlighted in three sections: theoretical implications; implications for the tourism industry; and implications for Tasmania. Future research suggestions are also included.

On the basis of the thesis aims, objectives and structure an outline of this study may

be developed to illustrate its methodological paradigm and organisation of the thesis (Figure 1.1).

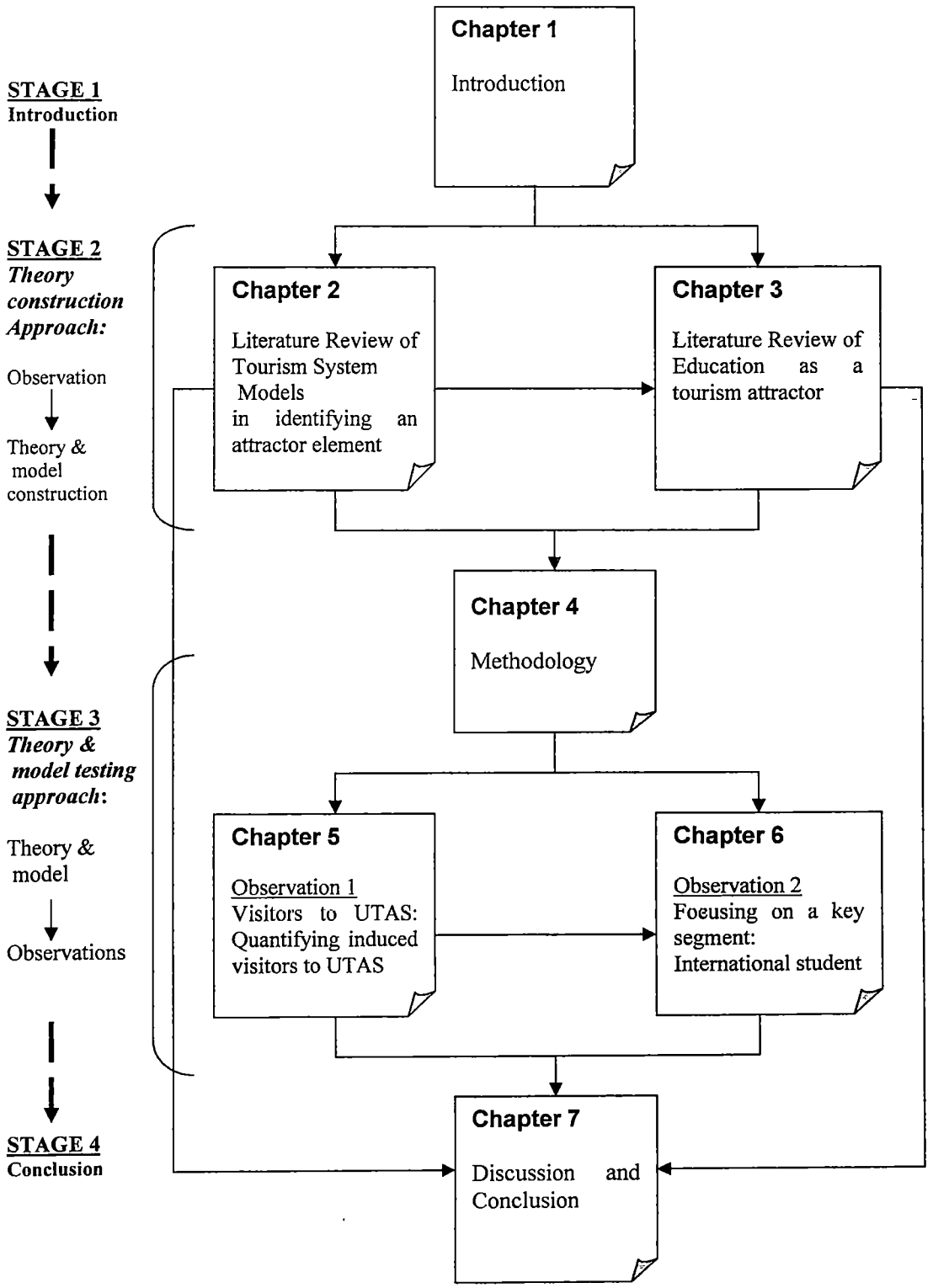


Figure 1.1 The organisation of the thesis

1.6 Methodology

This study is about clarifying an attractor element within a TSM. The inquiry in this thesis is based on understanding the tourism phenomena as a part of the world system which involves "open, dynamic, ever-changing systems that are non-linear in nature" and constructed of "multiple realities" and consequences (Jennings, 2001:57).

The methodology of this thesis includes a literature survey (stage two) of the term 'attractor' in comparison to the similar term 'attraction' and 'of 'TSMs' in order to rationalise the gap that has been identified. For testing the clarified definition of an attractor and a TSM, an instrumental case study method is chosen so that the primary objectivity of this study can be applied to larger scale outcomes in order to generalise a specific phenomenon (Stake, 1995).

It is considered to be appropriate to use quantitative and qualitative combined data analysis using primary and secondary data in order to demonstrate how an attractor element can be understood and what it will mean for the tourism industry. The methodology for stage three of this thesis is outlined in Chapter Four and this is summarised also in Table 1.1.

The data collection for this thesis was carried out through two surveys in stage three (discussed in Chapters Five and Six). The first survey aimed to identify the visitor numbers and segments to a university and also to assess the secondary data availability through a university answering the question of a university as an attractor. Primary and secondary data were used.

The second survey sought to gain insights and understanding of the tourism value of visitors to a university confirming the mutual relationship between an educational institution and the tourism industry. One key segment, the international student group has been chosen for this survey in order to investigate the potential for visitors to a university as a useful segment by developing a profile of their travel characteristics. A survey including quantitative and qualitative questions was used in this survey.

	First survey	Second survey
Research questions	Quantifying visitors to a university -How many visitors to the university? -Why they are coming? -Who are they? -Data availability through the university	Qualitative information of the key segment (International Students). -What are their travel characteristics? -Students' induced VFR profile -why are these visitors important to tourism?
Method	1) Quantitative survey -Structured Questionnaire 2) Secondary Data	Quantitative survey -Structured Questionnaire (including qualitative questions)
Survey Participants	Administrative officers and academic staff in schools and departments	International Students
Objectives	Identifying the visitor numbers and segments & current data availability	Analysing visitors' travel characteristics and tourism value
Analysis	Excel	SPSS Excel

Table 1.1: Methodology of two surveys for stage three

1.7 Definitions

Attractors are non-tourism features whose core role is non-tourism focused and this core role generates a movement of people to the given destination (Author's definition discussed in Chapter Two).

Industrial tourism refers to situations where the tourism business involves visits by tourist to operational industrial sites where the core activity of the site is non-tourism oriented (Frew & Shaw, 1999:212).

Market segment is a unit of the tourist market that is more or less distinct in its characteristics and/or behaviour (Weaver & Oppermann, 2000:204).

The tourism industry is regarded as synonymous with private sector involvement in tourism. The tourism industry includes those sectors which become part of the product present at the destination (e.g. facilities and attractions); those sectors which enable the tourist to travel to and from the destination (e.g. travel agents, airlines, bus companies, rental car companies, tour operators); and the human component of the tourism industry, in the form of an educated and trained labour force, an appropriate union structure, and the development of positive service attitudes (Hall, 1998:17-18).

The tourism system has been developed by applying core ideas from systems theory (Jafari, 2000:589) describing tourism as consisting of various other interrelated elements surrounded by various kinds of environments, such as physical, social and economic (Mill & Morrison, 1998:xiv; Jafari, 2000:589). The discussion on the tourism system is in Chapter Two.

Visiting Friends and Relatives (VFR) refers to visitors who have the intention to visit friends and relatives as their primary purpose for their visit (Weaver & Oppermann, 2000:30).

1.8 Chapter summary

This chapter has provided an overview of this study including the background to the research, the research aims, the objectives, outlining thesis structure and the methodology definitions of the key concepts of the thesis.

The next chapter will provide the theoretical background of this thesis by discussing the importance of systemic approaches in tourism studies and the evolution of various TSMs. It ultimately argues that a research gap exists and must be identified in order to clarify an attractor element.

CHAPTER TWO TOURISM SYSTEM MODELS

2.1 Chapter overview

This chapter includes the theoretical background for this thesis in order to illustrate the functions of an attractor element within a TSM. The chapter first discusses the distinctive nature of tourism to attain the needs of a systemic approach to tourism studies. This distinctive nature of tourism is explained as a set of complex phenomena of tourism related definitions, tourism studies and statistics. The chapter then addresses to the term 'attractor' within the definitional complexity of tourism and discusses how this element can be defined.

The chapter then moves on to explore the notion of a systemic approach and the development of systemic approaches in tourism to attain the importance and the concept of a system model in order to provide the theoretical background for this study. Following on from this, the chapter discusses the notion of a TSM. It defines the extent and the nature of existing tourism models in the four main contexts of geographical emphasis, economic emphasis, sociological emphasis given to TSMs and synthesised models. This discussion is based upon the variety of concepts, applications, theories and models that have been advocated for tourism system studies in many different contexts. It explores the key components and elements relating to each different system and its representation of the tourism phenomenon.

Subsequently, this chapter argues that despite the plethora of models that exist, there has been limited application as well as a lack of understanding and implementation of TSMs for the tourism industry. It also highlights that the concept of an attractor for tourism has not been given enough emphasis in the current TSM. That is, the study focuses on the worthiness of recognising an attractor element and its bearing on a TSM. Thus, the chapter highlights the prominent element of an attractor looking at its role for the tourism system and its values within the TSM. Finally, the discussion concludes by proposing an integrative work for considering the economic value of visitations made by an attractor element in applying the TSM.

2.2 The complexities of tourism

> A great wall of mythology surrounds the tourism industry. Under the onslaught of systemic tourism study the wall has now sustained minor breaches. But for most of the populace, including many who are direct participants in the industry, the mythology is treated as reality. Before comprehensive progress can be made toward sound development of the tourism industry of a community or a state, the myth must be demolished (Blank, 1989:1).

The purpose of this section is to identify the nature and extent of tourism, examine its complex phenomenon, and illustrate some of the major points to be contained in the development of systemic approaches in tourism studies. An understanding of the nature of tourism will lead to the attainment of a need for a systemic approach to tourism studies. Two main issues are suggested for the adequacy of a systemic approach to tourism in considering the distinctive nature of tourism: the complexity in tourism related definitions, tourism studies and statistics.

The distinctive characteristics of tourism have been explained in terms of the evolution of its definition (see the extended discussion in S. Smith, 1988; Blank, 1989; Jafari, 1990; Morley, 1990; Ashworth & Goodall, 1991; Leiper, 1995; Echtner & Jamal, 1997; Futter & Wood, 1997; Lickorish & Jenkins, 1997). Tourism can be defined in more than one way depending upon the purpose, such as in geography, sociology, psychology or economic disciplines (Elliott, 1997). Due to these complications there is still no universally accepted definition of tourism-related terms (S. Smith, 1995; Weaver & Oppermann, 2000). Thus tourism definitions have tended to specify the given situations within their exclusive disciplinary limitations (Morley, 1990; Brown, 1999; Weaver & Oppermann, 2000). One simple example is the standard definitions of 'tourism' and 'visitor' which were accepted by the United Nations Statistical Commission in 1993 (Elliott, 1997:20). Using these commonly used definitions, 'tourism' comprises "the activities of persons travelling to or staying in places outside their usual environment *for not more than one consecutive year* for leisure, business and other purposes" and 'visitor' denotes "any person travelling to a place other than that of his/her usual residence *for less than 12 months* and whose main purpose of the trip is other than the exercise of an activity

remunerated from within the place visited" (Elliott, 1997:21). Leiper (1990c:371) argues that these technical definitions are mainly used for statistical purposes and thus differentiate tourists from other travellers in a precise and unambiguous way. However, one author remarked that "while most tourism is recreational in nature, some tourism, such as business, professional, and personal travel is not associated with recreation" (Mieczkowski 1981 cited in Murphy, 1985:9). Brown (1999: 5) also states that "whole rafts of tourists are missed by these limited definitions". Blank (1989:3) suggests that in reality "almost everyone is a tourist". Thus, the actual scope of tourism definitions are much wider than generally understood, so the figures on tourists in fact include only a minority (Leiper, 1995:6-15; 1999:5). Consequently, it is certain that these commonly used definitions have been very limited in their relevance.

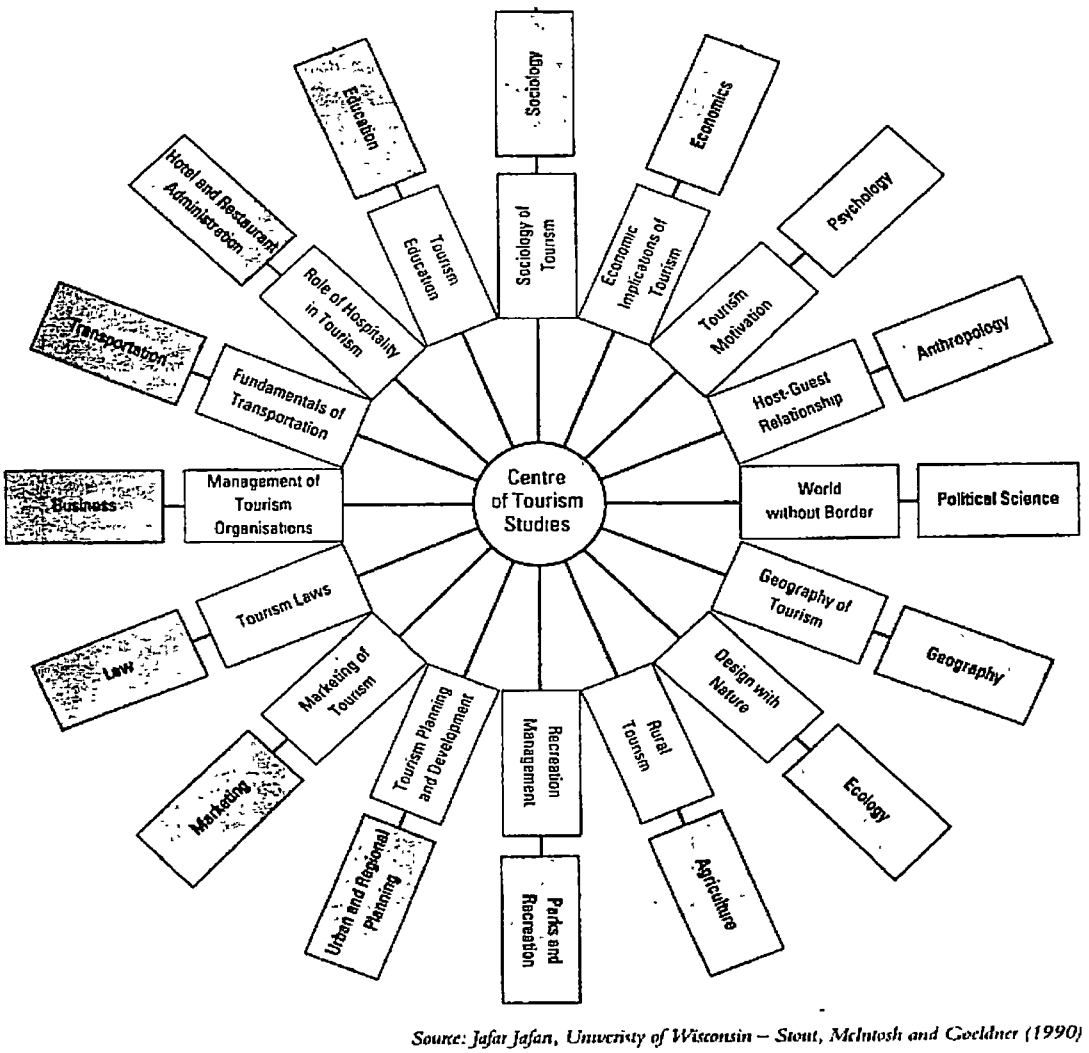
Whilst the definitions should be "useful instruments to stakeholders for statistical, legislative, administrative and industrial purposes" (Elliott, 1997:26), the limited definitions of these tourism categories have discounted tourism's systemic nature. Thus, recent tourism literature has tended to define tourism in its totality including its relationship with other various external factors. For example, Weaver and Oppermann (2000:3) give a much broad definition that:

> Tourism is the sum of the phenomena and relationship arising from the interaction among tourists, business, suppliers, host governments, host communities, origin governments, universities, community colleges and non-governmental organisations, in the process of attracting, transporting, hosting and managing these tourist and other visitors.

In a similar sense, Mill and Morrison (1998:4) recognise that "tourism involves an interaction of many organisations and people" and Bramwell and Lane (2000:1) mentioned that tourism is essentially "an assembly process". Murphy (1985:9) defined tourism as "a sum of the elements, resulting from the travel of non-residents to destination areas, as long as their sojourn does not become a permanent residence".

Tourism's multi-faceted nature is also well reflected in tourism studies. Many

academics agree that tourism is fragmented and divided into many different disciplines so that tourism study shows facets of not only tourism but also its associated phenomena (Blank, 1989; Jafari, 1990; Leiper, 1990a; Liu, 1994; Leiper, 1995, 1997; Bramwell & Lane, 2000).



Source: Jafar Jafari, University of Wisconsin – Stout, McIntosh and Goeldner (1990)

Figure 2.1 Jafari & Richie, 'Multi-disciplinary Nature of Tourism Model'
Source: (Cooper, Shepherd, & Westlake, 1994:48)

In tourism studies, Jafari and Ritchie's (1990) 'Multi-disciplinary Nature of Tourism Wheel Model' (Figure 2.1) elaborates on this theme. Jafari's model identifies 16 different tourism related areas and disciplines and shows how tourism studies relate to many different studies. Thus, TSMs illustrate the variety of tourism units which have been identified from its distinctive characteristics (Cooper *et al.*, 1994). Models such as this suggest that studying tourism involves each of the elements in relation to

the others and advocate a holistic, systematic and integrated approach to formal tourism studies as a precursor of TSMs (Leiper, 1995; Goeldner, Ritchie, & McIntosh, 1999). In a systemic approach, Leiper (1995:27) also proposes that:

> Evidence about tourism comes from looking at the elements (tourist, places, organisations), at their interaction with one another and with environments, and from making observations using any appropriate techniques from a range of disciplines.

However, definitional problems are deeply rooted in the complexity of tourism's systemic relationships and related economic activity. These complications have also brought much debate about whether tourism can be classified as a single industry (see Murphy, 1985; S. Smith, 1988; Leiper, 1990a; Mill & Morrison, 1998; Wilson, 1998; Bramwell & Lane, 2000). Leiper claims that 'tourism tends to be partially-industrialised' (Leiper, 1990a:603). Blank (1989:2) also notes that "tourism is complex, cross-cutting at least half of the entire economic and social fabric of the community and nation". Smith (1988:183) suggests that:

> Tourism is the aggregate of all business that directly provides goods or services to facilitate business, pleasure, and leisure activities away from the home environment.

McNulty adds that "Tourism is also compatible, over a broad range, with nearly all types of industries" (McNulty, 1985 cited in Blank, 1989:17). Thus, the tourism industry has also been explained by its multi-faceted and amorphous nature, with various links to other industry sectors and numerous seasonal or unofficial businesses (Murphy, 1985; Lickorish & Jenkins, 1997; Wilson, 1998).

As a consequence, the tourism industry has also been statistically problematic. The diverse nature of tourism and lack of clarity and definition have made it difficult to collect accurate and comprehensive tourism data, consequently information sources tend to be sporadic and inconsistent in terms of the nature and scope of information collected (Futter & Wood, 1997). Thus, it has never been easy to measure the incidence of tourism flows. This has created many problems and weaknesses in

administration and burdens for the industry sectors through lack of information (Lickorish & Jenkins, 1997; De Lacy & Boyd, 2000). Consequently, a proper statistical instrument is desperately needed in responding to this complexity throughout the tourism industry.

The need for managing diversification of tourism industries has resulted in the 'Tourism Satellite Account (TSA)' to meet the demands of increasingly concerning statistical problems. A satellite account is a term developed by the United Nations to measure the size of economic sectors that are not defined as industries in national accounts (WTO, 2001). The WTO acknowledges that tourism is the first activity to use a worldwide Satellite Account Standard to gauge its economic impact (WTO, 2001).

At this point, it would be opportune to deliberate upon the TSA agenda, as it is about facilitating systemic approaches to the production and management of tourism economics. Essentially, the TSA measures the overall economic contribution of tourism to the rest of the economy including employment, impact of consumer expenditure, capital investment, government revenues and expenditure, foreign trade and business expenditures from tourism (Pacific Asia Travel Association, PATA, 1999; WTO, 2001). It is developed according to international standards of concepts, classifications and definitions that will allow for valid comparison with other industries and eventually it will also be comparable with other internationally recognised economic statistics (Frechtling, 1999; ISR, 2000; Laimer & Smeral, 2001; WTO, 2001). The Australian Tourist Commission (ATC, 2002:1) notes that:

> Tourism is not an industry in the traditional sense because industries are classified in accordance with the goods and services they produce, whereas tourism depends on the status of the customer. A TSA (Tourism Satellite Account) partitions industries into tourism and non-tourism activities so that the direct contribution of tourism to the economy can be measured on a consistent basis with 'traditional industries'.

The TSA is now internationally recognised as the official methodology for providing accurate data on the economic significance of tourism and the linkages that exist between tourism and other industries (Tourism Victoria, 2000).

Therefore, it is clear that TSA is an effective approach to analysing the impact of tourism, which is systemic in its functioning. The WTO describes the TSA as the "only way to have an overall view of tourism's impact on the economy on an equal footing with all other sectors" (cited in PATA, 1999:1).

It is argued here that the way in which the interpretation of the tourism phenomenon has developed over the last decades indicates the notable development of tourism system studies. In recent years the greater realization of the economic value of the tourism industry has used a more intelligent systemic approach to tourism studies and associated industries. This section concludes that the complexities arising from tourism's distinctive nature, and the difficulties arising from the economic agenda presented by the tourism industry can best be examined and resolved through a systemic approach (Leiper, 1990b; Liu, 1994; Leiper, 1995; Sofield, 2003).

Following on from this, the next section will discuss the definition of an attractor in the content of tourism studies and thus the identified theoretical gap for this study.

2.3 The definition of an attractor and identification of a gap in the literature

Despite its importance, the attractor element has received far less attention than other topics in tourism system studies, and very little literature exists on this topic. In the current tourism literature, some authors have used the term 'attractor' literally and briefly in order to explain the meaning of an 'attraction'. However, it is argued here that an attractor should not be used interchangeably with an attraction.

In his study which reviewed ways of analysing attractors, Blank (1989:9) gives a definition following:

> Attractor – this is the feature of the destination community that induces people to travel there...this makes it possible for the traveller to live temporarily in the community.

Blank (1989:9) explains that people travel to some places not only because of the unusual natural features or holiday resorts, but also because of business operations there, superior health care facilities, or some other man-made features or service. The attractor brings people who would not otherwise come to that destination. In other words, the attractor's role exists in generating visitation. According to Blank's definition, the attractor includes both tourism and non-tourism features.

Gunn has used the term 'attractor' and regarded it as 'resources in the attraction which stimulates travel' (Gunn & Var, 2002:42). Gunn gives example that "the attractor may be the ecosystem, rare plant, landmark, or animal but the attraction is a developed and managed entity." (Gunn & Var, 2002:43). However, Gunn's definition is limited within tourism features which make up the tourism attraction.

Blank's definition is more appropriate than Gunn's, in the sense it has a much broader view in looking at tourism as an integral part of the whole destination system including both tourism and non-tourism features while Gunn's view still remains

within a tourism system itself. However, Blank (1989) does not clarify how an 'attractor' is different from an 'attraction'. Therefore, there is need for a careful and clear consideration of the concept of an attractor and how it can be understood in the TSM.

Once again, difficulties in defining tourism-related terms exist in relation to what is an attractor and what is an attraction. An attraction has been defined and classified in many different ways and many authors argue for different definitions (see Leiper, 1990c; Bull, 1995; Gartner, 1996; Cooper, Flectcher, Gilbert, Wanmhill, & Shepherd, 1998; Gunn & Var, 2002; Richards, 2002). Some authors generally regard attractions as a part of the tourism industry. For example, Gartner (1996:352) defines attractions as "the reason people travel to a particular destination, which signify the primary reason for the existence of tourism related business". In a similar sense, Blank (1989:26) identifies attractions (or the focal attraction as he calls it): as "the primary tourist attracting feature...which correlates with purposes for travel". Pearce (1991:46) explains that "a tourist attraction is a named site with a specific human and natural feature which is the focus of visitor and management attention".

In the recent literature others have explained the term attraction with a more systemic approach. Jafari (2000:35-36) suggests that: "attractions are more than just a site or an event and they are an integral part of a larger tourism system that also consists of tourists and markers"; Gunn (2002:41) describes an attraction as "a unit of the tourism system...it provides the major 'pull' to the market". However, some argue that "almost everything can be an attraction" (Gartner, 1996:352). Dann (1996 cited in Pearce, Morrison, & Rutledge, 1998:269) also notes that:

> Everything from sewers to pristine environments, from castles to slums, can be transformed into a tourist attraction with the right amount of presentation and an emphasis on nostalgia.

On the other hand, Weaver and Oppermann (2000:458) point out that "tourist attractions are specific and generic features of a destination that attract tourists; *some, but not all*, attractions are part of the tourism industry". This is a more appropriate definition than others in considering a tourism system as a sub system of the whole

world system. It is important to note that in reality, some cases are not generally perceived as a part of the tourism industry while they are contributing to the tourism industry. So, what is an attraction and what is not? In this study, it is suggested that a clearer classification between an 'attractor' and 'attraction' will give clearer picture to this question. Subsequently, in this study **attractors** are regarded as non-tourism features whose core role is non-tourism focused and this core role generates the movement of people to the given destination. On the other hand, tourism features will be regarded as attractions.

However, it should be noted that the role of an attractor is clearly different from the role of an 'industrial attraction'. Frew and Shaw (1999:212) argue that:

> Industrial tourism involves visits by tourists to operational industrial sites where the core activity of the site is non-tourism oriented.

Such things as factory tours and plant or animal or farm tours are good examples of industrial attractions. Industrial attractions provide facilities and services for the tourist and that becomes part of the business while an attractor does not have this operational tourist attraction. From the given definition, attractions can always be attractors in attracting tourists. On the other hand, an attractor may not in itself have any attraction for tourists. However, it is a pull factor in the sense that it induces people to go to the given destination to visit and stay for purposes other than tourism.

The classifications of attractions and attractors are given as examples in Figure 2.2 which is based on the economic core activity of the given industries, businesses or events. The current definitions do not clearly include these attractors within the tourism context. Thus, clarification of this point will allow a clearer separation highlighting non-tourism features as special elements within the broader category of tourism system studies. As shown in Figure 2.2, examples include educational institutions, medical facilities, businesses, and political/governmental facilities. However, some non-tourism features like sports, religious events, festivals or meeting and convention features are included in the tourism attractions as they are recognised as a legitimate part of the tourism industry although they also cater to non-recreational visitors (Bull, 1995; Gartner, 1996; Pearce *et al.*, 1998).

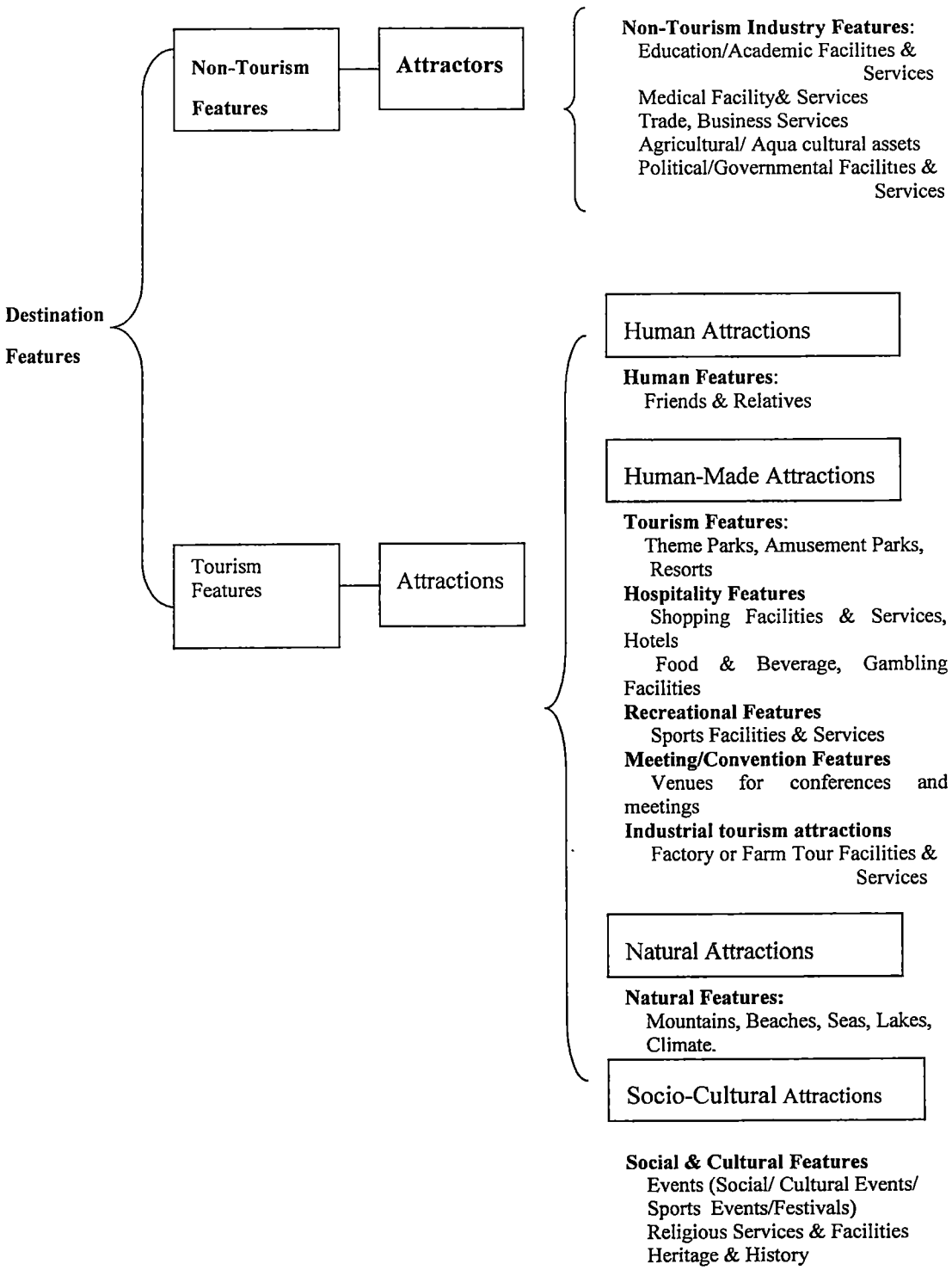


Figure 2.2 The Classification of Attractors and Attractions

(Source: Author)

An educational institution is a possible example of an attractor in that people come to the institution for their work, study and other events like conferences and seminars. The educational institution is not generally perceived as an attraction for tourism purposes. However, while education brings people to the destination for its own purpose, the visitors are naturally engaged with tourism related businesses and activities in conjunction with their visit or temporary stay. This may include students, visiting academics, conference/seminar attendees, intervarsity sports participants, cultural/social event participants and any other business related travellers. These visitors would need to use a travel agency to organise their trip, accommodation and hospitality facilities for their needs. They may want to or need to travel while they are staying and thus may need some information about places, events or venues. If they are staying for longer periods, friends and relatives might want to visit as well. Thus the potential for extra visits and travel related activities is generated.

Exemptions to this particular case are some historical educational institutions which attract actual holiday tourists in the form of cultural tourism attractions or industrial tourism attractions. These educational institutions will be under 'socio-cultural attractions' or 'human-made attractions' as classified in Figure 2.2. This will be discussed in Chapter Three under the heading of 'non-core role of the education industry as an attraction'.

It is clear that the core business of the educational institution (such as a university's education and training activities) does not aim to attract a tourist to the destination, nor contribute to the tourism business and it is not intrinsically a destination or an attraction for holiday tourists. However, a university certainly brings various visitors to the destination and these visitors have been naturally engaged with tourist-type activities, thus affecting the tourism industry within that destination.

At this point, one may suggest another definitional question that is whether these visitors can be regarded as tourists in terms of fitting into the current common tourism definitions (as discussed earlier in this chapter). Leiper's (1990c) definition gives an explanation about these induced visitors brought in by an attractor, but who may be seen as having tourist potential. Leiper (1990c:371) defines tourists as "persons away from home to the extent that their behaviour is motivated by leisure

related factors". Leiper (1990c:371) suggest that this definition will enable the researcher to avoid any questions of trips or visit purpose. His explanation that the visitor who visits the destination for other purposes such as business, study and work often have "intervals of uncommitted time during their itinerary, and may devote that discretionary time to a leisure-related pursuit" (Leiper, 1990c). In that sense, these visitors should realistically be regarded as temporary tourists (Blank, 1989; Leiper, 1990a). Thus, these visitors should be understood as a part of the tourism industry and as Blank (1989:10) suggests "they may generate large aggregate expenditures". It should be realised that these expenditures noticeably contribute not only to the given industry which is the initial destination, but also to the tourism industry.

It is argued that potential exists in the unrecognised area of the attractor's role in non-tourism features. Moreover, non tourism attractors should be focused on the aim of maximising the opportunities for expanding market diversity and speciality. Thus, in this study, the focus is on non-tourism features which are attractors.

The significance of the economic value of an attractor will vary depending on the types of the destination's economic, social, political and geographical features. However, among the features of the destination community, some of the significant ones that can be identified as generating visits include Education, Government, Business/Trade, Sports, Medical and Social Infrastructure (Lickorish & Jenkins, 1997). In recent years, the awareness of the spin-off effects in other industry sectors has also increased and the value of these attractors have also been implemented in new tourism product developments, in conjunction with focusing on consumers' special interests in tourism, such as shopping-tourism, medical-tourism, health-tourism, wellness-tourism, edu-tourism, agricultural-tourism, sport-tourism, scientific-tourism and architecture-tourism (Douglas, Douglas, & Derrett, 2001; Azwar, 2002). In other words, some of the significant non-tourism attractor features have been transformed into tourist attractions or tourism products. These interact to attract people and eventually make them travel to the destination to stay and spend their time, and money as temporary residents (Murphy, 1985; Blank, 1989). It should be recognised that attractors are contributing to visitation without any overt tourism purpose (Murphy, 1985; Blank, 1989). Therefore, an attractor element emphasises the mutual benefit between other industries (especially non-tourism industries) and

tourism industries within systemic interlinked relationships.

Following on from this, the next section will discuss the theoretical background for this study in order to elaborate the importance of a systemic approach and the plethora of system models which exist within tourism studies.

2.4 System models in tourism

2.4.1 Importance of a systemic approach in tourism

(1) The notion of a systemic approach

> Looking at how systems really work can be enlightening – or a wake-up call (Zemke, 2001:40).

Daellenbach (1994:27) defines a 'system' as "an organised assembly of components and each component contributes towards the behaviour of the system and is affected by being in the system". Therefore, the system comprises the relationships between the components, the process and its environment (Daellenbach, 1994; Liu, 1994; Jayne, 1999). The concept of system has pervaded many fields of science and entered into many problem analyses in attempting to deal with complexities with 'whole' or 'systems' (Kline, 1995; Lin, 2002:1). It is because the system concept provides "a window through" which assists the understanding of how the discipline connects to the larger ideas and problems of the world phenomenon (Kline, 1995).

Bearing the system concept in mind, **systemic thinking** fits naturally into the complicated process of decision making, as it provides a viable way of investigating social phenomena. It enriches the ability of communication to solve the complexity and ambiguity of the problems, which leads to more effective development (Sessa, 1988; Flood & Romm, 1996; Gill, 2001; Zemke, 2001; Lin, 2002; O'Dwyer, 2003:2). Hence, **a systemic approach** is based on systemic thinking in complex situations. Sessa (1988:221) explains that "the systemic approach brings into play a series of problems which can suggest new questions and new principles". Systemic approaches have become successful problem-solving methods in various sciences dating back to 1940 and have been applied through a wide range of disciplines to deal with complex global situations (Daellenbach, 1994; Flood & Romm, 1996; Mainzer, 1997). Conceptually, **the system model** is an instrument that enables researchers to explore and to attain a given goal. Models can represent specific

systems, and the feature of this type of model is its symbolism, which can also be used as a theoretical construct for general analysis and discussion (Leiper, 1990b).

In social science, the methodology used to produce a systemic review is relatively new and has often been influenced by physical theories in recognising that the main problems of humankind are global, complex and non-linear (Mainzer, 1997; Lin, 2002; Snow, 2002; O'Dwyer, 2003). Recently, the idea of a systemic approach, or systemic thinking, has received growing attention from tourism academics and decision-makers as a form of academic research.

In the pure science, 'general system theory' was introduced in the 1940's in considering the organism as a physical system and viewing a method to evaluate how a system is open to and reacts with its environment (see Snow, 2002). Bertalanffy (1968) presented a series of interrelated systems that can be organised in a hierarchy, so that each system has its sub-systems and superior systems (Lin, 2002). Systems science allows each science to develop its own science's paradigm in an orderly method by applying standards to all sciences, an empirical approach which observes a problem and seeks a solution (Bertalanffy, 1968:xix; cited in Snow, 2002). Leiper (1995:22) suggests that "the main benefit of general systems theory, its first principle, is that a systemic approach can clarify what would otherwise seem complex".

While there are various definitions and terms used for system study, Sessa *(1988:221)* identifies it thus:

> As for tourism, one can state that it is a global socio-economic system which follows logical and planned procedures, taking into account the interconnections and interactions which exist among the subordinate systems themselves, the organisation which they entail, their behaviours, and their goals.

Therefore, it is emphasised that systemic approaches contain a more holistic and integrated approach to the study of a phenomenon (Sofield, 2003).

(2) The development of systemic approaches in tourism studies

> The more we do this, the less will the knowledge be fragmented bits of information. This is a path to understanding (Leiper, 1995:26).

Carlsen (1999:322) suggests that "Leiper (1979) was the first to use general systems theory to develop a framework for understanding and managing tourism". But Leiper (1995:22) himself claims that "Cuervo (1967) was probably the first person to apply general system models to tourism research". Since the 1970s, tourism system study has been frequently mentioned as a prerequisite of successful tourism development in the widespread application of the system concept in attempting to overcome the difficulties of conceptualisation of tourism (King, 1987; Leiper, 1990b; Liu, 1994; Mill & Morrison, 1998; Sofield, 2003).

For tourism studies, Bertalanffy's (1968) general system theory gives a valuable theoretical background to exemplify the tourism system, and appears in much tourism literature in regard to the systemic approach (Leiper, 1990b, 1995; Mill & Morrison, 1998; La Lopa & Marecki, 1999). Moreover, many studies have led to the development of tourism in its wholeness, with the aid of several parts of the entire community, and by means of a multi-disciplinary and systemic approach. (McNulty, Jacobson, & Penne, 1985; Murphy, 1985; Getz, 1986; Sessa, 1988; Blank, 1989). The reason is that the systemic approach is a useful instrument for clearing up some of the fragmentation and overlap (King, 1987).

Since Leiper (1979), a number of academics have emphasised the need for a systemic approach to tourism, a theoretical formulation and multidisciplinary approach (Westlake, 1983; Murphy, 1985; McIntosh & Goeldner, 1986; Blank, 1989; Leiper, 1990b; Gunn, 1994; Stear, 1997; Mill & Morrison, 1998).

More recently, this was applied to a few academic issues related to the environment (Liu, 1994), management (Carlsen, 1999), service quality (La Lopa & Marecki, 1999), destination image (Jayne, 1999) and culture (Carter, 2000). Much of this research has involved attempts to conceptualise the definition of tourism as 'a

system' in relation to current issues. These tourism system studies have been used as a tool to define tourism in terms of its nature, role and relationships to the other factors in order to simplify its complex phenomena (Stear, 1997).

Thus, the systemic approach in tourism studies has been given attention in recent decades, with many scholars in tourism recognising the significance of a systemic approach to tourism, thus defining what might be a new way of looking at tourism responding to market and industry changes. These approaches eventually infer that there exist systemic flows and interrelationships within tourism systems (Wells, 1993; Pearce *et al.*, 1998). Moreover, the tourism systemic approach is not just minimising the gaps but is also geared towards breaking down and overcoming the difficulties that exist within defining tourism, and attempting to establish tourism as a valid and important area of economic development for both tourism itself and also for economic development in general.

Following on from this, the next section will discuss the various TSMs in terms of their evolution and development.

2.4.2 Defining tourism system models

Tourism is made up of many independent industries (e.g. accommodation, airlines, attractions, travel agencies). For this reason, the concept has been called the 'tourism industry' or 'tourist industry', and it is understood as a system of major components linked together in an intimate and interdependent relationship (Leiper, 1990b; Mill & Morrison, 1998; Gunn & Var, 2002). Ideally, the fundamental paradigm of the TSM is that every part of tourism is related to every other parts and all these relationships are complementary (Mill & Morrison, 1998; Gunn & Var, 2002). However, one constraint in the tourism system paradigm is the diversity of the elements, components, interpretations of different phenomena and also the TSM category. This includes whether it is in the tourism system itself (supply and demand side of the tourism industry), or in the tourism system as a sub system of the wider social system. Thus, the classification depends upon the emphasis and the interpretation of each model and all these TSMs have their own significance in illustrating the complexities in relation to the various tourism phenomena.

In this section, four types of TSMs have been identified and are discussed in terms of their development including geographical, economic, sociological and synthesised models. In addition to assessing the four types of models, attention will be given to the way in which they address 'attractors' as elements. Ultimately, the synthesised TSM will be highlighted as the underlying theoretical notion for identifying and clarifying an attractor element for this study.

(1) Geographical emphasis given to TSMs

Looking first at the geographical emphasis, it has been found that despite its importance, little extensive literature exists on this systemic approach to tourism. Such approaches are primarily based on the pioneering work by Leiper (1979), while later studies by Gunn (1994) and Mill & Morrison (1998) have helped to provide a useful foundation for applying a systemic approach to tourism.

Leiper (1979; 1990b; 1995) illustrates the complexities and diversities in tourism from a geographical perspective. His framework of tourism (Figure 2.3) suggests a simple three-fold approach – a traveller generating region; transit region; and destination region (Cooper *et al.*, 1994).

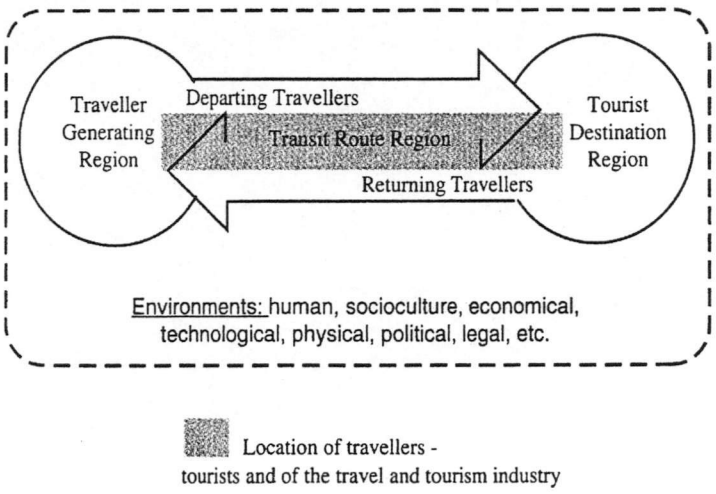


Figure 2.3 Leiper, 'A Basic Whole Tourism System'
Source: (Leiper, 1995:25)

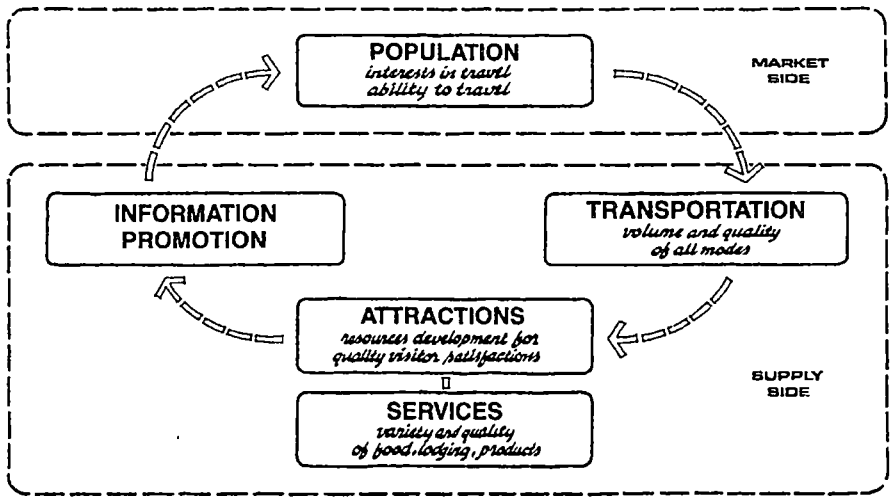
A feature of this model is the tourist's geographic representation, as the diagram can be imagined as an overlay on a map, representing the structure of the tourist's itinerary (Leiper, 1990b, 1995). From this geographical systemic view, Leiper (1995) provides three categories of analysing total tourism systems within a country: domestic tourism systems, outbound tourism systems, and inbound tourism systems. His approach explains the spatial patterns of tourism and considers the wider effects and relationships that exist within the tourism industries (Leiper, 1990b). This approach considers various environments of the geographical destination, such as the human, socio-cultural, economic, technological, physical, political and legal (Figure 2.3). However, these environmental influences are illustrated as the background of a tourism system and it does not demonstrate their interlinked relationship with any of the elements. Gunn and Var (2002) suggest that Leiper's TSM is limited in illustrating two main driving factors of a tourism system, demand and supply.

As explained previously (Section 2.3), 'attractors' are 'non-tourism features of the destination community'. This includes various businesses which are defined as non-tourism industries or businesses, which are subject to an adequate management principle for a non tourism goal. With this notion, an attractor element cannot be fully explained in this geographical TSM. However, it is acknowledged that the geographical emphasis of the TSM has initiated systemic approaches to the development of tourism system theory and model studies. It is meaningful to reflect on this fundamental paradigm of the TSM in the light of further discussion.

(2) Economic emphasis given to TSMs

The systemic approach in tourism has naturally flowed into its economic application (Leiper, 1995), as it has been realised that tourism has a great potential to enhance economic growth, given its ability to attract foreign exchange (Prosser, 1993; Lickorish & Jenkins, 1997:34). Blank (1989:1) once called tourism "a Cinderella stepchild of economic development" referring to its fast growing economic contribution to the destination community. Moreover, the tourism industry has been constantly recognised as indispensable in the expansion and evolution of the global market as it generates a considerable amount of revenue for the destination economy (Blank, 1989; Prosser, 1993; Goeldner *et al.*, 1999). Gunn (1988), Blank (1989), Mill and Morrison (1998) and other academics (see Westlake, 1983; Murphy, 1985; Jayne, 1999; La Lopa & Marecki, 1999) applied a more holistic view into the TSM to illustrate its interrelated parts and components specifically focusing on tourism economics such as the demand and supply side of the tourism industry and its linkages.

Gunn (1988) gives more a diagrammatic representation of a variety of elements in comparison to Leiper's (1990b) geographical model illustrating five different components in the process: attractions, promotion, transportation and services on the supply side, and population on the market side (Figure 2.4).



The functional tourism system. Designers and planners must recognize the interdependence of all components (and their constituent parts) and integrate them to create an overall functioning system.

Figure 2.4 Gunn, 'The Functional Tourism System'

Source: (Gunn, 1988:14)

Gunn (1988:14) notes that "conceptually, this model borrows from economics by showing a market (demand) side interrelated with a supply side". Thus, it emphasises the interdependency of each component and the importance of various facets of the tourism system.

In a similar approach, Mill and Morrison (1998) illustrate a TSM consisting of four parts: market, travel, destination and marketing (Figure 2.5). The model is displayed in a way that emphasises the interactions and interdependency between the four components of the system. Mill and Morrison (1998:8) note that:

> In examining the parts of the TSM and their linkages, those involved in tourism can see where they fit, who is affected by their actions, and how they are affected by the actions of other system participants.

The model also explains a number of internal and external market influences as a major part of the system. It emphasises each of the element's interrelationships. Sofield (2003:3) notes that in the Mill & Morrison model "tourism must be seen

holistically if dynamics and processes of the system and the way they influence or affect each other are to be appreciated".

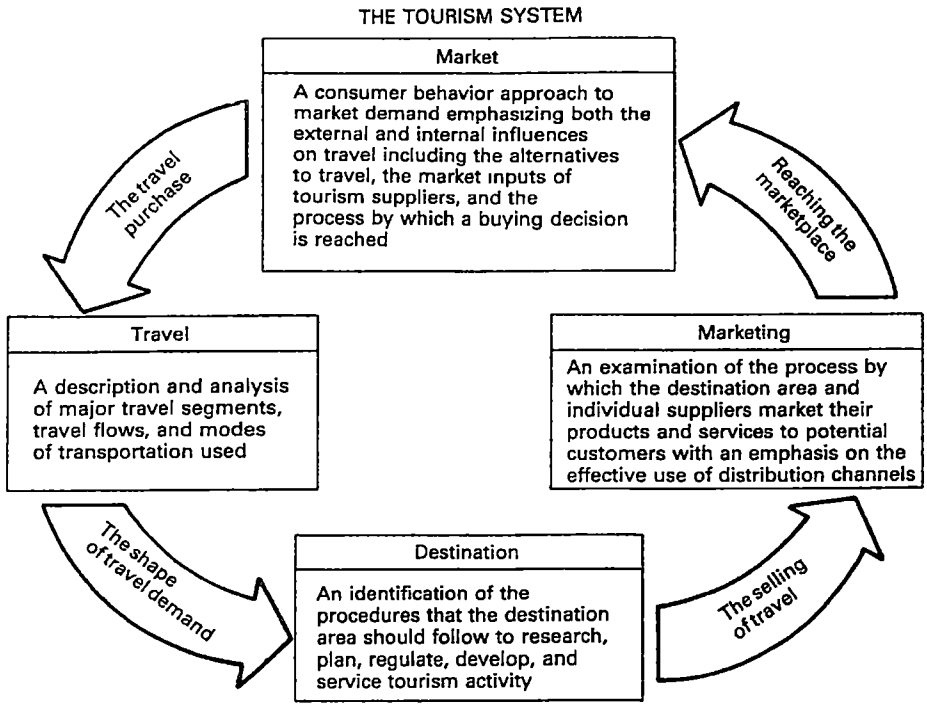


Figure 2.5 Mill & Morrison, 'The Tourism System'

Source: (Mill & Morrison, 1998:7)

In a similar approach, Blank (1989) illustrates a TSM in a simplified graphic form as consisting of three major parts: the market (tourists who travel), the destination (the places to which tourists travel), and the linkages (communications and transportation).

Blank's model focuses more on the tourism system's complicated interaction within the community. In his studies of the processes from which those debates emerged, Blank has paid attention to tourism and the destination community components and attractors (Blank, 1989). Blank (1989) has defined the term 'attractor' in his study and has illustrated this in his TSM (Figure 2.6) although no clear differentiation is made between the definitions of 'attraction' and 'attractor'.

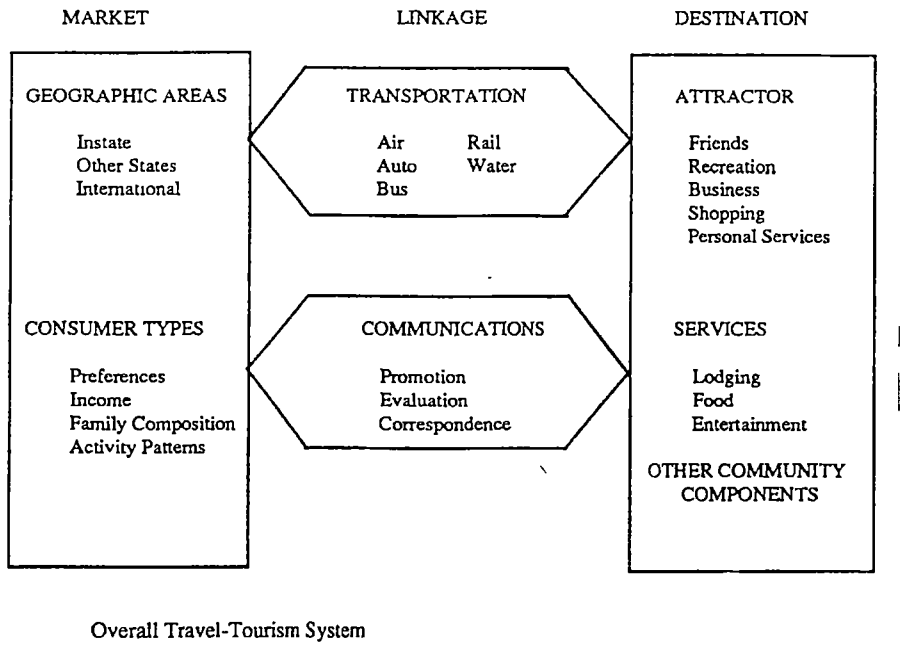


Figure 2.6 Blank, 'Overall Travel & Tourism System'
Source: (Blank, 1989:6).

One point to make is that Blank's (1989) TSM is much broader than Gunn's (1988) or Mill and Morrison's (1998) models as it considers other external community components while the other two models focus on the internal relationship of the tourism industry stressing the dynamic relationship between demand (market) and supply of the tourism industry. Issues relating to other sectors of the whole destination community are not illustrated in Gunn's (1988) or Mill and Morrison's (1998) TSM conceptualisations in which attractors cannot be allocated.

In addition, some others like Westlake (1983), Murphy (1985), La Lopa and Marecki (1999) and Jayne (1999) also apply economic emphasis to TSMs by paying special attention to specific issues related to tourism planning and management.

Westlake (1983) specifically concentrates on the central role of transport in linking demand for tourism with its supply, and focuses on the importance of the communication process between markets and destinations (Figure 2.7).

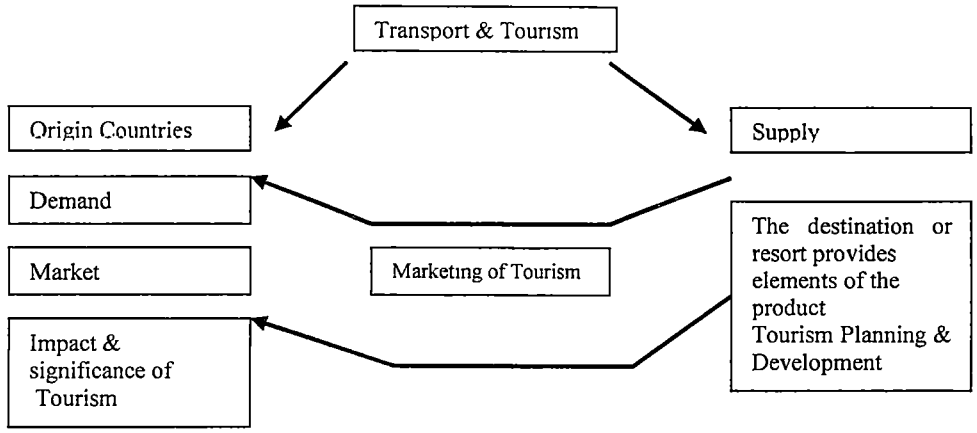


Figure 2.7 Westlake, 'Tourism System Model'
Taken and redrawn from Cooper *et al.*, (1994:41)

Murphy's (1985) model (Figure 2.8), which includes the psychological factors in viewing demand, supply and influences of various components, shows how these components are linked by intermediaries in the market (Cooper *et al.*, 1994).

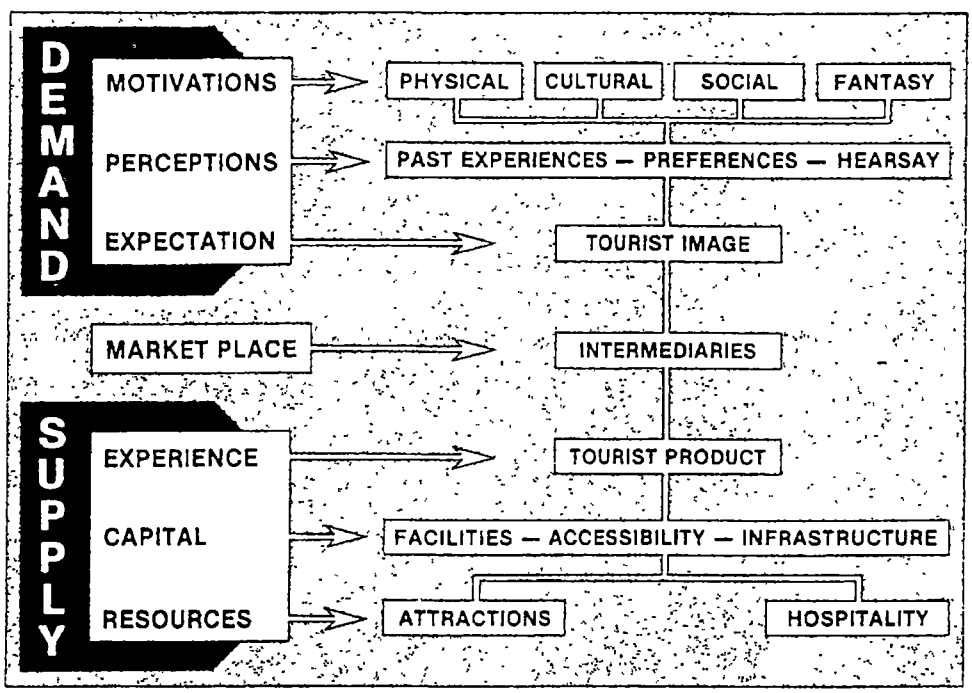


Figure 2.8 Murphy, 'Components of the Tourism Market'
Source: (Murphy, 1985:10)

La Lopa and Marecki (1999) view the tourism industry in terms of 'General System Theory', which was first proposed by Bertalanffy (1968), and integrated quality management programs in businesses. La Lopa and Marecki's TSM (Figure 2.9) includes the following four parts: an output (A), feedback loop (B), input (C) and throughput (D) (La Lopa & Marecki, 1999:38). They identified four key inputs: methods, materials, manpower and money into the tourism system to produce high quality leisure experiences for tourists, to accomplish the real goal for tourism industries of producing profits.

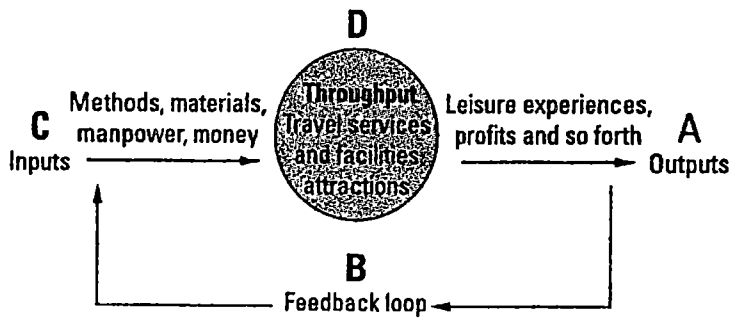


Figure 2.9 La Lopa & Marecki, 'General System Theory Model for Tourism System'
Source: (La Lopa & Marecki, 1999:38)

Jayne (1999:10) also applied a systemic approach to tourism destination image measurement to enable a more holistic analysis of destination image. Jayne (1999) argues that the existence of a tourism system structured principally in terms of the distribution of tourism products, involves interactions between supply and demand factors which help shape and frame the characteristics of tourism at a particular destination. These models by Westlake (1983), Murphy (1985) and La Lopa and Marecki (1999) focus on the internal tourism market, inter-linkage of the elements, though their views have included other influencing factors.

In summary, the conceptualisation of the economic emphasis of the above models highlights the economic value of the tourism industry. These models are justified by the significant growth and the prominent economic role that tourism has played in the past few decades. It could be argued that these models are likely to be limited in exemplifying the basic economic notion of a tourism system, lacking consideration of the external influencing factors and the interlinked relationships (e.g. social, political and other issues which are related closely to the economic phenomena).

However, the economic significance of tourism has raised interest regarding the tourism impact of the whole destination region. The issue of the impact of sudden tourism development has been emerging "since 1970 as tourism came to be seen as one main cause of environmental impact on destination ecologies, and was also seen to be causing social and cultural effects on local residents and host communities" (Pearce *et al.*, 1998:313-315). Thus, in the past few decades, tourism has increasingly become the subject of sociological study, in recognising both the interrelationship between complex issues, and tourism's actual and social impacts on the destination communities (Warszynska & Jackoski, 1986; Lindberg & Johnson, 1996). Thus, the sociological emphasis of TSM looks at the ultimate impact of TSMs to project how tourism is functioning throughout a region and an entire economy to achieve the destination's main goal. These models discuss the economic and also other sociological impacts of tourism phenomena which will be able to give a broader picture in explaining an attractor element.

(3) Sociological emphasis given to TSMs

Underlying the sociological concept of tourism as a system is the link between humans, nature and community (Lindberg & Johnson, 1996; Carter, 2000; Hardy, 2002). The improved understanding of these linkages and impacts facilitates their incorporation into the tourism development process (Lindberg & Johnson, 1996; Goeldner *et al.*, 1999). Since the late 1980s, the concept of sustainable development has been popularised in responding to this procedure (Pearce *et al.*, 1998; Ritchie, Carr, & Cooper, 2003). Building on this, the term sustainable tourism became apparent in the early 1990s (Hardy, 2002). Sustainable tourism development is the term used for tourism development, management and other tourism activities which optimise the economic and other societal benefits available in the present without jeopardising the potential for similar benefits in the future (Department of Environmental Affairs and Tourism, 1996; cited in Pearce *et al.*, 1998:316). Such models by Draper and Driscoll (1991 model presented in Gartner, 1996), Carter (2000) and Hardy (2002) show that the tourism system in its sociological concept.

A complex model by Draper and Driscoll (1991) (Figure 2.10) explains that "achieving sustainable development involves understanding of the interrelationships between the economic, social, and environmental systems" (Gartner, 1996:512-513).

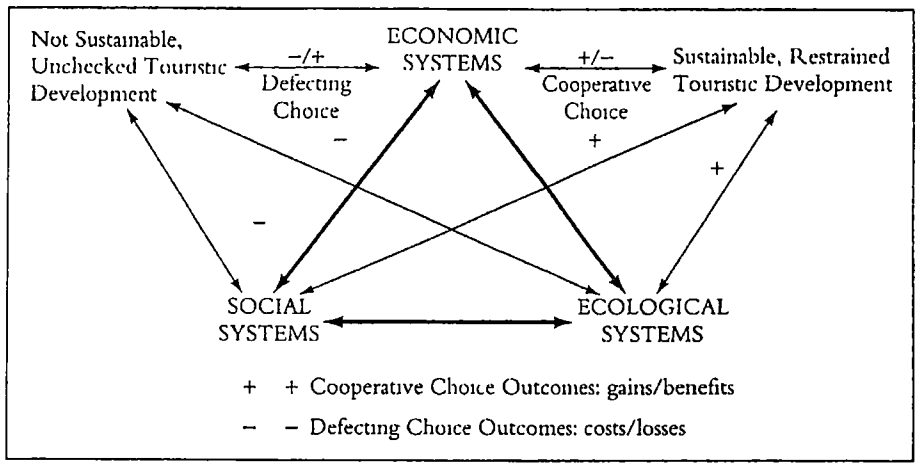


Figure 2.10 Draper and Driscoll 'A Tourism System Model'
Taken from Gartner (1996:513)

Alternatively, a TSM by Carter (2000:43) demonstrates the interrelationship of cultural expressions, arguing that "cultural expressions are a direct link between a host culture and the tourism' and one affects others" (Figure 2.11).

Hardy illustrates 'A Model of a Sustainable Tourism System in Discrete Regions' (Figure 2.12) based upon the assumption that "stakeholder groups are heterogeneous, interact with each other and that sustainable tourism involves recognition of stakeholder interests and the incorporation of their interests into management, with continual feedback mechanisms" (Hardy, 2002:75).

Though Draper and Driscoll's model (1991 model presented in Gartner, 1996), Carter's (2000) and Hardy's (2002) TSMs explain a different perspective of the sustainability and integrity of tourism development. The significant basic notion of these models is that since "tourism largely represents a process governed by human interactions" (Jayne, 1999 :10), tourism should be understood in the context of the whole system of the destination community and its interconnected linkages, as tourism's economic value implies a contribution to the unique interrelationships (Getz, 1986; Simonson, Koth, & Kreag, 1988).

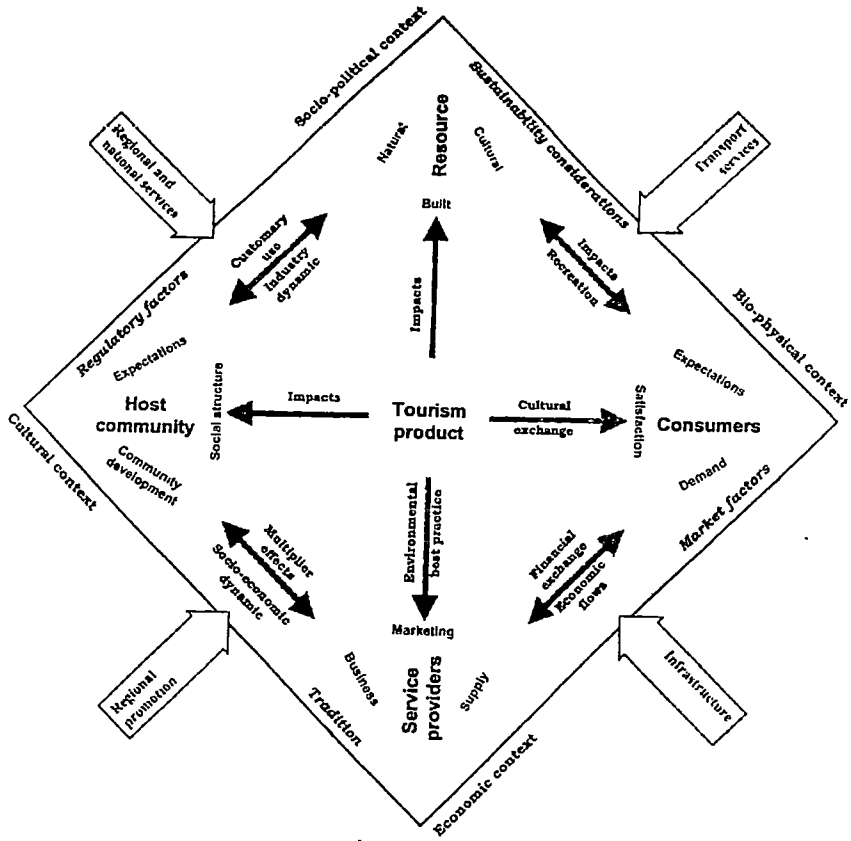


Figure 2.11 Carter, 'A Dynamic Model of Tourism'

Source: (Carter, 2000:43).

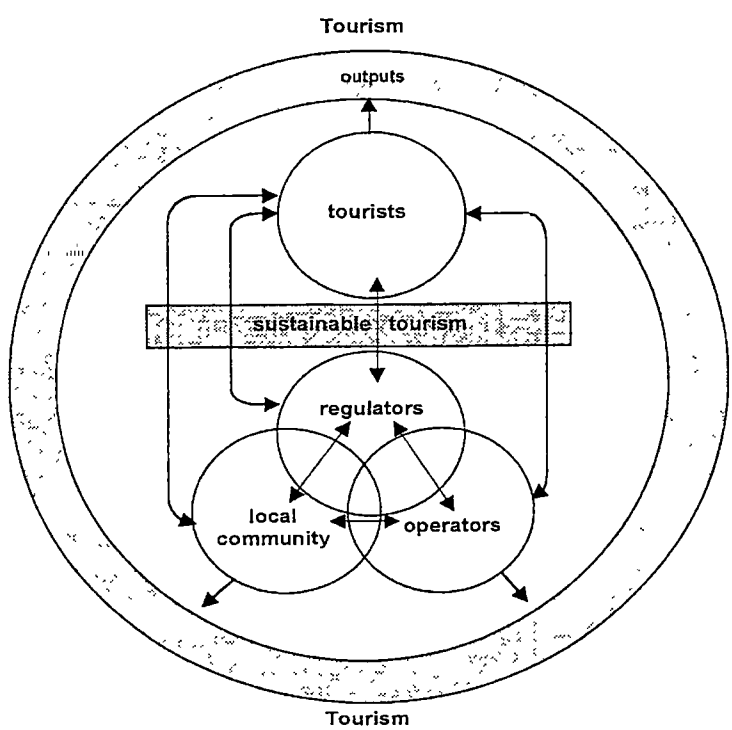


Figure 2.12 Hardy, 'A Model of Sustainable Tourism System in Discrete Regions'

Source: (Hardy, 2002:75)

Therefore, the sociological interests in tourism studies and interpretations of TSM have been a precursor of synthesised TSM in its totality and integrity which will fully enable the application of the notion of an attractor element.

The following section will discuss these synthesised models which strive to demonstrate the entirety and wholeness of the tourism phenomenon encompassing its complex aspects.

(4) Synthesised models

> Tourism is the totality of relationships and phenomena resulting from the travel and sojourn by non residents in a given locality, warranting no principal permanent establishment and not being as a general rule linked to any lucrative activity (Hunziker and Krapf 1942:21 cited in Sessa 1988 :220).

Many writers have stressed that the growth of a destination community involves a confined yet interconnected system of all the various economic, environmental, political, social, and cultural elements (Blank, 1982; Sessa, 1988; Blank, 1989; Leiper, 1990c; Prosser, 1993; McKercher, 1998; Carlsen, 1999; Jayne, 1999; Emmett & Manaloor, 2000). This interpretation can permit one to envisage a kind of potentiality connected to the enormous streams of systemic relationships in relation to the tourism system. Here, the advantage lies in the models' ability to identify the ways in which the tourism industry is able to strive for its invisible potential opportunities within the broader context.

Namely, the synthesised TSMs embrace the integration of these interrelated parts in their openness, totality and reality in assessing the external environment. They also assess how the parts function together to reinforce the area as a travel destination and subsequently reinforce its regional economy (Sessa, 1988; Leiper, 1990c; Liu, 1994; Sofield, 2003). The underlying notion of these models lies in tourism's integrity and openness to the whole world phenomenon (Mill & Morrison, 1998). In addition, a principle of system theory is a hierarchical notion which consists of a number of subsystems which are themselves simultaneously part of a larger structure (Leiper,

1990c:371; Sofield, 2003:1). Accordingly, the tourism system has been considered as a subsystem of the whole world system in its integrity and totality (Sofield, 1996, 2003). Implying this paradigm in the synthesised TSMs, the tourism system is presented as a sub-system within the wider context of the whole destination community (Sessa, 1988; Liu, 1994; Sofield, 2003).

Such models by Mathieson and Wall (1982), Sessa (1988), Liu (1994), and recently Sofield (2003) deal with the study of tourism among the various sectors of the wider destination system and the various interrelationships and interactions. Much of this research has attempted to analyse tourism development within a broad picture.

Liu (1994) studied the environment of tourism development, by adopting the systemic approach and interdisciplinary methods, and the nature, functioning, evolution and spatial distribution of the tourism system.

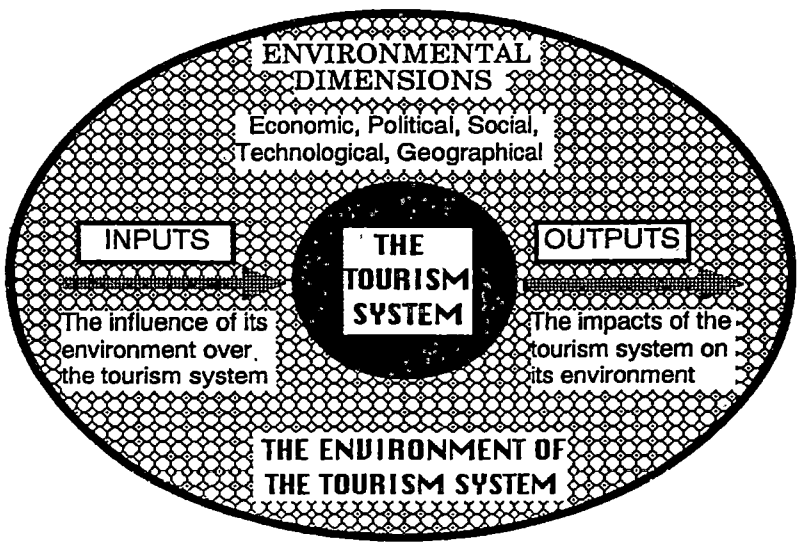


Figure 2.13 Liu, 'The Environment of the Tourism System'
Source: (Liu, 1994:6)

Specifically, Liu explains that the environment of the tourism industry can be partitioned into three distinct but interlocking levels: the internal environment, the operating environment, and the macro environment (Figure 2.13). Liu's model focuses on the examination of the macro environment, which is divided into five dimensions: economic, political, socio-cultural, geographical and technological.

Compared to other synthesised TSMs, Liu's model does not fully illustrate the interactions between environment and the tourism system as no arrows are connected to the tourism system. Ideally, Liu's TSM specifically emphasises the nature and the mechanism of the tourism system and its various environments. However, it is important to point out that his view is about the tourism system as a sub-system of these influential environments.

The model by Mathieson and Wall, (1982) is more detailed than Liu's and it also holds an overview of the industry structure (Cooper *et al.*, 1994) (Figure 2.14).

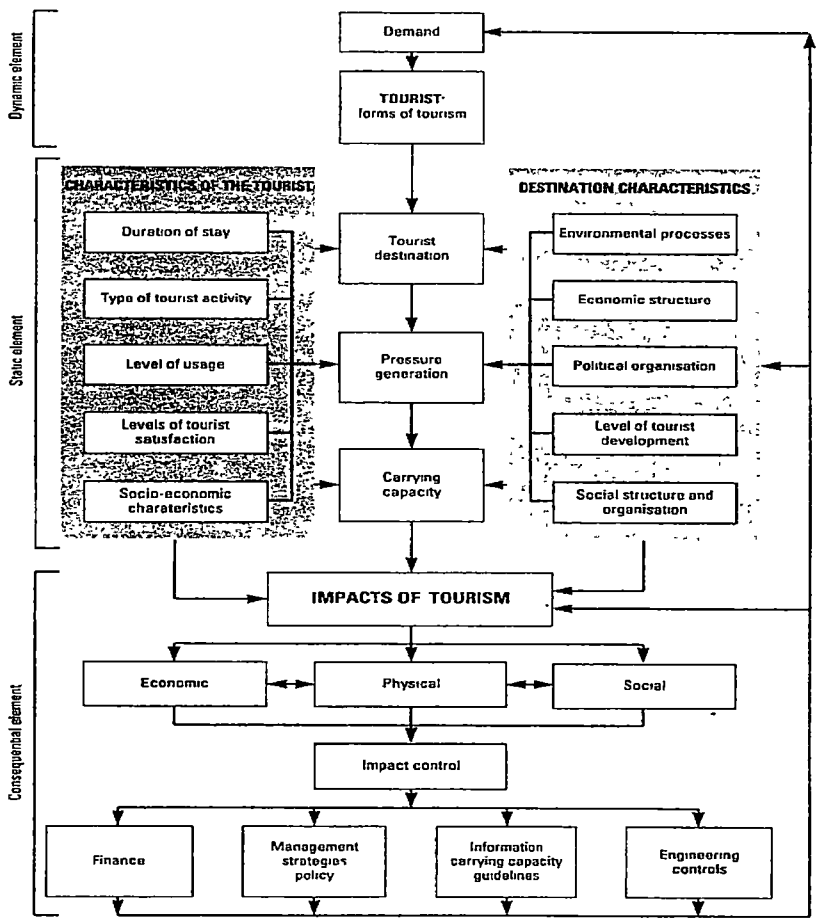


Figure 2.14 Mathieson & Wall, (1982) 'Overall Tourism Industry Structure'
Taken from Cooper *et al.*, (1994:42)

Mathieson and Wall (1982) identify dynamic, static and consequential elements of the tourist industry system. In their TSM, the dynamic elements present the demand

for all types of tourism; static elements are the characteristics of the destination including political, environmental, and economic influences (while Matheison & Wall's model of TSM is static in fact political, environmental and economic influences are dynamic) and the tourist which combine to constitute the destination, the pressure on the destination and carrying capacity; and consequential elements are the impacts of tourism referring to the physical, social and economic impacts of tourism which need to be controlled by comprehensive management and planning policies (Mathieson & Wall, 1982; Cooper *et al.*, 1994). This model specifies the elements in tourism demand and supply and it also demonstrates various other influential elements, such as environmental, economic, political and social structure and their interlinked consequences as independent yet correlated characteristics. In this model, attractors can be explained as the 'destination characteristics' element (environmental processes, economic structure, political organisation, and social structure/organisation). The impact of these 'destination characteristics' would go into the 'impacts of tourism' element then specifically into the 'economic' impact cycle in the sense that it contributes to the tourism market.

With a relatively different in structure to Liu's and Mathieson and Wall's (1982) TSM, Sessa's TSM (Figure2.15) comprises of interactions with real, conceptual, and abstract systems.

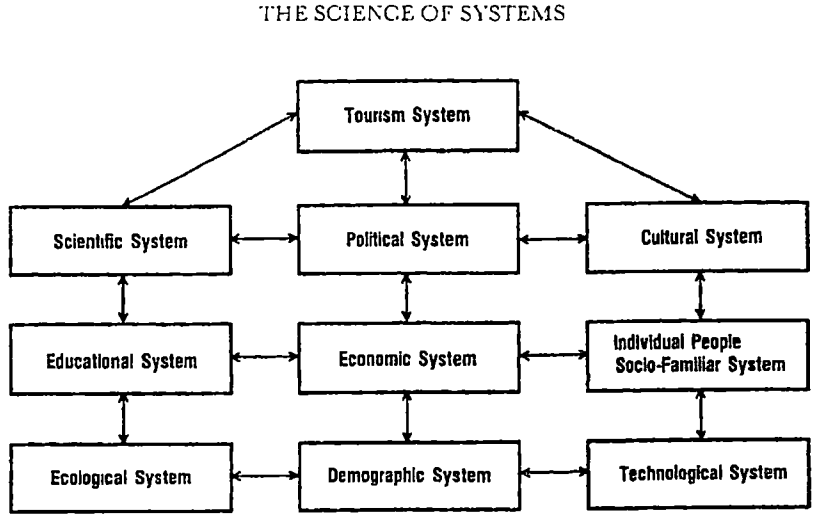


Figure 2.15 Sessa, 'The Science of Systems'

Source: (Sessa, 1988:228)

Sessa (1988:221) defines the tourism system as "a global system which connects regional development worldwide". He explains that the tourism system appears as "a spatial system which is nevertheless dynamic, moving in both space and time, and which establishes a spatial hierarchy of a scale which may not be one of coherence" (Sessa, 1988:227). It is clear from this model that all the given sub systems are independent industry systems but not separable as they are connected to each other especially to the 'tourism system' (Sessa, 1988). It can be assumed that if any of these sub-systems are contributing to the tourism market in generating visitations, then any of these (scientific, political, cultural, educational, economic, individual people/socio-familiar, ecological, demographic and technological systems) can be understood as attractors affecting the 'tourism system'.

However, some argue that traditionally these TSMs have failed to understand the chaotic nature of tourism systems, as they only present a relatively mechanistic picture by breaking down tourism into various components in closed system models (McKercher, 1998; Sofield, 2003). Thus, similarly but with a different approach to the previous TSMs, Sofield's TSM (Figure 2.16) consists of seven connected parts and numerous inter-linkages including the visitor generation region (demand side front line sector), destination (supply side front line sector), transit, support businesses and services, community, biological-physical environment and government.

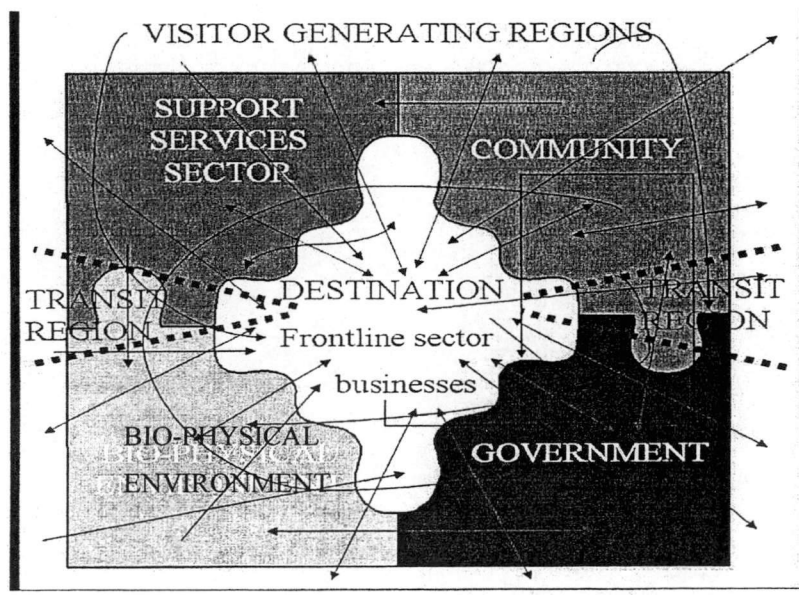


Figure 2.16 Sofield, 'The Tourism System', taken from Sofiled (2003:11)

Sofield's TSM illustrates that all these parts are closely connected with each other and emphasises their integration with a schematic representation of the many thousands of relationships (Sofield, 2003:11). The interlinked relationships then imply the complexities in unstructured causes and effects of the tourism related phenomenon containing the notion of the chaos and complexity theory (Sofield, 2003:12). From Sofield's TSM, attractors can be explained in any of the 'community', 'bio-physical environment' or 'government' sector when the relationship is formed in relation to the tourist market.

To summarise this section, the difficulties arising from tourism's distinctive nature, the opportunities presented by the industry and the difficulties arising from its rapid growth can best be examined and resolved through a systemic approach (Liu, 1994; Leiper, 1995; Mill & Morrison, 1998). The TSM has been developed along the lines of the issues related to the tourism industry's growth and impact. Hence, all of the models offer a different perspective on how the tourism system functions and what the elements are which interrelate and complement each other. However, it is apparent that the synthesised models give a better understanding of an attractor element and remain useful in their ability to help us view their complexity from the position of numerous interlinked relationships. The understanding of the chaotic and open nature of the tourism system can lead to the justification as to how non-tourism industries could contribute to tourism market development as an attractor.

Following on from this theoretical background, the next section will discuss a redefinition of a TSM including an attractor element.

2.4.3 Attractor within a tourism system model

In this chapter, the importance of systemic approaches in tourism studies has been discussed by explaining the complexities in the nature of tourism and the evolution of tourism system theories and models. However, as mentioned previously, the theoretical gap is that there has been no clear discussion on the element of an attractor within tourism system studies. Thus, this study seeks to clarify an attractor element in the TSM and to reconstruct a TSM.

The discussion on the definition of an 'attractor' established it as a provider of added access to attractions, physical, indirect or informational. Attractors make it possible for visitors to come and have the opportunity to participate in tourism activities, and therefore these activities broaden the area's tourism market opportunity. These visitors should then be recognised as the object of tourism promotion for capturing a viable segment and generating increases in revenue.

The theoretical framework (Figure 2.17) sets out a paradigm of an attractor within a TSM which illustrates the interrelationship between the tourism industry, the market and an attractor. The role of an attractor is explained as one which shares the market with tourism industries through indirect linkages (② area in Figure 2.17). The basic assumption is that all impacts are influenced by various other environments - internal and external - such as economic, social, cultural, political, geographical and environmental. This control is then related back in the form of market demand and supply for both the tourism and attractor industries. It is argued that the majority of industries and even the tourism industry, itself fail to recognise that they contribute to and complement each other when the visitors are not seen as holiday tourists. Capitalizing on this opportunity will require a significant effort in recognising the holistic benefits of this hidden area.

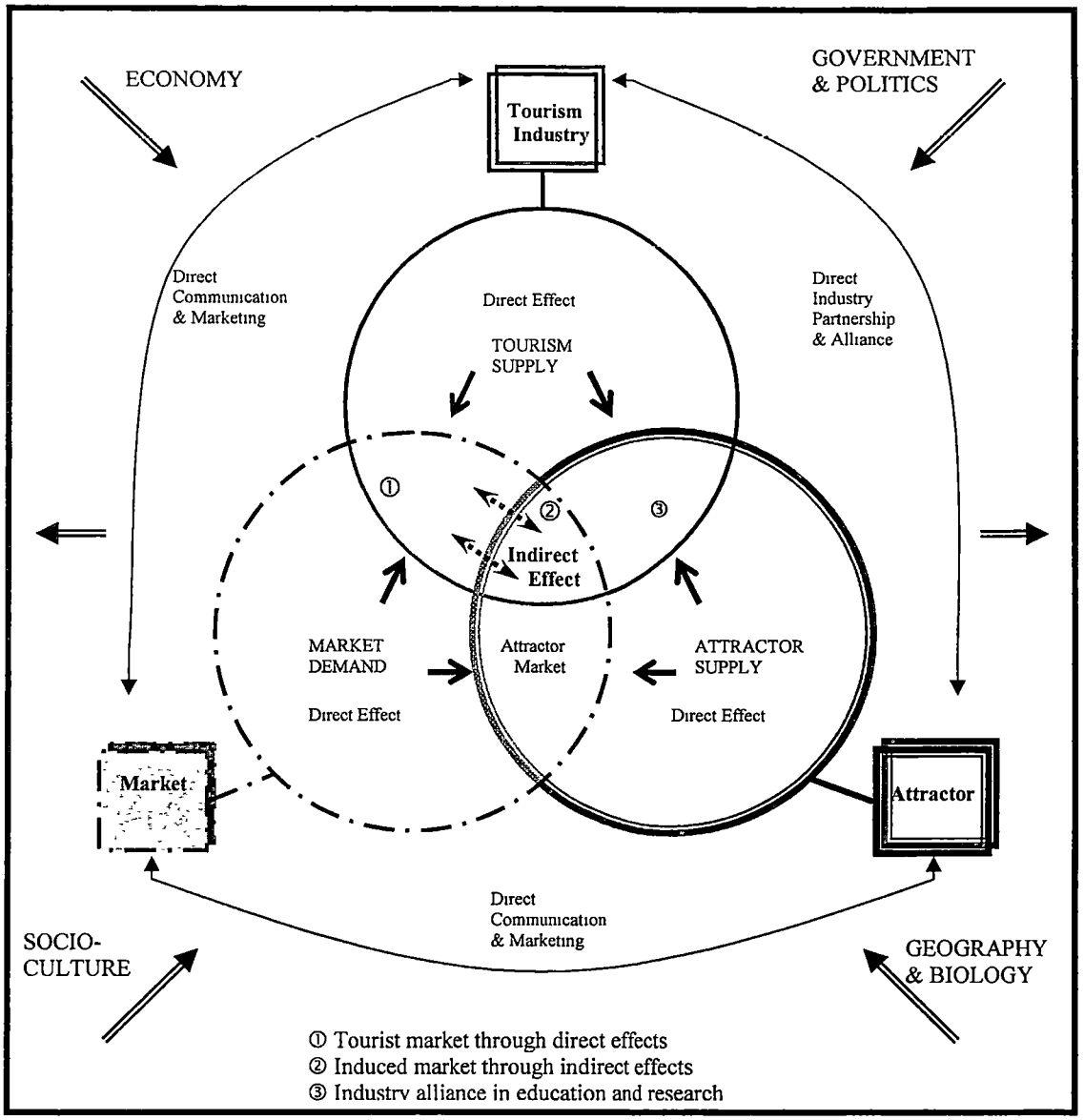


Figure 2.17 Tourism Industry, Attractor & Market Interaction within A Tourism System (Source: Author)

Accordingly, the industry needs to know who is coming and why they are coming in order to make use of this potential market. To successfully manage the development of the tourism market, the views of tourism stakeholders must be taken into account.

2.5 Chapter summary and conclusion

In this chapter, tourism's distinctive nature has been described and expanded upon, in order to explain the need for a systemic approach to tourism. The meaning of systemic thinking has been reviewed in relation to the need for tourism studies in order to explain tourism's special nature. The complexities in tourism related definitions, tourism studies and statistics were described. The chapter argued that a more realistic understanding is needed in order to recognise the potential in developing the tourism market within this broader picture. The chapter then highlighted to the importance of identifying and developing the attractor element. An attractor element has been defined as 'non-tourism features which induces people to travel to the destination'.

The chapter moved on to the theoretical background for this study discussing the various existing TSMs. The notion of the system model was examined to identify the elements of a tourism system, and explain the relationship between them. Four categories of TSMs were illustrated, and the context in which each model has been developed was described. Tourism system models and theories were examined to argue the tourism system concept which is the basis of this thesis. Consequently, it was found that the tourism system should recognise its interrelationship with other industry systems in a broad manner (McNulty *et al.*, 1985; Blank, 1989; Sofield, 1996; Mill & Morrison, 1998). It argued that the problem of understanding the economic value of the attractor role was not successfully covered in the existing TSMs because of the insufficient application of important systemic effects, inadequate limitations of tourism definitions, and problems capturing management effects related to enhancement of market development. Ultimately, the value of an attractor has been explained in a tourism systemic relationship between tourism industry, attractor and market within a remodelled TSM.

Earlier in this chapter, the **education industry** was briefly identified as a significant **attractor** in terms of bringing various visitor segments into the destination community. However, according to current literature, its value has not been

perceived. Both the tourism and education industries have tended to see tourism in overly simplistic ways, delimiting their own and others' perceptions of what is their traditional industry or business purpose. Facing the enormous growth of both education and the tourism industry, it is necessary to evaluate the segments and overall relationship from the tourism systemic view to ensure that an opportunity is properly understood and managed.

Based on this, the next chapter will attempt to demonstrate that the education industry, utilising a university as a prime example, plays a pivotal role in the supply of quality visitors to the tourism industry across various sectors, and provides key functions as an attractor to tourism.

> The amount of control, which components involved in selling a destination hold or the amount of choice or buying power that potential tourists possess can be a key determinant in the way a tourism system operates (Jayne, 1999 :99).

CHAPTER THREE EDUCATION AS A TOURISM ATTRACTOR

3.1 Chapter overview

In the previous chapter, various issues, discussions and distinctions in relation to the TSM and the 'attractor' element were highlighted. With their definitions and classifications in mind, this chapter addresses how an attractor might be used to directly support the tourism industry.

As mentioned, the education industry has been identified as a significant attractor to tourism in bringing a variety of visitors to the destination with various purposes. The following discussion is on the role of the education industry in the context of tourism. In explaining the rationale for the prominent role of the education industry, the chapter stresses four main contexts of the role of the education industry within tourism. The chapter first identifies three traditional roles of the education industry: hard-core role, soft-core role and non-core role. Then it focuses on the hidden role as a tourism attractor. To give a clearer explanation, the example of a university is used as an attractor within the education industry.

Through recognising these relationships, a revised and expanded model is developed which provides a more explicit and clearer picture of the interrelated features of the education industry as a tourism attractor. To enrich the discussion, trends in Australia's education industry are described. This section also includes the background information on the case study: the University of Tasmania (UTAS).

3.2 The education industry as a tourism attractor

3.2.1 The role of the education industry

On the basis of the relationship between the two industries and in the context of tourism, the role of the education industry traditionally involves two types of roles: a core role and a non-core role. The core role can be further classified into two categories: a hard-core role and a soft-core role.

1) Hard-core role as an educational institution:

The education industry provides education and training services to the tourism industry and likewise, the tourism industry provides jobs and education and training resources.

2) Soft-core role as an organisation:

The education industry's spin-off businesses or organisations provide research and consulting services for the tourism industry.

3) Non-core role as an attraction:

The education industry acts as an attraction by drawing actual tourists to itself in its capacity as a 'cultural tourism attraction' and/or as an 'industrial tourism attraction'.

In general, these roles form the traditional mutual relationship between tourism and education industries. Through these roles the study's assumption has been made to the fourth scenario suggesting an induced role to examine the education industry as a tourism attractor that has an:

4) Induced role as an *attractor* for tourism:

When the education industry is functioning in its core roles, it attracts a variety of visitations (students, academics, conference participants, business travellers etc) and these visitors are also involved with tourist-like activities in the destination area.

These roles of the education industry are illustrated in Figure 3.1 which demonstrates the role of the education industry within the structure of the tourism industry system.

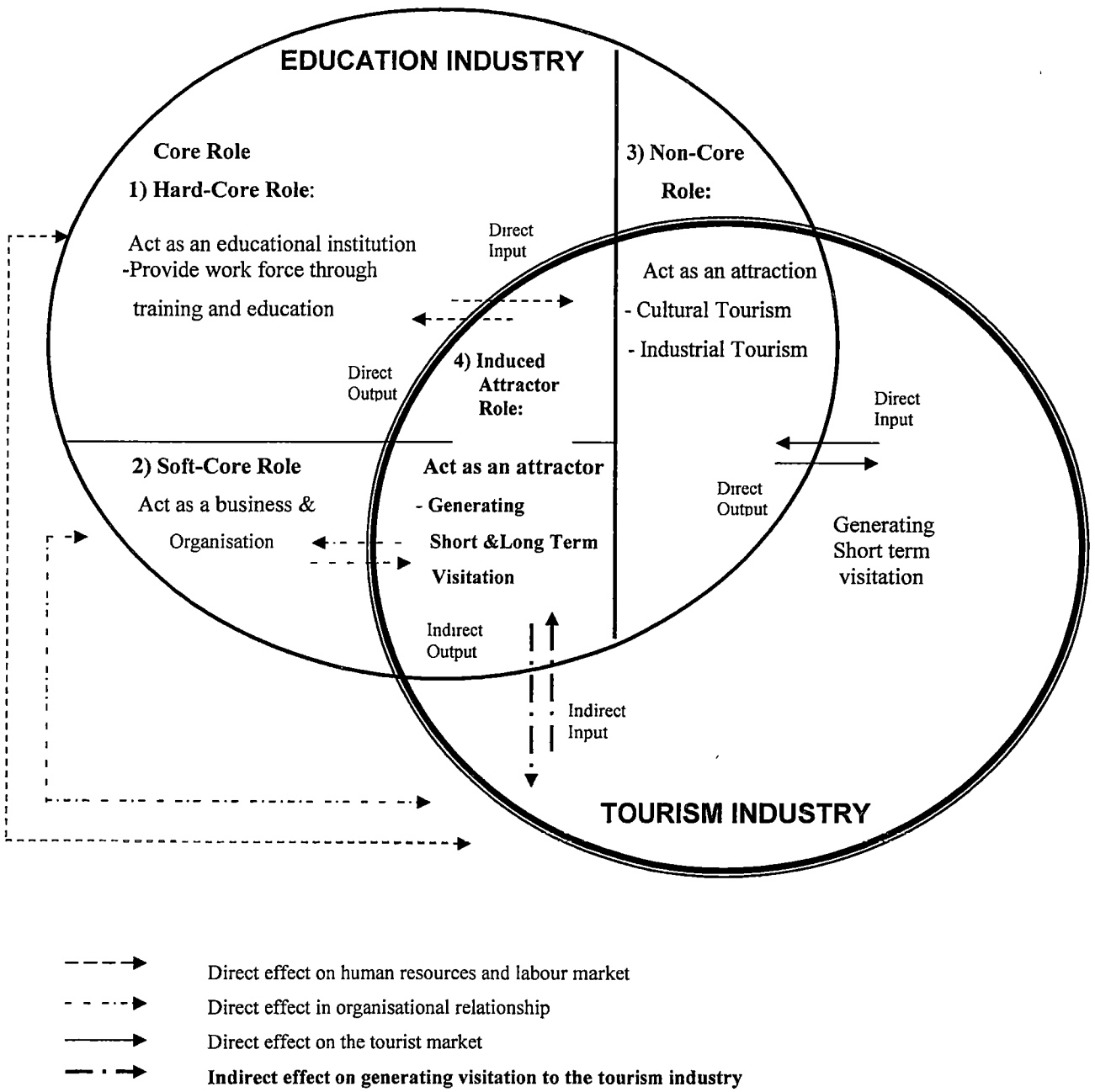


Figure 3.1 Roles of the Education Industry for the Tourism Industry

(Source: Author)

This study is especially concerned with the fourth scenario which explains the prominent role of the education industry in generating short and long term visitations thus affecting the tourism industry within the destination while it is functioning in its core roles (hard-core and soft-core role). It should be pointed out that this fourth role is invisible and thus has not been fully realised by both the tourism and education industries as its impact occurs in an indirect way. Therefore, this indirect economic effect has not been recognised by the industries regardless of its significance. In other words, it can be argued that in this fourth role, the education industry is acting as an attractor in sharing its market with the tourism industry. This explanation will highlight the economic value of the education industry as a tourism attractor and improving the overall prospects for tourism.

Though this study focuses on the fourth 'attractor role' of the education industry, understanding the other three roles (hard-core, soft-core and non-core) are essential in order to explain the fourth role. Therefore, the following section will review the role of the education industry within the tourism context under the above four scenarios.

3.2.2 The traditional role

(1)Core roles

1) Hard-core role: The traditional role as an educational institution

Garforth (1985:21) characterises the concept of 'education' as "broad and inclusive as well as complex; it embraces a large number of other concepts such as teaching, schooling, instructing, aims, values". Thus, education, like tourism, has also been defined as a system, a set of processes designed to transmit the knowledge and skills forming cohesion in the society (Marshall, 1983; Walsh, 1993). In the current literature, several definitions exist, with numerous aspects to them (see Peters, 1980; Marshall, 1983; Garforth, 1985; Walsh, 1993). However, it is more appropriate to select a simple definition, which leads to a suitable approach for explaining the core role for this study. Using Marshall's (1983) simple definition, 'education' is a 'social

institution', providing education and training. In other words, education is an 'assisting industry' which fulfils its foundation to provide work. In the traditional way, education as an institution has affected future output and income through human capital formation (Blackwell, Cobb, & Dweinberg, 2002). This is its 'hard-core role'. Especially, "higher education in the tourism arena appears to exhibit all the hallmarks of professional education; that is; essential knowledge, skills and attitude elements" (Wells, 1993:474). Thus, in essence, the role of higher education is in its hard-core function of recruiting and training an adequate supply to the professions (Anderson, 1990; cited in Wells, 1993). For example, since the 1980s the tourism industry has experienced a rapid and steady growth in Australia, and has generated a great demand in the skilled workforce and opened up employment opportunities and career prospects across all sectors and at all levels (Wells, 1993; Norris, Stromback, & Dockery, 1995). As a result, in recent years there have been much discussion about the development of tourism education, and particularly about the issue of cooperation between tourism higher education and the tourism industry (Rowe, 1987; Prosser, 1993; Wells, 1993; Richards, 1998).

A diverse range of course offerings and delivery modes have been developed in response to the result of tourism's extensive needs (Prosser, 1993; Wells, 1993). A study revealed that the educational attainment of the workforce as a whole has been increasing fairly rapidly for a long time and also stressed that 10 per cent of all new jobs since 1982 can be attributed to tourism, and that this growth has seen tourism labour expand by over 50 per cent (Norris *et al.*, 1995:7). The WTTC (World Travel & Tourism Council) estimates that in 2003, the world travel and tourism industry is expected to generate 3.7 per cent of GDP and over 67 million jobs worldwide, while the broader travel and tourism economy is expected to total 10.2 per cent of GDP and over 194 million jobs (WTTC, 2003). Other global findings also indicate that by 2011 the travel and tourism economy will make up more 11% of the global GDP; it will more than support 260 million jobs worldwide, which is 9% of total employment or 1 in 11.2 jobs (SDI, 2003). Other various estimates also exist which project an ongoing increase in demand for a skilled workforce in the tourism industry (Wishniewsky, 1993).

Moreover, there has been growing recognition that the quality of the workforce and

its versatile professionalism will be the focus of Australia's ability to compete successfully at an international level (Wells, 1993:466). Issues have been constantly raised about how the tourism labour market has adjusted and responded to the tourism industry's sudden growth (Norris *et al.*, 1995). Also, of interest has been the increase in the importance of university education and training and how it should be integrated into the tourism industry. Thus, it has been apparent that "tourism training and education needs were suddenly forced into the limelight to embrace the tourism industry's sudden evolution" (Rowe, 1987:37).

2) Soft-core Role: business/organisational role

Education not only enhances the quality of the labour force, it also engages and attracts further business activities (Blackwell *et al.*, 2002). Many recent studies show that the education industry is diverse, and is made up of a variety of organisations and businesses providing services in regard to both 'educational' and also 'various organisational purposes', both at a regional level and more broadly in its global links (Fischer, Belcher, Cairney, English, & Harding, 2002). Some academics (Hamnetts, 1999; Cairney, 2000; cited in Fischer *et al.*, 2002) have referred to such activities as part of a university's 'third role' or 'enhanced role' (defined as a soft core role in this study) emphasizing that a university's success lies not simply in terms of the internationally accepted quality of its teaching and research, but also in terms of its role in a region's social, economic, and cultural development (Fischer *et al.*, 2002).

Consequently, this understanding has resulted in various industry alliances and partnerships. Over the last 15 years, there has been increasing significance of 'knowledge-based' cooperative arrangements (formed in alliances and partnerships) between tertiary education institutions, especially universities, and industry in Australia (Wells, 1993; Turpin, Alward, & Garrett-Jones, 1996; G. O'Sullivan, 2000; Fischer *et al.*, 2002). A study by Turpin *et al.*, (1996) suggests that in Australia, three types of industry and university links have been developed.

1) **Research cooperation through the activities of intermediary groups** such as advisory bodies, funding bodies or joint committees for establishing future research directions and priorities which effectively combine industry, university and government interests.

2) **Education and training cooperation**, which is traditionally associated with the professions (such as medicine, law, engineering and nursing) and newly formed enterprise-based training.

3) A wide range of **consulting and other services**.

Since 1990, interest in the tourism industry and knowledge-based cooperation has increased along the lines of sustainable tourism issues, and in developing tourism policies and planning (Bramwell & Lane, 2000). It was mainly due to this complexity that the tourism industry had long struggled in such areas as the diffuse and fragmented nature of tourism development, current changes in a competitive global market, rapid transformation in demand, and increasing awareness of the social and environmental impacts of tourism (see more discussion in Bramwell & Lane, 2000; De Lacy & Boyd, 2000). As a result, efforts are being made to substantially increase information knowledge-based collaboration (De Lacy & Boyd, 2000). Partnership is the term used for describing this industry cooperation, and is defined as "a regular, cross-sectoral interaction between parties based on at least some agreed rules or norms, intended to address a common issue or to achieve a specific policy goal or goals" (For more discussion on terminologies see Bramwell & Lane, 2000:2-3). In Australia, since 1990 the Cooperative Research Centres (CRC) Program has played a key and major role in the Australian research partnership between industry, research organisations, educational institutions and relevant government agencies with a primary aim of strengthen collaborative research links (CRC, 2003).

In summary, the traditional way that the education and tourism industries partnership has been formed is mainly in education and training, and research activities. However, there is still further need to expand the variety of forms of those two

industry systems cooperation to enhance the capacity for growth and development (Fischer *et al.*, 2002).

(2) Non-core Role: role as an attraction

This scenario refers to the situation when the education industry acts as an attraction. This category may take two forms which will not always be separate: a university as a cultural tourism attraction and/or as an industrial tourism attraction.

Douglas *et al.* (2001) note that "cultural tourism relates to aspects of culture". It involves "customised excursion into other cultures and places" (Craik 1995 cited in Douglas *et al.*, 2001:114). It also includes "historic and heritage tourism, including visiting sites and buildings of significance" (Douglas *et al.*, 2001:115).

Similarly, some educational institutions like universities can act as 'attractions' in their own right because of characteristics such as heritage buildings, famous archival collections, architectural merit and their historical iconic status. In this case a university acts as a cultural tourism attraction with heritage and historical aspects[1]. Examples are Cambridge University (Tour UK, 2002), Oxford University (Oxford University, 2002), the University of Edinburgh (University of Edinburgh, 2002) in the United Kingdom, Harvard (Harvard University, 2002), Yale (Yale University, 2002), Princeton University (Princeton University, n.d.) in the United States of America (USA) and Queen's University (Queen's University, 2002) in Canada.

They are not exactly industrial tourism attractions since the core business of the university – that is, its teaching and research educational activities – are not on display for the tourist gaze (Urry, 1990). As mentioned previously, an 'industrial

[1] Douglas *et al* (2001:146) note that "heritage tourism is identified in industry terms, as a subset of cultural tourism, and in fact the distinctions between these two categories are blurred". Similarly, "historical and heritage tourism are almost synonymous and have an overlapping relationship with many other forms of tourism" (Jafari, 2000:277).

attraction' is:

> a site that is open to the public and one of its purposes is to allow the public to enter. Its core business can be either the production of goods and/or services intended solely for its visitors, or the production of goods and/or services not intended solely for its visitors, but with facilities provided for tourist access (Frew & Shaw, 1999:212).

In the general sense these universities such as Oxford and Cambridge can be regarded as cultural tourism attractions because their industrial functions – for example lecturing – are not exhibited to tourists, compared to other industrial tourism attractions such as a chocolate factory, plant/animal farm or motor vehicle assembly line.

However, another instance would be when a tour of the university includes aspects of university life, work and operations. In this case the tour of the university could be classified as a form of industrial tourism. Some universities run regular guided or organised tours on special request and provide related services such as accommodation, tour guides and campus tour information. These tours can be combined with cultural elements of the university so that these educational bodies characterise themselves as an attraction in promoting rich history, diverse tradition, buildings, architecture, events and activities of their area and also museums, art galleries and valuable collections. Examples include Cal Poly Pomona University (CPPU, 2002) and San Francisco State University (SFSU, 2002) in USA.

As mentioned above, in many cases, these universities' roles as attractions would overlap between cultural, heritage, history tourism and also industrial tourism. Nevertheless, these universities have an essential role to play in raising among the public more awareness towards their historical and cultural assets within their destination. They can also be categorised as human-made tourism attractions (in Figure 2.2) or some call it "artificial tourism attractions" (Cooper *et al.*, 1998:298).

In summary, in this section the linkage between the education and tourism industry systems was explained in three ways. Traditionally, these two industries have been

linked in the form of partnerships and alliances mainly in education and research activities and the linkage is also observed in the aspect of cultural and industrial tourism. At this point, this study seeks new ways to meet the needs of the tourism industry and related organisations in identifying the hidden role: the role as an attractor to tourism.

The following section will highlight the fourth role of the education industry on the basis of the previous three traditional roles of the education industry.

3.2.3 The role as an attractor to tourism

Explained in section 3.2.1 (Figure 3.1) the fourth scenario occurs when the education industry acts as an attractor in generating visitations through its core role. However, the extent to which the education system is recognised as a tourism attractor is open to debate. Thus, this section seeks to fill the gap in the literature and discuss the education industry as a prominent attractor to the tourism industry. Among the education industry, a 'university' has been identified as an ideal model in which to apply a systemic approach to tourism in describing the role of an attractor. Thus, in the following discussion, the attractor role is explained in the case of a university.

(1) Impact and value of universities

> That is what a university does. It enriches the culture. It advances learning and research. It provides education to the sons and daughters of people for whom a higher education may have been an unreachable dream. It elevates. It uplifts. It challenges us to be better than we are. It provides a well-trained work force for industry and an educated electorate to ensure that our democracy lives on. If that were all, it would be enough. But a university is also an economic engine that supports and energizes business activity in the community, the state and the region (Bryant, 2002:3).

As explained in the above paragraph, it is becoming apparent that universities and their organisations contribute to the economy of a region through providing advanced high quality education across a variety of disciplines. Without doubt, a university is multi-faceted in its operation and management. Its activities consist of numerous components across its core (hard-core and soft-core role) or non-core role. In recent years it has been noted that the significant economic value of a university is a powerful economic force in a region and state (UTAS, 1997; Hill, 1999; Emmett & Manaloor, 2000; Blackwell *et al.*, 2002; Callahan, 2002). Various studies use different analyses and approaches, suggesting the institution's overall regional

economic and socio-cultural impact. These discussions have so far been focused on the impact of export effects: that is incremental economic activities derived from non-local sources, resulting from the core operation of a university (Richards, 1998; Blackwell *et al.*, 2002). Also they are consistent with most economic impact studies in assuming that the total economic impact of a university includes both direct and multiplier effects[2], as economists categorise economic impacts as direct, indirect and induced[3] (multiplier effect) (SUNY, 1995). Citing the multiplier effect, many reports have also noted the secondary impact of a university's employment and expenditure (Callahan, 2002). Reporting on its own processes, the University of Wisconsin (2002) highlights the economic impact of the university in four areas:

1) **economic contribution through direct expenditure,** including institutional spending on goods, services and payroll, faculty and staff spending and student and visitor spending;

2) **tax payment** (faculty and staff income and sales tax, student and visitor spending and tax on income and spending from jobs created);

3) **job creation** (direct and indirect); and

4) **return on investment** (return to state and return to student).

A university also increases the productivity of organisations through research, development, and consulting services (UTAS, 1997). A university's intangible contribution and impact, as well as tangible factors have also been recognised (UTAS, 1997; Auburn University, 2000). These include contribution to community welfare through teaching involvement of academics in community and public sector, hosting concerts, recitals, public performances and custodianship of community assets, libraries, museums and art collections (UTAS, 1997).

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[2] **Multipliers** are used to capture the secondary effects of visitor spending in a region. There are two basic kinds of secondary effect: indirect effects and induced effects (Stynes, Propst, Chang, & Sun, 2002).

[3] **Indirect effects** are the changes in sale, jobs and income within backward-linked industries in the region. **Induced effects** are the changes in sale, jobs and income in the region resulting from household spending of income earned either directly or indirectly from visitor spending (Stynes *et al.*, 2002).

(2) Universities' internationalisation and globalisation

A university's diverse linkages with various social sectors are an especially valuable source in recognising the attractor role. As shown in Figure 3.2, a variety of disciplines exist for educational purposes including; Arts, Commerce, Education, Health Science, Law, Science and Engineering. Numerous operational departments also exist, such as Administration, Finance, Human Resources, Operation and Maintenance, and also a range of organisational components which are linked to industries, other organisations and government. Other significant supplementary roles, such as those in diplomacy and politics, art, sport, and cultural activities are also notable when recognising the attractor role that universities can play within the tourism system.

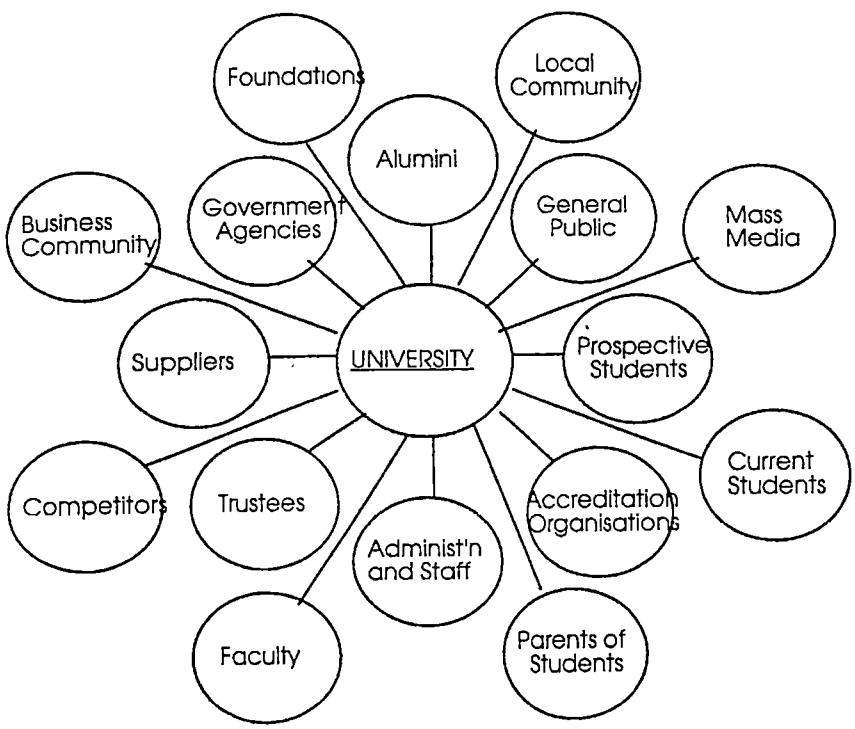

Figure 3.2 A University and its Public

Source: Kotler & Fox (1985, p.25), taken from Gatfield (1997:11)

Furthermore, it is important to note that a university is judged to be successful in terms of the quality of visitors it attracts not only domestically, but also internationally. It is particularly important to understand the variety of these

components and elements to identify their value in relation to visitors. For example, the research collaborations between universities and industries are led by the movement of people and the establishment of global personal networks: students are travelling overseas to study and scholars are working internationally with new communication resources and new technologies (Turpin *et al.*, 1996:3; Altbach & Davis, 1999:4). According to a report from the Australian Vice-Chancellors' Committee (AV-CC) report (AV-CC, 2003), since 1990, the number of agreements between Australian universities and overseas higher education institutions has also been increasing steadily: in 2003 there were 4,485 formal agreements (Figure 3.3). There is particular emphasis on new agreements being active across a range of areas such as student and staff exchange and research collaboration (Table 3.1).

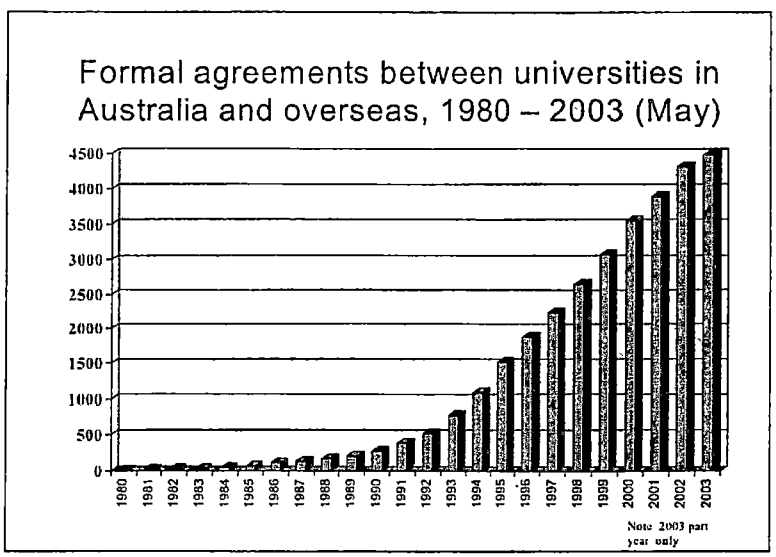

Figure 3.3 Source: (AV-CC, 2003)

Nature of agreements

Year	Staff Exchange %	Student Exchange %	Research %	Study Abroad %
1999	69.7	70.2	77.0	14.3
2001	71.3	73.9	79.3	15.8
2003	61.8	72.0	68.1	19.0

Table 3.1 Nature of agreements, Source: (AV-CC, 2003)

(Percentage add up more than 100 as it shows total responses for each agreement type)

O'Sullivan (1991) stresses that

> Impacts and incremental impacts are different. An example of incremental impacts is the construction activity associated with a major offshore development project. Those impacts exist only because of the project and disappear when it winds down. They can be separated from the rest of the economy and viewed as something that is built on top of the ongoing activity in the economy. We cannot do the same with an institution like a university since it is so closely linked to the rest of the economy (M. O'Sullivan, 1991:20).

To sum up, a university has enormous potential to increase tourism revenue, as there is an increasing awareness of the visitor potential. Those visitors would be entirely absent or be somewhere else if the university did not exist (M. O'Sullivan, 1991).

(3) Induced visitors to universities

1) Visitor impact and segments

More recently, many university impact studies have addressed visitor segments and their economic impact (M. O'Sullivan, 1991; SUNY, 1995; University of Waterloo, 2001; Callahan, 2002; Carstensen, McMillen, & Arik, 2002; PEIATF, 2002; University of Wisconsin, 2002; Princeton University, n.d.; USASK, n.d.). Although researchers have paid attention to the issue of these visitors' economic value, in only a few cases are the visitors specifically recognised in the context of tourism and moreover the information is often incomplete in terms of the quality of data presented (University of Waterloo, 2001; Carstensen *et al.*, 2002; University of Edinburgh, 2002). Consequently, very limited and scattered records are often kept on campus visitors, including how many visitors there are, where they come from, how long and where they stay and therefore, their potential (M. O'Sullivan, 1991; Sudmant, 2002; Princeton University, n.d.). The reason for the lack of coordinated data may be due to the limited understanding between education and tourism industries about who are the visitors to universities and who are the visitors to the

tourism industry.

Despite the lack of data, a number of studies have looked at (amongst other things) university visitors and their economic impact (Appendix 3.1). Of these, a few studies briefly considered these visitors' value to tourism, such as the University of Edinburgh (see University of Waterloo, 2001; Carstensen *et al.*, 2002; University of Edinburgh, 2002). As an example, one study (University of Waterloo, 2001: 30-35) presents these visitor segments and their total and average figure (Appendix 3.1) which indicates the high value of these visitors. It estimated that there were 358,681 visitors and total expenditures by visitors amounted to $35 million. Identified visitor segments are elementary/secondary students and their parents, business visitors, event-goers and facility users, conference attendees, alumni and casual visitors.

'*The economic impact of college football games: a case study of the University of Alabama*' provides another example (Fish, 1992). This study measured the economic impact on the region, of three football games held on the university campus in 1989 (both direct and indirect economic impacts of non-local fans). The study shows that each of the three games attracted over 70,000 fans, with about 46,000 fans from outside the country, and these non-local fans spent an estimated $1.8 million per game directly into the region's and the country's economy (Fish, 1992:123).

Based upon reports and survey information from the existing literature, a large number of visitors are estimated to have travelled to universities and the area for other events and activities. During their stay in that area, these visitors travelled within that region and many of them also had overnight stays in association with the main purpose of their visit. Therefore, it is apparent that a university may attract many visitors to the local community. These include students, researchers, scientists, scholars and professionals who come to study and work or to attend conferences; athletes, musicians, artists and their fans who com to play and attend a variety of cultural and sporting events; and also parents, friends and relatives who come to visit (M. O'Sullivan, 1991; University of Alaska, 2003; Princeton University, n.d.). They may be domestic visitors or they may be international visitors. A university's historical and cultural assets, such as museums, theatres, galleries, libraries can also attract actual tourists and visitors (Carstensen *et al.*, 2002). This flow of visitors not

only generates economic development opportunities in general, but also has the potential of an increasing tourism market composed of the visitors' relatives and friends who may visit over the period of their stay.

In terms of understanding visitors which universities attract, many have illustrated the potential for market growth through studies of separate segments of visitors to universities. In the literature, some of these visitors have been segmented under different categories by a number of researchers:

- **international student travel** (Chadee & Cutler, 1996; Hsu & Sung, 1997; Chen & Kerstetter, 1999; Field, 1999; Shanka & Musca, 1999);

- **youth tourism** (Ghaffar, Handy, Jafari, Kreul, & Stiva, 1992; Bywater, 1993; Cho, 1996);

- **backpackers** (McCulloch, 1991; Locker & Pearce, 1995);

- **educational tourism** (Weiler & Kalinowski, 1990; Holdnak & Holland, 1996; C. Smith & Jenner, 1997; Gibson, 1998; Coughlan & Wells, 1999; Ritchie *et al.*, 2003; Ankomah & Larson, n.d.); and

- **scientific tourism** (Jafari, Rouby, & Wahab, 1992).

Moreover, visitors have also been included under the more conventional categories such as **meeting/convention travel** (Johnson, 1999), **academic travel** (Ritchie *et al.*, 2003), **VFR** (Jackson, 1990; Morrison, Hsieh, & O'Leary, 1995) , **sports tourism** (Fish, 1992; Gibson, Willming, & Holdnak, 2003), **event tourism** (Getz, 1997) and **business travel** (Carolyn, 1994; Nada & Kenneth, 2000).

Specially, education's hard-core role has recently become an increasingly recognised component of tourism, in the form of 'educational travel' or 'educational tourism' which includes either formal or informal education and/or learning experience and tourist activities (Weiler & Kalinowski, 1990; C. Smith & Jenner, 1997; Gibson,

1998; Coughlan & Wells, 1999; Commonwealth of Australia, 2001; Douglas *et al.*, 2001; ATC, 2003; Ritchie *et al.*, 2003). For example, a number of universities organise study tour programs and general educational learning experiences open to the public – e.g. language courses, school excursions, cultural historic learning programs and study abroad programs (C. Smith & Jenner, 1997; Douglas *et al.*, 2001; Ritchie *et al.*, 2003). Recently, tourism products have also been developed under the names of 'study tours', 'edu-tourism' and 'educational tourism' and these are easily found on-line through a simple internet search. Ritchie *et al.,* (2003:11) classify two categories of 'educational tourism' in terms of whether the primary motive is 'tourism first' or 'education first': general travel for education (or 'edu-tourism') and adult or senior educational programmes; or 'university/college students, language schools, school excursion and exchange programmes. Ritchie *et al.,* (Ritchie *et al.*, 2003:14) argue that:

> Nevertheless, in both instances, although tourism or education/learning may be primary or secondary motives, both of these groups can be considered tourists and have distinct tourism-related impacts and needs.

Thus, it is more appropriate to understand 'educational tourism' as a part of the education industry's attractor role which is derived from its core role in terms of its involvement and effects of 'educational tourism' to the tourism industry.

Consequently, the attractor role of a university in generating visitations for tourism may be conceptualised (Figure 3.4). Students, academics, conference attendees, short course participants, event-goers, business travellers and diplomatic visitors were identified through the existing literature and included both domestic and international visitors. These visitors simultaneously occupy two roles as their functional role may change into that of a tourist. In other words, through the attractor role of a university, these visitors to a university are transformed into tourists in any given destination.

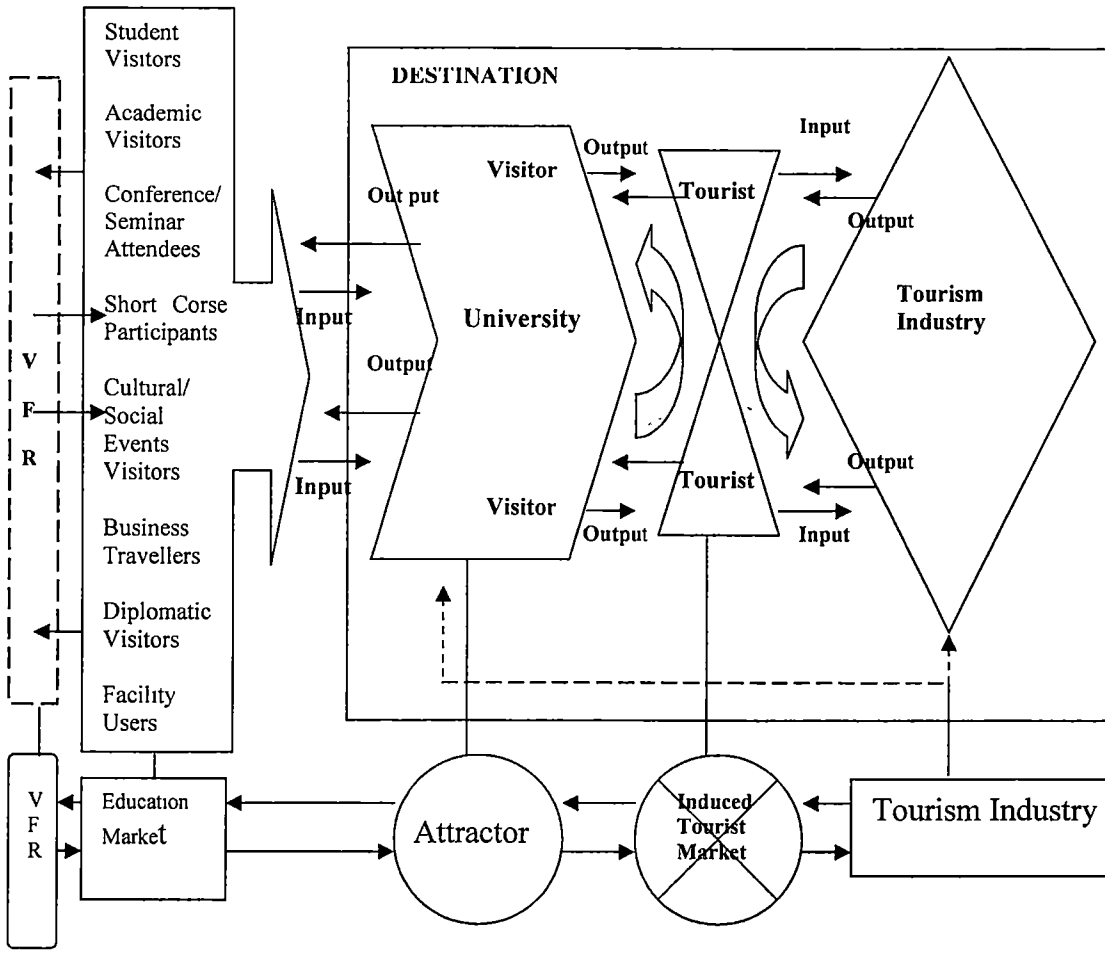

Figure 3.4 A University as an Attractor to Tourism & its Induced Visitors within a Tourism Systemic Relationship
(Source: Author)

Especially, among visitors to a university, international students can be considered as valuable tourists, as it is assumed that expenditures and market potential due to students' stay are substantial (M. O'Sullivan, 1991; Bywater, 1993; Chadee & Cutler, 1996; Leiper & Hunt, 1998; Michael, Patel, Armstrong, & King, 1999; Shanka, 2000; Crabb, 2002; Shanka, Kight, & Pope, 2002). Following on from this, the next section will discuss international students' tourism value through the examination of the current literature.

2) Travel impact of international students

Over the last decade, the growth in demand for international education has been significant (International Development Program Education Australia, IDP, 2002a; IDP, 2002b, 2002c). The IDP reports that there were an estimated 1.8 million international students in higher education institutions around the world in 2000. Of these, approximately 200,000 were studying in Australian institutions, contributing over AUD$4.2 billion to the Australian economy annually (IDP, 2002a). The total expenditure by these student-tourists (excluding airfares) represents 20% of total expenditure by all tourists (an estimated $3 billion) (Bywater, 1993:35; Leiper & Hunt, 1998:196).

The number of international students in Australia has increased every year and has grown by 80% since 1996 (Shanka *et al.*, 2002). Globally, the number of youth and student travellers is still increasing (Bywater, 1993:40). Moreover, the value of international students to tourism has also been constantly emphasised (Chadee & Cutler, 1996; Hsu & Sung, 1997; Chen & Kerstetter, 1999; Field, 1999; Michael *et al.*, 1999; Shanka, 2000; Tourism News, 2001; Crabb, 2002; Shanka *et al.*, 2002). Recognition of the value of the international student segment to tourism is part of the interest in niche market development that began almost a decade ago. Since then it has been continued by some academics to establish the value and potential of new market developments and new partnership opportunities across industry sectors. One remarked that:

> International education brings enormous benefits for Australia. It is a major contributor to tourism income – each student staying in Australia has on average of **four visits** from family during their stay. (Nelson, 2002:1).

Thus, the student segment of the tourism industry is not only important economically, but also significant for future market development. However, despite its economic significance, the economic value for international student visitors has not been given enough attention by tourism studies (Hsu & Sung, 1997; Leiper & Hunt, 1998; Chen & Kerstetter, 1999; Shanka & Musca, 1999). Also tourism organisations do not consciously target students in international markets, as they

have been under the shadow of the traditional narrow perceptions and misunderstandings of tourists (Bywater, 1993; Chadee & Cutler, 1996; Leiper & Hunt, 1998; Field, 1999).

Leiper argues that international students are traditionally not seen as tourists because of the following reasons; first, students are not generally regarded as a category of tourists (Leiper, 1995; Leiper & Hunt, 1998; Leiper, 1999); second, some also see the international student segment as not valuable compared with other types of visitors because international students make up only a small fraction of total tourist visitors (Leiper & Hunt, 1998:192-193). Thus, because of the general perception on the international student segment, little literature exists on international student travel impact. One is Hsu and Sung (1997) who identified the travel behaviours and demographic characteristics of international students travelling in the United Sates. Chen and Kerstetter (1999) explored international students' image of rural Pennsylvania as a travel destination. Shanka *et al* (2002) examined the impact on Western Australian tourism of the growing number of international students in the state. Leiper (1998) provided explicit documentation for a strategic alliance of Australian universities and tourism commissions indicating the market value of international students. Michael *et al* (1999) investigated the value added by overseas students and their visiting friends and relatives to Victoria's tourism industry and economy. Shanka and Musca (1999) assessed the tourism habits of international students and identify marketing opportunities for domestic tourism service providers. Coughlan and Wells (1999) examined the 'educational tourism' case for marketing to schools. However, comprehensive research on the impact, profiles, characteristics of international student travel and their implication for industries remain problematic. Consequently, the above studies indicate that an opportunity exists for the development of a new market segment for international students in the Australian tourism industry.

3) Education industry trends in Australia

The Australian education export industry has developed under the shadow of other leading countries, such as the UK, USA, Canada, New Zealand, and Germany. According to a current United Nations' study, Australia ranks fifth in the world survey as having the most effective education system among the world's richest countries (Sydney Morning Herald, 2002). Data supplied by IDP Australia indicate that currently the value of Australian education exports is worth more than $4 billion to Australia (IDP, 2002a, 2002b, 2002c). Australian Bureau of Statistics (ABS) data also show that the educational service industry has grown up steadily and was currently recorded as the third largest service industry, and the fourteenth largest overall export industry in Australia (Figure 3.5) (IDP, 2001, 2002c). Moreover, it has been anticipated that international demand for the Australian education industry will grow faster than other industries like tourism, projecting $10 billion by 2010 and to $38 billion or more by 2025 (IDP, 2002c).

Thus, in recent years Australia was judged to have the third highest number of overseas students, after Luxemburg and Switzerland, with 18.8 per cent of all commencing students in Australian Universities in 2002 coming from overseas (Nelson, 2002; Shanka *et al.*, 2002; ATC, 2003).

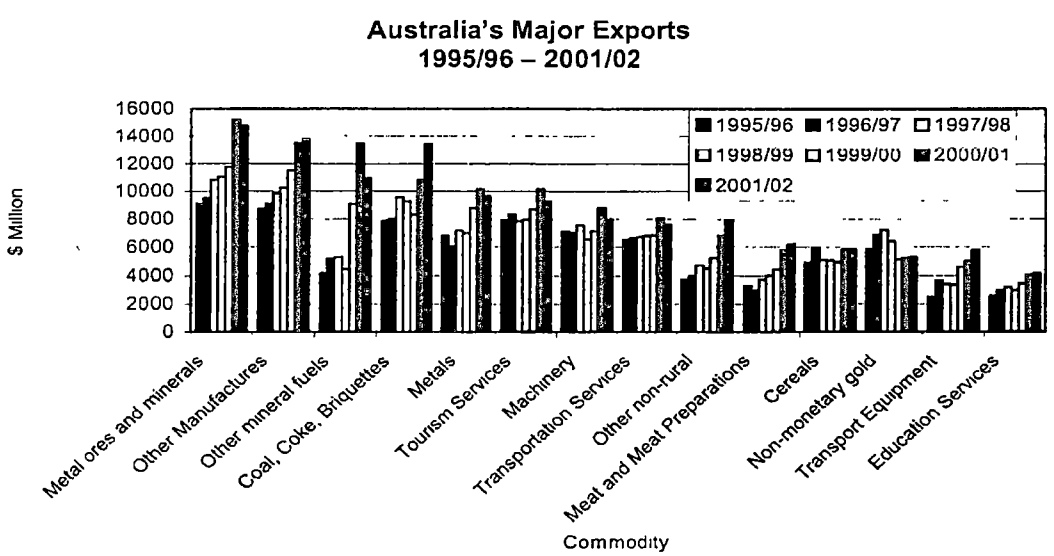

Figure 3.5 Australia's Major Exports

Source: IDP, Compiled data supplied by ABS Statistics

Some geographical regions are more important to Australia's education export market than others. Singapore remains the largest source of overseas students for Australia, followed by Hong Kong, Malaysia and Indonesia while China has recently emerged as the fastest growing source of overseas students (Crabb, 2002). Leiper (1998:192) also indicates a common trend in comparing the Australian tourism and higher education sectors; since the 1990s both sectors have become increasingly dependent on Asian markets. As shown in Table 3.2, in 2000 the majority of overseas students studying in Australian institutions were from Asian countries (82.6%).

Comparison of Student Numbers for Top 10 Source Countries, 1998 to 2000

Country	1998	% Change 1998-1999	1999	% Change 1999-2000	2000
Singapore	16,509	16.3%	19,207	8.6%	20,866
Hong Kong	18,161	3.7%	18,833	10.1%	20,739
Malaysia	16,485	0.4%	16,544	18.5%	19,602
Indonesia	17,715	8.2%	19,172	-6.8%	17,868
China	5,273	68.0%	8,859	68.7%	14,948
Korea, South	11,150	-13.6%	9,633	19.2%	11,485
India	8,073	18.7%	9,581	10.3%	10,572
Japan	10,739	-8.5%	9,828	4.0%	10,220
Thailand	6,299	6.5%	6,709	21.9%	8,179
Taiwan	6,403	-7.7%	5,912	3.2%	6,104
Sub-total	116,807	6.4%	124,278	13.1%	140,583
Other Countries	34,637	11.4%	38,587	23.6%	47,694
Total	151,444	7.5%	162,865	15.6%	188,277

Table 3.2 International student numbers from Asian countries

Source: ABS Catalogue 3401.0

Moreover, Nelson (2002:1) remarks that

> Not only does it mean jobs and income for Australians, it also provides a foundation for strong foreign and trade relations as well as research and scientific exchanges and collaboration – particularly with our Asian neighbours from where most of our international students come...these benefits highlight the need for continuing a strong image for Australian education overseas.

Consequently, it is clear that international education has the potential to drive the

tourism industry's transition towards a new market development (Leiper & Hunt, 1998; Tourism News, 2001:11; Bohm, Davis, Meares, & Pearce, 2002; Crabb, 2002). These trends directly suggest strong future needs in cooperation between the tourism and education industries. It is critical that this potential should be nurtured due to the growing global competition (AV-CC, 2002).

Following on from this, the next section explains the background of the University of Tasmania which has been used as a sample case in this study, to illustrate the role of the attractor for tourism.

3.3 The case of the University of Tasmania

Tasmania, where the University of Tasmania is situated, is an island state lying off the south-east corner of the Australian mainland: it is the smallest state (area of state is 68,102 Km^2 or about 0.9% of the total area of Australia) and the least populated (total population of 470,272 in 2001), and is separated from mainland Australia by the 250km wide Bass Strait (ABS, 2002; Tourism Tasmania, 2002b).

The University of Tasmania (UTAS) was founded in Hobart, Tasmania in 1890 and is both one of Australia's oldest and newest universities; in 1991 it merged with the Tasmanian State Institute of Technology in Launceston to form the new University of Tasmania. The university has two main campuses in Hobart and Launceston, and a smaller regional North-West Centre in Burnie, as well as several other specialised teaching and research facilities (UTAS, 2002).

UTAS has been playing a key role in the state in terms of its contribution to both the Tasmanian economy (in the year of 1995/96 it contributed $320 million to the GSP (Gross State Product): created 7,420 jobs and spent $180 million), and also contributed to the welfare of the Tasmanian community through research, development and consulting services (UTAS, 1997) (Appendix3.2). This report, while the most recent, is now six years' old and it would be useful for the University to undertake a second study to update the information. In the academic year of 2002, UTAS total student enrolment consisted of 13,972 students (10,711 full time, and 3,261 part-time). About 8% of total students (1,147) were full fee paying overseas students who had come from over 50 countries (UTAS, 2002) (Appendix 3.3 and 3.4). In the same year, the university had 1,751 staff (full-time equivalent); 30 schools, 8 disciplines and 17 departments under 6 Faculties; and 16 administrative units under 5 divisions (UTAS, 2002). UTAS is positioning its research capabilities regarding the major activities contributing to wealth generation in the state, such as agriculture, aquaculture and fisheries, forestry, mining, and tourism (UTAS, 2001b).

In Tasmania, tourism is getting significantly more recognition for its economic value. A report indicates that tourism in Tasmania is worth around $650 M annually, and

the State Business Plan for Tourism envisages this expanding to $1 billion by 2007 (UTAS, 2001b). Tasmania received 703,100 visitors in 2003, almost 22% higher than the number of visitor arrivals in the previous year 2002 (Tourism Tasmania, 2003). According to 2003 statistics, visitors spent 6,413,200 visitor nights and generated approximately $95 million (Tourism Tasmania, 2003). The main purpose of this travel was holiday/leisure (50%), VFR (23%) and business (17%). Interstate visitors accounted for more than 81% of total visitors, with 47% originating from Victoria (Appendix 3.5).

UTAS, as the only university in the state has performed a significant roles for the tourism industry and organisations. As mentioned, the relationship has been formed mainly in the hard and soft-core role of UTAS, such as providing education, research and consulting services to the industry and organisations. However in this study the new tourism value of UTAS as a tourism attractor will be examined through its induced visitors and their importance for the tourism industry.

3.4 Chapter summary

The object of this chapter has been to ascertain the education industry's role as an attractor for tourism and to consider the tourism value, as determined in the previous chapter.

The chapter first discussed three traditional contexts of the role of the education system (hard-core, soft-core and non core role) within the tourism perspective. The discussion moved on to a university level in order to highlight the fourth 'induced attractor role' of the education industry. It was explained that the attractor role is generated from the core role of the education industry which has been largely invisible to both the tourism and education industries. Within this role, a university attracts short and long term visitors to the destination and thus affects the tourism industry indirectly. Following this proposition, a revised and expanded model was provided to give a clearer picture utilising a case of university visitors (Figure 3.4). It explains that through the attractor role of the university, the induced visitors are transformed into tourists in any given destination and thus the education market is transformed into the induced tourist market. Following this, trends in Australia's education industry were described in order to strengthen the future potential of the education industry as a tourism attractor. In addition, details of the study's sample case, the University of Tasmania, are given to provide background information for this study.

The following chapter outlines the methodology of this study and describes the data collected and used.

CHAPTER FOUR METHODOLOGY

4.1 Introduction

As mentioned in Chapter One, the methodology of this thesis includes a literature review of the term 'attractor' and of 'TSMs' in order to justify the thesis questions in defining an 'attractor' and reconstructing a TSM which contains the paradigm of an attractor. This was achieved through the previous Chapters Two and Three (stage two of this thesis). Following on from this, the third stage (Chapters Four, Five and Six) of this thesis consists of the methodology used and the results of two surveys. In this stage, research questions of 'a university as a tourism attractor' and the 'tourism value of induced visitors by a university' are addressed in order to assess the observed concept and a reconstructed TSM which were achieved from stage two. Thus, this chapter outlines the methodology for stage three of this thesis. The main questions, data collection methods, sample size and analyses of the two research approaches are discussed along with the research boundaries and limitations.

It was judged that a case study method is most appropriate to use for this study in order to present "holistic and meaningful outcomes" for the observed TSM paradigm discussed in the previous chapter (Yin, 2003:2). Yin's (2003:13) definition gives a justification to the chosen method that:

> A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident.

Furthermore, the case study can be classified into various different categories: intrinsic case studies, instrumental case studies and collective case studies or explanatory, single or multiple case studies (Stake, 1995; Jennings, 2001; Yin, 2003). Borrowing Stake's (1995:3) explanation, an 'instrumental study' seeks extended general understanding from a specific research question by studying a particular case. An instrumental case study was relevant to this study where a university was

chosen as a specific case, in order to make a broader generalization of the TSM which illustrates education as a tourism attractor. Case studies can be also based on any mix of quantitative and qualitative methods (Jennings, 2001:256; Yin, 2003:15). In this study, the quantitative method has been chosen for data collection in order to measure the "observed fact and its statistical analysis", rather than "construct social meaning and thematic analysis" which can be achieved through qualitative methods (Weaver & Oppermann, 2000:396). However, to gain a deeper insight, the research also included partially qualitative questions.

Specifically, within the case studies an integrated series of two surveys were conducted over two years (2002-2003) at the University of Tasmania, Australia. This involved:

1) Quantifying visitors to the university
   - Investigation through departments at the university
   - Descriptive demographics and secondary data analysis through the university data sources

2) Survey of key segments
   - Examining international students' value to tourism

The rationale for undertaking two different surveys was to obtain a broad picture in clarifying the tourism 'attractor' role of a university in terms of its variety of visitors and the significance in the visitors' tourism potential.

The first survey is analysed and discussed in Chapter Five by focusing visitor numbers and segments. The result of the second survey, a survey of international students as a key segment, is discussed in Chapter Six and demonstrates the value and potential for niche market development.

4.2 Survey of visitors to the university

4.2.1 Survey of departments and schools at UTAS

An initial investigation was conducted through selected departments (the International Office, Public Relations Office, Venue Hire Office, Administration Offices and the Sports Council) to find out the number of events held, visitors from outside the state, and visitor status to the University of Tasmania (UTAS). However, none kept relevant and detailed data on visitors to UTAS, including attendees of conferences, seminars, cultural events etc. Thus primary research, a survey of each school and department was necessary in estimating the total number of visitors to the university.

However, these primary data are inherently biased as it mainly relies upon responses from secretaries and academic staff of each school (except data from two research organisations' annual report and UNITAS Consulting) not from properly kept records – thus, it is mainly constructed from estimates and this was the information able to be collected. Therefore, the assumption is that the estimate of visitor numbers and their length of stay are based on the very conservatively estimated and incomplete data set. The data may therefore underestimate the true number and impact of UTAS visitors.

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(1) Questionnaire

Self-completion questionnaires were used, as this method is useful for reaching a large number of respondents with minimal administration (Kervin, 1992). In addition it involves a relatively high response rate and also allows for respondents' convenience (Kervin, 1992; Cavana, Delahaye, & Sekaran, 2001; Jennings, 2001). A draft questionnaire was designed to obtain information on the number of events and visitors and was pilot tested within the School of Sociology and Social Work before it was finalised.

Respondents were asked to complete a self-administered questionnaire about conferences, short courses, seminars, workshops, exchange programs, tourism related activities and academic visitors in the previous year 2001 (Appendix 4.1 Questionnaire). The respondents were asked to exclude international student data, as this information was available from the UTAS website.

A list of possible schools, departments, organisations and academic staff was obtained from the UTAS website, (UTAS, 2002). On the basis of this list, a total of 368 questionnaires were distributed to 125 administrative officers and 243 selected academic staff at UTAS in an initial stage and then two subsequent stages in order to obtain the data required for this study. Once completed, they could be returned via an enclosed envelope and sent through internal mail. To encourage completion of the questionnaire a number of phone calls, e-mail contacts and visits were made to limit the receiving period to one month for each attempt.

(2) Data collection

In total 39 secretaries or administration officers and 20 academic staff responded (the response rate was 16% out of 368 distributed questionnaires) during three periods from August to November 2002.

In the first attempt, 23 questionnaires were returned (response rate=27%) from 84 schools, departments and organisations at UTAS (Hobart campus). Due to the low response rate and insufficient data, a second attempt was made to elicit more information on visitors. Using the university newsletter, '*UNITAS*' 2001 (UTAS, 2001a), the names of departments and schools were obtained from those who had frequent advertisements on seminars, conferences and visitors. On the basis of the newsletter information, an extra 19 questionnaires were sent out as a reminder to those who did not return the questionnaire from the first attempt and who were also recognised as prospective departments or schools for '*UNITAS*' information. In addition, the questionnaire was also sent out to an extra 41 academic and administrative unit in Launceston and the North West campus as it was found that

the data were managed separately on separate campuses. From these attempts, 16 replies were obtained from the second attempt consisting of a 27% response rate.

For the purpose of maximising the estimates, a third approach was also made to 243 individual academic staff from each department and school which still had not responded after the second attempt. Of these, 20 questionnaires were returned (8% response rate) with poor quality information. Each phase of this school, department and organisation visitor investigation yielded low response rates. Moreover, it is felt that the quality of the data gained was poor as it depended mainly on the respondents' memory, not on exact records.

There are possibilities that a small amount of data overlap may have occurred due to the fact that the data was mainly constructed from estimates. However, to minimise this problem, only one response was selected from each department through first and second attempts. For the third attempt, individual academics were asked to count visitors whom only they hosted.

In addition, annual reports (2001) were also obtained from UTAS and main research organisations, such as CODE (Centre for Ore Deposit Research), Antarctic CRC (Cooperative Research Centre), CRC for Sustainable Production and Forestry, TAFI (Tasmanian Aquaculture & Fisheries Institute), and TIAR (Tasmanian Institute of Agricultural research), Menzies Centre for Population Health Research which it was thought may have had information on visitors. Unfortunately, only 2 organisations' annual reports (CODE and CRC for Sustainable Production and Forestry) included information on visitors and this additional data have been included in the analysis with the previous survey responses. Though some organisations' annual reports included information on conferences, seminars and visitors, they were not able to collect the information on interstate or international visitors. Thus this information was not included in this study.

Due to the lack of data collected on conference attendees for the year 2001, additional details of three UTAS-initiated conferences were obtained, and these are set out in Chapter Five under the heading of 'Conference/Seminar Attendees'. The discussion is only given for the purpose of gaining further insight into the value of

'conference attendees'. Thus, these data are not included in quantifying the total visitors to UTAS for 2001.

(3) Secondary data set

During the process of this research, it was found that information on the international and interstate student segment (in degree award programs and English language programs) was the only secondary data set available through UTAS website and UTAS IT Resources department. This is included in counting the total number of visitors to UTAS (Appendix 4.2) in conjunction with the primary survey data.

Through on-line statistics, there were 1,099 international students and 518 interstate students enrolled in award programs. However, additional data were obtained about 496 international students who enrolled in the English language program. This data were obtained from UTAS IT Resources department.

4.2.2 Survey of international students as a key segment

(1) Population and sample size

For accuracy of the data, a confidence level[4] of 95% (confidence interval[5] 5) was expected from a population of approximately 1000 international students at UTAS during the 2002 academic year. This required a minimum sample size[6] of 278 responses (CRS, 2002) and an adequate response rate of 50 % was also expected (Babbie, 1999:240). Based upon the minimum sample size and expected response rate, 600[7] questionnaires were distributed.

The individuals within the sample were contacted through the International Student Society (ISS) both at the Hobart and Launceston campuses and one student residential college at the Hobart campus. The sample thus represents individual members enrolled at UTAS. It is biased to the extent that not all international students joined the society or were living at the college. Also an estimated 77% coming from about 40 nationalities did not have a student society in 2002 (12 ISS catered for 53 different nationalities of international students at UTAS in 2002).

(2) Questionnaire

This survey examined international students as a key segment of visitors to UTAS to determine if the students tended to be tourists and therefore their travel characteristics. It was hypothesised that the students travel through the year regardless of their previous length of stay, visit their home country regularly and have friends and relatives visiting during their stay.

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[4] Confidence level is expressed as a percentage and represents how often the true percentage of the population who would pick an answer lies within the confidence interval (CRS, 2002).

[5] A confidence interval gives an estimated range of values which is likely to include an unknown population parameter, the estimated range being calculated from a given set of sample data (Easton & McColl, 2003).

[6] Sample size is how large a sample is needed to allow statistical judgements that are accurate and reliable (StatSoft, 2003) 'Sample Size Calculator' was used (CRS, 2002).

[7] $X \times 0.5 = 278$, $X = 556$, thus approximated 600 questionnaires (X: Questionnaire to distribute)

The questionnaire had been constructed during the preceding month of the actual survey with a pilot survey of 15 for testing at UTAS (Appendix 4.3 Questionnaire). It was designed to determine students' travel characteristics concerning issues such as expenses, transportation, accommodation and activities, and their VFR travel patterns, which can be summarised in three categories:

- students' travel characteristics;
- students' visitors (VFR) from outside the state and their travel profile; and
- students' perceptions of the destination and their return visit intentions.

Besides their individual travel expenses, students were also asked to specify their 'going home' expenses. A 5-point Likert-type scale was used to measure students' satisfaction on outdoor adventure activities from "Very much enjoyed" to "Not enjoyed".

To enhance the quality of data, open-ended questions were used to find out students' perceptions of Tasmania including details on their return travel intentions. To identify this, three questions were asked.

- First, they were asked their opinions about enjoyable features in Tasmania and were requested to rank the given list in order. The sample answers were derived from 'The Tasmanian Attraction Study' (Tourism Tasmania, 1999).

- Second, students were also asked about their return visit plans after graduation and the reasons for their answers and expected return time as an open ended question.

- Third, a question on their recommendations about Tasmania to others was also asked.

In the development of the questionnaire, specific events and activities were derived from a previous 'Tasmanian Attraction Study' (Tourism Tasmania, 1999) and various seasonal reports from the 'Tourism Tasmania Corporate Website' (Tourism

Tasmania, 2002c).

(3) Data collection

The survey was conducted in early September to late November when the 'Multicultural Week' event was organised by the International Student Committee, and consequently many events and meetings were available to international students. It was also intended to be completed before examinations, for students' convenience.

The International Student Office was contacted to obtain the database of the International Student Society (ISS). There were 12 ISS existing and of those 9 ISS were contacted to distribute the survey questionnaire (3 societies were not contactable). The representatives of 12 ISS were contacted by e-mail and phone and were asked to distribute the survey form during their meetings and events to maximise responses. Despite this, during the first month period only approximately 15% of questionnaires were returned. On average, it was necessary to make several additional follow-up contacts to achieve a reasonable number of responses through telephone and e-mail. Consequently, a total of 291 questionnaires were returned, for a 49 % response rate which is more than 25% of the total international student population at UTAS in 2002 (Margin of error[8] in the sample is 13.7%).

(4) Analysis

Data were recorded and analysed in SPSS (Statistical Package for Social Science) and the results are summarised in Chapter Six where these specific areas are discussed:

- demographic background of international students;

[8] Margin of error is a common summary of sampling error, referred to regularly in the media, which quantifies uncertainty about a survey result. It can be interpreted by making use of ideas from the laws of probability or the "laws of chance", as they are sometimes called.
(American Statistical Association, 1998).

- description of the travel pattern including amount of travel and travel expenses;
- type of accommodation and transportation, seasonality and activities;
- international students' VFR data; and
- future revisit intentions and international students' perceptions of Tasmania as a tourist destination.

4.3 Research boundary and limitations

A number of limitations and research boundaries were necessary in order to scope this research to an achievable size, given time and budgetary constraints.

Firstly, this research aimed at identifying the role of UTAS as a tourism attractor in terms of generating visitations to the state not the UTAS impact on the local economy. Thus, this study does not include an economic impact analysis. However, it seeks to determine the number of visitors and different segments through UTAS events and activities.

Secondly, UTAS was chosen as an instrumental case. Thus, the final discussion is on the level of an Australian case or more general theory application. Thus, while it focuses in detail on the Tasmanian case its findings could be applied generally.

Thirdly, the first survey was limited to finding the number of visitors and different segments (not all segments and their profile in detail). However, the research indicates the diversity of visitor segments (from the first survey) and the unique potential of a university in terms of contributing to the tourism industry. It provides the potential for the university's attracting people to a destination and impacting on the tourism industry. It was assumed that people coming to UTAS would not travel to Tasmania if the university were not there. Primary and secondary data were also used to quantify the number of visitors to UTAS.

Fourthly, in the second survey only one key segment (the international student segment) was chosen for more detailed investigation because of the research time limitation and because the main objective of this study was to identify UTAS's role as a tourism attractor and not to compare the different segments. Thus the research is limited to examining international students' tourism value and not their economic impact. The second survey provides a profile of international students and their VFR travel characteristics in a more detailed analysis.

Fifth, analysis for cross-cultural comparison, such as ANOVA[9] (Analysis Of Variance), MANOVA[10] (Multiple Analyses Of Variance), T-test and Z-test[11] were not performed, as all international students were regarded as one group. The differences between nationalities and age groups were not necessary to meet this study's main objective.

Finally, this study does not provide detailed strategic industry implementation, but rather suggests the opportunity through remodelling the existing TSM and demonstrates an attractor element in the university's core role and value for tourism.

4.4 Chapter summary

This chapter described the methodological approach used for stage three of this thesis and sought to achieve the objectives of this study which are to provide further insights into the value and potential of the educational industry and specifically university visitors in the context of tourism. The main research questions, data collection methods, sample size and analyses of the two survey approaches were discussed along with the research boundaries and limitations. It also explained the undertaking of the instrumental case study which was based on quantitative investigations through two surveys.

Based on this, the following chapter discusses the results of the survey on visitors to UTAS. It summarises the estimated number of visitors and segments in order to assess the attractor role of UTAS.

[9] Analysis of Variance (ANOVA) tests for significant mean differences in variables among multiple groups (Cavana *et al.*, 2001:453).
[10] Multiple Analysis of Variance (MANOVA) tests mean differences among groups across several dependent variables simultaneously by using sums of squares and cross-product matrices (Cavana *et al.*, 2001:442).
[11] T-test, Z-test compare between two means to suggest whether both samples come from the same population (Gaten, 2000)

CHAPTER FIVE INDUCED VISITORS TO UTAS

5.1 Introduction

Earlier chapters have specified the importance of systemic approaches in Tourism studies, and in particular, it was stressed that identifying the role of an attractor element is important. The most significant problem was found to be the lack of the tourism industry's understanding of the complex tourism phenomena within a broader picture in recognising induced tourist by attractors. Therefore, the education institution's role as a tourism attractor has been overlooked by both tourism and the education industries. This problem directly relates to quantifying visitor numbers and segments implementing this relationship to the tourism industry situation.

Thus, this chapter focuses on the role that the UTAS plays as a tourism attractor by assessing the number of visitors to UTAS, their profiles and why they came to UTAS. Quantifying visitor numbers is important because with this information, it is possible to estimate visitor numbers, segments and characteristics and to identify which segments should be targeted, what sort of product can be developed and thus what sort of partnership or alliance potential can be developed between the tourism and education industries.

Here, one important point to be made that, in most of the existing tourism literature, those two concepts are cross referenced without clarifying the differences. However, in this thesis 'visitors' refers to a broader spectrum of people who come to the destination with various purposes. On the other hand 'tourists' are regarded as people who simply come to the destination for recreational and leisure purposes. Those who are visiting a university are regarded as 'visitors' and have the potential to become 'tourists' within the same destination. Thus, there is an assumption that not all visitors to a university are tourists.

Quantitative data were collected from secretaries and academic staff at UTAS in 2002. These data relate to the academic year 2001. The discussion below presents

each segment of the survey, and then it highlights problems with the current research which compromises data integrity.

5.2 Visitors to UTAS

Data were obtained from the survey of administrative and academic staff of 39 academic units, administration units and organisations, 20 individual academic staff and annual reports from two research organisations at UTAS in 2002. In conjunction with these primary survey data, secondary data were also included for international and interstate student segments which were obtained through UTAS website.

The results indicate that for the academic year 2001, UTAS attracted approximately 4,120 visitors to the state (Table 5.1). In considering low survey responses and lack of existing secondary data, the results still demonstrate UTAS's ability to induce 'out of state' visitors.

Visitor Segments	Number	%
1. Students	2113	51.3%
2. Conference/Workshop Attendees	1550	37.7%
3. Short Course Participants	245	6.0%
4. Academic Visitors	139	3.4%
5. Business Travellers	66	1.6%
6. Government Officials	4	0.1%
Total	4117	100%

Table 5.1 Visitors to UTAS in 2001

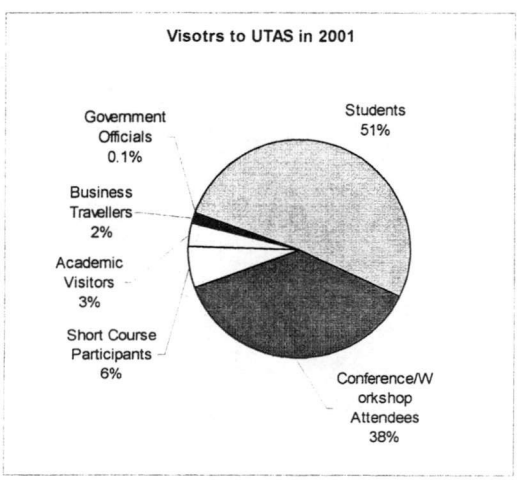


Figure 5.1 Visitors to UTAS in 2001

The visitors were identified and classified into six categories (Table 5.1 & Figure 5.1). Among these visitors, the two largest groups were 'students' (51% of total) and 'conference / seminar attendees' (38% of total), followed by 'short course participants' (6%), 'academic visitors' (3%), 'business travellers' (2%) and a minority of government officials (0.1%).

5.2.1 Students as visitors

In the academic year 2001, a total of 2113 students came to UTAS (Table 5.2) from out of the state and from overseas, and this student segment comprised 51% of the total identified visitors to UTAS (Figure 5.1). International students numbering 1595 came from more than 55 overseas countries and 518 interstate students came from other parts of Australia (Appendix 4.2).

Students	Number	%
1. International Students	1595	75.5%
2. Interstate Students	518	24.5%
Total	2113	100%

Table 5.2 Student visitors to UTAS in 2001
Source: UTAS Statistics website, IT Resources

(1) International students

1,595 international students to the state accounted for 76 % of total student visitors which comprises 39% of total visitors to UTAS (Table 5.2). Of these, 1099 students were enrolled in the academic degree awards program and 496 students were enrolled in ELICOS (English Language Intensive Course for Overseas Students) and Foundation course (Appendix 4.2).

Predominantly, 85% of students were from Asian countries (Figure 5.2): 36% of students were from Malaysia, 16% of students were from Singapore and the rest of the students were from 19 other Asian countries (Appendix 5.1). A second and much smaller group of students (7%) came from America and the third largest group of students (5%) were from Europe. Smaller number of students came from other areas, such as Africa (1.3%), Middle East (0.4%), Pacific (0.3%) and North Africa - only 1 student (0.06%). There were another 16 students (1.5%) whose country of origin was unknown.

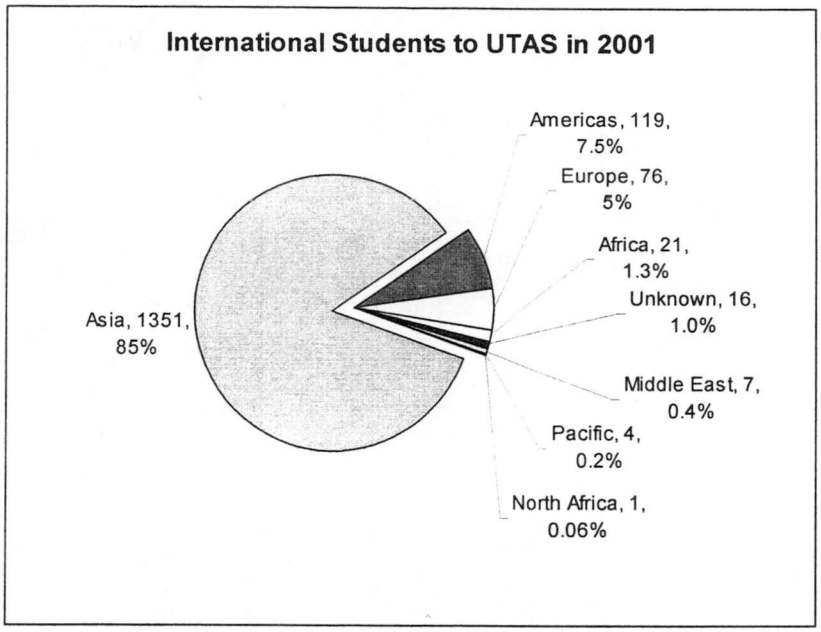


Figure 5.2 International students to UTAS in 2001
(Source: UTAS Statistics website, IT Resources)

(2) Interstate students

As shown in Table 5.2, 518 students came from interstate to UTAS accounting for 25 % of total student segment. The majority of interstate students (207 students - 40% of total interstate students) originated from Victoria (VIC). The second and third largest segments show that 20% of students came from New South Wales (NSW) and 17% from Queensland (QLD) (Figure 5.3).

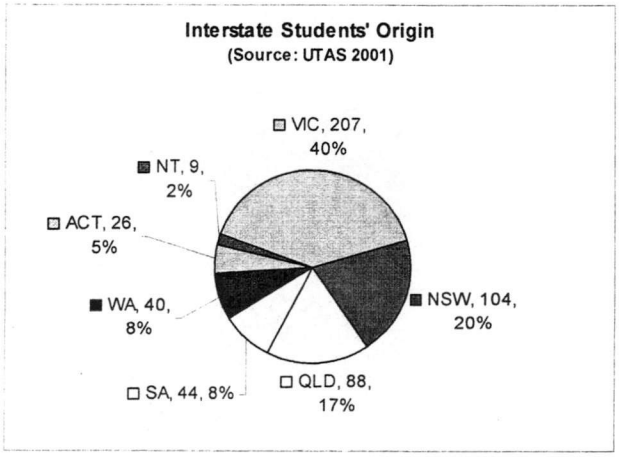


Figure 5.3 Interstate students' origin

Smaller numbers of students came from the other states with 9% originating from South Australia (SA), 8% from Western Australia (WA), 5% from the Australian Capital Territory (ACT) and only 2% from the Northern Territory (NT).

5.2.2 Conference/seminar attendees

This segment represents delegates, speakers and audiences for conferences, seminars and workshops. These attendees were 38% of total visitors (1550 people) to UTAS (see Table 5.1). Detailed data, such as number of nights stayed, expenses and tourism related activities were not able to be obtained as no secondary data existed within any department at UTAS. However, one UTAS organisation (UNITAS Consulting) provided more detailed data about the number of attendees including country of origin for four conferences which they organised. The results are shown in Table 5.3 and while they cannot be relied upon, they do give some idea of the origin of conference attendees.

	Country of Origin	Attendees	%		% of Interstate/ international
Interstate	**ACT**	144	32.36%	Interstate Sub Total	
	NSW	94	21.12%		
	VIC	55	12.36%		
	QLD	28	6.29%		
	SA	20	4.49%		
	WA	14	3.15%		
	NT	5	1.12%	360	81%
International	NZ	27	6.07%	International Sub Total	
	UK	3	0.67%		
	France	2	0.45%		
	USA	2	0.45%		
	Island	1	0.22%		
	Scotland	1	0.22%	36	8%
	Not specified	49	11.01%	49	11%
Total		445	100.00%		

Table 5.3 Conference/seminar attendees' country of origin

The majority (81%) of attendees were from interstate and 8% visited the state from overseas. Of interstate conference attendees, 32% originated from ACT, 21 % from NSW and 12% from VIC with smaller percentages from the other states.

Interestingly, the UTAS data set revealed that conference attendees travelled mostly from interstate while academic visitors, business travellers, short course participants and students originated mostly from overseas (Table 5.4).

Country of Origin comparison			
	Interstate	*Overseas*	Unknown
Conference Attendees	80.90%	8.10%	11%
Short Course Participants	0.80%	98.80%	0.4%
Students	24.51%	75.49%	0%
Academic Visitors	31.00%	69.00%	0%
Business Travellers	6.00%	50.00%	44%

Table 5.4 Visitors' country of origin comparison by segments

Apart from this given information from the survey, additional information on three conferences organised by UTAS was obtained in order to provide a glimpse of the value of conference attendees. Thus, the data below on three conferences are not included in counting the total visitors to UTAS for this survey.

The 'Escape Conference' was hosted by the International Centre for Convict Studies and UTAS for 4 days in June 2003 at Strahan, Tasmania. The conference attracted a total of 116 visitors to the Strahan region, 17 international, 20 interstate, 68 local visitors and 11 of non-identifiable origin (Table 5.5). The identifiable expenditures by these attendees into the local tourism industries were estimated at approximately $52,000 excluding the registration fees ($40,600), individual incidental expenditure like buying souvenirs and expenses for individual transport.

Attendees		
	Origin	*n*
1	International	17
2	Interstate	20
3	Local	68
4	Not specified	11
	Total	*116*
Attendees' Expenses		($)
1	Registration	40,600
2	Accommodation	35,072
3	Meal	12,180
4	Cruise tour	4,050
5	Show	800
	Total	*$ 92,702*

Notes on Expenses

1. Conference registration: $350 per person
2. 86 attendees stayed $88 accommodation for 4 nights
   30 attendees stayed $40 accommodation for 4 nights
3. Dinner cost at average of $25 per person for 3 evenings. Drinks cost at average $10 per person for 3 days. Breakfast was included in the bed tariff.
   Lunch was provided as part of the conference registration.
4. 90 attendees went on the boat cruise tour($45 per person, Lunch included)
5. Approximately 100 attendees went to a show which cost $8 per person.

Table 5.5 Expenses of 'Escape Conference' attendees
Source: International Centre for Convict Studies, University of Tasmania

Another form of conference which casts the university in the role of an invisible attractor is when the university operates as a supporting partner for conferences. The 'CRC Tourism Wildlife Conference 2001' was hosted as a partnership between CRC for Sustainable Tourism at Griffith University, QLD and UTAS, with Tourism Tasmania as a minor partner. The conference attracted a total of 145 visitors to the Hobart region, 10 international, 81 interstate, 54 local visitors (Source: CRC sustainable Tourism, UTAS).

Similarly, the 'Island of Vanishment Conference' was held in June 2002 at Port Arthur, Tasmania (Source: Port Arthur Historic Site Management Authority). The International Commission on Monuments and Sites (ICOMOS) was a major sponsor and the conference was held around their annual world board meeting. The organising committee was composed of the university (represented by the Department of History, the Department of English, and the Tourism Program), the Port Arthur Historic Site Management Authority, and the local Tasman Peninsula Historical Society. The conference attracted a total of 173 visitors to the Port Arthur

region, 15 international, 95 interstate and 63 local visitors. While the complete lack of a central recording system meant that no definitive details could be obtained for these conferences, two such conferences for which details were uncovered provide further evidence of the attractor role of the university.

From this additional information, it is apparent that without the university's participation, the conference would not have been held in that region. Consequently, without these conferences, these particular visitors would not have visited the region or the state and thus the estimated expenditures would not have occurred within the local tourism industry.

5.2.3 Short course participants

The short course participant segment represents visitors from outside the state who come to UTAS for a short period taking courses organised by UTAS departments or schools apart from conferences, seminars, workshops or any award, foundation or ELICOS program.

Only two departments, UNITAS Consulting and International Office provided data on short course participants and one of them (International Office) provided detailed information on short course participant numbers, countries of origin and duration of course. The International Office runs study tour programs which attract participants mainly from Japan and China and which provide language experience in conjunction with travelling in Tasmania.

Short course participants were 6% (245 visitors in 14 short courses) of total visitors to UTAS (Table 5.1). The majority (99%) of short course participants originated from Asia and only 1% were from interstate (Table 5.6).

Short Course Participants		
Country of Origin	*Visitors*	*%*
Interstate	2	0.82%
Asia	242	98.78%
Not specified	1	0.40%
Total	245	100%

Table 5.6 The number of short course participants and their origin

Participants from 12 courses (242 Study tour program participants) stayed a total of 7,677 days (approximately 32 days for each participant on average). Small numbers (1%) of participants' nights of stay were not specified.

Though some research organisations' annual reports included information on short courses, detailed information was not available in terms of out of state visitor numbers, country of origin, duration of the course and tourism related activities.

5.2.4 Academic visitors

An 'academic visitor' represents visiting scholars, researchers and scientists who come to UTAS in relation to their work for example teaching, guest lecturing, conducting examinations, research etc. In total, 139 academic visitors (3% of total visitors) were identified (Table 5.1), of which 69% were from overseas and 31% were interstate visitors (Figure 5.4).

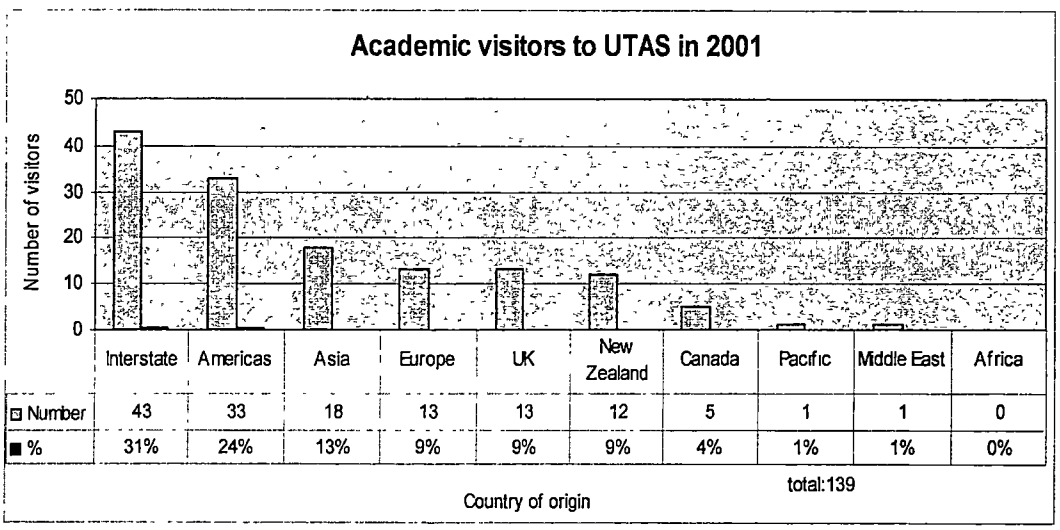


Figure 5.4 Academic visitors to UTAS in 2001

Among the overseas academic visitors, 24% came from America, 13% from Asia and 9% each from Europe, UK, and New Zealand. Also 4% travelled from Canada, 1% each from the Pacific Islands and the Middle East. Also, academic visitors spent a total of 3,320 nights accounting for an average of 24 days stay per visitor. Thus, academic visitors' number of nights stay was significantly longer than other segments apart from the student segment.

An important point is that the number of academic visitors may be much higher as many programs in the university maintain no data on academic visitor segments. These include external examiners, panels for formal reviews, or those who travel regularly to UTAS each year.

5.2.5 Business travellers

Consultants, engineers, agencies and marketing people were categorised as business travellers. This segment is difficult to identify as most of individual staff in the departments have formal and informal visitors without keeping any records. However, 66 people were identified under this category comprising 2% of total visitors to UTAS (Table 5.1 & Figure 5.5). Business travellers were a small segment and generally stayed for very short periods. They stayed a total of 211 days accounting on average for a stay of 3 days per person.

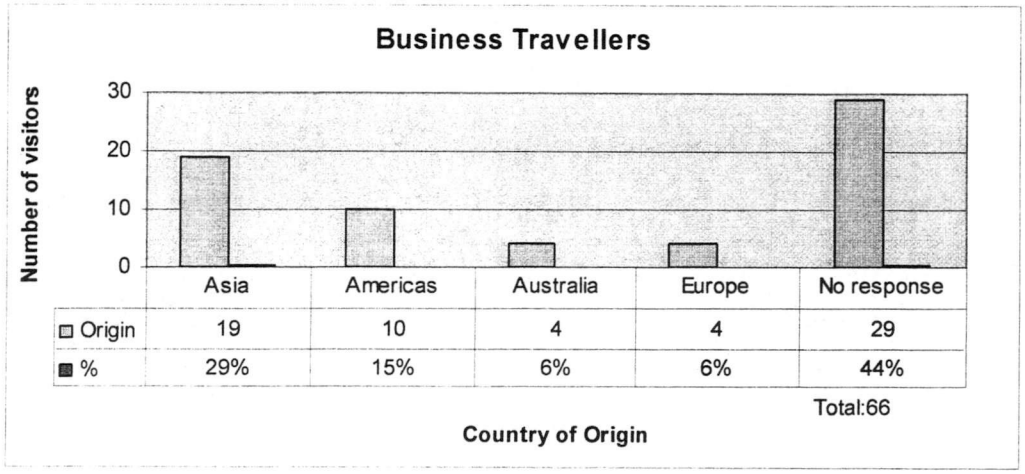


Figure 5.5 Business travellers to UTAS in 2001

Included among them are agents for various academic publishers who travel regularly to UTAS from interstate in order to visit a significant number of academics each time. However, it was impossible to quantify these visitors because of a complete absence of UTAS records.

5.2.6 Government officials

'Government Officials' refers to the people who visited UTAS, e.g. in a diplomatic relationship. A small number of government officials (4 visitors) were identified in this category representing 0.1% of total visitors to the university (Table 5.1). These visitors travelled from interstate, mainly NSW (2 visitors). No further information could be collected for this segment.

5.3 Induced visitors and TSM implications

This chapter has determined that the university is a prominent attractor to tourism in terms of bringing a variety of visitors to Tasmania, despite the lack of a comprehensive system to record such visitation other than student enrolees. These visitors may be conceptualised in 'A Tourism System Model illustrating Induced Visitors through a University' (Figure 5.6). This model is based upon the assumption that the tourism industry is a sub-system which works with an attractor in mutual relationships: where the attractor (a university) is not visibly connected to the tourism industry for its market; how they contribute to each other; how the market transition occurs; and how the tourism industry and attractor interact within the destination. The ideal situation would be for the majority of visitors to spend their spare time within the destination apart from their original purpose (e.g. education, business or any events). In this way they voluntarily become tourists. On the other hand, their original purpose could also include tourism related activities. Thus, educational institutions, such as universities, create situations where all visitors are understood as tourists to the destination.

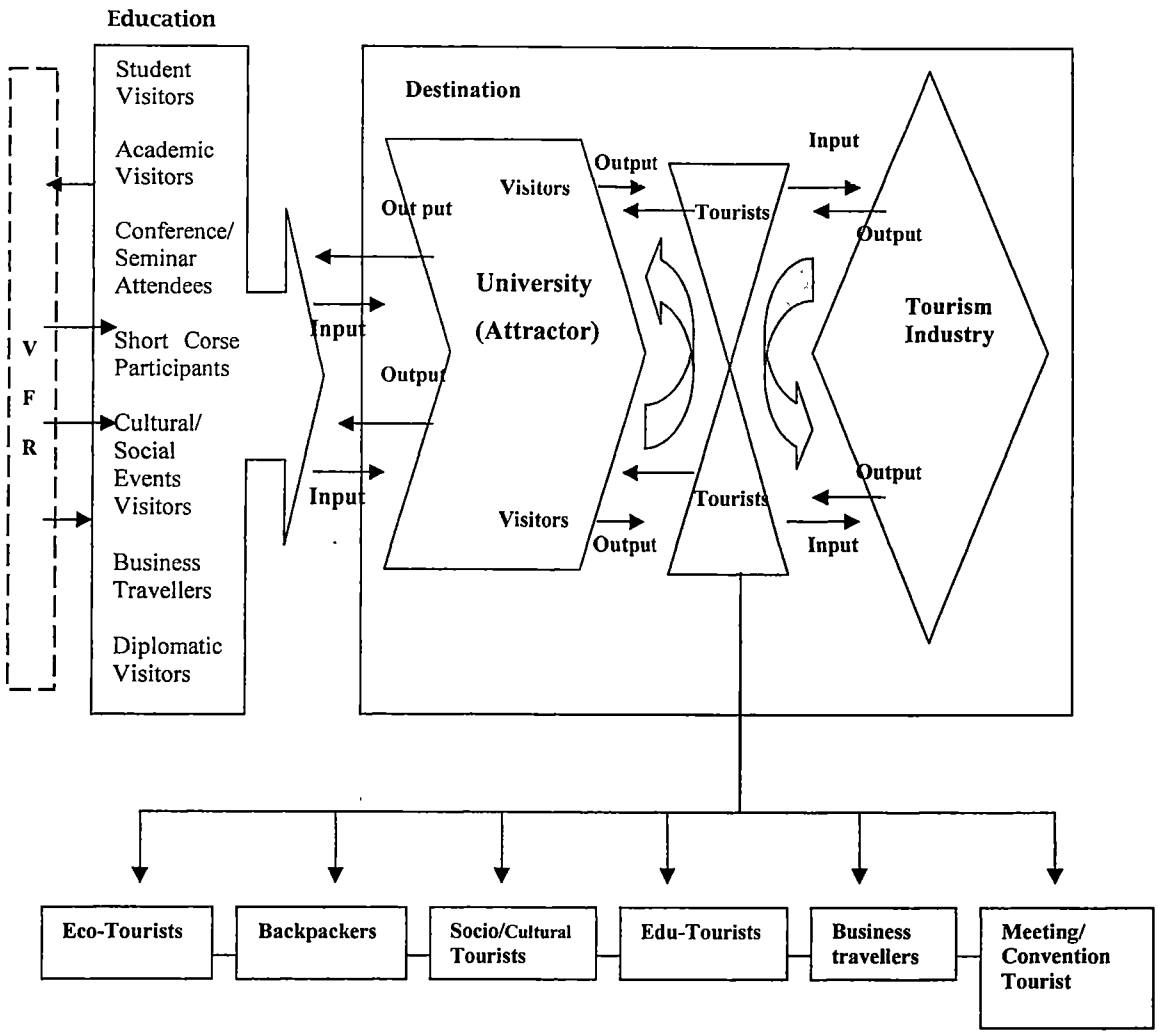


Figure 5.6 A Tourism System Model illustrating Induced Visitors through a University

(Source: Author)

It is also based upon the notion that the visitors to universities are heterogeneous and thus the tourism industry should broaden its views on the market in a systemic way. Development of the tourism market involves an understanding of attractors and their visitors for tourism management and planning stages, and also for a constant evaluation process.

5.4 Survey limitations

Major problem which was encountered was limited responses based on an unstructured data sources, thus the data are limited and conservative in numbers. Consequently, the actual number of visitors within each sector is potentially much higher.

Initially, it was expected that some data sets and information would be available through the university departments eliciting information on 5 aspects, such as conferences, seminars, intervarsity sports games or arts and music events. Thus, in early 2002, departments and organisations were contacted during the preparation of this study, such as International Office, Venue Hire Office, Sports Union, Music/Arts Department, Vice-Chancellor's Office, Public Relations, Administration, University Statistics Department, Research Organisations and University Newsletter Publishing unit. However, it was found that no department regularly monitors their visitor patterns in UTAS so the majority of respondents were not able to provide proper answers. The relevant data are scattered through all university units and in many cases are held by an individual staff member.

- Conferences, seminars, short courses, cultural/social events records are held by the individual staff member who was involved in or organised the event, not at department or faculty level.

- Visiting academics and diplomatic international visitors' records were not available through the International Office or elsewhere.

- No data were provided on sports events, art events or about participants at these events through this survey.

Tourism Tasmania statistics department, Tasmanian Meeting and Convention Bureau (TMCB) were also contacted. However, no relevant data or information were available in relation to visitors to the university.

5.5 Conclusion

This chapter has assisted in building a descriptive background for this study rationale. The principle aim of this survey was to build and to explore the university's role in attracting visitors to the state in the tourism context. Thus, the objectives of this survey were to determine the number of university visitors and segments and to test the current data accessibility to allow this study to examine the university and its potential for the tourism industry. The results clearly showed that a university attracts a substantial number of visitors that are not easily recognised in terms of their value to the tourism industry, but could contribute to the tourism industry in the region. These visitors to UTAS are significant because the visitors originated outside the state and would not have come to the state without the presence of UTAS. The international student segment showed the strong potential in developing the young Asian tourist market segment as the majority of students (85% of total international students) came from a variety of Asian countries. Furthermore, conference visitors (81%) travelled mainly from interstate, thus reflecting a potential niche segment for the interstate meeting and convention tourism market.

However, it was found that the majority of sources were not able to provide comprehensive and relevant records because no such data are kept. The lack of UTAS's and tourism organisations' visitor information in relation to university events shows that the mutual relationship in sharing visitors has not been realised by either the tourism or the education industries. Moreover, it was highlighted that the poor quality of responses shows the lack of industry understanding on research issues.

As mentioned earlier, student visitor groups remain the largest segment and its growth rate is well above all other visitor groups coming to the university. Following on from this, the next chapter will detail the results of the survey of international students in order to assess their potential as a tourist segment among the induced visitors to a university.

CHAPTER SIX INTERNATIONAL STUDENTS AS TOURISTS

6.1 Introduction

This chapter discusses the findings of the international students' survey conducted during September 2002 and November 2002 at the University of Tasmania (UTAS), Australia. The overall objective of this survey was to provide further insight into international students who were visitors to UTAS. More specifically, it attempted to provide in-depth travel characteristics of international students as visitors to UTAS and explore their value as a potential niche segment for the tourism industry. In addition, the study investigated whether students generate VFR and return travel.

The findings are discussed in four parts: descriptive characteristics of the respondents, students' travel profiles, students' VFR profile and students' perceptions as tourists.

Of the Asian population just under half (41%) were Malaysian students and the other half were from diverse Asian countries where low numbers make analysis by country inappropriate (Appendix 6.2). Due to this lack of meaningful data regarding nationalities, all international students are treated as one group in the following discussion. Also, in the analysis of the data in terms of age, students were treated as a homogeneous group due to the majority of students (73%) being in the 20-25 age bracket. Only gender as a factor was considered in the analysis and results are presented when it was judged appropriate in indicating a difference.

6.2 International students' travel profiles

6.2.1 Demographic characteristics of the respondents

The results of the demographic characteristics of the respondents are summarised in Table 6.1. The gender distribution is almost even between males and females (48.5 % male and 51.5 % female). Significantly nearly three quarters of students were in the age group 20-25 (73%), while the remaining 14% of students were under 20, 9% were between 26 and 30 and only 5% were over 31 (the overall distribution of the sample is shown in Appendix 6.1).

A high proportion of students (62%) answered that the duration of their courses was 3 or 4 years (mean=3.23). Only 5% of the students expected to stay in the state less than one year for their prescheduled study courses.

Over half of the total respondents (58%) had lived in Tasmania less than one year, approximately 22% of total respondents had lived in the state for one or two years and another 20% of total respondents had stayed in the state more than 2 years. On average, the respondents had lived in the state 1.36 years at the time of this survey.

The majority (91%) of respondents came from 14 different Asian countries (Appendix 6.2), reflecting the normal distribution of total international students at UTAS (83% of total international students came from Asian Countries to UTAS in 2002 - Appendix 3.4). The distribution of this study is slightly (about 10%) more than UTAS data yet reasonably similar. Of these Asian students, over two fifths (42% or 122 students) of the total were from Malaysia.

Demographic characteristics of respondents				
Characteristics	Frequency (n)	%	Cumulative %	*Mean value*
Gender				
Male	141	48.5		
Female	150	51.5		
Age				
< 20	39	13.6	13.6	
20-25	208	**72.7**	86.4	
26-30	26	9.1	95.5	
> 31	13	4.5	100.0	
Official Duration of Their Course				3.23
< 1yr	11	5.2	5.2	
2yr	53	24.9	30.0	
3yr	57	26.8	56.8	
4yr	74	**34.7**	91.5	
5yr	4	1.9	93.4	
> 6yr	14	6.6	100.0	
Duration of their previous stay				1.36
< 1yr	165	57.9	57.9	
1yr-2yr	63	22.1	80.0	
2yr-3yr	35	12.3	92.3	
> 3yr	22	7.9	100.0	
Country of Origin				
Asia	265	91.0		
Americas	18	6.2		
Africa	3	1.0		
UK	1	0.3		
Europe	1	0.3		
Pacific	1	0.3		
NZ	1	0.3		

Table 6.1 Demographic characteristics of respondents

6.2.2 International students' travel characteristics

(1) Travel

1) Frequency of travel

Based on students' previous 12 months travel experiences, international students' travel characteristics are discussed in this section. Table 6.2 summarises travel undertaken by international students.

The majority of students (76%) indicated that they had undertaken travel at least once within the previous 12 months, and this travel may have been within the state, interstate or internationally. Though the research interest is in international students' travel impact on Tasmania, interstate and international travel is also considered as it relates to the part of the local tourism businesses (e.g. travel agencies, air services) and that discussion is included in the following section.

Among those students who have travelled, the number of trips ranged between 1 and 15 trips. Almost half of the students (47%) travelled two or three times with an overall average of 3 trips. As shown in Table 6.2 Just under a fifth of students (19% of total) made more than 5 trips within the last 12 month. However, one person claimed 75 trips and this data were excluded from the analysis.

Travel in Tasmania for the last 12 mth			
Number of travel	*n*	*%*	*Cumulative %*
0	22	9.1	9.1
1	39	16.0	25.1
2	62	25.5	50.6
3	51	21.0	71.6
4	23	9.5	81.1
>5	46	18.9	100.0
Total	242	100.0	
Mean: 3.29	N=291 n=242		

N: Total sample n=valid responses

Table 6.2 Frequency of travel

Additionally, the data of respondents who were in their first year, second year and third year of stay in Tasmania were compared, to find out whether there is any relationship between their stay and the number of trips made. Figure 6.1 indicates that the trend is similar in each year representing on average between 2 and 3 trips per student. Students travel more in their 1st year period than those in their 2nd and third year.

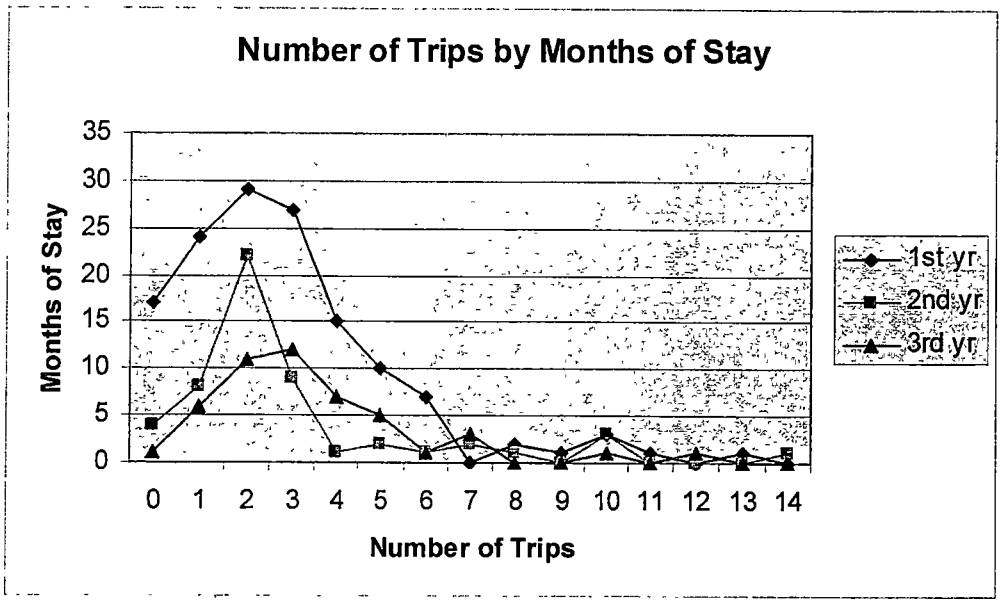


Figure 6.1 Number of trips by months of stay

2) Places visited

Table 6.3 summarises the places visited by students within Tasmania, interstate and overseas while staying in Tasmania. Students were specifically asked to separate this travel from their home country visits ('going home' visits). The data related to students 'going home' visits are analysed later in this chapter.

Places travelled by students (1)		
	n	%
Tasmania	185	63.6
Interstates	103	35.4
International	66	22.7

* Percentages add up to more than 100% as some respondents answered more than one category.

Table 6.3 Places travelled to by students (1)

More than 63% of students have travelled within Tasmania, 35% of students made an interstate trip, and 22.7 % of total respondents went overseas during their stay in Tasmania. On the whole, students travelled widely around the state visiting all Tasmanian regions The North, East and South regions had about equal participation (Table 6.4). However, the West coast region had less visits by these students (18%).

Places travelled by students (2)		
Places	*n*	*% of Responses*
Tasmania	(N=393)	
North	109	27.7%
East	108	27.5%
South	106	27.0%
West	70	17.8%
Interstate	(N=150)	
VIC	70	46.7%
NSW	43	28.7%
QLD	17	11.3%
WA	7	4.7%
SA	7	4.7%
ACT	3	2.0%
NT	3	2.0%
International	(N=66)	
Asia	48	72.7%
NZ	10	15.2%
Americas	5	7.6%
UK	2	3.0%
Europe	1	1.5%

N=Total responses

Table 6.4 Places travelled by students (2)

Approximately one third of students (35%) have made an interstate trip (Table 6.3). VIC was the most frequently visited (47%) state by UTAS international students, then NSW (29%) and QLD (11%) (Table 6.4). A minority of students went to WA (5%) and SA (5%) followed by ACT (2%) and NT (2%). Just over one fifth (23%) of total respondents travelled internationally to countries other than their home countries (Table 6.3). Of these, 72.7% (48 students) made trips mainly to Asian countries, such as Malaysia, Singapore, Indonesia and Thailand with others travelling to New Zealand (15.2%), America (7.6%) and the UK (3%) (Table 6.4). The following Table 6.5 summarises the details of international students' trips.

Characteristic	*n*	*%*	*Characteristics*	*n*	*%*	*Cumulative %*
Main purpose of the previous trip *			**Average length of trip**			(N=285)
Entertainment	142	48 8	Day Trip	53	18.6	18.6
Relaxation	139	47.8	1-2 Days	94	33.0	51 6
New Experience	90	30 9	3-5 Days	83	29 1	80.7
Learning local culture	49	16 8	1 week	23	8.1	88.8
Taking Visitors	36	12.4	1-2 weeks	26	9.1	97.9
Meet local people	27	9.3	Over 2weeks	6	2.1	100 0
School activity	23	7.9				
Other	6	2 1	**Average Travel Costs**			(N=287)
			Under $50	31	10.0	10.8
Travel Parties *			50-100	71	24.7	35 5
With Friends	240	82.5	100-300	118	41.1	76.7
Alone	40	13 8	300-500	28	9 8	86.4
Home-stay family	21	7.2	500-1000	29	10.1	96.5
Other	11	3 8	Over $1000	10	3.5	100.0
Visitors	5	1.8				
			Type of Accommodation *			
When do you usually travel? *			Backpackers	106	36.4	
			Motel	83	28.5	
			Friends/relatives	83	28.5	
Uni Holiday	219	75.3	Cabin/Shack	66	22.7	
Weekend	105	36.1	Hotel	43	14.8	
Public Holiday	60	20 5	Youth Hostel	40	13 7	
Anytime	30	10 3	Holiday House	35	12.0	
Other	1	0.3	Guest House	16	5.5	
			B&B	14	4.8	
			Camp	7	2.4	
Modes of transportation *			Farm	5	1.7	
Hire vehicle	149	51.2	**Type of organising trip**			(N=283)
Own Vehicle	107	36.8	Self arrangement	211	74.6	
Coach	63	21.6	Travel Agency	33	11.7	
Bicycle	7	2 4	STA	26	9.2	
Other	4	1.4	Other	13	4.6	

* Percentages add up to more than 100% as multiple answers exist.
N=291 unless the numbers are given.

Table 6.5 Overall travel characteristics of international students

3) Main purpose of trip

Students were asked the reason for their travel while studying in Tasmania. It was found that the primary reason for about half of the students in the present sample for making a trip was 'entertainment' (49%) followed by 'relaxation' (48%), and 'new experience' (31%). Other students indicated 'learning local culture' (17%), and 'taking visitors' (12%) while some suggested 'meeting local people' (9%) and school related activities (8%). (Table 6.5 & Figure 6.2)

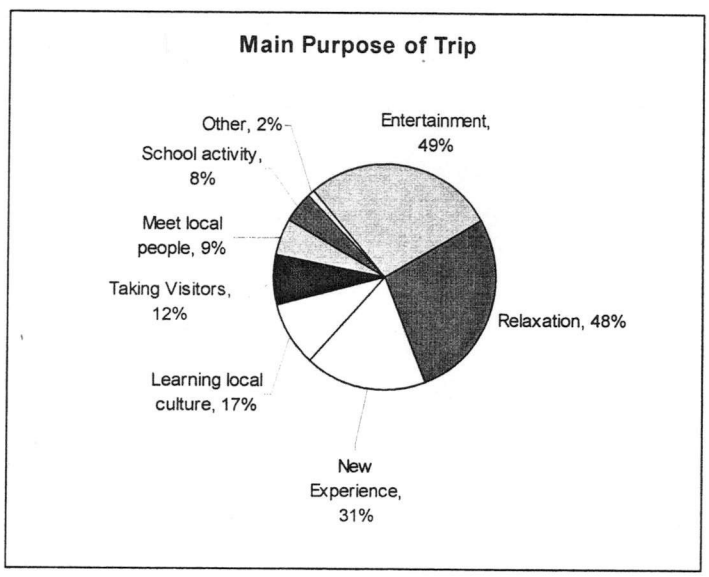


Figure 6.2 Main purpose of trip

The major conclusion from this analysis is that recreational purposes (entertainment and relaxation) make up 55% of the primary reasons given for making a trip while they were studying in Tasmania.

4) Travel parties

Students were asked to indicate the two most common types of travel party. Not surprisingly, 83% of total respondents travelled with friends (Table 6.5). Only 14% of students indicated they made a trip as a single traveller. Others answered they usually travelled with home-stay family (7%) or their visitors (2%).

5) Timing of travel

Students were asked to choose the two most common answers regarding their travel timing. The result shows that students most likely travelled 'during university holiday' (75%) followed by 'over the weekend' (36%) (Table 6.5). One fifth (21%) of students indicated they travel during a 'public holiday' while 10 % of students answered they travel 'anytime'.

6) Modes of transportation

When travelling, over half of the students (51%) indicated they used hire cars, 37% used their own or friends' vehicles and many (22%) students used coaches. Only 2% of students used bicycles. Overall, the majority of students (88%) preferred to drive when travelling, using hire cars or their own/friends' cars (Table 6.5 & Figure 6.3).

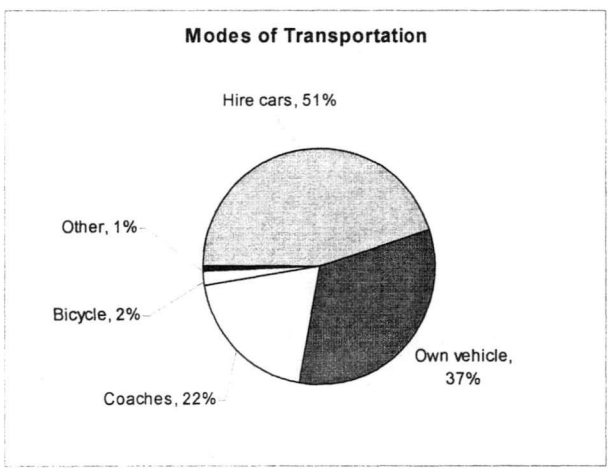


Figure 6.3 Modes of transportation

7) Average length of stay

The majority of students (33% of total) spent one or two days away, and another 29% of students spent 3 to 5 days away. In terms of short trips, 19% of students indicated a day trip as their preferred length of their trip. A small number of students stayed about one week (8%), and 9% of students stayed more than one week and up to two weeks (Table 6.5). Few spent more than two weeks (2%) (Table 6.5).

8) Average travel cost

Students were asked how much money they spend on average for each trip on the basis of their previous trips within the last 12 month period. Approximately two fifths (41%) of the students indicated their average travel cost was between $100 and $300 for each trip followed by $50 to $100 (25%) and 10% spent between $300 and $500 (Table 6.5).

Another 10% of students who spent under $50 would have made a day trip or group travel and perhaps shared the cost. Some students (14%) spent between $500 to $1000 or more.

9) Type of accommodation

Backpacker style accommodation was the most commonly used accommodation type (36%) followed by motels (29%) and friends/relatives' accommodation (29%). (Table 6.5) Over one fifth of students (23%) spent their nights at a cabin/shack. Hotels were used by 15% of respondents and another 14% used youth hostels and 12% spent nights at a holiday house while Bed and Breakfast (B&B) (5%), camping (3%) and farm accommodation had a low usage (2%).

In addition, Table 6.6 shows the differences in accommodation preferences in terms of gender. The percentage of total responses for each accommodation type is given but there are few gender differences in terms of accommodation types and preferences are very similar. However, females are more likely to have used a holiday house, B&B and farm accommodation than male students. On the other hand male students are more likely to have used guest houses than female students. Nonetheless, this data should be read with caution as numbers are small.

Gender differences in accommodation preferences (%)		
Accommodation	*Male*	*Female*
Backpackers	52.8	47.2
Motel	51.8	48.2
Friends/relatives	45.8	54.2
Cabin/Shack	48.5	51.5
Hotel	44.2	55.8
Youth Hostel	42.5	57.5
Holiday House	**34.3**	**65.7**
Guest House	**81.3**	**18.8**
B&B	**35.7**	**64.3**
Camp	57.1	42.9
Farm	**40.0**	**60.0**
% of total responses for each accommodation type		

Table 6.6 Gender differences in accommodation preferences

10) Trip organisation

As previously summarised in Table 6.5, the majority of students (211 or 75%) preferred to organise their trip themselves while 21% of students used a travel agency or Student Travel Australia (STA).

Interestingly, cross-tabulation results (Table 6.7) shows that female used travel agents more than male students while other methods are similar in terms of gender.

Methods of organising travel (%)					
	Self	*STA*	*Travel Agent*	*Other*	*Total*
Male	36.4	4.9	**4.2**	2.1	47.7
Female	38.2	4.2	**7.4**	2.5	52.3
Total	74.6	9.2	11.7	4.6	100.0

Table 6.7 Methods of organising travel

Over a quarter of the students who stated they prefer to organise their trip themselves (34% or 72 students) suggested reasons for their preference in self-arrangement (Table 6.8).

Reasons for travel self-arrangement *(N=72)*			
Reason	*%*	*Gender differences (%)*	
		Male	*Female*
1. Convenient	42	22.2	19.4
2. Cheap	35	18.1	16.6
3. Flexible	10	2.8	**6.9**
4. Freedom	8	**5.6**	2.8
5 Other	6	1.4	4.2

Table 6.8 Reasons for travel self-arrangement

Students perceived that self arrangement was more convenient (42%) and cheaper (35%) than using travel agencies. Another 18% of students remarked flexibility and freedom as influencing factors for choosing their travel arrangement while a minority of others suggested organising 'by themselves' is more adventurous. Students' preferences in self-arrangement may relate to the fact that students prefer to travel as a group with friends and thus are seeking more flexibility and cost-saving way. It may also be attributed to the fact that students are familiar with accessing on-line information and using other tourist information facilities which makes it easy to organise their own travel. This issue has also been raised previously by Chadee and Cutler (1996:77) who suggest that further study needs to be carried out in the area of reasons why students tend not to use travel agencies or packaged tour products. There is a need to ascertain the true potential of the international student market.

Cross-tabulation results illustrated that besides the factor 'cheap' and 'convenient' more females suggested 'flexibility' than male students and more males recommended 'freedom', thus suggesting a possible gender difference in trend, but the numbers are small and more research or evidence is needed to find out if it is a real trend (Table 6.8).

11) Factors affecting students' travel arrangements

As suggested in the previous section, the cost of travel is one of the major factors when making travel arrangements. In reinforcing the fact that cost is the major factor affecting students' travel arrangements, indeed 35% of those who preferred to organise their trip by themselves (Table 6.8) indicated the cost factor as the number one reason for doing so (Table 6.9).

As suggested earlier, it may also reflect students' common travel plans, and these plans may indicate such things as students preferring to travel with friends in a group and use hire cars or friends' vehicles while staying at backpackers, motels or friends' and relatives' places, which in turn would enable them to keep costs down.

Factors affecting travel arrangements				
	Being 1st factor (%)	*Mean* [a]	*Gender differences* [b] *(%)*	
			Male	Female
1. Cost	**40.6**	2.22	**25.3**	19.8
2. Entertainment/Fun	17.8	2.70	6.3	**13.7**
3. New experience	14.3	2.95	7.3	9.4
4. Relaxation	14.3	3.35	8.7	7.5
5. Personal Interest/Educational	12.9	3.50	7.9	7.4

[a] Scale: Ranking in order with '1' as the most important to "5' as the least important

[b] Being as a 1st factor

Table 6.9 Factors affecting travel arrangements

The gender differences (Table 6.9) also illustrated that male were more concerned with 'cost' factors while females were more interested in 'entertainment and fun' as factors for their travel arrangements.

(2) Activities

1) Tourist type of activities

A number of listed tourist activities were given to students who were asked to indicate an approximate number of times they participated each month in such events as 'dining out', 'going to Salamanca Market', 'Hobart sight seeing', 'museum or art gallery', 'bushwalking', 'fishing', 'gambling' and 'golf'.

As indicated by Table 6.10, the majority of students most frequently engaged in going to Salamanca Market (83%), dining out (82%) and sight-seeing (49%). Salamanca Market is an important tourist attraction in Hobart. Students went to Salamanca Market on average twice or more each month. Of these, 30% of students answered they went to Salamanca Market three or four times per month (mean=2.94).

Dining out is also considered an important tourist activity as it directly relates to the students' expenses spent within the local economy. The result shows that the majority of students (82%) went out for a meal at least once a month. Of these, more than half of the students (55%) went out over 4 times per month. The high mean value 5.29 reflects that a few students (7.6% of total) answered more than 15 times up to a maximum of 40 times. A more realistic figure for students' dining out activity is around three to four times per month on average with a median of 3.78.

Frequency of international students' monthly activities

	n	%	*Mean* [a]
1. Salamanca Market	241	82.8	2.94
2. Dining Out	237	81.4	**5.29**
3. Sight Seeing	141	48.5	2.80
4. Bushwalking	81	27.8	2.25
5. Fishing	57	19.6	2.93
6. Museum/Art Gallery	51	17.5	1.49
7. Gambling	48	16.5	2.38
8. Golf	20	6.9	2.15

[a] Frequencies per month
Percentages add up to more than 100% as multiple answers exist (N=291)

Table 6.10 Frequency of international students' monthly activities

Around half of students (49%) participated in some form of sight-seeing (averaging twice or more per month, mean=2.8). Bushwalking (28%), fishing (20%), visiting a museum or art gallery (18%) and gambling (17%) were common activities averaging twice per month, although participated in by a smaller number of students.

Playing golf was also another activity which 7% of students engaged in on a reasonably regular basis (on average twice per month) although again numbers of the overall survey are small for this activity (n=20).

2) Outdoor adventure experiences

To find out students' participation in outdoor adventure activities, respondents were asked to name each activity, and also indicate how much they enjoyed this activity, using a 5 point-Likert style (Scale: 1=not very enjoyed to 5=very much enjoyed). The names of 12 common activities were given to students as samples which were drawn from 'The Tasmanian Attraction Study' (Tourism Tasmania, 1999).

Table 6.11 shows all outdoor activities which were undertaken by international students and mean values of their satisfaction for each activity with figures in bold indicating the highest satisfaction level. As previously mentioned, bushwalking was again the most widely undertaken outdoor activity by students (36% of total respondents) with above average enjoyment in the activity (mean =3.84). Of students who went on a cruise (14%), all indicated a similar enjoyment result (mean=3.88) to the bushwalking experience. A smaller number of students undertook cycling, flying, caving, canoeing, fishing, and sea-plane as activities, and they had similar patterns in enjoyment.

Interestingly, some of those activities which were undertaken by a minority of students accounted for a higher mean value. Students indicated high satisfaction on 4WD tour (mean=4.44), abseiling (4.40), kayaking (4.38), jet boating (4.33), climbing (4.14) and rafting (4.00) as outdoor activity experiences.

Outdoor activity experiences and satisfaction			
	n	%	*Mean* [a]
Bushwalking	104	35.7%	3.84
Cruises	41	14.1%	3.88
Cycling	28	9.6%	3.93
Flight	25	8.6%	3.92
Rafting	18	6.2%	**4.00**
Caving	14	4.8%	3.43
Canoeing	14	4.8%	3.86
Jet Boating	12	4.1%	**4.33**
Fishing	12	4.1%	3.17
Sea-Planes	10	3.4%	3.60
4WD tours	9	3.1%	**4.44**
Kayaking	8	2.8%	**4.38**
Climbing	7	2.4%	**4.14**
Abseiling	5	1.7%	**4.40**
[a] Scale: 1=Not very enjoyed to 5=very much enjoyed Average of total: 3.95 (N=291)			

(Bold figures indicate highest satisfaction levels)

Table 6.11 Outdoor activity experiences and satisfaction

Overall, apart from 'bushwalking', most of the students did not participate in many outdoor adventure activities; however, those students who did participate were more than satisfied with these activities with an average enjoyment mean value of around four out of a possible five point scale for all activities.

Besides the above activities, a smaller number of students mentioned horse riding, skiing, driving, sky diving and some water sports like swimming, scuba diving, snorkelling and surfing. The result showed that students again expressed a high satisfaction with these outdoor adventure activities (on average mean=4.5).

(3) Major events and participation

Approximately two fifths of respondents (39% or 112 students) had attended at least one major event during their stay in Tasmania. However the majority of students (62% or 179 students) had never attended any events that were listed as activities in the questionnaire (Table 6.12).

Events attended (1)

Number of Events	n	%	Cumulative%
1	43	38.4	38.4
2	19	17.0	55.4
3	10	8 9	64.3
4	15	13.4	77.7
5	5	4.5	82.1
Over 6	20	17.9	100.0

n= 112 (N=291)

Table 6.12 Events attended (1)

The type of events attended by students was assessed, along with the frequency of attendance (Table 6.13). This question revealed that the 'Taste of Tasmania', 'Tulip Festival', and 'Royal Hobart Show' were the events most frequently attended.

Events attended (2)

	Once	*Twice*	*3 times*	*4 times*	*Total*	*%*	*Mean*
1. **Taste of Tasmania**	41	8	3	2	**54**	48.2	1.37
2. **Tulip Festival**	37	5	7	2	51	45.5	1.49
3. **Royal Hobart Show**	30	8	1	3	42	37.5	1.45
4. Targa Tasmania	31	3	2		36	32.1	1.19
5. Sydney Hobart Yacht Race	12	6	2		20	17.9	**1.60**
6. Taste of Huon	13	3			16	14.3	1.19
7. Mountain Festival	9		1		10	8.9	1.20
8. Blooming Tasmania	8	1			9	8.0	1.11
9. Jazz Festival	7				7	6.3	1.00
10. Huon Folk Music Festival	6				6	5.4	1.00
11. Agfest	6				6	5.4	1.00
12. Tasmanian Heritage Festival	5				5	4.5	1.00
13. Launceston Christmas Carnival	3				3	2.7	1.00
14. Burnie Show	2				2	1.8	1.00
15. Three Peaks Race	1				1	0.0	1.00

(N=112, Percentages add up to more than 100% as multiple answers exist.)

Table 6.13 Events attended (2)

However, some events received more repeat visitation than others (Table 6.13). In comparing the mean values to events like the 'Sydney Hobart Yacht Race' (highest mean value of 1.60) with the 'Taste of Tasmania', it is apparent that whilst the 'Taste of Tasmania' (mean value of 1.37) is more popular in terms of getting more international students, proportionally more students made return visit to the 'Sydney Hobart Yacht Race'.

(4) 'Going home' trips by international students

Prior to the survey, it was assumed that students would visit their home country during the university holiday period. The result shows that half of the students (51%) answered that they had not been home since arriving in Tasmania (Table 6.14). The other half of the students answered that they visited their home country once or twice and one student visited home more than 3 times per year.

Home country visits per year (1)		
Number of visits	*n*	*%*
0	132	50.8
1	104	40.0
2	23	8.8
Over 3	1	0.4
Mean value=1 65 N=261		

Table 6.14 Home country visits per year (1)

However, in considering the duration of respondents' previous stay in the state, this result is reasonable. As previously mentioned, over half (58%) of the total respondents had lived in Tasmania less than one year (Table 6.1), while the remaining 42 % of students had spent more than one year in the state. It can be assumed that students may not go home in their first year of stay. To test this assumption, variables were transformed and reanalysed (Table 6.15). Over half of students were in their 1st year in Tasmania (57%) and of these 41% of students answered they hadn't been to their home country, but 16% did return home. The remaining students (35%) who had lived in Tasmania more than one year responded that they had been home at least once.

Home country visits per year (2)			
	No (%)	Yes (%)	Total (%)
1st year	**40.8**	15.8	56.6
2nd year and over	8.8	**34.6**	43.5
Total	49.6	50.4	100.0

Table 6.15 Home country visits per year (2)

Chi-Square tests also confirmed that there were significant differences in between students' year of stay and going home visits (significant at 0.001 level, value=68.456, df=1). This trend supports the assumption that many students do not return home until they have spent some time in Tasmania (at least one year).

Students were also asked how much they spent on average when they visited their home countries. The areas of expenditure in regard to their home country visits have been listed in Table 6.16.

'Going home' expenses ($)	
	Mean
Airfare	1442.7
Gifts	318.1
Other	344.4
Total	$1815.9

Table 6.16 'Going home' expenses

On average including airfare, gifts and other expenses, students spent around $1816. The majority of the expenses were airfares with average $1443 spent, and students spent around $318 buying gifts and $344 on other expenses.

As indicated by Table 6.14 and going home expenses (Table 6.16) this places around $230,632 (127 students returned home - average spending $1816 per trip) into the tourism economy. However, the expenses may not necessarily be spent within Tasmania and could include interstate and international spending.

6.3 International students' VFR profile

Students were asked how many visitors they had from their home country while studying in Tasmania and this visitor profile is discussed in this section. On the following page Table 6.17 summarises international students' VFR profile.

6.3.1 Number of visitors

Over one fifth of total respondents (20.6% or 60 students) answered they had at least one family member, friend, relative or other types of visitor (Table 6.17 & Figure 6.4). These students had a total of 306 visitors representing on **average 5 visitors per student**. It is slightly more than Australian Education International (AEI) data (Nelson, 2002) - average 4 visits from family - which was mentioned previously in Chapter Three. These extra visitors are introduced to the state via international students which feeds extra money into the local economy and potentially raising the tourist profile of the state.

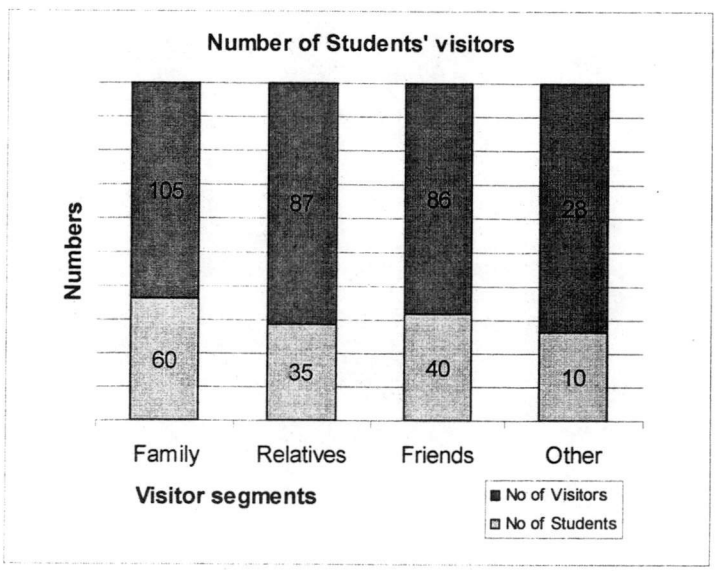


Figure 6.4 Number of students' visitors

Number of visitors

	n	*No of visitors*
Family	60	105
Relatives	35	87
Friends	40	86
Other	10	28
Total	(N=60) *	**306**

Seasonality of visitors (N=99)

		%
During their holiday	46	**46.5**
Mid semester break	19	19 2
Graduation	14	14.1
Other	11	11.1
Christmas	5	5.1
Easter	4	4.0

Activities with visitors

	n
Dining out	80
Shopping	78
Sight Seeing	71
Bush walking	23
Gambling	20
Sports	19
Fishing	15
Camping	7

n: respondents answered in more than one category

Nights of stay (Days)

	Days Total	*Mean*	*Median*[a]
Family	755	13 48	6.70
Relatives	241	7.30	6.08
Friends	280	7 78	6.42
Other	125	13 89	7
Total	**1,401**		

[a] Value calculated from the grouped data

Did you travel with your visitors?	*%*(N=98)
Yes	**82.7**
No	17.3

Places travelled with visitors (N=153)

		n	*%*
1. Greater Hobart		61	39.9
2. Around Tasmania		47	30.7
3. Went to Mainland		42	27.5
	a) VIC	26	17%
	b) NSW	12	7.8%
	c) QLD	4	2.6%
4 International		3	2.0

n: multiple answers are exist.

Accommodation * (%) (N=131)

	My Place	*Hotel*	*Motel*	*B&B*	*Backpackers*	*Other*
Family	61.8	18.2	10.9	3 6		5.5
Relatives	69.7	12.1	6 1		3.0	6 1
Friends	60.0	20.0	5.7	2.9	2.9	8.6
Other	37.5	37 5	12 5			12.5
Total	**61.83**	18.32	8 40	2.29	1 53	7.63

* Percentages and total responses (N) add up to more than 100% as multiple answers exist.

Table 6.17 International students' VFR profile

6.3.2 Timing of visitors

The students were also asked to indicate when their visitors came to visit them in Tasmania. The following Figure 6.5 presents timing of their visitors' visitation figures. Figures indicate high visitation **during the visitors' holidays** (47%), less visitation during students' mid semester break (19%) and graduation (14%). Relatively low visitation occurred during Christmas (5%) and Easter time (4%).

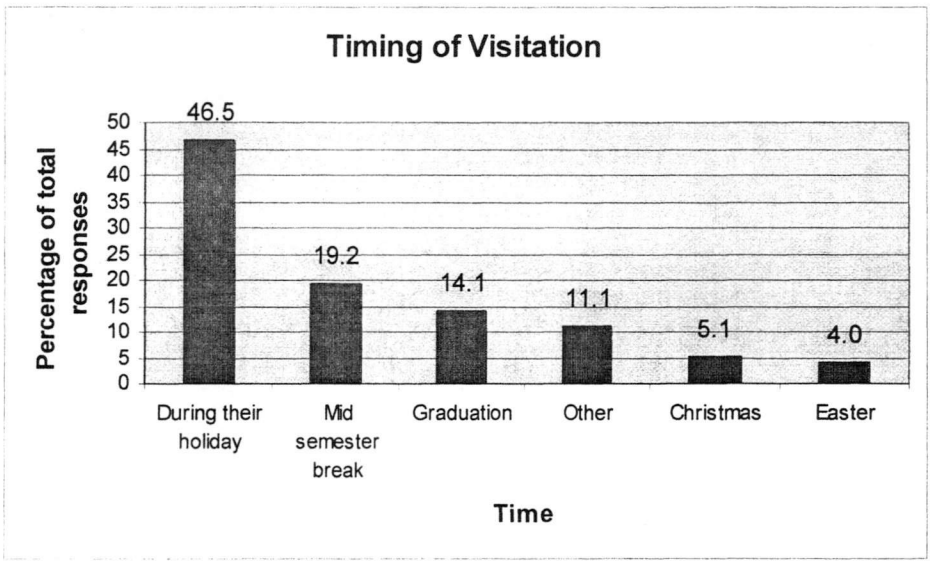


Figure 6.5 Timing of visitation

As noted in the previous paragraph, almost half of students' visitors came to Tasmania during their holiday period and this may suggest tourist opportunities. Thus these visitors would be holiday travellers who may not have come to Tasmania without these students being present in the state which is a good illustration of the 'attractor' role of UTAS.

Data are also compared to find out the relationship between students' length of stay and the time of visitors' visitation. Figure 6.6 shows that 'family members' and 'friends' most visited students in the first year of a students' stay in Tasmania. This also suggests a travel pattern when previous comments indicate most students do not return home in their first year. This section indicates that family and friends typically visit in the students' first year. Therefore a tentative pattern is that family and

relatives visit students early in their study program and students return home in the latter part of their study program.

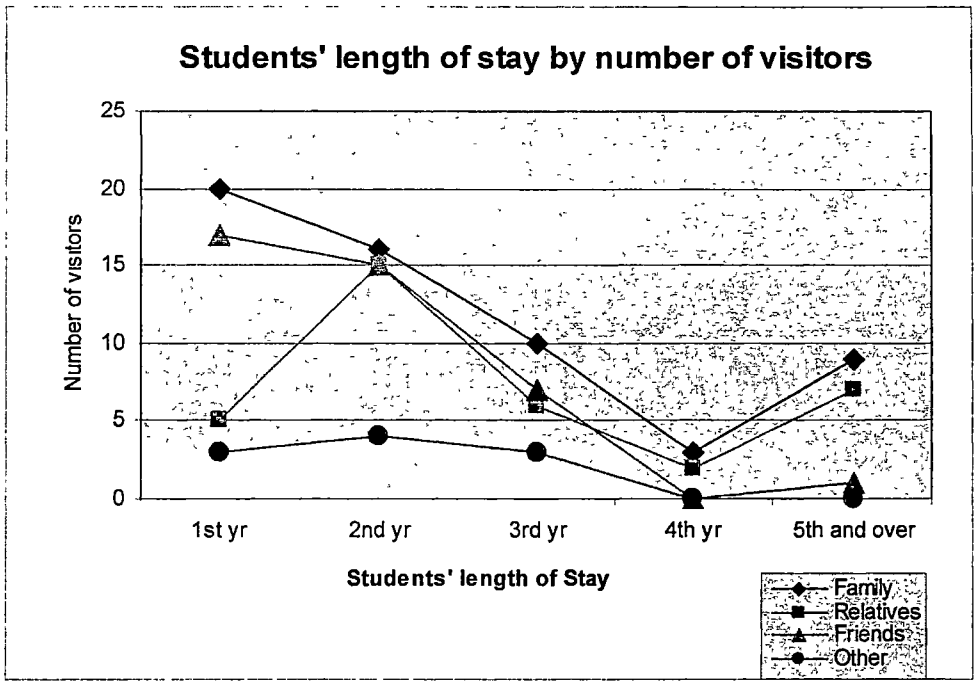


Figure 6.6 Students' visitors by students' length of stay

A further finding was that 'family' and 'friends' visits decreased in visits over time. Relatives came to the state and visited students in their second year of stay with a decrease in visits over time with an increase again in family and relatives in the 5th and subsequent years. All categories of visitors came less in the 3rd and 4th year of stay and more came in the 5th or 6th year, especially family and relatives. Although the survey result doesn't clearly show the reason why these visitors came more in the 5th plus years, it could be partly explained by the suggestion that the family members and relatives come for students' graduation or alternatively due to the fact that it was the students' last year of stay in their study program.

Overall the picture confirms that including family, relatives and friends, the most visitors came in the 2nd year of students' stay in Tasmania.

6.3.3 Visitor's activities

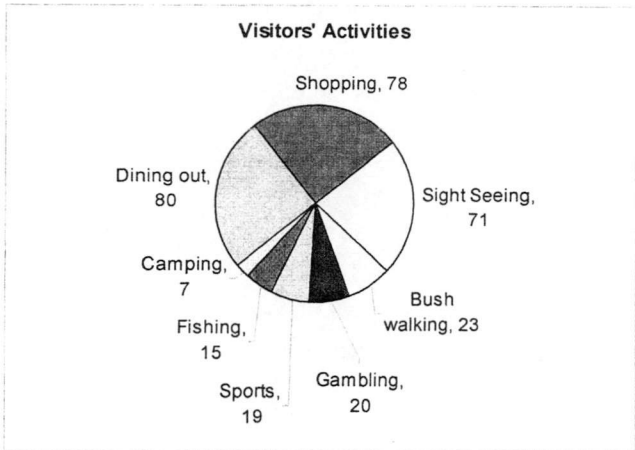


Figure 6.7 Visitors' activities

Students and their visitors' most common tourist type of activities were 'dining out' (80 responses), 'shopping' (78) and 'sight-seeing' (71). Visitors were also engaged in bushwalking (23), gambling (20), playing sports (19) and fishing (15) (Table 6.17 & Figure 6.7). Only 7 students answered that they went camping with visitors.

6.3.4 Accommodation

Students were asked to indicate their visitors' accommodation type including students' own house. The majority of students' visitors (62%) stayed with students rather than using commercial accommodation followed by hotel (18%) and motel (8%) (Table 6.17 & Figure 6.8). A minority of visitors spent their nights at B&B (2%) or backpackers (2%). The remainder of visitors (8%) used other types of commercial accommodation.

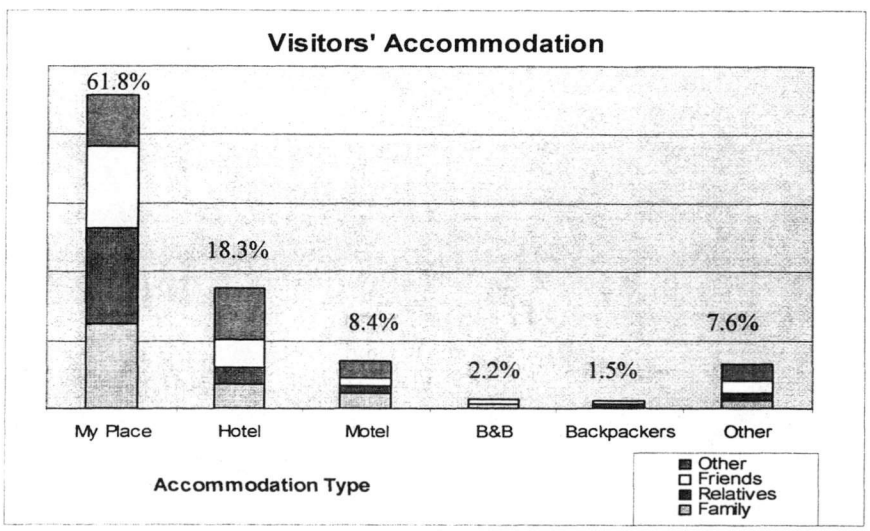


Figure 6.8 Visitors' accommodation

6.3.5 Nights of stay

Conservatively, visitors spend a total of 1401 nights taking into account an average of 5 nights stay per visitor. From Table 6.17, the mean value shows family visitors (mean=13.5) and other visitors (mean=13.9) stayed around 13 days on average. However, in reality the majority of families (median=6.7), relatives (6.08) and friends (6.4) spent approximately one week or less, and other types of visitors spent seven days.

The differences in result indicate a large number of missing values and also a few extreme values from the collected data, thus the mean value is distorted with a high average and is high due to some family members and other visitors spending up to a few months (maximum 100 days) in Tasmania.

6.3.6 Students' travel with visitors

Students who had visitors were asked whether they travelled with their visitors. As summarised in Table 6.17, the majority (83%) of respondents travelled with their visitors while only 17% answered that they didn't.

Over one quarter of respondents (40%) answered they travelled within the Greater Hobart area, 31% made a trip around Tasmania, 28% went interstate and 2% made an international trip with their visitors. Overall, just under three quarters of travel (71%) was within the state while the remaining quarter (30%) was outside Tasmania.

Victoria was the most frequently visited state (17%) by UTAS international students with visitors, followed by New South Wales (8%) and Queensland (3%). However, none of the respondents indicated they went to any other Australian states within their visitation.

6.4 International students as repeat visitors

6.4.1 Revisit intentions

Students were asked whether they would revisit Tasmania in the future. On a positive note, 77% of total students indicated that they wanted to revisit Tasmania, while 21% indicated that they do not want to come back (Table 6.18).

Future return-travel intentions		
	N	%
Yes	224	77
No	62	21
No response	5	2
Total	291	

Table 6.18 Future return-travel intentions

Of the students who indicated their intention to revisit, 81% of these respondents gave some indication of expected times for revisiting and this is listed in Table 6.19. Of these students, 37% stated that they would revisit Tasmania within a few years while others indicated after graduation (8%), after getting a job (3%), or when they retire (2%).

Expected revisit time		
	N	%
Within a few years	68	37.4
After graduation	15	8.2
In 10 years time	13	7.1
After getting a job	6	3.3
When retired	4	2.2
Other	34	18.7
Not sure	42	23.1
Total	182	

Table 6.19 Expected revisit time

To determine whether students' revisit intention differed depending on their duration of stay, cross tabulation procedures have been used. The result shown in Table 6.20 and in general students who stayed longer in the state are more likely to revisit the

state in the future. Of all students, 74% of those staying less than 6 months indicated they would return for travel and 85% of those who had been in the state more than 30 months indicated their revisit intentions.

Future revisitation		
Length of stay	*Yes (%)*	*No (%)*
f ≤ 6 mth	**74.7**	25.3
7 ≤ f≤ 12	76.9	23.1
13 ≤ f ≤ 18	72 7	27.3
19 ≤ f ≤ 24	86.2	13.8
25 ≤ f ≤ 30	78.6	21.4
f ≥ 31mth	**85.0**	15.0
Total	77.9	22.1
f: duration of respondents' previous stay		

Table 6.20 Future revisitation by students' length of stay

6.4.2 Reasons for their intentions

Respondents who answered that they would revisit, or not revisit in the future, were asked to state the reasons for their answer. The most frequent responses were determined by an open-ended question and results are presented in Table 6.21.

Respondents indicated the following attributes for their revisit intentions: 40% of those who intended to revisit stated 'wilderness and beautiful nature', 25% indicated because Tasmania is 'peaceful and relaxing atmosphere' and another 14% wanted to revisit because of their 'memory' of Tasmania and 'friends' made. Some also pointed out 'friendly and kind people' (6%), 'clean and pure environment' (5%), and mild climate (5%) as their reason for revisiting while a minority of students pointed out 'cheap and affordable' (3%), 'history and heritage' (1%) and 'flora and fauna' (1%).

Five of the nine identified attributes such as wilderness/beautiful nature, peaceful/relaxing atmosphere, clean/pure environment, mild climate and flora/fauna were related to the natural factors, thereby confirming Patterson's discussion (2000) that the natural environment is a significant factor in Tasmania as a tourist destination (Patterson, 2000).

Reasons for revisit intention			Reasons for no-revisit intention		
	N	%		N	%
1 Wilderness/beautiful nature	79	40.3	1 Boring/Too quiet	14	30.4
2. Peaceful/ Relaxing atmosphere	49	25 0	2 Had enough time while studying	12	26.1
3 Memory & Friends	28	14 3	3. Have been to most of the places	5	10 9
4. Friendly/Kind People	11	5.6	4 No entertainment	4	8.7
5. Clean/Pure Environment	11	5 6	5. Poor shopping facilities & short hours	3	6.5
6 Mild Climate	9	4 6	6. Not enough attractions	3	6.5
7. Cheap/Affordable	5	2 6	7. Cold & unpredictable weather	2	4 3
8 History/Heritage	2	1.0	8 Inconvenient Public transportation & Air services	2	4.3
9 Flora & Fauna	2	1 0	9. Other	1	2.2
Total	196	100.0		46	100.0

Table 6.21 Reasons for students' revisit and no-revisit intention

However, in his research, Patterson (2000:10) noted that "although Tasmania's natural environment appears to attract visitors to the state, it is not clear that the nature-based tourism experience motivates people to return for another visit" indicating only 50% of respondents showed any intention to return, compared with 73% of those who did not participate in nature-based tourism.

In contrast, it is interesting to note that in this study 77% of international students indicated an intention to revisit Tasmania in a few years because of Tasmania's natural appeal to them as a tourist destination.

From the qualitative analysis, the primary reasons for non-revisit were 'boring/too quiet' (30%) and 'had enough time while studying' (26%). Some stated that they 'had been to most of the places' (11%) thus they would go to different places rather than revisit Tasmania. Smaller percentages (9%) indicated 'not enough entertainment facilities', 7% pointed out 'not enough shopping facilities/short shopping hours' and another 7% suggested a need for improvement in the area of attractions. Others pointed out inconveniences in weather conditions (4%) and public transportation/air services (4%) as a problem area.

6.4.3 Students' perceptions of Tasmania

Students were asked two questions to indicate their perceptions of Tasmanian tourism attributes. For the first question, the example answers were drawn from 'BDA Wilderness Chart' (Brian Dermott & Associates Marketing Planning)[12] in the 'Tourism 21' report (Tourism Tasmania, 1999:15-16). The same four attributes as the BDA Wilderness Chart were given to students and they were requested to rank them in order where '1' stands for 'most enjoyable' and '4' stands for 'least enjoyable'.

Students' Tasmanian preferences		
	Mean	*N(%)*
1. Wilderness	1.48	70.0
2. Lifestyle	2 67	12.7
3. Food/Wine	2.76	12.4
4. History	2.93	7.8

N (%) = those who indicated '1'

Table 6.22 Students' Tasmanian preferences

As shown in Table 6.22, 'wilderness' was indicated by 70% of students as the most enjoyable attribute. 'Lifestyle' was the 2nd most enjoyable attribute with 13% of students indicating it followed by 'food and wine' as the third attribute indicated by a similar amount of students (12%). 'History' was the least enjoyable attribute with only 8% of students rating it.

The Australian result from 'BDA Wilderness Chart' (Tourism Tasmania, 1999:16) was slightly different to the student results. 'Wilderness' has top appeal for both the Australian and international student sample. However, international students' second preference was 'lifestyle' and third was 'food and wine' while Australians' second preference was 'food and wine' followed by 'lifestyle'. 'History' was the least preferred attribute for both Australian interstate travellers and international students.

Overall, Tasmania's natural attribute is the most attractive factor to the international

[12] BDA Wilderness Chart (Appendix 6.3) is a part of results from the 'Holiday Tracking Study (HTS)'. HTS is a section of a single source omnibus (The Roy Morgan Tracking Study) which includes track references and intentions of **Australians** to travel (survey samples 15,000 Australians each year) (Tourism Tasmania, 1999).

student group. This can also reinforce the result of students' reasons for revisit intention (Table 6.21) and also recommendations for Tasmania tabulated in Table 6.23. To confirm the preferences of international students, students were also asked to give comments on what they would recommend to others about Tasmania as an open-ended question. The attributes which were mentioned more than twice are counted and grouped into 5 different attributes: Nature, culture, activities, food/wine and other.

	Nature	N	Culture	N	Activities	N	Food/Wind	N	Other	N
1	**Natural beauty**	**37**	**Relaxation/rest**	**23**	**Outdoor**	**6**	**Wine**	**7**	**Study**	**7**
2	**Scenery/ sight seeing**	**27**	**People**	**22**	Bushwalking	4	Food	4	Cost	4
3	**Wilderness**	**20**	**Peace**	**19**	Driving	4	Seafood	3	Short Visit	2
4	**Air**	**11**	History	9	Experience	2	Restaurants	2		
5	Mountain	10	Life style	8	Fishing	2				
6	Parks	9	Salamanca Market	5						
7	Environment	8	Culture	4						
8	Beaches	7	Events	2						
9	Weather	6	Heritage	2						
10	Coast	4								
11	Farm	4								
12	Port Arthur	3								
13	Summer	3								
14	Bay	3								
15	Forest	2								
16	Island	3								
17	Stanley	2								
18	Water	2								
19	Wildlife Park	2								
20	Waterfall	2								
21	Caves	2								
n		**167**		**94**		**18**		**16**		**13**

Table 6.23 Students' recommendations about Tasmania

As shown in Table 6.23, 'natural attributes' was ranked as the most favourable item about travel in Tasmania and it was perceived that Tasmania has a high quality of natural beauty. Students indicated a high recommendation with natural attributes (21 items with a total of 167 responses) with natural beauty, scenery/sight seeing, wilderness and clean fresh air etc. Cultural attributes were perceived as the next

favourable items (94 responses) with relaxation/rest, kind people and peaceful atmosphere.

Outdoor activities and experiences was the third attribute which students recommended. However, these outdoor activities such as bushwalking, driving and fishing fundamentally relate to nature based attributes. Thus it reinforces the students' perceptions of nature as strength for Tasmania as a tourist destination. Some also suggested food and wine items (16 responses) and a small number suggested study, cheap affordable cost and relatively short trip to Tasmania.

6.5 Summary and conclusion

The overall objective of this chapter has been to determine the value of the international student group as a prospective niche segment by examining the value of induced visitors by a university. The chapter also provides travel characteristics of international students as being tourists including their VFR profile.

In summary, the survey analysis suggested that international students to UTAS mainly came from Asian countries (91%), overwhelmingly they are young with 73% of respondents between 20-25 years of age and they spend on average 3 years in Tasmania for their study.

An overview of international students' travel profile in Tasmania suggested that:

- the majority of international students (75%) travelled on average twice or more per year while staying in Tasmania, spending an average of $100-300 for each trip;

- just under two thirds (63%) of international students travelled in Tasmania, over a third (35%) of students made an interstate trip, and 23% went overseas during their stay in Tasmania;

- students usually travelled during the university holidays (75%) with friends as a group (83%), mainly used hire cars (51%) or own vehicles (37%) and preferred self-organised travel (75%);

- the usual average length of trip was 1-2 days (33%) or 3-5 days (29%);

- the most common type of commercial accommodation was backpackers (36%), motel (29%) and cabin/shack (23%);

- on average one international student had 5 visitors;

- students' visitors came to Tasmania mainly for their holiday (47%) and the majority of them stayed in a private accommodation (62%) for one week or less;

- the majority (83%) of students had travelled with their visitors. Travel was mainly centred on the greater Hobart area (40%), but students and visitors also went around Tasmania (31%) and interstate (28%);

- most students (77%) intended to revisit the state in a few years time; and

- most international students perceived Tasmania as a natural state with wilderness (40%) and peaceful/relaxing atmosphere (25%).

Overall the results shown above indicate a number of interesting findings. International students' visitors are overwhelmingly Asian. Malaysia, Thailand, Singapore, Korea and Japan seem to be the major markets (Appendix 6.2).

Students preferred self-organised drive tours with flexibility and freedom, as a majority of students used hire cars or their own vehicles and therefore could set their own itinerary rather than using travel agencies. Also these students were most likely to have stayed in backpackers or motel accommodation. Thus, proper products should be developed to meets this need.

Outdoor adventure activities need to be developed as the result showed that a small numbers of students have experiences of outdoor adventure activities yet showed very high satisfaction when experiencing them.

Natural attributes are seen as a major attraction and must be a key factor for product development for this segment.

Lack of recreational entertainment, shopping facilities and air service seem major obstacles in targeting this student group.

International students are an important 'pull factor' for visits from families, relatives and friends accounting for 5 visitors per student on average.

International students' visitors came mainly for their holidays and a majority (71% of students' responses) travelled within the state with other students. Some (28% of students' responses) also travelled to other states in Australia such as VIC, NSW and QLD. The students' visitors stayed mainly at students' private accommodation, thus it may hinder these visitors being recognised as holiday tourists. However, these visitors would not come to the destination without the students' presence there.

The majority of international students are seen as repeat visitors within a few years and many will attract their friends and relatives at that time.

Following on from this, the next chapter contains the final stage of this thesis and discusses the implications of the findings, including how the attractor element should be understood by the tourism industry.

CHAPTER SEVEN DISCUSSION AND CONCLUSION

7.1 Introduction

This chapter provides a final discussion and conclusions, which build upon the findings of this study. The major issues discussed in this study were: the presence of an attractor element in the TSM; the presence of the traditional barriers between industries which prevent understanding of an attractor element; the education industry as an attractor for the tourism industry; the significance of a university as an attractor and its induced visitors; and the tourism value of the international student segment.

Based on these issues, the discussion is divided into three sections: theoretical implications, implications for the tourism industry and implications for Tasmania. Then the chapter will conclude by suggesting future research requirements that become evident as a result of this study.

7.2 Discussion

7.2.1 Theoretical implications

This study sought to make a contribution to the theoretical progress in tourism system studies by introducing a type of TSM which clarifies an attractor element. The application of this model provides relevance, particularly to tourism industry marketers. In particular the notion of 'induced visitors by an attractor' provides an alternative way of thinking and implementation for the development of the market.

In Chapter Two, an attractor was defined as 'a non-tourism industry feature whose core role is non-tourism focused and which generates movements of people to the given destination'. The given theoretical framework (Figure 2.17) illustrated the

mutual benefit and interrelationship between the tourism industry, the market and an attractor in its market sharing through indirect inter-linkage.

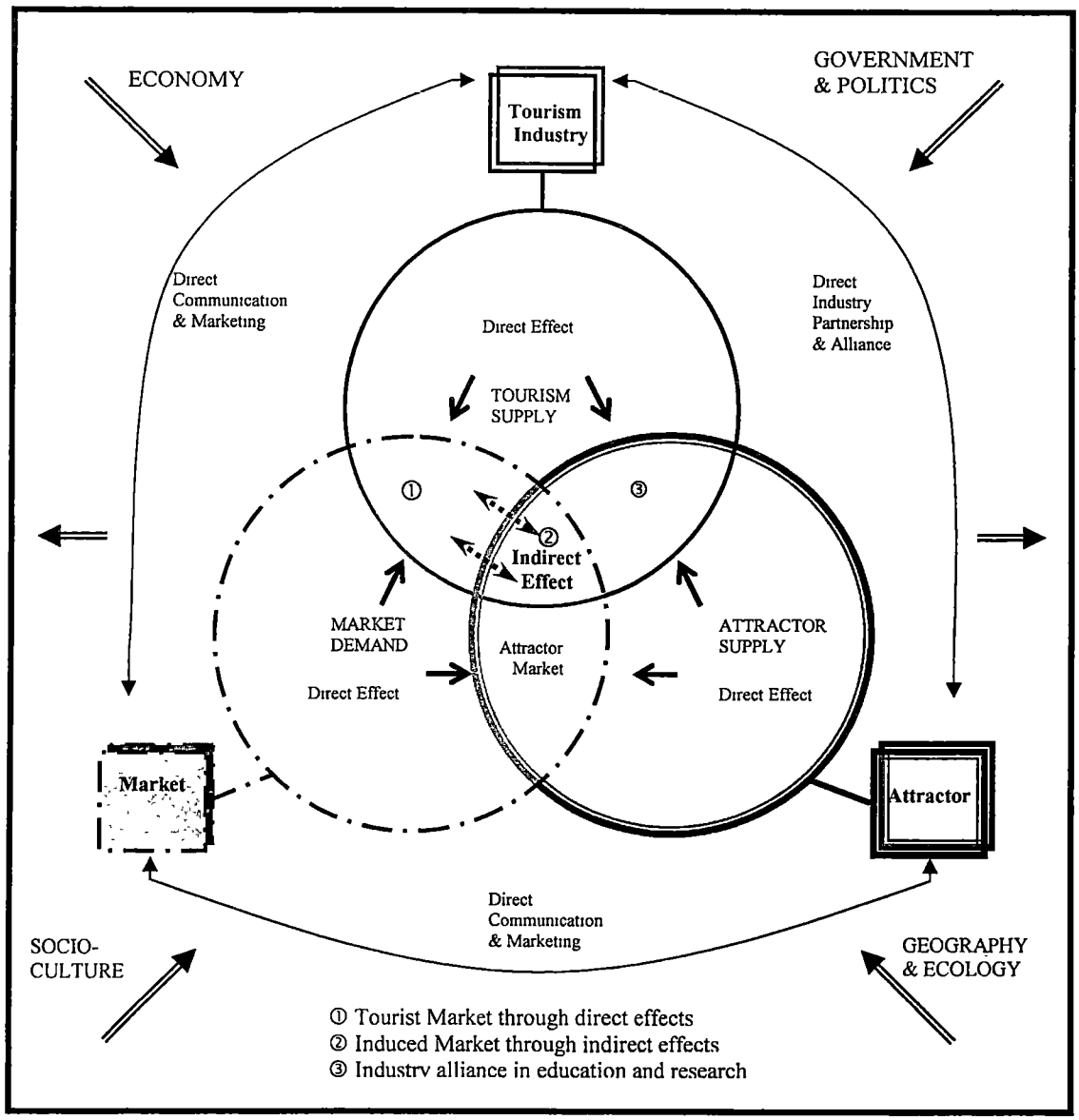


Figure 2.17 Tourism Industry, Attractor & Market Interaction within a Tourism System

The theoretical framework (Figure 2.17 in Chapter Two) set out a paradigm of an attractor within a TSM which illustrated the interrelationship between the tourism industry, the market and an attractor. The focus of the conceptualisation was the indirect mutual relationship in economic value resulting from the market sharing between the tourism industry and the attractor.

To test this model, the University of Tasmania was chosen as an instrumental case to be a prominent attractor to tourism. The research results clearly showed that the university attracted a reasonable amount of visitors to the destination: in the academic year 2001, UTAS attracted over 4,000 visitors to the state. The visitors were categorised into six categories: 'students' (51.32% of total), 'conference/seminar attendees' (37.65%), 'short course participants' (6%), 'academic visitors' (3%), 'business travellers' (2%) and a minority of 'government officials' (0.1%). Of these segments, the international student group was chosen to assess the tourism value of visitors to a university.

The result showed the strong tourism value in the international student segment. Specifically it found that the majority of international students (75%) travelled while staying in Tasmania; mainly used hire cars (51%); the common types of commercial accommodation were backpackers (36%), motel (29%) and cabin/shack (23%); over a third (35%) of students made an interstate trip, and 23% went overseas during their stay in Tasmania; on average one international student had 5 visitors; students' visitors came to Tasmania mainly for their holiday (47%) and stayed for one week or less; the majority (83%) of students travelled with their visitors; 77% of students intended to revisit the state within a few years.

Consequently, by illustrating the tourism profile of international students at UTAS, this study demonstrated the paradigm of the refined TSM (Figure 2.17). It was based upon the assumption that the tourism industry works with an attractor in mutual relationships sharing their market. In terms of sharing their market, the two different industries are invisibly connected and are contributing to each other. If the invisible area (② area in Figure 2.17) can be clearly understood by the tourism industry and implemented in the process of the tourist market development, the resulting expansion in the market size and impact will affect the tourism industry positively. This means that the tourism industry's perception of their market should shift from the limited traditional deliberation to recognising a more collaborative and mutual connection with additional industry sectors.

7.2.2 Implications for the tourism industry

This study intended to confirm the education industry as a prominent tourism attractor by examining visitation to the university within the larger context of tourism visitation to a destination. The result demonstrated that there were more than 4000 visitors to the university from outside the state in one year (2001). Considering it is very conservatively estimated data, this study certainly indicates that a university is a prominent tourism attractor. Consequently, given the rising profile of the education market in Australia (Discussed in Chapter Three) and potential mutual relationships with the tourism industry future tourism market development strategies should consider partnerships between the education and the tourism industries in marketing and product development. These findings also support the implication of a '*new possibility of strategic alliance in joint funding between Australian universities and tourism commissions*' proposed by Leiper (1998) and suggest the issue of industry awareness, relating to the wider concept of tourism as a system.

Other similar examples can be found in the New Zealand case where Tourism New Zealand has developed consultation and collaboration between Trade NZ, Education NZ and Tourism New Zealand and has developed educational tourism products (Tourism News, 2001). Tourism New Zealand (2001:11) notes the importance of educational products for the tourism market and suggests proper collaboration between the tourism and the education industry sectors in order to take advantage of the marketing opportunities.

Recently, in Australia the tourism industry's interest has risen in the education sector and can be found in a recent press release by the Australian Tourist Commission (ATC). The ATC has started to work closely in the educational tourism industry with Australia Education International (AEI), English Australia, Qantas Airways, Austrade and IDP Education Australia in a strategic partnership in marketing activities to attract educational visitors from overseas (ATC, 2003).

In Chapter Five, three given examples of conferences (ESCAPE Conference, CRC Wildlife Tourism Conference and Island of Vanishment Conference) also reinforced

the strong potential in joint partnerships between a university and the tourism organisation/agency. From the UTAS case these three conferences' simple data showed the universities' ability to host conferences and attract international, interstate and local visitors to the state or to the region, thus demonstrating the role of the university as an attractor.

It was also found that 'student' and 'academic' segments may induce VFR segments because their stays are significantly longer than other university visitor groups. Moreover these segments may provide more balanced tourism market development which is less depended upon seasonality factors.

This study also demonstrates that among university visitors, the international student segment has a strong tourism value as a potential niche market (Chapter Six). The study examined the three different roles which international students have within any given destination: first, as long term visitors for educational purposes and attracted by the university; second, as an alternative tourist with recreational purposes; and third, as an additional attractor for the VFR (Visiting Friends and Relatives) segment.

However, the overall findings suggested a lack of UTAS's and tourism organisations' visitor information in relation to university events. They illustrated that there is still a lack of awareness both in the tourism and the education industries that they contribute to each other and share their markets. There is a need for a more structured data collection system in order to quantify the complex assembly of data sets on events and visitors to the education industry. Specifically conferences, seminars, sports games, art events, socio-cultural events and other diplomatic relationships should be considered as important sources of information. This will also enable a further detailed individual survey to ask for comprehensive information on the visitors and visitors' VFR segment. Marketers from both industries need to be properly informed and need to broaden their views about their market and product concept through constant monitoring and evaluation of these visitors to the education industry.

7.2.3 Implications for Tasmania

In relation to the international student segment, a number of issues arose for the Tasmanian tourism industry.

The results showed that nearly three quarters of students were in the age group of 20-25 (73%), and the majority (91%) of respondents came from 14 different Asian countries. This age group (under 26) student group can be categorised as the 'youth and student travel' market (Bywater, 1993:35). This gives strong potential for Tasmania to attract Asian youth segment in developing a niche market.

The survey results indicated that the majority of students (75%) preferred to organise their trip themselves while 21% of students used a travel agency. This may indicate the need for a more diverse range of organised travel products which are designed particularly for meeting student requirements.

The results also showed that students prefer self-organised driving tours in groups. This can be combined with students' recommendations on natural attributes, such as 'scenery' and 'sight-seeing', which may be useful information for developing a tourism product and promotional materials.

Students' repeat visits are important for the future tourism market. There were 196 positive revisit intentions and only 46 negative intentions. From a tourism perspective this is an endorsement of Tasmania both as a primary location with a local revisit appeal. However, one indicates that "the intention to return is always higher than the actual return visit" (Tourism Tasmania, 2002a). Therefore, for a number of reasons, further research is required into the factors that may affect actual return visits, with emphasis placed upon certain destination attributes and to establish proper marketing strategies.

In this study, the result showed that students were most attracted to the natural attributes of Tasmania; on the other hand the lack of entertainment and shopping facilities were also pointed out as a problem area. Thus, the natural attributes should

be developed for facilitating these tourists' compound needs. Thus, the strong interest in both the natural and recreational attributes should be harmonised to target this international student segment.

Consequently, the need for product development of outdoor adventure activities is a related issue which needs to be properly developed and specialised for the international student group in terms of combining natural attributes and recreational entertainment attributes. More active advertising and promotion strategies need to be developed as the results showed (Chapter Six) that only a small number of students experienced outdoor adventure activities however their satisfaction was high (such as 4WD tour, abseiling, kayaking, jet boat, climbing). There could be a potential niche market for these noted activities for local businesses catering for this small but seemingly enthusiastic student cohort.

Conversely, another issue to consider is how differently people perceive 'the natural beauty or attributes' between different demographic variables (eg, different cultures and nationalities - Western, European and Asian). Furthermore, the ultimate challenges are to find out how product development can be achieved in conjunction with the destination sustainability and area development in considering tourists' multiple needs.

7.3 Conclusion

In Summary, this study has assisted in filling a gap in the literature by clarifying an important element of an attractor that so far has been little discussed in tourism system and model studies. The study was exploratory in nature and consisted of four stages. The second and third stages were the main context of this study.

In the second stage of this study, the term 'attractor' was defined and clarified from the term 'attraction' with a re-conceptualised TSM in response to the fundamental aim (Chapter Two). Drawing on the evidence provided by the study, the chapter challenged current thinking regarding the perceptions of attractors by paying particular attention to the systemic interrelationships within tourism. Thus, it is hoped that the understanding of the attractor concept within a TSM will make a significant contribution to the development of the tourism market in understanding its visitors and also developing an effective partnership with other industry sectors. More specifically, this study examined the strong potential between the tourism and the education industries leading to the secondary purpose of this study (discussed in Chapter Three). Tourism marketers as well as education industry marketers have a mutual interest in putting the relationships into effect in order to promote a destination for their shared market. Hence, in answering these objectives the theoretical framework was achieved for stage two.

In the third stage of this study, two empirical surveys were conducted on the basis of a theoretical TSM developed in stage two. The surveys sought to investigate whether the education industry would perform an attractor role for tourism by generating visitations to the given destination. The first survey was a quantitative survey of visitors to a university in order to test the role of the university as an attractor and also to assess the availability of secondary data through the university (discussed in Chapter Five). The surveys demonstrated that a university attracts a substantial number of visitors that are not usually recognised by the tourism industry. However, the deficiency in the visitor information and data availability showed that there are still deficiencies in the industry's understanding of a university's attractor role and its induced visitors' tourism value.

During stage three, further insight was also given to a key segment of visitors to a university, examining international students' travel characteristics; international students' VFR profile; and international students' tourism value in regard to their return travel intentions and their perceptions of the destination (Chapter Six). Drawing on the evidence provided by this study, it determined the value of the international student group as a prospective niche segment, also proving the tourism value of the induced visitors by an attractor, an educational institution.

To conclude, this thesis represents a first step towards quantifying visitors to educational institutions and assessing their tourism value using the theory and model testing approach at one university in Tasmania, Australia. The study illustrated that if the tourism industry seeks to maximise the opportunity offered by attractors, it must give more attention to the importance of induced visitors through constant monitoring and evaluation.

7.4 Further research

Further research with other types of attractors, including holistic and competitive non-tourism features whose rationale lies best in assisting the tourism industry with shared goals, would also enhance the understanding of the attractor elements within the TSM. In some destinations a different attractor will play a more important role than the education industry does.

Nevertheless, it is clear that the tourism and the education industries sectors' cooperation is crucial to further develop their role in tourism. In terms of visitors to the university, this study found that collecting relevant information and data were not as easy as initially anticipated. Further studies are required to quantify accurate visitor numbers, segments and their travel impact in order to properly inform the tourism industry.

This study examined only the international student segment, however additional studies are needed about the other valuable segments, such as conference attendees, social/cultural events participants, short course participants, academics and business travellers in terms of visitor numbers, travel characteristics, travel impacts and the possibilities of developing this market in conjunction with the education industry.

Moreover, further research with a larger sample size will better identify the market and its economic value of these visitors. Moreover, holistic and detailed strategies for joint marketing and product development opportunities between education and tourism industries are needed in considering the value of visitors to the education industry. In particular, the international education, the meeting/convention and the Asian youth tourist segments could all be targeted in order to increase visitation to Australia.

APPENDICES

Appendix 3.1 University impact studies

1. Name of University	Dalhousie University	State University of New York	University of Oregon	Princeton University
2. Year	1989/90	1992-93	1995/96	1997-98
3. Total visitors estimated		1.2 million (multiplier of 1.64 used)		400,000
4. Total expenditure	$508,000 (indirect + spin off)	$50 million	$6 million	
5. Average expenses	$200 per day			
6. Nights of Stay				
7. Methodology/ Data used	1) 5 faculties limited and incomplete data (Number of out-of-province visitors to Uni) 2) Tourism expenditure data - attribute per diem expenditure to short-term visitors 3) Household expenditure pattern to long term visitors (more than 1 month)			
8. Identified visitor segments	Students' parents Scientists Scholars Professional Athletes	1)Family members and friends of students 2)Audiences for conferences, workshops, seminars, sports, arts and special events		
9. Identified components	Conferences Sports games		Meetings Conventions	Athletic Events (150,000 -visitors) Concert (100,000) Art Museum: (69,000) Conference: (30,000) Tours : (28,610) Library : (22,000) Alumni Council: (14,000) Commencement: (10,000) School program: (5,000) Laboratory (2,000)

10.Student impact	Calculated separately	1) Calculated separately 2) International student impact considered for out-of-state dollars (17,769 students; 8,078 students from 149 foreign countries), total spending $239 million and attracting over $983 million out-of-state sources	Calculated separately	Considered but not calculated
11. Note		1) Taxes paid by visitors were considered 2) Out-of-state & Foreign students' dollar value were considered		

1. Name of University	Augustana University College	University of Alaska	Arizona State University	University of Saskatchewan
2. Year	1998-99	1998	1999	1998/99
3. Total visitors estimated	Hosted by students, staff & conference 8,266			
4. Total expenditure	$1,266,000 (both include direct+indirect)	$3 Million	$50 million in sale 870 Jobs (Multiplier effects are added in)	$10.7 million on local accommodation, food, travel
5. Average expenses	1) Staff & Students: $27 – $32 per day 2) Conference attendees:$15.84 per day		Total $24 million on locally produced goods and services	
6.Nights of Stay	1) average 2days 2) total 8,446 bed nights		Total spent more than 200,000 visitor days	
7. Methodology/ Data used	Survey employees and students		Combining estimates by different Uni departments & convention and Visitor Bureau	
8.Identified visitor segments			Students' parents & friends, Prospective students and families, Athletes, Program participants	1) Attendance at University activities 2) Students' visitors
9.Identified components		Uni commencement, reunion, conferences, festivals, athletic events, meetings, training/events	Athletes Events Other programs	Conference Concert Museum Reunion Sports Events Other Special Events
10.Student impact	Calculated separately	Calculated separately	Calculated separately	Calculated separately
11. Note				1.9% of Visitor spending to total direct impact of University (Total Uni impact is 14% of City Income)

1. Name of University	University of Waterloo	Trent University	University of Wisconsin
2. Year	1999/2000	1999/2000	2002
3. Total visitors estimated	358,681	14,000	
4. Total expenditure	$35 million	Total $2.2 million	$1,712,603,580 (multiplier added in)
5.Average expenses			
6. Nights of Stay			
7. Methodology/ Data used	1)Community relations office and community resource guide visitor data 2)previous economic impact studies methods and assumptions 3)Historic figures adjusted with an enrolment or graduate increase factor		
8. Identified visitor segments	1)Elementary/secondary students & parents (Average one night/$6.05 per day total $340,863 spent) 2) Business visitors (86% day trip, 14% one night/day visitor $74.12, over-night visitor spent $125.18 per day, total $1,007,222 spent) 3)Event goers and Facility users (Total 412,958, 25% from outside, spent $74.12 per day) 4)Conference attendees (11,350 persons spent $2,841,586 based on $125.18 per day 5)Alumni (23,242 overnight visitors, spent $5,818,867 based on $125.18 per day) 6)Casual visitors (154,312 visitors spent $12,881,849 based on $48.22 per day)	1) Conference Participants: 10,145 visitors @ $120 2) Head of the Trent visitors: 2,000 visitors @$120 3) Convocation 2,000 visitors @$120	
9. Identified components	Spin-off Companies, Sporting events Theatrical Music or Arts Presentations, Conferences , Public Lectures		
10.Student impact	1)Calculated separately (53% from rest of Ontario & 27% from overseas)	Calculated separately	Calculated separately
11. Note	Comment on casual visitors: most difficult category to tabulate, as no register on campus (staff, students visitors)-calculation based on assumptions from Meyer (1990), McCready (1985), Kitchener-Waterloo Tourism and other		

1. Name of University	University of British Columbia	University of Edinburgh	University of Connecticut
2. Year	2002	2002	2002
3. Total visitors estimated	35,000 visitors annually (registered figure only through its conference centre)	20,000	165,949 net new visitors
4. Total expenditure	1) $135 million (multiplier applied) 2) 4,030 jobs		$10 million net new spending in the region
5. Average expenses			1) day tripper staying with family & friends: $60 per day 2) staying at Hotel Motel : $150 per day
6. Nights of Stay			
7. Methodology/ Data used	1) Based on very conservative estimate 2) Used University Conference Centre & **Tourism Vancouver** estimates		1)Athletic department's annual ticket sales revenue 2)Visitor centre survey 3)Arts centre attendees data 4)Health Centre visitor data
8. Identified visitor segments	1) Conference delegates & participants 2) Students		
9. Identified components		Conference participants	1)Athletic teams 2)Theatres 3)Fine Arts Department 4)Community Events 5)Health Centre
10. Student impact	Calculated separately	1) Calculated separately 2) International student impact considered in brief total spending £20 million per year	Calculated separately
11. Note			Median party size, median days of stay, and types of accommodation used

Appendix 3.2 The contribution of the University of Tasmania to the Tasmanian economy

(Percentage rates of change unless otherwise specified)

	Operating Budget		Investment Budget		Student Expenditure		Total	
	No fiscal reaction (1)	State Gvnt balances budget (2)	No fiscal reaction (3)	State Gvnt balances budget (4)	No fiscal reaction (5)	state Gvnt balances budget (6)	No fiscal reaction (7)	State Gvnt balances budget (8)
Real gross state product	(1.82)	(2.32)	(0.14)	(0.16)	(0.6)	(0.85)	(2.55)	(3.33)
Employment	(2.4)	(2.87)	(0 12)	(0.14)	(0.44)	(0.68)	(2.96)	(3.69)
Real consumption expenditure	(1.2)	(1.58)	(0.07)	(0.08)	(1.15)	(1.35)	(2.42)	(3.01)
State Gvnt borrowing requirement ($m)[a]	10.21	-	0.43	-	5.31	-	16.18	-
Real investment spending	(1.33)	(1.89)	(1.25)	(1.28)	(0.88)	(1.17)	(3.46)	(4.34)
Tasmanian consumer price index	(0.05)	0.07	0 01	(0.00)	(0.02)	0.05	(0.06)	0.12
Tasmanian export volumes	0.48	(1.08)	0.01	(0.06)	0.16	(0.65)	0.65	(1.79)

[a] $ million. Positive numbers increase in the State government budget deficit.
Gvnt : Government

Source: (UTAS, 1997)

Appendix 3.3 Overview of UTAS students and staff 2002

Students 2002

Student Enrolments	Enrolments (No.)					
	Launceston	Hobart	Off-shore	NW Centre	Other	Total
Total	4641	8601	193	359	178	13972
Commencing	2048	3386	54	226	37	5751
Women	2783	4513	127	230	91	7744
Men	1858	4088	66	129	87	6228
Full-time	3761	6607	76	211	56	10711
Part-time	880	1994	117	148	122	3261
Full-fee Overseas	246	691	193	1	16	1147
Level of Course	4641	8601	193	359	178	13972
Higher Degree research	152	707	0	3	73	935
Higher Degree coursework	113	174	0	1	30	318
Other Postgraduate	112	328	0	0	9	449
Undergraduate	4004	7118	192	273	66	11653
Non-award, Enabling	260	274	1	82	0	617

NB "Other" includes isolated and interstate students. "Off-Shore" is Malaysian and Singapore based load.
Student numbers are based on the campus where the student is enrolled, whereas load is based on student's actual study centre for the particular unit.

(Source: UTAS Statistics website)

Staff 2002

Staff FTE	Full-Time Equivalent (FTE) Launceston	Hobart	NW Centre	Un-specified	Total
Total	415.6	1055.2	31.9	248.5	1751.2
Casual (actual for 2001) [1]				248.5	248.5
Total FTE (Excl. casual)	415.6	1055.2	31.9		1502.7
Academic Support	52.2	133.6	1.8		187.6
General Services	96.9	167.6	7.6		272.1
CRC	0.0	41.7	0.0		41.7
Academic Activities	266.4	712.4	22.5		1001.3
Teaching & Research	152.3	333.0	2.2		487.5
Research Only	16.8	132.6	7.0		156.4
General Support staff	97.3	246.8	13.3		357.4
Faculty Total (Excl. casual)	266.4	712.4	22.5		1001.3
Arts	48.9	123.7	0.0		172.6
Commerce & Law	16.8	56.8	0.0		73.6
Education	53.8	20.1	0.0		73.9
Health Sciences	61.5	143.9	4.8		210.1
Law	0.0	21.5	0.0		21.5
Science & Engineering.	85.4	346.5	17.7		449.6

[1] Casual Staff numbers are not available.

(Source: UTAS Statistics website)

Appendix 3.4 The distribution of the total of International students at UTAS (2002)

(Source: UTAS Statistics website)

Country of origin	Total	% of Total
Asia	**948**	**82.65%**
Malaysia	483	42.11%
Singapore	219	19.09%
Viet Nam	45	3.92%
Thailand	41	3.57%
China (excludes SARs and Taiwan	31	2.70%
Japan	28	2.44%
Hong Kong (SAR of China)	25	2.18%
Korea, Republic of (South)	22	1.92%
Indonesia	17	1.48%
Taiwan (Province of China)	12	1.05%
India	9	0.78%
Sri Lanka	4	0.35%
Pakistan	2	0.17%
Laos	1	0.09%
Philippines	1	0.09%
Macau	1	0.09%
Bangladesh	1	0.09%
Afghanistan	1	0.09%
Americas	**102**	**8.89%**
United States of America	76	6.63%
Canada	16	1.39%
Chile	5	0.44%
Argentina	2	0.17%
Brazil	2	0.17%
Colombia	1	0.09%
Europe	**49**	**4.27%**
United Kingdom	9	0.78%
Sweden	8	0.70%
Germany	5	0.44%
England	4	0.35%
Austria	3	0.26%
Switzerland	3	0.26%
Norway	3	0.26%
Denmark	2	0.17%
Italy	2	0.17%
Spain	2	0.17%

Russian Federation	2	0.17%
France	1	0.09%
Netherlands	1	0.09%
Finland	1	0.09%
Czech Republic	1	0.09%
Hungary	1	0.09%
Africa	**26**	**2.27%**
Botswana	7	0.61%
South Africa	6	0.52%
Kenya	5	0.44%
Zimbabwe	4	0.35%
Nigeria	1	0.09%
Zambia	1	0.09%
Middle East	**7**	**0.61%**
Iran	4	0.35%
Israel	2	0.17%
United Arab Emirates	1	0.09%
Pacific	**5**	**0.44%**
Fiji	3	0.26%
Papua New Guinea	1	0.09%
Samoa	1	0.09%
North Africa	**1**	**0.09%**
Egypt	1	0.09%
Unknown	**9**	**0.78%**
Total	1,147	100.00%

* SAR (Special Administrative Region)

(Source: UTAS Statistics website)

Appendix 3.5 Tasmanian visitors survey results

– June 2003 (Source: Tourism Tasmania Statistics 2003)

TOTAL VISITORS TO TASMANIA FROM ALL SOURCES

	YTD JUNE 02	YTD JUNE 03	% Change
Visitors to Tasmania			
Scheduled air and sea visitors	519,900	652,200	25.5
Cruise ship visitors	48,100	47,600	-1.0
Navy ship visitors	7,300	2,500	-66.1
Singapore charter flight visitors	500	800	60.0
	-	-	
Total visitors to Tasmania	**575,800**	**703,100**	**22.1**

The following tables present data from scheduled air and sea transport visitors only

YEAR TO DATE - JUNE 2002 & 2003

	YTD JUNE 02	YTD JUNE 03	% Change
Visitors			
Day Visitors	10,200	13,500	31.9
Overnight Visitors	509,700	638,700	25 3
Total Visitors (including day visitors)	519,900	652,200	25 5
Nights			
Total Nights	5 126 800	6,413 200	25 1
Average Length of Stay	9 9	9.8	
Expenditure ($'000s)			
All Expenditure	$712 000	$945.300	32 8
Australia Expenditure	$561,400	$776,800	38.4
International Expenditure	$150 200	$168.400	12 1
No response	$400	$0	-96.3
Origin - visitors			
Australia	422,800	543,600	28.6
International	96,700	108,600	12 3
No response	500	-	-96 9
Mode of departure			
Air	409,000 (79%)	473,200 (73%)	15 7
Sea	110,900 (21%)	179,000 (27%)	61 4
Purpose - visitors			
Visiting friends/relatives	120,500	147,400	22.4
Holiday	259,500	343,100	32.2
Convention/conference/seminar	18,100	22,800	26.0
Business	90,900	110,300	21 3
Major event/festival	8,400	11,000	31 1
Other	9,900	14,600	47 5
No response	12,700	3,100	-75.5
Holiday Nights	2.627.900	3.325.300	26 5
Average Length of Stay	10 1	9 7	0 0

VISITORS	ALL VISITORS			HOLIDAY VISITORS		
	YTD JUNE 02	YTD JUNE 03	% Change	YTD JUNE 02	TD JUNE 03	% Change
Victoria	197,900	255,900	29.3	86,900	122,900	41.3
N S W	94,200	136,400	44.7	46,900	71,200	51.9
Queensland	49,100	62,200	26.6	22,700	29,500	30.0
South Australia	24,200	31,900	32.1	12,200	14,300	17.0
Western Australia	23,400	31,900	36.2	10,400	16,800	60.5
A C T	15,000	16,600	10.6	6,000	6,900	15.3
N T	2,800	3,900	37.2	800	1,600	92.1
Australia - no state given	16,100	4,800	70.0	1,700	700	-55.0
Australia	**422,800**	**543,600**	**28.6**	**187,600**	**263,800**	**40.6**
United Kingdom	24,300	31,200	28.6	16,500	22,300	34.9
Total Continental Europe	19,500	21,100	8.6	15,900	17,400	9.6
Japan	5,900	6,900	15.8	5,000	6,400	27.8
Other Asia	10,300	10,900	5.9	8,100	6,000	-26.0
New Zealand	10,900	7,400	-32.4	6,200	3,200	-49.0
North America	22,600	27,400	21.3	18,100	22,400	23.8
Other Overseas	3,200	3,600	15.2	1,600	1,600	-0.8
International	**96,700**	**108,600**	**12.3**	**71,500**	**79,300**	**11.0**
No response	500	-	96.9	400	-	100.0
Total	**519,900**	**652,200**	**25.5**	**259,500**	**343,100**	**32.2**

Appendix 4.1 Questionnaire for UTAS visitors

Survey of Visitors to the University (Type 1)

The purpose of this study is to investigate the role of the education system as an integral part of the tourism system. It is being conducted as part of the Assistant Investigator's work to fulfil the requirements for a degree of Master of Arts in Tourism, University of Tasmania. If you have questions or concerns about this project, please contact the Assistant investigator, Jaehee Lee on (03) 6226 2715 or Professor Trevor Sofield on (03) 6324 3578.

1. How many conferences/short courses did you host in your school/department in 2001? And approximately how many participants did you have from outside Tasmania?

Name of Conference	Number of participants from outside Tasmania	Duration (No.of days)
a. _____	_____	_____
b. _____	_____	_____

2. How many seminars/workshops did you organise in 2001? How many visitors from out of the state could you estimate?

Total number of seminars	Total number of visitors
_____	_____

3. In 2001, how many Visitors did you have from outside Tasmania?
(Include Visiting Lecturers, staff on exchange programs, visiting researchers, University officials, agents and other government officials etc)

Visitors' status	Country of origin	Duration of their stay (Approx)
a. _____	_____	_____
b. _____	_____	_____
c. _____	_____	_____
d. _____	_____	_____
e. _____	_____	_____

(Please use back of this page if you need more space)

4. Did your school have exchange programs with other states or countries?

❑ Yes ❑ No

If yes, please state name of the state or country.

_____

5. Did you have any tourism related activities last year?
(e.g. for staff or visitors or students)

❑ Yes ❑ No

If yes, please state details.

Activity purpose	Number of Participants	Duration (Dates)	Organiser
a.			
b.			
c.			

6. During 2002, how many Academic Visitors do you expect to have from outside Tasmania?
(Include Visiting Lecturers, staff on exchange programs, visiting researchers, University officials, agents and other government officials etc, except international students)

Visitors' status	Country of origin	Duration of their stay (eg. 6mths)
a.		
b.		
c.		
d.		
e.		

(Please use back of this page if you need more space)

7. How many events (Conferences, workshops, seminars, short courses) have you organised in 2002?

Number of events	Number of participants (From outside Tas)	Dates

Name of Department: _____

Name of Faculty: _____

Contact name: _____ Tel (03) 62 _____

***Thank you very much for your cooperation** in taking this study. Please put the completed form in the reply envelope and put into internal mailbox.*

Survey of Visitors to the University (Type 2)

The purpose of this study is to investigate the role of the education system as an integral part of the tourism system. It is being conducted as part of the assistant investigator's work to fulfil the requirements for a degree of Master of Arts in Tourism, University of Tasmania. If you have questions or concerns about this project, please contact the Assistant investigator, Jaehee Lee on (03) 6226 2715 or Professor Trevor Sofield on (03) 6324 3578.

1. How many games/events did you host in your department in 2001? And approximately how many participants did you have from outside Tasmania?
(Sports games, special events, concerts, exhibitions etc)

Name of events	Duration	Number of participants from outside Tasmania
a.		
b.		
c.		
d.		

2. In 2001, how many Visitors did you have from outside Tasmania?
(eg. University officials, agents, other business related visitors, sports players, musicians, artists, visiting academics, researchers etc.)

Visitors' status	Country of origin	Duration of their stay (Approx)
a.		
b.		
c.		
d.		
e.		
f.		
g.		
h.		

(Please use back of this page if you need more space)

3. Did your department organise any tourism related activities last year?
(e.g. for staff or visitors or students eg)

❑ Yes ❑ No

If yes, please state the detail.

Purpose of activity	Number of Participants	Duration (Dates)	Organiser
a.			
b.			
c.			

4. During 2002, how many Visitors do you expect to have from outside Tasmania?

(eg. University officials, agents, other business related visitors, sports players, musicians, artists, visiting academics, researchers etc.)

Visitors status	Country of origin	Duration of their stay (eg. 6mths)
a.		
b.		
c.		
d.		
e.		

(Please use back of this page if you need more space)

7. How many games/events has your school organised in 2002?

Number of games/events_____ dates hold_____

Expected participants (Total) _____

Name of Department: _____

Name of Faculty: _____

Contact name: _____ Tel (03) 62 _____

***Thank you very much for your cooperation** in taking this study. Please put the completed form in the reply envelope and put into internal mailbox.*

Appendix 4.2 UTAS International & interstate students' country of origin (2001)

		Country	Number of students	%	% of Total
International Students	**Awards Program**				
		Europe	62	5.60%	
		Germany	17	1.60%	
		Sweden	11	1.00%	
		United Kingdom	6	0.60%	
		England	4	0.40%	
		Norway	4	0.40%	
		Austria	3	0.30%	
		Spain	3	0.30%	
		Denmark	2	0.20%	
		Finland	2	0.20%	
		Italy	2	0.20%	
		Russian Federation	2	0.20%	
		Belgium	1	0.10%	
		France	1	0.10%	
		Netherlands	1	0.10%	
		Switzerland	1	0.10%	
		Iceland	1	0.10%	
		Hungary	1	0.10%	
		Americas	103	9.40%	
		United States of America	78	7.10%	
		Canada	17	1.60%	
		Brazil	3	0.30%	
		Chile	2	0.20%	
		Argentina	1	0.10%	
		Colombia	1	0.10%	
		Ecuador	1	0.10%	
		Pacific	4	0.40%	
		Fiji	3	0.30%	
		Samoa	1	0.10%	
		North Africa	1	0.10%	
		Egypt	1	0.10%	
		Middle East	7	0.60%	
		Iran	4	0.40%	
		Lebanon	1	0.10%	
		Turkey	1	0.10%	
		United Arab Emirates	1	0.10%	
		Asia	885	80.50%	
		Malaysia	463	42.10%	
		Singapore	220	20.00%	
		Vietnam	42	3.80%	
		Thailand	32	2.90%	
		Hong Kong (SAR of China)	22	2.00%	
		Korea, Republic of (South)	21	1.90%	
		Indonesia	20	1.80%	
		Japan	20	1.80%	
		China	18	1.60%	
		Taiwan (Province of China)	9	0.80%	
		India	8	0.70%	

		Brunei Darussalam	2	0.20%	
		Sri Lanka	2	0.20%	
		Laos	1	0.10%	
		Philippines	1	0.10%	
		Macau	1	0.10%	
		Bangladesh	1	0.10%	
		Pakistan	1	0.10%	
		Afghanistan	1	0.10%	
		Africa	21	1.90%	
		South Africa	12	1.10%	
		Botswana	3	0.30%	
		Kenya	3	0.30%	
		Madagascar	1	0.10%	
		Zambia	1	0.10%	
		Unknown	16	1.50%	
		Sub Total	**1099**	100.00%	52.00%
	ELICOS	South Korea	157	31.70%	
		Japan	111	22.40%	
		Thailand	91	18.30%	
		Taiwan	36	7.30%	
		Hong Kong	25	5.00%	
		Malaysia	24	4.80%	
		China	8	1.60%	
		Vietnam	8	1.60%	
		Colombia	5	1.00%	
		Germany	3	0.60%	
		Mexico	3	0.60%	
		Switzerland	3	0.60%	
		Argentina	2	0.40%	
		Brazil	2	0.40%	
		France	2	0.40%	
		Poland	2	0.40%	
		Singapore	2	0.40%	
		Spain	2	0.40%	
		U.S.A.	2	0.40%	
		Bangladesh	1	0.20%	
		Chile	1	0.20%	
		Indonesia	1	0.20%	
		Italy	1	0.20%	
		Nepal	1	0.20%	
		Peru	1	0.20%	
		Russian Federation	1	0.20%	
		Syria	1	0.20%	
		Sub Total	**496**	100.00%	23.50%
		International Students Total	**1595**		75.50%
Interstate Students		VIC	207	40.00%	
		NSW	104	20.10%	
		QLD	88	17.00%	
		SA	44	8.50%	
		WA	40	7.70%	
		ACT	26	5.00%	
		NT	9	1.70%	
		Sub Total	518	100.00%	24.50%
Grand Total			**2113**		**100.00%**

(Source: UTAS Statistics website, UTAS IT Resources

Appendix 4.3 Questionnaire for international students

Survey of International Students' Travel Pattern

(Number _____)

I am conducting a study of international students' travel patterns and characteristics at the University of Tasmania, and your cooperation in completing this questionnaire would be appreciated. Details of the survey are confidential. The result will help in developing tourism and education in Tasmania.
The study is part of the assistant investigator's work to fulfil the requirements for a degree of Master of Arts in Tourism, University of Tasmania. If you have questions or concerns about this project, please contact the Assistant investigator, Jaehee Lee on (03) 6226 2715 or Professor Trevor Sofield on (03) 6324 3578.

1.About yourself

1) Country of origin _____
2) Gender ☐ Male ☐ Female
3) Age _____years old

2.The course you are enrolled in

1) Name of Degree _____
2) Name of Majors 1 st _____ 2nd _____
3) Official duration of the course _____

3.How long have you been living in Tasmania?

_____

4.Have you previously studied in Australia before enrolling in your current course? (Including English language course), (If NO go to Q5)

1) Name of state_____2) Course name_____

3) Total duration of the course _____

5. How much does it cost for you to live in Tasmania **per week**? (**excluding your course fee and holiday travel money**)

1) Rent (per week) $_____
2) Food (per week) $_____
3) Transport (per week) $_____
4) Other (general needs/per week) $_____
5) Recreation (movies, sports etc/per week) $_____
Total living expenditure per week $ $_____

6. Have you travelled during the past 12 months while doing your study in Tasmania? (In Tasmania, Interstate or Overseas)

1) YES 2) NO (Go to question no. 9)

If yes, how many times? _____Times

7.According to question no.6, where have you travelled? (Please circle as many as you want, except your home country)

1) Tasmania East 2) Tasmania South 3) Tasmania North 4) Tasmania West
5) Australia (name of the states) _____
6) Internationally (name of the countries) _____

8.What was the main purpose of your previous trips within Tasmania?
(Circle as many as you want)

1) Relaxation (away from stress)
2) Entertainment with friends
3) Taking visitors
4) New experiences/challenges
5) Meet new local people
6) Learning more about the local culture
7) School activity
8) Other (please state)_____

9.How do you usually organise your trips?

1) Myself 2) STA 3) Travel agent 4) Other_____

Are there any reasons for this? Please state.

_____
_____

10.What are the important factors in making your travel decisions?
(Please rank them in order with '1' as the most important.)

1) Cost _____
2) New experiences _____
3) Entertainment/fun _____
4) Personal interest/Educational (historical, environmental etc)_____
5) Relaxation _____
6) Other (please specify) _____

11.Whom do you normally travel with?

1) Alone 2) Friends 3) Home-stay family 4) Visitors 5) Other

12.When do you usually travel? (Choose at most 2 answers)

1) Weekends 2) Uni holiday 3) Any time 4) Public holiday 5) Other_____

13.What is the average length of your trip when you travel in Tasmania?

1) Day-trip 2) 1-2days 3) 3-5days 4) 1week 5) +1 -2weeks 6) over 2 weeks

14.On average, how much money did you spend for each trip?
(On transportation, accommodation, food, etc)

1) Under$50 2) $50-$100 3) $100-$300 4) $300-$500 5) $500-$1000 6) over$1000

15.What modes of transportation do you normally use when you travel?
(Choose not more than 2 answers)

1) Coach 2) Bicycle 3) Hire vehicle 4) Own vehicle 5) Other(please specify)

_____

16.What type of accommodation have you used when travelling in Tasmania?
(Circle as many as you want and please state for the answer 'other')

1) Hotel 2) Motel 3) Guest House 4) B&B 5) Youth Hostel
6) Holiday house 7) Farm 8) Backpackers 9) Cabin/Shack
10) Friends/relatives 11) Other_____

17.How frequently do you participate in the activities below per month?
Please write approximate number of times. (Write 0 if you don't do it at all)

1) Dining out _____2) Salamanca Market _____3) Hobart sight seeing_____
4) Museum/Art Gallery_____5) Bushwalking_____6) Fishing _____
7) Gambling _____8)Golf _____9) Other sports (specify)
_____

18.What sort of outdoor adventure activities have you participated in while travelling? How much have you enjoyed each activity?
(eg. Bushwalking, rafting, caving, canoeing, kayaking, cycling, abseiling, jet boat travelling, cruises, flights, sea-planes, 4WD-tour)

a) Activity_____Not Enjoyed **1 2 3 4 5** Very Much Enjoyed
b) Activity_____Not Enjoyed **1 2 3 4 5** Very Much Enjoyed
c) Activity_____Not Enjoyed **1 2 3 4 5** Very Much Enjoyed
d) Activity_____Not Enjoyed **1 2 3 4 5** Very Much Enjoyed
e) Activity_____Not Enjoyed **1 2 3 4 5** Very Much Enjoyed

19.Have you attended any of the Tasmanian events below while living in Tasmania? (Write number of times attended)

1) Huon Folk Music Festival _____2) Taste of Huon_____3) Taste of Tasmania____
4) Tasmanian Heritage Festival ____5) Three Peaks Race____6) Blooming Tasmania___
7) Launceston Christmas Carnival____8) Agfest _____9) Tulip Festival _____
10) Sydney Hobart Yacht Race____11) Burnie Show_____12) Mountain Festival_____
13) Royal Hobart Show _____14) Jazz Festival_____15) Targa Tasmania _____

20. How often have you visited your home country since living in Tasmania?

1) Haven't been 2) once a year 3) twice a year 4) over 3 times a year 5) Other (specify)

_____

If you haven't been home at all, go to question no. 22 ↓

21.How much money on average, did you spend in relation to going home?

a) Air Fare (Return) $_____
b) Gifts $_____
c) Other $_____

Total $_____

22.How many visitors have you had from your home country while studying in TAS?

(If you didn't have any visitors, go to question no.26)

	a) Number of people	b) Nights of stay (Per visit)	c) Accommodation (Including your house)
1) Parents	_____	_____	_____
2) Friends	_____	_____	_____
3) Relatives	_____	_____	_____
4) Other	_____	_____	_____

23.When did they visit you?

1) Mid Semester break 2) Christmas 3) Easter 4) Graduation
5) During their holiday 6) Other (please state)_____

24. Did you travel in Tasmania or Australia with them?

1) YES 2) NO

If yes, please circle appropriate number below. (Choose as many as you can)

a) Sightseeing near Hobart b) Travelling around Tasmania
c) Went to mainland (Specify)_____ d) International(Specify)_____

25. What other activities did you do with your visitors? (Circle as many as you want)

1) Shopping 2) Dining out 3) Gambling
4) Fishing 5) Sight seeing 6) Bush walking
7) Camping 8) Sports (please state the name of the sports)_____
9) Other (please specify)_____

26. What is your opinion of the Tasmanian tourism activities below? Please rank them in the order that you feel they are enjoyable, with "1" as the most enjoyable.

1) Wilderness (National Parks, nature experience, outdoor activities) _____
2) Food/Wine (Restaurants, wineries) _____
3) Lifestyle (Festivals, Events, Movies, Casinos) _____
4) History/culture (Historical places, Museums) _____

27. In the future, would you like to come back to Tasmania for travel?

1) YES
If yes, please state **Why** and **When**?

2) NO
If No, what is the **reason** for that?

- Why? (Reason for visiting or not visiting):

- When (Expected time):

28. What would you recommend about Tasmania to your friends or others?

This is the end of the questionnaire.
Thank you very much for taking part in this study.

Appendix 5.1 UTAS International students' countries of origin (2001)

	Country	Number of Students	% of Country Sub Total	% of Total
Asia		1351		84.70%
	Malaysia	487	36.05%	
	Singapore	222	16.43%	
	Korea, Republic of (South)	178	13.18%	
	Japan	131	9.70%	
	Thailand	123	9.10%	
	Vietnam	50	3.70%	
	Hong Kong (SAR of China)	47	3.48%	
	Taiwan (Province of China)	45	3.33%	
	China (excludes SARs and Taiwan)	26	1.92%	
	Indonesia	21	1.55%	
	India	8	0.59%	
	Brunei Darussalam	2	0.15%	
	Bangladesh	2	0.15%	
	Sri Lanka	2	0.15%	
	Laos	1	0.07%	
	Philippines	1	0.07%	
	Macau	1	0.07%	
	Nepal	1	0.07%	
	Pakistan	1	0.07%	
	Syria	1	0.07%	
	Afghanistan	1	0.07%	
Americas		119		7.46%
	United States of America	80	67.23%	
	Canada	17	14.29%	
	Colombia	6	5.04%	
	Brazil	5	4.20%	
	Argentina	3	2.52%	
	Chile	3	2.52%	
	Mexico	3	2.52%	
	Peru	1	0.84%	
	Ecuador	1	0.84%	
Europe		76		4.76%
	Germany	20	26.32%	
	Sweden	11	14.47%	
	United Kingdom	6	7.89%	
	Spain	5	6.58%	
	England	4	5.26%	
	Switzerland	4	5.26%	
	Norway	4	5.26%	
	Austria	3	3.95%	
	France	3	3.95%	
	Italy	3	3.95%	
	Russian Federation	3	3.95%	

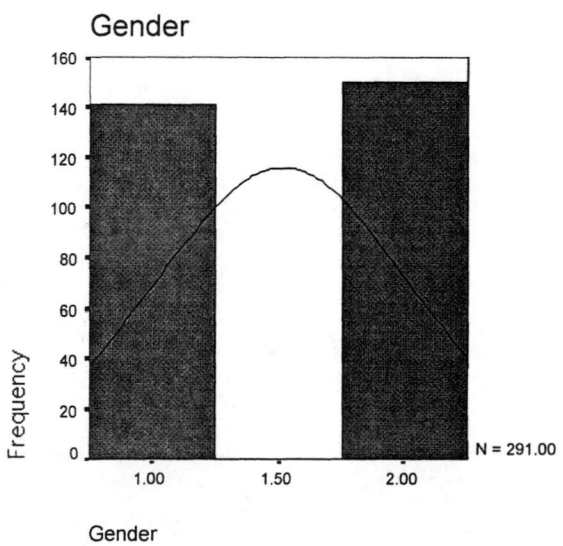
	Denmark	2	2.63%	
	Finland	2	2.63%	
	Poland	2	2.63%	
	Belgium	1	1.32%	
	Netherlands	1	1.32%	
	Iceland	1	1.32%	
	Hungary	1	1.32%	
Africa		21		1.32%
	South Africa	12	57.14%	
	Botswana	3	14.29%	
	Kenya	3	14.29%	
	Madagascar	1	4.76%	
	Zambia	1	4.76%	
Middle East		7		0.44%
	Iran	4	57.14%	
	Lebanon	1	14.29%	
	Turkey	1	14.29%	
	United Arab Emirates	1	14.29%	
Pacific		4		0.25%
	Fiji	3	75.00%	
	Samoa	1	25.00%	
North Africa		1		0.06%
	Egypt	1	100.00%	
Unknown		16		1.00%
	International student total	**1595**		100.00%

(Source: UTAS Statistics website, UTAS IT Resources)

Appendix 6.1 The overall distribution of the international student sample

Overall demographic Statistics (SPSS output)

		Gender	Age	Official duration of the course by year	How long have you been living in Tasmania? (by month)
N	Valid	291	286	213	285
	Missing	0	5	78	6
Mean				3.23	16.32
Median				3.21	9.69
Mode		2	2	4	6
Std. Deviation				1.19	15.26
Variance		.25	.48	1.42	233.01
Skewness		-.062	1.682	.371	1.413
Std. Error of Skewness		.143	.144	.167	.144
Range		1	5	5	71
Minimum		1	1	1	1
Maximum		2	6	6	72
Sum		441	589	688	4652
Percentiles	25	1.02	1.42	2.29	5.59
	50	1.52	2.00	3.21	9.69
	75	.	2.61	4.04	23.95

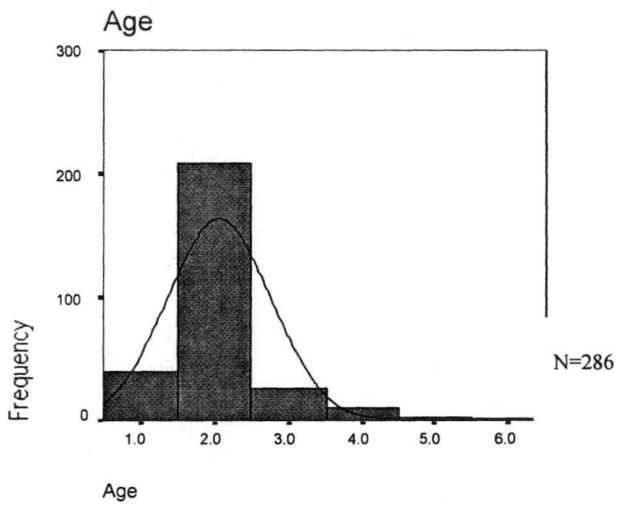


(1.00=Male, 2.00=Female)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	141	48.5	48.5	48.5
	Female	150	51.5	51.5	100.0
	Total	291	100.0	100.0	

Age distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1. Under 20	39	13.4	13.6	13.6
	2. 20yr-25yr	208	71.5	72.7	86.4
	3. 26yr-30yr	26	8.9	9.1	95.5
	4. 31yr-35yr	10	3.4	3.5	99.0
	5. 36yr-40yr	2	.7	.7	99.7
	6. over 40yr	1	.3	.3	100.0
	Total	286	98.3	100.0	
Missing		5	1.7		
Total		291	100.0		



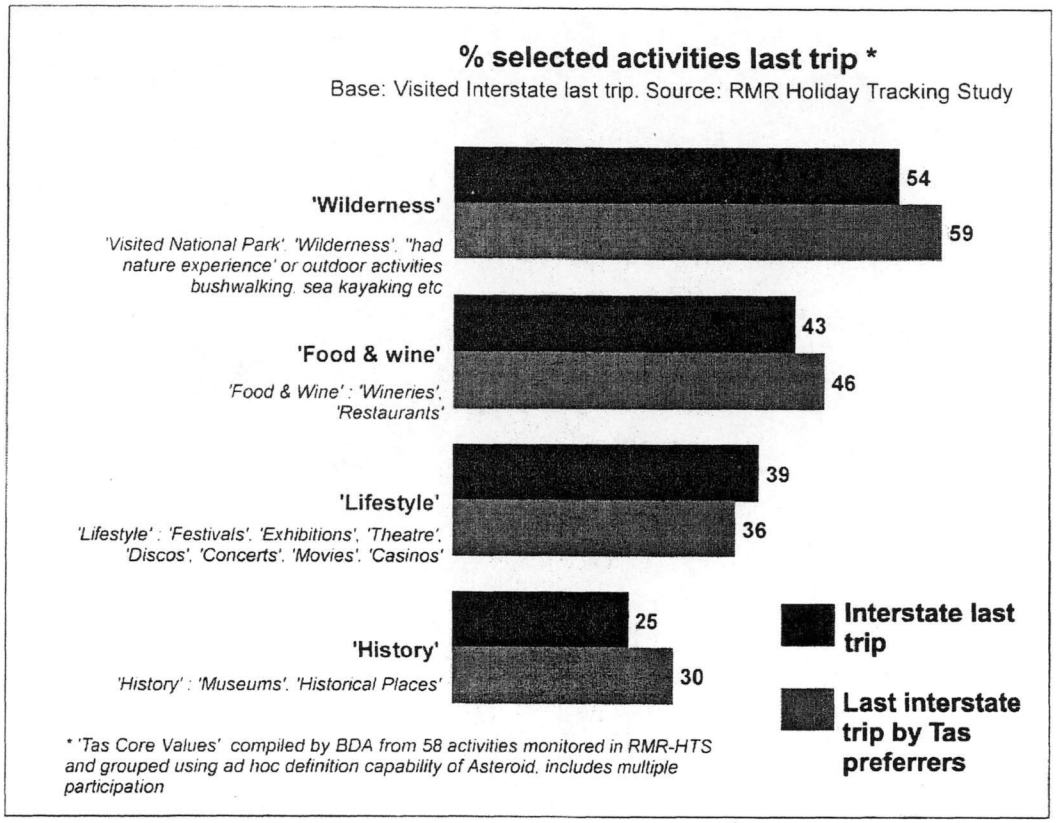
Appendix 6.2 Respondents' countries of origin

International Students' Travel Pattern Survey
Respondents' Countries of Origin

Respondents' Country of Origin			
Country	n	Sub Total	%
Asia		265	91.07%
Malaysia	122		41.92%
Thailand	23		7.90%
Singapore	21		7.22%
Korea	21		7.22%
Japan	21		7.22%
Vietnam	15		5.15%
Indonesia	12		4.12%
Taiwan	9		3.09%
HongKong	9		3.09%
China	6		2.06%
India	3		1.03%
Sri Lanka	1		0.34%
Bangladesh	1		0.34%
Philippines	1		0.34%
Americas		18	6.19%
USA	11		3.78%
Canada	3		1.03%
Colombia	2		0.69%
Argentina	1		0.34%
El Salvador	1		0.34%
Europe		2	0.69%
UK	1		0.34%
France	1		0.34%
Maldives Island	1	1	0.34%
NZ	1	1	0.34%
Africa	3	3	1.03%
No response	1	1	0.34%
Total		291	

Appendix 6.3 BDA Wilderness Chart

BDA Wilderness Chart



Source: Tourism Tasmania (1999)

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