

Key Factors that Could Influence Tertiary Students' Overall Satisfaction of Their Educational Experience: What University Leaders and Administrators Should Consider

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Abstract: This paper discusses identified factors that link to tertiary level students' satisfaction of their educational experiences at Tabor – a small private tertiary education provider in South Australia. It focuses on the educational experiences, particularly overall satisfaction, of Tabor Faculty of Education students who participated in the Australasian Survey of Student Engagement (AUSSE) conducted by the Australian Council for Educational Research (ACER) in 2010, 2012 and 2013. In all three years of participation, Tabor ranked number one in the nation, especially in the area of overall student satisfaction. Using the AUSSE datasets for Tabor Faculty of Education collected using the Student Engagement Questionnaire (SEQ), a single level path analysis was undertaken to identify the factors that appear to link (either directly or indirectly) to overall student satisfaction. Factors including supportive learning environment, career readiness, academic challenge, and work integrated learning have been found to have significant influence on why students feel satisfied towards their educational experiences in the Faculty of Education at Tabor. The interactions between these factors, in addition to the aspects of active learning, enriching educational experiences, and student and staff interactions, and their implication to student retention and quality outcomes are discussed. Implications to university leadership and administration are also provided.

Keywords: tertiary student satisfaction; educational experiences; path analysis

I. INTRODUCTION

Over the past two decades, many studies have been conducted to examine student satisfaction and engagement at universities (e.g., Aitken, 1982; Browne, Kaldenberg, Browne & Brown, 1998; Elliot & Healy, 2001; Navarro, Iglesias & Torres, 2005; Douglas, Douglas, McClelland & Davies, 2015). Seeking student feedback about all aspects of their academic life has become a vital undertaking by universities and other tertiary institutions worldwide.

Rowley (2003, as cited in Douglas, Douglas & Barnes, 2006) identified the following reasons why universities collect student feedback: (1) to provide auditable evidence that students have had the opportunity to pass comment on their courses and that such information is used to bring about improvements; (2) to encourage student reflection on their learning; (3) to allow institutions to benchmark and to provide indicators that will contribute to the reputation of the university in the marketplace; and (4) to provide students with an opportunity to express their level of satisfaction with their academic experience.

The final dot point has become a crucial one to address as it has significant bearing towards student retention. In the context of this study, student satisfaction is defined as an attitude resulting from an evaluation of a student's educational experience where actual performance meets or exceeds expectations (Elliot & Healy, 2001). A student's educational experience is composed of academic as well as selected non-academic and social aspects collectively known as student engagement (Krause & Coates, 2008). Krause and Coates (2008) also added that the concept of engagement embraces a specific understanding of the relationships between students and institutions. Universities and other tertiary institutions are tasked to create learning environments that afford opportunities for students to

learn. Thus, student engagement is an idea focused on students and their interactions with their institution. It rests on the premise that learning is influenced by how an individual participates in educationally purposeful activities, and on how institutions and staff generate conditions to stimulate involvement (ACER, 2013, p. 1).

Enhancing student engagement in tertiary institutions is of paramount importance. Radloff (2011) explains that measures of student engagement provide information about individuals' intrinsic involvement with their learning, and the extent to which they are making use of available educational opportunities. Such information enhances knowledge about learning processes, can be a reliable proxy for understanding students' learning outcomes and provides excellent diagnostic measures for learning enhancement activities.

If conditions to stimulate involvement are met, then students would generally feel "satisfied" in their academic experiences. Student engagement, therefore, is seen as very important to quality tertiary education. Although Tabor has ranked on top in terms of overall student satisfaction in its three years of participation in the AUSSE study, the results of this study provide insights into how the different aspects of student engagement might be further improved, particularly in the Faculty of Education, to provide students with the best possible academic experience. Other tertiary institutions may find the processes and results of this study of use in evaluating their programs and corresponding educational opportunities that they afford their students. Thus, in relation to Tabor's Faculty of Education, this paper aims to: (1) examine student engagement using the AUSSE SEQ scales and their influence on students' overall satisfaction, particularly the extent to which each construct, as defined in the SEQ scales, interact with the other constructs to influence students' overall satisfaction; and (2) present an analytical model that provides a

graphical representation and in-depth discussion of the relationships between the constructs.

II. THE AUSSE

The Australian Survey of Student Engagement (AUSSE) was an annual survey participated by students enrolled in tertiary education institutions in Australia and New Zealand. These institutions constitute both Government and private, including Institutes of Technology, Polytechnics and Private Training Establishments (ACER, 2013). The Australian Council for Educational Research (ACER) coordinated and managed the AUSSE study in close collaboration with participating institutions.

According to the ACER, the AUSSE was derived from the North American National Survey of Student Engagement (NSSE). It provides higher education institutions data that they can use to attract, engage and retain students, and with the intention to provide new and significant perspectives for managing and enhancing the quality of education (ACER, 2010).

The AUSSE used the Student Engagement Questionnaire (SEQ), under license from the *Center for*

Postsecondary Education at Indiana University, to measure students' participation in effective educational practices, and whether institutions support such engagement (ACER, 2011). The SEQ contains around 150 items that define the concept of student engagement.

The SEQ items are grouped to measure seven scales including *Academic Challenge*, *Active Learning*, *Student and Staff Interactions*, *Enriching Educational Experience*, *Supportive Learning Environment*, *Work Integrated Learning*, and *Career Readiness*. An outcomes measure called *Overall Satisfaction* is also included in the SEQ. A summary of the scales used in the SEQ is shown in Table 1. All SEQ items were validated using a range of psychometric analytic approaches including differential item functioning, and Rasch item response modelling (ACER, 2011; Radloff, 2011).

ACER (2011) has indicated that the SEQ is an instrument "specifically designed to measure a reasonably large number of aspects of student engagement" (Table 1). Consequently, the study used the scales employed in the AUSSE study to measure the aspects of educational experience of pre-service teaching students at Tabor Faculty of Education.

Table 1
SEQ Scale Descriptions (ACER, 2011)

Scale	Label	Description
Academic Challenge	AC	Extent to which expectations and assessments challenge students to learn
Active Learning	AL	Students' efforts to actively construct their knowledge
Student and Staff Interactions	SSI	Level and nature of students' contact with teaching staff
Enriching Educational Experiences	EEE	Participation in broadening educational experiences
Supportive Learning Environment	SLE	Feelings of legitimation within the university context
Work Integrated Learning	WIL	Integration of employment-focused work experiences into study
Career Readiness	CRE	Preparation for participation in the professional workforce
Overall Satisfaction	OVL	Students' overall satisfaction with their educational experience

Subsequently in 2014, the AUSSE was replaced by the Quality Indicators of Learning and Teaching (QILT) survey that is conducted annually by the Australian Government's Social Research Centre (see www.qilt.edu.au). Tabor participates in this annual survey, and it has maintained its rank on top.

III. TABOR' PARTICIPATION IN THE AUSSE

Tabor participated in the AUSSE study for three years (2010, 2012 and 2013). Table 2 shows a break down by year of the Tabor population and response statistics. Sample respondents came from the three Faculties of Tabor: Faculty of Education, Faculty of Humanities and Social Sciences, and Faculty of Ministry, Theology and Culture. This paper is specific to the analysis of the Faculty of Education data.

IV. ANALYSIS OF THE TABOR FACULTY OF EDUCATION AUSSE DATA

Tabor's Faculty of Education data from the AUSSE study for First- and Third-Year pre-service teachers in 2010, 2012 and 2013 were analysed. Permission from the ACER was obtained to use institution-specific data collected using the SEQ. As the SEQ used scales to measure aspects of student engagement, analytic techniques were employed to analyse the data. Due to potential issues that could arise in the interpretation of statistical analysis results from small

sample sizes, data from all three years were combined to form a single data set.

Table 2
Population and response statistics for Tabor (source: ACER, 2010; ACER, 2012; ACER, 2013)

	First Year	Later Year
2010		
Respondents	72	117
Target population size	173	293
Response rate	42	40
2012		
Respondents	48	89
Target population size	104	183
Response rate	46	49
2013		
Respondents	53	86
Target population size	105	217
Response rate	50	40

Table 3
Number and composition of participants from Tabor Faculty of Education

Year of Participation	First Year	Third Year
2010	31	41
2012	25	27
2013	21	32
Total	77	100

A total of 177 first- and third-year Education students participated in the AUSSE study (see Table 3).

The AUSSE data consist of raw scores converted to measures using the Weighted Likelihood Estimation ability estimation method. These measures were used in the statistical analyses. For details of how the AUSSE data was collected, please refer to AUSSE study reports published by the ACER (www.acer.edu.au). Normality of data was tested before further analyses could be carried out. Having the data *normally* distributed provides a very good model for the observed frequency distribution for naturally occurring events, enabling sound statistical analyses and interpretation. Skewness and kurtosis (as indicators of normality) were examined to determine if the data collected for each of the factors were normally distributed. Critical values for skewness and kurtosis, as suggested by Kline (1998), were < 3 and < 8 , respectively. No factors identified in the study showed skewness greater than 3 and kurtosis greater than 8. The test for normality was performed using the IBM Statistical Package for the Social Sciences (SPSS) software (IBM Corporation, 2015).

A structural equation modeling technique called *single level path analysis*, was carried out to obtain a graphical model of the interactions of the different factors identified in this study and how they impact student satisfaction. In other words, this model can be seen as a representation of causal relationships. Path analysis indicates independent, intermediary, and dependent variables, and aims to provide estimates of the magnitude and significance of the hypothesised variable interactions shown through a path diagram. Single level path analysis was considered adequate since the data extracted from the AUSSE dataset only contain one distinct group at one distinct level. This analysis technique provided an “aggregated” composite of the interaction between the identified variables. The Linear Structural Relations (LISREL) Version 8.8 (Jöreskog & Sörbom, 2006) statistical software was used to carry out path analysis.

V. ANALYSIS RESULTS

A model resulting from single level path analysis using the Tabor Faculty of Education AUSSE data is shown in Figure 1. The model generated consists of seven scales and an outcomes measure. The scales include *Academic Challenge (AC)*, *Active Learning (AL)*, *Student and Staff Interactions (SSI)*, *Enriching Educational Experience (EEE)*, *Supportive Learning Environment (SLE)*, *Work Integrated Learning (WLI)*, and *Career Readiness (CRE)*. *Overall Student Satisfaction (OVL)* is the outcomes measure in the model. All of the seven scales have been hypothesized to influence the outcomes measure, allowing them to be included in the path analysis. Only the significant paths ($p < 0.01$) showing the standardized path coefficients and t -values (in parentheses) are included in the diagram presented. The path diagram shown in Figure 1 shows direct effects (represented by a single-headed arrow) between the variables concerned.

A. Influences on Overall Student Satisfaction

Based on the path analysis results using the Tabor Faculty of Education data, there are four factors that appear to have direct effects on *Overall Student Satisfaction (OVL)*. Beginning with the leftmost factors in the path diagram (Figure 1), *Work Integrated Learning*

(WIL, 0.27, $t = 3.54$; $p < 0.01$) shows a significant positive influence on OVL. This indicates that greater student satisfaction in pre-service teacher education could result from more work integrated learning experiences (i.e., the professional experience component of the pre-service teaching program). This result is generally consistent with similar studies (e.g., Rayner & Papakonstantinou, 2015; Carter & Romero, 2014) where students who experience more work integrated learning in their tertiary studies are more likely to have greater student experience satisfaction.

Supportive Learning Environment (SLE), 0.30, $t = 4.23$; $p < 0.01$ likewise has a significant positive association with OVL. This result could be expected, as students who experience a supportive learning environment are most likely to cite satisfaction with their tertiary student experience. Similar studies including Whannell (2013), McDonald (2013), and Bradley, Noonan, Nugent and Scales (2008) confirm this finding.

Another factor that appears to have significant influence on OVL is *Academic Challenge (AC)*, 0.14, $t = 2.05$; $p < 0.01$. This result suggests that provision of challenging academic tasks, in addition to high expectations of quality performance in practical teaching in schools, contribute to students’ overall satisfaction. However, this interpretation might be received as unformulated, requiring sharper focus and definition of the term. Hence, a more thorough investigation is warranted. Consequently, there is a clear opportunity presented here to examine the relationship between academic challenge and student satisfaction due to lack of related published works.

An important aspect of student experience at tertiary level is confidence in being ready to build a career after graduation. Thus, the model in Figure 1 shows *Career Readiness (CRE)* having a direct, albeit negative, association with OVL. The negative relationship might be interpreted as counter-intuitive. However, Mayer et al. (2015) explain that student perception of career readiness as complex and dynamic which cannot be causally linked to characteristics of their initial teacher education (ITE) program. In addition, since the First- and Third-Year data were combined (to overcome the challenges of statistically analysing data from small sample sizes), data “noise” could have resulted.

This “noise” could have come from the real possibility that the perceptions of career readiness of First Year students and Third Year pre-service teaching students are vastly different. At the time of survey First Year students may still have been adjusting to their tertiary studies environment and will have had less work integrated experience, and so felt a lesser sense of readiness for a future career in teaching. Thus, this result prompts further (and more detailed) investigation. Seeking a significantly larger sample size and including final year students could provide different, but more meaningful results.

B. Other likely influences of Overall Student Satisfaction

An indirect effect is demonstrated where a variable affects another variable through intermediate variable(s). This could also be indicated in a single level path analysis

model. Obtaining the effect of one variable on another variable through a third (or fourth, or fifth, etc.) variable means multiplying the individual effects in its “indirect” path (similar to calculating the resultant of two or more vectors) (Ben, 2010). The product of the individual effects in an indirect path represents the proportion of variance explained by that path.

As shown in Figure 1, through the interactions between factors, it can be observed that AC through EEE and CRE can indirectly influence OVL, with a total indirect effect of $0.27 \times 0.27 \times 0.18 = 0.013$, which is considered small. In other words, this indirect path could only explain 1.3% of the direct relationship between academic challenge (AC) and overall student satisfaction (OVL). Similarly, WIL has an indirect effect on OVL through CRE (total indirect effect = 0.07), which could explain about 7% of the direct relationship between work-integrated learning (WIL) and overall student satisfaction.

This is an indication of the importance of providing students with enough professional experience to make them feel that they are ready to start their teaching career. This then could lead to their overall satisfaction of their pre-service teaching course experience. In addition, SSI through AC has an indirect effect on OVL (total = 0.03 or 3%). Furthermore, SSI can also indirectly affect OVL through AC, EEE and CRE albeit the total effect being very small (0.002 or 0.2%). This indirect path can be disregarded. Another indirect path disregarded due to very small total effect is SLE on OVL through EEE and CRE.

Also, in Figure 1, it is of interest to note that some of the factors examined (WIL, AC and SLE) showed both direct and indirect effects on students’ overall satisfaction. This highlights the importance of the interactions of the different factors examined in this study and how they impact student satisfaction, potentially leading to better student retention.

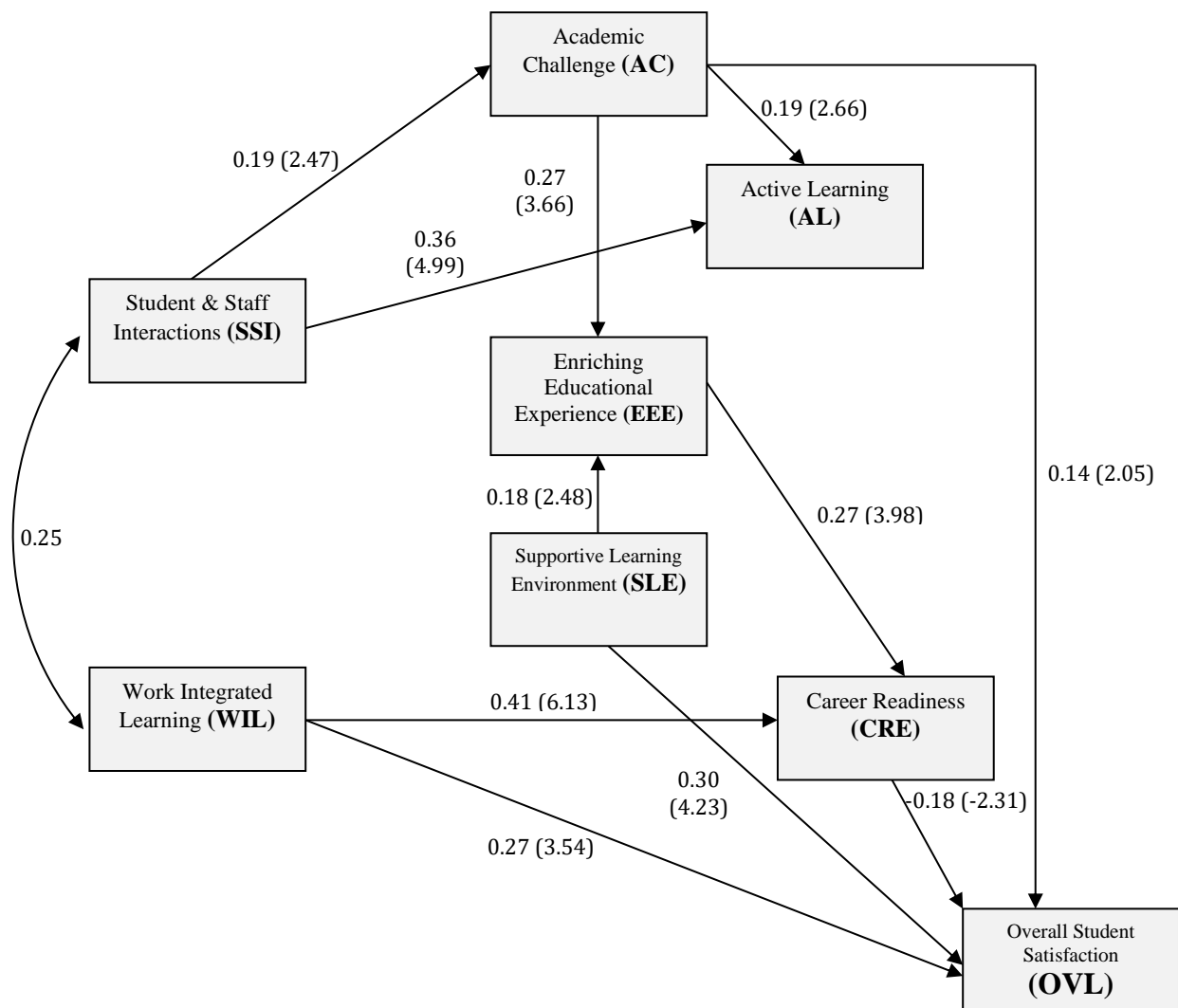


Figure 1
Path Diagram Showing Factors that Significantly Influence Student Satisfaction

VI. DISCUSSION

Over the three years of participation in the AUSSE survey (2010, 2011, 2013), Tabor Faculty of Education AUSSE data indicated consistently excellent levels of student satisfaction with their overall educational experience (OVL). Key factors contributing to OVL

include the direct association of, and interaction between, four factors: supportive learning environment; work integrated learning; career readiness; and academic challenge. Additional supporting factors of indirect relationship to OVL are: student and staff interactions; active learning; and enriching educational experience.

A. Supportive Learning Environment

A supportive learning environment contributes directly to the high level of student satisfaction among Education students at Tabor. The supportive learning environment for pre-service teachers at Tabor can be defined as a synchronized approach incorporating interactive lectures with a small to medium size cohort, promotion of pre-service teacher scholarly and professional identity, consistent student support through accessibility to lecturing staff, and a culture that accepts and differentiates learning to meet the diverse needs of students.

Supportive learning is enacted as a culture for pre-service teachers within the Faculty of Education. An interactive lecturing approach provides opportunity for lecturers to model best teaching practices. Lectures are compulsory and are designed to develop metacognitive skill, defined as strategies to learn effectively (Allen & Clarke, 2007). Within a typical lecture pre-service teachers are guided through theoretical content, ask questions, and work in small groups to consolidate ideas and understandings or solve problems; this also extends to role play and micro teaching opportunities. Tabor Faculty of Education students typically learn within a small to medium sized class cohort. Class size is a factor in managing effective cooperative learning. Although the research is divided regarding class size and academic achievement, McDonald (2013) concludes that higher level outcomes such as development of thinking, problem solving and motivation are impacted by the cooperative learning possible with smaller groups. Bradley et al. (2008) found that opportunity for students to learn cooperatively with smaller staff-student ratios also increased levels of student satisfaction.

An interactive lecture approach consolidates engagement, and affirms positive learning journeys for pre-service teachers. A shift from the traditional teacher centred approach toward student centred learning is particularly beneficial to pre-service teachers – ‘developing sociability, interdependence, communication skills, leadership qualities and professional ethics’ (Hussain, 2013; Jones & Jones, 2008; Attle & Baker, 2007). Maintaining academic rigor and incorporating critically reflective and cooperative learning strategies allows students to process their learning in a supportive lecture environment, where positive feedback, affirmation and opportunities to explore ideas and applications further are present. Behavioral engagement is increased as pre-service teachers are encouraged to interact with the lecturer and their peers. Sharing ideas and experiences in small groups enables reflective practice and establishment of individual and peer identities for pre-service teachers. Scott (2008) identifies strong links between retention, success, and the extent to which students are linked to fellow learners as markers for student satisfaction at tertiary level. Supporting learning in this way has academic, social and psychological benefits (Williams, 2007). A main focus here is in supporting the ‘scholarly’ and ‘professional’ identity of pre-service teachers; supporting learning, developing content knowledge, and importantly higher order thinking skills, links to a sense of autonomy and ownership for students. Honouring the

voices (Shields, 2007) of pre-service teachers supports their professional identity development.

There is a strong focus on student engagement within Education lectures at Tabor. Reeve (2013) defines engagement as behavioural, emotional and cognitive, and also agentic – where students are supported to become autonomous. The characteristics of autonomy support include: taking the students’ perspective, welcoming their thoughts, feelings, and behaviors into the delivery of instruction, and providing learning activities that vitalize...students’ inner motivational resources within lectures (Reeve, 2013).

Accessibility to staff has emerged as an important factor in students’ learning experience (Bradley et al. 2008; Whannell, 2013). Facilitating interactive lectures heightens dialectical transactions between lecturers and pre-service teachers, allowing space for supportive learning. This also links to students having clear goals and understandings regarding assessment requirements – lectures can also incorporate workshop time which allows students to access peer and lecturer guidance for assessment preparation. Johnson, Johnson and Smith’s (1991) assertion that students learn together but perform alone shows the underlying tension pre-service teachers face regarding assessment. Despite learning together there is an individual accountability to perform. Support and specific guidance, both in peer settings and individually, eases this individual accountability tension, and interactive strategies within workshops allow pre-service teachers to affirm and refine their learning styles.

As well as access to Education lecturing staff within lectures at Tabor, support is also offered to pre-service teachers through Academic Advisors; full time lecturing staff members who take on the role of mentors to pre-service teachers for the duration of their degree. Individual support is offered, as required, to meet a range of diverse needs that may impact study for pre-service teachers. This support may take the form of regular weekly support or short-term support to manage the processes of academic study through illness or other personal circumstances.

Involvement of academic staff to engage appropriately with pre-service teachers in a supportive role, can act as an intervention, which builds a positive tertiary academic identity and emotional commitment (Whannell, 2013). All of this contributes to enriching the educational experiences of the students, which could be a contributing factor to their feeling of career readiness, which ultimately leads to their overall satisfaction (as shown in Figure 1).

B. Work Integrated Learning

According to Universities Australia (2013), WIL is about integrating theory with practical work experience in education, and is well-established in the area of teaching. In other words, WIL provides learning experiences for students while demonstrating their graduate skills to employers. WIL has become a significant part of university student experience in most Australian universities and tertiary institutions to improve career readiness of graduates. Rayner and Papakonstantinou (2015) have found WIL to be useful to undergraduates especially in terms of non-academic learning and career

development particularly when they enable sufficient student involvement.

Professional Experience placements (PEPs) provide work integrated learning for pre-service teachers. Tabor's Faculty of Education requires its pre-service teachers to complete a total of 110 days of PEP in various school settings, exceeding the required minimum total of 80 days. Pre-service teachers from Tabor also receive optimum support during placements from the close working relationships between Professional Experience Liaisons and Mentor Teachers. Tabor implements an integrated approach to PEP where University-Based Teacher Educators (UBTE) are employed to work directly with pre-service teachers and school-based mentor teachers and coordinators. This role places UBTEs in schools and in direct dialogue and interaction with pre-service teachers and their teaching contexts. At a time when initial teacher education providers are under financial pressure to withdraw UBTEs from PEP (Morrison, 2016), Tabor continues to support the vital connections between teacher educators and school-based colleagues. This integration of theory and practice within PEP, through the interactions between teams of educators, is of vital importance to the development of pre-service teachers and the strength of the PEP program overall (Le Cornu, 2015). This is realised through the provision of close support of pre-service teachers and their mentors, feedback from teams of educators at the point of need, and, continuous goal setting to stimulate rapid professional growth during placements.

C. Career Readiness

The transition from pre-service to early career teaching is a challenging one (Crosswell & Beutel, 2013). Navigating this transition is filled with uncertainty and complexity (Department of Education Science & Training, 2002) and the nature of this transition has implications across the career span (McCormack, Gore & Thomas, 2006). The following discussion provides part explanation to the negative relationship between CRE and OVL. Notwithstanding, it is recommended that further research be undertaken in relation to career readiness and overall student satisfaction.

Pre-service teachers' perspectives about teaching are often disrupted by their experiences of abrupt career entry (Howe, 2006). Australian graduate teachers often enter the workforce in hard-to-staff, educationally disadvantaged, and rural and remote schools (McKenzie et al, 2011; Department of Education, Employment and Workplace Relations, 2011) with varied access to support structures and induction (Crosswell & Beutel, 2013). They regularly enter the profession in part-time or casual teaching roles, which further compound the complexity and intensify the uncertainty (Pietsch & Williamson, 2010). As a result, many tensions arise for early career teachers about how to manage the roles and their experiences within them (Pearce & Morrison, 2011; Pillen, Beijaard & den Brok, 2013). These factors lead to feelings of dissatisfaction with teaching and impact on early career teachers' intentions to remain teaching (Ewing & Manuel, 2005; Ewing & Smith, 2003) even when initially, as pre-service teachers, they felt they were quite ready to tackle challenges in the teaching

profession. Such complexities make it difficult to progress beyond the survival stage (Huberman, 1989) and many early career teachers leave teaching prematurely (House of Representatives Standing Committee on Education and Vocational Training, 2007).

Mayer et al. (2015) explain that pre-service teachers' perceptions of career readiness incorporate a variety of complex beliefs across a range of domains. Perceptions of career readiness provide insights into the histories, experiences, preparation, achievements and aspirations of pre-service teachers. They continually filter important information about themselves and about teaching through their prior knowledge and experiences (Bloomfield, 2010). As such, these perceptions reflect the awareness that pre-service teachers hold of the complexities of teaching (Rorrison, 2008) while simultaneously revealing the idealistic motivations that they bring with them into their roles (Abbott-Chapman, 2005).

Pre-service teachers use their academic achievement and depth of curriculum knowledge as indicators of future capacity (Rosas & West, 2011). They also draw on the interactions they have with more knowledgeable others, like mentor teachers and school principals, to shape their perceptions in dynamic and responsive ways (Soccorsi, 2013). Pre-service teachers therefore learn a great deal about themselves and their future roles when learning through practice with others (Billett, 2008). Conversely, where pre-existing perspectives are not challenged through experience or interaction, they can develop misconceptions about teaching and teachers' work and make subsequent over-estimations about their future capacity. These misconceptions and over-estimations therefore shape pre-service teachers' perceptions about career readiness (Peters, 2012).

Seeking pre-service teachers' perspectives about their career readiness is a way of acknowledging their voices (Huntly, 2008). Mayer et al. (2015) found that the complex and dynamic perceptions of pre-service teachers cannot be causally linked to characteristics of their ITE program but that they do provide important insights about the focus of pre-service teachers' attention and previous experiences. Tabor student participants of the AUSSE study reported feeling as prepared as possible by their Initial Teacher Education program, despite areas where they felt under-prepared. This reflects the positive impact of Tabor Faculty of Education's highly supportive learning environment and effective work integrated learning program. It also highlights how Tabor pre-service teachers are aware of the dynamic, evolving and multi-faceted nature of their perceptions about career readiness and how these individuals make continual critical and reflective assessments about themselves in relation to future roles, demands and expectations.

D. Academic Challenge

As shown in Figure 1, the results of the path analysis suggest that Academic Challenge (AC) has a direct influence on overall student satisfaction (OVL). Within an environment of high support (as previously discussed in this paper), Tabor Faculty of Education students are overtly encouraged to face the challenge of

developing and maintaining self-responsibility for their learning. This requires student motivation to increase knowledge, to sustain commitment to learning, and to develop self-responsibility with study skills such as organisation and research. Interactive lectures and final assessments involve students in authentic pedagogical tasks that are rich, robust and rigorous, often requiring engagement of higher order and critical thinking skills. The high levels of support and respectful interactions between staff and students at Tabor creates a high safety and high trust factor that encourages and enables students to take risks in theoretical learning and practice of pedagogical skills.

Generally, it is assumed that tertiary students prefer to experience academic challenge as this prepares them to enter the workforce ready to take on greater challenges. Tabor Faculty of Education students are required to complete a total of 110 days of professional teaching placement, requiring sustained practice in up to three blocks between three- and eight-weeks' duration. However, student learning and preparation is carefully scaffolded in this process, which is generally perceived by students as beneficial to their preparation as classroom teachers. Applied to many contexts, an academically challenging tertiary institution implementing a challenging curriculum produces well-prepared graduates with more confidence and higher level of competency. Thus, academic challenge contributes to overall student satisfaction.

It is important to note, however, that, according to Payne et al. (2005), the academic challenge scale used in the National Survey of Student Engagement (NSSE) – which was also used by the AUSSE study – does not fully capture many meanings of academic challenge. It is also likely that students' interpretation of "academic challenge" may be different from how academic staff members interpret it. This issue needs to be addressed; hence a follow up study is recommended. In addition to the four direct causal factors discussed above, the following three factors, Student and staff Interactions, Active Learning and Enriching Educational Experience have indirect but equally significant relationship to overall student satisfaction.

E. Student and Staff Interactions

Student and Staff Interactions (SSI), as shown in Figure 1, appears to have indirect influence OVL through previously discussed aspects of Academic Challenge (AC) and Work Integrated Learning (WIL). Tabor's consistently developed and pedagogically modelled culture of developing personal character and professional academic learning and teaching, underpinned by an authentically holistic worldview, contributes to consistent survey reporting of high levels of student (pre-service teacher) satisfaction (OVL).

Noble and Henderson (2011, p. 79) recognize that "undergraduate teacher education programs have been increasingly scrutinized regarding their (in)ability to adequately prepare students for the challenging social contexts that they will meet" in tertiary study and in future work contexts. Results from the AUSSE survey indicate, however, that over several years, students recorded high levels of satisfaction and career readiness

with their undergraduate course at Tabor. A range of key factors contributed to this satisfaction, and Staff and Student Interactions is one.

As Richardson's (2011) briefing in relation to the AUSSE survey identifies, the data clearly indicates that high levels of student support given by quality staff-student interactions create high levels of student satisfaction.

Establishment of social networks and meaningful relationships with peers and with academic staff can facilitate students' sense of belonging to the institution and increase their awareness of the support offered (Young & Sax, 2009). In such an environment student persist with their studies (Tinto, 1998) and achieve academic success (Meuwisse et al., 2010) through greater engagement in learning. Robinson (2015, p.71) reminds us that "the heart of education is the relationship between the student and the teacher". In terms of assisting new students to transition successfully to first year tertiary studies, the University of Southern Queensland (USQ), for example, incorporated a program to allow students, throughout the year, to meet with peers and academic staff to discuss issues of concern, ask questions, raise fears and to develop relationship. Noble and Henderson (2011) show the success of this program in that it developed a climate of trust and connectedness between staff and students, enabled development of reflectively critical conversations, linked in with students needs to develop character, and increased academic results.

Tabor pre-service teaching students recorded high levels of satisfaction in both first- and third-year surveys as the Faculty of Education staff (academic and administrative) treat all students as beginning teachers, developing their professional identity and understanding of that identity throughout their course. This develops in students a perception of being a step beyond the status of 'student', which engenders greater awareness of what 'professional' means, and leads to their increased professional practice in learning (study) and in teaching. This methodological approach by staff links with aspects of Work Integrated Learning (WIL) by placing pre-service teachers in a shared teaching space with lecturers; creating a balanced power relationship and encouraging shared learning as teachers together. This increases pre-service teachers' understanding of vocabulary associated with the profession of teaching, increasing their capacity for and effectiveness in relating from a critical reflective and professional focus.

Tabor's Faculty of Education students' high satisfaction levels reflect their increased capacity to engage in Academic Challenge (AC). Where supported by effective Staff and Student Interactions, Tabor pre-service teachers learn about the importance of personal and professional values and character, and are gently but consistently enabled to accept the challenge of character development. Noble and Henderson (2011, p.83) allude to "the characteristics that are usually associated with character education" which emerge in conversations within their Transition Program; 'fairness, trustworthiness, caring, and community participation' and cite supporting authors such as Kagan (2001), and Lovat and Toomey (2007). Tabor pre-service teachers learn from such texts as part of their education studies with

regard to understanding character qualities in relation to themselves and their future students. Palmer's (2007, p.2) concept that "we teach who we are" is the underpinning refrain for their studies, in light of which pre-service teachers are encouraged to consider ways in which they need to develop in order to be effective people and effective teachers. Donnison and Edwards (2010) agree that a significant factor in successful pre-service teacher engagement in their course is staff respect of students' personal values, as well as communication with students about how their values interact with their understanding regarding learning and teaching theory and practice. In both lecture based discussions, across the range of subjects, and in pastorally focused staff academic support of students, Tabor employs a future focus to enable pre-service teachers to celebrate their values and relative readiness at varying points during the course whilst simultaneously being excited about the learning and changes, personal and professional, still to come.

As previously discussed in this paper (under SLE), every pre-service teacher has access to an Academic Advisor, who is a full-time academic member of staff. The Academic Advisor is available for one-to-one assistance with any aspect of need; personal or academic. Browne et al. (1998, p.3) identify that student perception of satisfaction is multidimensional but showed that "students with less clear goals tended to base...satisfaction judgements on the educational process and the educational environment". Interactions with the service provider are "especially critical" (Browne et al., 1998, p.3). Tabor Faculty of Education Academic Advisor provision allows students opportunity and freedom to develop clear personal and academic goals. Although the student formally initiates this relationship, it is staff that formally and informally encourages them to do so. Combined with the highly relational and interactive nature of lectures and the consistently articulated expectations of student professional communication with all Faculty of Education staff, "sustained and substantial contact" (Richardson, 2011) occurs. An important aspect of such relationship is that students have lecturers who do not only connect with them but who believe in them (Robinson & Aronica, 2015) as people and future colleagues.

F. Enriching Educational Experience

Figure 1 indicates that Enriching Educational Experiences (EEE) indirectly influences OVL through the aspect of Career Readiness (CRE). It is, itself, partly a consequence of factors associated with Academic Challenge (AC) within a Supportive Learning Environment (SLE); aspects that have already been discussed in this paper. As such enriching educational experiences are like jigsaw pieces that combine to provide Education students with confidence to be a committed and passionate teacher. During their Initial Teacher Education (ITE), pre-service teachers develop a teaching identity that often changes as they respond to the experiences and activities in which they are engaged. Furlong (2013) notes that there are many shifts within their 'teaching identities' and that this continues well into their teaching career. In a research study Rose (2013) posits that these identities can be formed by educational experiences, which include

modelled teaching, direct instruction, and discussion of pre-service teaching experiences. This paper has shown, for example, Tabor's focus on forming a professional teacher identity alongside developing one's personal character because, as Palmer (2007, p. 2) reminds us, "we teach who we are".

Tabor Faculty of Education provides rich educational experiences within the requirements of current best practice and various key stakeholders, including government requirements of, for example, the Teacher Education Ministers Advisory and the Australian Institute for Teaching and School Leadership. Crosswell & Elliot (2004) reflect a growing body of literature that supports the connection between teacher commitment and an inner experience of passion for teaching. An important part of the Tabor ITE process is to develop pre-service teachers' confidence and professional pride; encouraging them to retain and grow the passion for education that first led them to study teaching.

Marsh (2015) ascertains that bland learning experiences may lead to dissociation, ambivalence or an absence of meaningful learning. In contrast, enriching educational experiences provide scaffolding for more complex conceptual and meaningful learning. Student satisfaction that comes from such learning experiences is a pivotal motivator for remaining in their course of study. Such satisfaction also contributes to the development of pre-service teacher confidence and passion, which could lead to highly effective graduate teachers.

G. Active Learning

Figure 1 indicates that Active Learning (AL) has a statistically insignificant impact on OVL; rather it appears to be a by-product of Staff and Student Interactions (SSI) and Academic Challenge (AC). As already discussed in this paper, these latter two aspects contribute to Tabor Faculty of Education students being active learners through academically challenging methodologies and high levels of positive staff and student interactions. According to Prince (2004), "Active learning is generally defined as any instructional method that engages the students in the learning process". Satisfied students are those who are actively engaged in their learning. "More engaged learners are more satisfied, and vice versa. By enhancing students' engagement, institutions can enhance satisfaction with provision." (ACER, 2008).

As Bonwell (1991) notes active learning strategies are those defined as "instructional activities involving students in doing things and thinking about what they are doing". A clearly articulated expectation of Tabor's pre-service teachers is that they are not to be passive recipients of transferred knowledge (Prince, 2004). Through an interactive learning environment that values praxis, methodologies and tasks including questioning, critical thinking and higher-order thinking tasks, open-ended activities, problem solving and structured small group work (Mills, 2012), lecturers and students share a love of inquiry and of teaching.

Within the Initial Teacher Education context, it is vital that Tabor's pre-service teachers understand that all students have their individual learning styles. This necessarily translates into Tabor presenting lectures and workshops incorporating diversity, considering that

“some cognitive research has shown that a significant number of individuals have learning styles best served by pedagogical techniques other than lecturing” (Bonwell et al., 1991, p. iii). Lecturers model pedagogical approaches and principles that students are then able to apply to their Professional Experiences in schools. Recognising that “education is lifelong learning built on experience” (Zull, 2011 as cited in Millis, 2012, p. 1), students’ ideas about the Primary and High School teaching they have experienced in the past is also challenged. Tabor Education’s interactive lectures produce superior educational outcomes and consequently high satisfaction in students. As Braxton, Milem and Sullivan (2000) pointed out, “Students who frequently encounter active learning in their courses perceive themselves gaining knowledge and understanding. As a consequence, such students may be more likely to view their college experience as personally rewarding”. Embedding relevant activities into lectures significantly improves student recall of information, and realises the extensively recognized benefits of student engagement (Prince, 2004; Zhao & Kuh, 2004; Carini, Kuh & Klein, 2006; Pawson, Healey & Solem, 2010).

VII. IMPLICATIONS TO LEADERSHIP AND ADMINISTRATION

This paper has strongly implied the highly relational aspect of education (i.e., in learning), not just in pre-service teaching studies, but in all other areas. Students who participated in the AUSSE survey at the time attended tertiary studies on predominantly face-to-face basis. Online contents were provided as a facility, which students could access anytime they require. However, over the past few years, there has been an increase in universities and other tertiary institutions offering fully online courses and degrees. This has been initiated, planned and implemented by their leadership and administration to reach out to potential students beyond their physical campuses. According to the Open Education Database (2019), there are 10 reasons for this: variety of programs and courses; lower total cost; more comfortable learning environment; convenience and flexibility; more interaction and greater ability to concentrate; career advancement; continuing profession; avoid commuting; improvement of technical skills; and transfer credits.

However, there are also disadvantages including low quality of education; little or no face-to-face interaction; possibility of more work; intense requirement for self-discipline and self-direction. These disadvantages have been highlighted to cause excessively low and continuously receding student retention rates (Bawa, 2016). Although the general intent of offering online courses and degrees is good, university and other tertiary institutions’ leadership and administration are challenged to curb the disadvantages, especially if they would like to provide their students the best learning experiences and increase retention rates and overall educational experience satisfaction. Leaders and administrators are challenged to shy away from pure business models that almost do not consider the relational nature of learning. That is, pure online courses and degrees are implemented not just to increase student numbers, and, hence, the institution’s

income. Thus, leaders and administrators are urged to consider how they could implement online learning experiences while considering the seven factors identified in this paper. Tabor is certainly exploring the possibility of offering online courses and degrees (including pre-service teacher education) to go with the changing educational landscape, but its leaders and administrators must carefully consider the factors that have been shown to engage students and provide satisfying educational experiences while maintaining high quality learning and training. Ideas to achieve this goal have to be carefully examined and implemented, hence, conducting in-depth research would be necessary.

VIII. CONCLUSION

Student satisfaction of their educational experience is of paramount importance in any tertiary education context. Based on the factors used in the AUSSE study, the results reported in this paper have shown the various ways in which *Overall Student Satisfaction (OVL)* of Tabor Faculty of Education students is influenced by the interactions between four factors of direct influence, being *Supportive Learning Environment (SLE)*, *Work Integrated Learning (WIL)*, *Career Readiness (CRE)*, and *Academic Challenge (AC)*, and three factors of indirect but equal relevance, being *Student and Staff Interactions (SSI)*, *Active Learning (AL)*, and *Enriching Educational Experiences (EEE)*. The resulting model (Figure 1) has shown how important it is to identify and integrate effective processes in all seven factors in the tertiary education process to attain student satisfaction, as this holds significant bearing towards student retention (and perhaps future study and professional work success).

However, due to the relatively small sample size used in this investigation, further examination of the interactions between the factors and how they influence overall student satisfaction is warranted. Employing other statistical procedures that are becoming more widely recognized due to their advantages over “traditional” ones, such as the Rasch Model (Rasch, 1980), to examine these interactions is encouraged. Using the Rasch Model as an analytical tool provides flexibility in terms of operating with datasets from small sample sizes, producing more robust and interpretable analysis results.

Still, the (2010, 2012, 2013) AUSSE data indicates that Tabor Faculty of Education provides all the right ingredients to make students feel very satisfied with their Initial Teacher Education tertiary course experience. In the recent 2018 Student Experience Survey National Report (see www.qilt.edu.au) conducted for the Government’s Quality Indicators for Learning and Teaching, Tabor Faculty of Education also obtained the highest rating (around 96%) among all participating universities and private tertiary institutions. The model drawn from analysing the AUSSE Tabor Education data certainly applies to the 2018 QILT report for Tabor. Combined, they present an outline picture of Tabor Faculty of Education’s high-quality support and teaching processes that engage its pre-service teaching students in what they rate as a highly satisfying course. In some ways, Tabor Faculty of Education demonstrates a few characteristics of the Finnish Education System – widely known for their high quality of education. These include

trust, flexibility and putting the wellbeing of students as a major priority, with both academic and administrative staff contributing to a supportive learning environment delivering appropriate content and a high standard of academic direction (Stehlik, 2016). Now, if only online courses and degrees could replicate these positive experiences afforded by predominantly face-to-face means. Are our university and tertiary institution leaders and administrators ready to tackle this challenge?

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