

National Association of Enabling Educators of Australia

Flexibility: Pathways to participation

Refereed papers from the
NAEEA Conference
27 – 29 November 2013
Australian Catholic University, Melbourne Australia

James, T. (2013). Successfully transitioning to university: The influence of self-efficacy.

In Proceedings of the National Association of Enabling Educators of Australia Conference;
Flexibility: Pathways to participation, Melbourne, Australia, 27-29 November, 2013.
Accessed from <http://enablingeducators.org/conference/2013.html>

Published 2013 by the National Association of Enabling Educators of Australia, C/- Open Access College, University of Southern Queensland, Toowoomba, Queensland, Australia, 4350

This paper was reviewed using a double blind peer review process that meets DIISR requirements. Two reviewers were appointed on the basis of their independence and they reviewed the full paper devoid of the authors' names and institutions in order to ensure objectivity and anonymity. Papers were reviewed according to specified criteria, including relevance to the conference theme and sub-themes, originality, quality and presentation. Following review and acceptance, this full paper was presented at the NAEEA conference.

Copyright © 2013 NAEEA Inc. Apart from any fair dealing for the purposes of research or private study, criticism or review, as permitted under the Copyright, Designs and Patent Act, 2005, this publication may only be reproduced, stored or transmitted, in any form or by any means, with the prior permission in writing of the publishers, or in the case of reprographic reproduction in accordance with the terms and licenses issued by the copyright Licensing Agency. Enquiries concerning reproduction outside those terms should be sent to the publishers at the address above.

Successfully transitioning to university: The influence of self-efficacy

Trixie James

CQUniversity Australia

t.james@cqu.edu.au

Within the current context of offering university education to the broader socio-economic environment, there is a concern that students who have been out of the education arena for many years may not handle the rigours of university. Therefore, an even greater emphasis has been placed on up-skilling through enabling programs prior to entering university. However, research that investigates the reasons for successful transition of students from enabling programs to undergraduate study is quite limited. This paper is expanding on previous research that explored the lived experiences of eight first year undergraduate students who had all completed the STEPS enabling program, successfully transitioned and completed their first year of undergraduate study in their chosen degree. Where experiential evidence from enabling educators supports the belief that their students enter university better prepared and with a higher level of resilience, this research explores this idea from the student perspective and their lived experiences. Through the process of existential phenomenology, this research identified four themes (sense of preparedness, university as an anchor, fear of the unknown, and a sense of certainty and rightness) that ultimately demonstrate that, through mastering core skills and adopting a studious mentality with a positive attitude, these students displayed high levels of self efficacy. This paper endeavours to show that enabling programs are in an ideal position to nurture the development of self efficacy in their students.

Keywords: self efficacy, enabling education, first year, transitioning to university, mature students, phenomenology.

Widening participation to university has been on the political agenda since the Bradley Review of Higher Education in Australia (Bradley, Noonan, Nugent, & Scales, 2008) which recommended that people who have been disadvantaged by the circumstances of birth, should not be disadvantaged in their endeavour to obtain a university degree. There are many terms used to describe these disadvantaged students such as disengaged, underrepresented, missed-opportunity, and even second chance learners (Klinger & Wache, 2009). These terms stereotype these students and portray an image that can have negative connotations, and the case is that most prospective students who have been out of the education arena for a period of time enter with limited academic skills which will disadvantage them if they were to transition straight into an undergraduate program. Alongside a low skill set and limited academic ability, these students also tend to face fiscal concerns, often have family commitments and may deal with low self esteem and ‘self’ issues (Klinger & Murray, 2011). Some students present with learning difficulties

and this is yet another barrier to be faced and overcome. Therefore, enabling programs have a very important structural role in the development and up-skilling of these students in order to assist with a positive transition into undergraduate studies. However, there is limited research into how successful this transition really is and the variables that impact on a successful transition.

Background

Research undertaken by the author through a Master's program, looked at the transition from an enabling program into the first year of university. The aim was to investigate the claim made by Klinger and Wache (2009, p. 5) who found that students who complete an enabling program and transition to undergraduate study, often against considerable odds, are "manifestly resilient and typically display considerable independence, skill, and savvy in their determination to succeed." This quote was core to this research as most enabling educators believe that their students do, in fact, enter university better prepared and with a higher level of resilience. Therefore, the research explored this idea from the students' perspective and their lived experiences. Using phenomenology, the research investigated the lived experiences of eight first year undergraduate students who had all completed the Skills for Tertiary Education Preparatory Studies (STEPS) enabling program, transitioned and successfully completed their first year of undergraduate study in their chosen degree. The aim was to identify what traits these students displayed that allowed for them to be successful in their pursuit of a higher education. This paper reviews the findings of this research and then expands further in order to explicate the key findings and identify areas that may have implications for enabling education.

The core business of an enabling program is to teach the basics of academic rigour to students who present with lower level academic skills. They are designed specifically to offer an alternative pathway for those who may not have the necessary skills and credentials required for this higher level of education. Klinger and Wache (2009) preface this by saying that enabling programs offer a 'second chance' opportunity for these people to change their life direction. Enabling programs vary depending on the university to which they are aligned and the specific needs of the students they attract.

The STEPS enabling program is a holistic program designed to equip future university students with essential skills and knowledge in order to achieve an entry score sufficient to enter tertiary education. The program is designed to teach not only the core skills of mathematics, computing and academic writing, but also to assist the students in gaining personal awareness of themselves as learners and to appreciate and experience the tertiary culture. The fundamental underlying philosophy of the STEPS program is born from the belief that, within an adult learning program, the inner as well as the outer lives of adult learners must be considered and this is achieved through a holistic curriculum that not only looks at the core subjects that they require skills in, but uses a student centred approach in a supportive learning environment to help expand students' current worldview and self efficacy (McConachie, Seary & Simpson, 2008, p. 90). STEPS lecturers anecdotally agree that the personal and academic skills acquired through this program can assist students to transition into their first year of university study with reduced stress and greater proficiency. This belief is enforced by Willans and Seary (2007) who have identified that, within an enabling program, a combination of

core skilling and self skilling is vital to allow students to immerse themselves fully in the first year of undergraduate studies with confidence.

Huntly and Donovan (2009) claim that the first year at university is crucial for most students as it can often lay the platform for academic success. This is because, once in the undergraduate arena, students are expected to engage with a vast body of knowledge, and then proceed to analyse, synthesise and evaluate arguments. Krause (2006, p. 1) argues that “for some students, particularly those from under-represented backgrounds, the transition to university can be a significant battle” which can cause a conflict of values and may challenge their identity. This is supported by Burton, Taylor, Dowling and Lawrence (2009) who acknowledge that students go through a period of transition as they adjust to the challenges that this new environment presents, with both the context of learning new material and the social experiences. Klinger and Wache (2009) suggests that this is a formidable expectation for any first year student, let alone for those students drawn from diverse educational, social, cultural, ethnic, and economic backgrounds (Klinger & Wache, 2009, p. 7). Maunder, Gingham and Rogers (2010) suggest that due to the range of educational backgrounds, many students enter with disparate expectations about university study. Nelson, Duncan and Clarke (2009) agree and suggest that many students commence undergraduate study with ill-informed preconceptions about what might be encountered in their chosen program of study. In addition, they do not realise what it is to be an independent or autonomous learner (Brownlee, Walker, Lennox, Exley & Pearce, 2009). Understanding how the transition process is experienced by students, and identifying areas of difficulty or challenge, enables universities to put systems in place to try and prevent the number of first year students leaving the higher education sector (Maunder, Gingham & Rogers, 2010, p. 2).

Methodology

The master’s research aim was to look at the first year experience through the lived experience of students who had successfully completed their first year of undergraduate study. Therefore, the methodology of phenomenology was used as it offers a potentially powerful way to investigate the lived experiences within an educational context. It is characterised by its unique inquiry method as it strives to portray the phenomenon from the personal perspective of the one who experienced it (Kupers, 2009). Phenomenology formalises the lived experience in order to grasp the conscious experience and identifies the implications for the subject experiencing it. Van Manen (1990, p. 31) uses the terminology of ‘mining’ the meaning as this methodology requires the researcher to look in-depth at the data in order to construct meaning from the experience. Van Manen (1990, p. 31) personifies this process through his explanation that phenomenology research is “always a project of someone: a real person, who, in the context of particular individual, social and historical life circumstances, sets out to make sense of a certain aspect of human existence.”

Phenomenologists agree that a person cannot effectively reflect on a lived experience while living through the experience. They believe that the real data can be found in the reflection of an experience that has already passed or been lived through (Ehrich, 1999; Giorgi, 1985; van Manen, 1990). Therefore, it can be said that phenomenological reflection is retrospective and the experience is recollective. Through the analysis and the mining of the meaning, the researcher uses a contemplative, even meditative attunement to the phenomenon (Kupers, 2009; van Manen, 1990). The outcomes of this

process are not just insights or epiphanies, but thoughts and discourses which are captured and represented through textual prose.

Phenomenology burrows deep in order to find the essence of an experience. This search for the essence is based around delineating the essential themes throughout the data. Each participant enters with their own individual experience which may vary due to cultural backgrounds, language, and individual situations. Therefore, the goal is to understand and find commonalities in meaning, skills, practices and experiences, and “to find exemplars or paradigm cases that embody the meanings of everyday practices ... in such a way that they are not destroyed, distorted, decontextualized, trivialized or sentimentalized” (Leonard, 1994, p. 3).

Participants and instrument

The population for this study was a small sample of students who completed the STEPS program and successfully completed their first year of undergraduate study. An initial email was sent out to all students who fell into this category. Eight students responded to this email and each one agreed to participate in the interview process used in this research project. As shown in Table 1, the demographic age range showed all, but one, were over the age of 25, with one being over 60 years of age. There were five female participants and three males. All, but one, were born in Australia and were first generation students which means they were the first in their close family to attend university. Five of these participants had been out of an educational environment for more than 16 years, with two being out between 6-15 years.

Table 1 – Demographics of sample population

Participant	Age range	Gender	Australian born	Years since last studying	1 st generation student
1	36-45	Female	Yes	16+	Yes
2	46-60+	Female	Yes	16+	Yes
3	36-45	Male	No	16+	Yes
4	36-45	Female	Yes	16+	Yes
5	26-35	Female	Yes	1-5	Yes
6	18-25	Male	Yes	6-15	No
7	60+	Female	Yes	16+	Yes
8	26-35	Male	Yes	6-15	Yes

The participants were individually interviewed within a non-threatening environment. Each interview began with the same question, asking the participant to share their experiences as a first year student. The interview was not structured but was guided by the participant’s responses with the researcher posing open questions in order to probe further into their reflection of that experience. Each interview was recorded and then transcribed verbatim with nuances and non-verbal communication noted as well.

Analysis

The analysis process in phenomenology was very time consuming as the transcripts were analysed line by line, and any words/phrases/sentences, known as natural meaning units (NMU) that aligned to the overall phenomenon, were copied accurately and precisely into another document. Through the process of reading and re-reading, these NMUs were clustered into similar themes until four key themes emerged: sense of preparedness, fear of the unknown, university as an anchor, and sense of certainty and rightness. Throughout the mining of the data process, the researcher was constantly reflecting and contemplating in order to identify what the overall essence was within the key themes. Through retrospective thinking and analysing the experiences, the researcher identified that there was a similar thread and commonality that connected all these students' experiences and enabled them to succeed in their endeavour to gain a higher education. The essence of these experiences demonstrated that these particular students had a strong sense of self efficacy.

Findings

In brief, there were four key themes that were identified. The first theme to emerge was the '*sense of preparedness*' that the students felt as they entered into the first year of undergraduate studies. Evident within the data was the students' appreciation for the STEPS program and the way that each student felt empowered and prepared as they transitioned into their first year of undergraduate studies. Comments such as "*I would never have come to university or thought I could do university if I hadn't achieved well in the STEPS program to give me the confidence to go on*" exemplifies the student's belief in their own academic capability.

The second theme actually reflected a sense of fear of what was yet to come. This '*fear of the unknown*' emerged as they expressed feelings of uncertainty as they faced challenges in their first year. The students' reflections showed that, even though they gained confidence in STEPS, they still had to battle with the fear of failure or the fear of having taken on something that was still beyond their academic capacity.

The third theme built upon the previous one because, even though fear of the unknown was evident, these students actually found that '*university became an anchor.*' Each student identified that the balance between personal life and study can sometimes be skewed and demand various levels of commitment; however, as problems arose in their personal life, these students found that university was their anchor. The routine and expectations at university stayed the same and, even though the content varied, there was a sense of security in the consistency that university provided. At university, students found that they could put aside the problems of life and focus their minds on their study.

Finally, one element that emerged through respondents' interviews was that they felt a '*sense of certainty and rightness*' about being at university. They indicated that they finally felt that they had some control over their future and now had a sense of purpose for studying. They felt more resolute about their future and were able to actively set goals to achieve the pathway they mapped out for themselves.

These students' experiences revealed what it was like to successfully transition into university. Although they all felt better prepared for this transition, they constantly battled fear and self doubt. However, as each student traversed this new terrain, they started to become a new person with a new identity through the transformation of their character and subjectivities. Willans (2010) found that although personal transformation can be empowering, for many students it can be an erratic, emotion-laden process, often fraught with contradiction and tension. What was clear from this research was that none of the students found it an easy journey. However, each of the participants effectively drew on an inner strength which gave them the ability to succeed. It was at this point that the researcher was able to reveal that the underlying essence could be found in Bandura's construct of 'self efficacy.' Self efficacy is defined by Bandura (1997, p. 3) as "beliefs in one's capabilities to organise and execute the courses of action required to produce given attainments." Bandura (1997) claims that a person's belief in their own ability can have diverse effects on many aspects that affect their performance and behaviour. It was evident through the anecdotes in this research, that each student demonstrated this strength through mastering each element, being self motivated and demonstrating perseverance. It revealed that self efficacy was core to their being. Their individual and personal sense of self efficacy had the power to influence their actions, and their personal beliefs in 'self' demonstrate that participants had a level of self-efficacy that enabled them to successfully achieve their first year of undergraduate study.

Discussion

The overall essence from the research espouses that self-efficacy is an innate belief system that these participants were able to draw on and increase during their time in STEPS and throughout their first year of university. Therefore, it seems crucial that higher education institutions pay attention to how they can assist students to develop self efficacy. This research indicates that enabling programs are well placed to provide their students with opportunities to develop their self efficacy. However, it does need to be acknowledged that there are some discrepancies that are beyond the scope of this paper. The participants in this project were all successful through STEPS and into their first year of study; however, this project did not look at the variables associated with non-successful students and whether their level of self efficacy was similar to, or lower, than these particular participants. At the interview, these participants presented with a strong level of self efficacy and through their recollections, they acknowledged that the enabling program gave them opportunities to maximise the potential for growth in this area. Equally important is the acknowledgement that the needs of a student cohort typical of an enabling program are quite diverse, and it can be challenging to cater to each individual's needs. Unfortunately there are disappointments when some students are unsuccessful in their endeavour to further their education. Nevertheless, enabling programs are well placed in the university environment and play an integral role in the development of self efficacy in their students.

Bandura (1997) reinforces the fact that self efficacy develops over time and through both personal and vicarious experiences. At times, it can be inadvertently stimulated by either the student or the environment they are in, but in general, self efficacy can be taught and practised in order to become an integral part of the student's innate fibre and character. Therefore, it would seem that within the tertiary sector, enabling lecturers are

in an ideal position to mentor and implement strategies that will assist enabling students in developing their internal efficacy. Middleton (2003, as cited in Lemon, 2009) looked at the question of success for enabling students. His belief is that “in all the work that we do, we help people by giving them success – the only currency that education has that is worth striving for.” Consequently, it seems pertinent that enabling educators look more closely at the four sources that promote and develop self efficacy and align these to current teaching practices in order to enhance and improve teaching practices and even personal mindsets.

According to Bandura, there are four major sources that aid in the development of self efficacy: mastery experiences, social modelling, social persuasion and emotional arousal (1994; 1997). Bandura (1994), Palmer (2006) and van Dinther, Dochy & Segers (2011) agree that the most powerful source of creating a strong sense of efficacy is through mastering experiences, as this provides students with authentic evidence that they have the capability to succeed at the task they are doing. When students are successful in performing a challenging task, their sense of self efficacy is strengthened, but failing to adequately deal with a task or a challenge can undermine and weaken their sense of efficacy. These outcomes have both positive and negative implications for enabling programs. If the task is sufficiently challenging as to arouse a student’s determination through applying a higher level of perceived skill, this places those students in a position to maximise the potential to cultivate their self efficacy. On the other hand, due to the diverse nature within an enabling program’s cohort, there is a chance that some students have not had to utilise their inner strength and determination, and in-turn failing these challenges could in fact, undermine the work of the program as these students leave disillusioned with themselves and with a weaker sense of self efficacy. The students interviewed demonstrated that success was pivotal in building their personal sense of efficacy; however, this robust sense of efficacy was not achieved through easy successes. Each student demonstrated strength of character to overcome obstacles and difficult situations through being determined and persistent. Their first tastes of success were through each assessment item completed successfully, and further success came from the completion of STEPS. It was through *mastering* the different core elements of language, mathematics, computing and tertiary preparation skills that the students first experienced success. Therefore, to make mastery worthwhile, the scaffolding of knowledge provided through the courses need to be reflected through assessment tasks that challenge the students to apply the skills at a higher level.

Within an enabling program, there is a commonality and connection amongst the students and the benefits of peer support and peer tutorage align to Bandura’s source of *social modeling* (1994; 1997). Enabling students are valuable contributors to the university and through their early journey, are developing strong ties and relationships within the university sector. They build up a sense of community, develop personal identity, learn about the culture and adopt a studious mentality and in turn, these characteristics are taken into their undergraduate studies. There is a sense of comradeship as students view their classmates with a connectedness that comes from being in a similar environment and having likeminded goals, they will often draw strength and conviction through watching others achieve and succeed. Therefore, building that sense of connectedness within the class cohort and encouraging study groups are simple, yet very effective ways to encouraging *social modelling*.

It is important that enabling educators be aware that their perceptions of individual student's self efficacy may influence that student's learning journey. Corkett, Hatt and Benevides (2011) suggest that teachers need to draw students' attention to their successes rather than assume that the students are making this connection on their own. Enabling educators are in a position to use motivational strategies to persuade their students to believe that they have the skills and capabilities to succeed. The value placed on the quality of support from the STEPS lecturers in the research data speaks to this fact. When students receive verbal encouragement from their lecturers, this enabled them to overcome their internal self doubt and allows them to focus on giving their utmost to their study. This is referred to as *social persuasion* by Bandura (1997). The spoken word has long been recognised as a way to either enhance or diminish a person's confidence and lecturers are in a position of authority that carries certain responsibility as they interact with adults and develop collegial relationships. Body language can also speak loudly to students and lecturers need to be aware that the message their body language is conveying is supporting the words they are speaking (Penner, 1984). Specific consideration needs to be focused on how traditional communication models can be adapted to present a more positive and supportive environment to promote self-efficacy.

The internal psychology enlisted by students plays an important role in developing self efficacy. Bandura (1997) refers to this as emotional arousal and explains that a person's mood, emotional state, physical reaction and stress level can all impact on how a person perceives their abilities in a particular situation. Many enabling students enter with negative prior experiences which can be emotional, fiscal, or physical and often this transition is fraught with anxiety and uncertainty (Klinger & Murray, 2011). Enabling lecturers can be placed in a position where they may need to consider their student's emotional and mental state of health in-case it is causing the student to have a negative perception of their ability in that particular situation. Pastoral care falls naturally to the enabling lecturer and it can often be the informal support that is given at the point of need that is most beneficial to the student. As students begin to see themselves achieving goals, their sense of certainty is heightened and in-turn they increase their own internal motivation. Integrating strategies drawn from positive psychology and resiliency programs into classes or shared times can be beneficial and highlight to the students that there are practical ways that they can develop their internal locus of control.

Conclusion

When considering the four constructs of Bandura's self efficacy theory (mastery, social persuasion, social modeling and emotional arousal) and reflecting upon the four key themes in the research (sense of preparedness, university as an anchor, fear of the unknown, and sense of certainty and rightness) there are some clear links, but mostly the constructs are interwoven into the themes in a subtle way. Through mastering the skills taught in the enabling program, these students gained a deeper awareness of their capacity and preparedness to enter the undergraduate arena. As they mastered each skill, their self efficacy increased and they felt more confident in their own ability. However, even after completing the enabling program, entry into undergraduate studies still presented these students with new challenges, but because they felt prepared, they entered with an enhanced sense of belief in their capability and were able to 'put on' a

studious mentality and assimilate into the culture of the university. Fear of the unknown was a variable that remained throughout their first year undergraduate journey, but as these students gained a stronger sense of self efficacy, they inadvertently used the constructs of social modeling (seeking support through their peers and lecturers) and social persuasion (feedback from lecturers) to gain mastery over their negative selves. It is within this context that they develop their sense of self and while there may be a fear of the unknown, what is known is that the sense of community and support they receive enables the students to face the fear of the unknown by holding onto these support networks. Finally, through actively using emotional arousal to ignite their internal motivation, these students found that they had a strong sense of certainty and rightness about their future and the effort that study had on seeing those goals come to fruition. They had an innate sense that they could be successful and that university was the right place for them. Therefore, through the construct of phenomenology and the individual lenses of the student's personal recollections, their experiences weave together a story from their individual journeys and bring forth evidence of the value of developing a student's personal self efficacy.

References

- Bandura, A. (1994). *Self efficacy*. Retrieved from <http://des.emory.edu/mfp/BanEncy.html>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman and Company.
- Bradley, D., Noonan, P., Nugent, H., & Scales, B. (2008). *Review of Australian higher education: Final report*. Retrieved December 17, 2008, from <http://www.deewr.gov.au/HigherEducation/Review/Pages/ReviewofAustralianHigherEducationReport.aspx>
- Brownlee, J., Walker, S., Lennox, S., Exley, B. & Pearce, S. (2009). The first year university experience: using personal epistemology to understand effective learning and teaching in higher education. *Journal of Higher Education*. 58:599-618. DOI 10.1007/s10734-009-9212-2
- Burton, L.J., Taylor J.A., Dowling, D.G. & Lawrence, J. (2009). Learning approaches, personality and concepts of knowledge of first-year students: Mature-age versus school leaver. *Studies in Learning, Evaluation, Innovation and Development (SLEID)*, 6(1), 65-81.
- Corkett, J. K., Hatt, B. E., & Benevides, T. (2011). Student and teacher self-efficacy and the connection to reading and writing. *Canadian Journal of Education*, 34(1), 65-98.
- Ehrich, L.C. (1999). Untangling the threads and coils of the web of phenomenology. *Education Research and Perspectives*, 26(2), 19-44.
- Giorgi, A. (1985). *Phenomenology and psychological research*. Pittsburgh, PA: Duquesne University Press.
- Huntly, H., & Donovan, J. (2009), 'Developing academic persistence in first year tertiary students: a case study', *Studies in Learning, Evaluation, Innovation and Development*, 6(1),1-14. Retrieved from <http://sleid.cqu.edu.au/include/getdoc.php?id=804&article=242&mode=pdf>
- Klinger, C.M. & N. Murray. (2011). Transitioning from enabling education into higher education: a case study of the benefits and challenges presented to and by mature students with life experience. *Journal of the Educational Research Group of Adelaide (ERGA)*, 2(2), pp. 19-26.
- Klinger, C.M., & Wache, D. (2009), *Two heads are better than one: Community building in the Foundation Studies program to promote student engagement in learning*. University of South Australia.
- Krause, K. (2006). *On being strategic about the first year*. Keynote paper presented at First Year Forum, Queensland University of Technology, Brisbane, Queensland.

- Kupers, W.M. (2009). The status and relevance of phenomenology for integral research. *Integral Review*, 5(1), 51-95.
- Lemon, M. (2009). *MUVE to a better alternative: The scaffolding of bridging students in SL*, Paper presented at the 3rd National Conference of Enabling Educators: Enabling Education.
- Leonard, V. (1994). A Heideggerian phenomenological perspective on the concept of person. In P. Benner (Ed.), *Interpretive Phenomenology: Embodiments, caring and ethics in health and illness*. Thousand Oaks: Sage.
- Maunder, R.E., Gingham, J. & Rogers, J. (2010). *Transition in higher education: Exploring the experiences of first and second year psychology undergraduate students*. *Psychology of Education Review*. 34(1).
- McConachie, J., Seary, K., & Simpson, J. (2008). Students' perceptions of a quality preparatory program at an Australian regional university: Success through changing worldviews. In J. McConachie, M. Singh, P.A. Danaher, F. Nouwens., & G. Danaher (Eds.), *Changing university learning and teaching: Engaging and mobilising leadership, quality and technology* (pp. 87-106). Teneriffe: Post Pressed.
- Nelson, K., Duncan, M., & Clarke, J. (2009). Student success: The identification and support . *Studies in Learning, Evaluation, Innovation and Development (SLEID)*, 6(1), 1-15.
- Palmer, D. H. (2006). Sources of self-efficacy in a science methods course for primary teacher education students. *Research in Science Education*, 36, 337–353.
- Penner, J.G. (1984). Why many college teachers cannot lecture: How to avoid communicatin breakdown in the classroom, ERIC Database. Retrieved from <http://eric.ed.gov/?id=ED261638>
- Van Dinther, M., Dochy, F. & Segers, M. (2011), Factors affecting students' self-efficacy in higher education. *Educational Research Review*, 6, 95-108.
- Van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. London: State University of New York Press.
- Willans, J., & Seary, K. (2007). *"I'm not stupid after all"-Changing perceptions of self as a tool for transformation*. Paper presented at the 2nd National Conference of Enabling Educators: Enabling Education – What works?, Newcastle, Australia.
- Willans, J. (2010). *Navigating personal change: Transforming perceptions of self as learner*. (Unpublished doctoral thesis). Central Queensland University, Rockhampton, Qld.