

From the horses' mouths: Reflections on transition from peer leaders

Bonnie Amelia Dean

Learning, Teaching & Curriculum, University of Wollongong

Kathryn Harden-Thew

Learning, Teaching & Curriculum, University of Wollongong

Kylie Austin

Student Diversity, Outreach, Pathways & Transition, University of Wollongong

Melissa Zaccagnini

Learning, Teaching & Curriculum, University of Wollongong

Abstract

World-wide peer learning programs support students in their transition to university. Peer leader support is distinctive, being closer to the learning experience or transition encountered. This paper explores transition into the first year of university through the reflections of peer leaders. It outlines two synergetic programs at the University of Wollongong (UOW): one supporting high school students in the early stages of transition to university (In2Uni); and the second supporting enrolled university students (PASS). Focus groups were conducted to elicit the voices of leaders reflecting on their own transition and experiences of mentoring peers through transition. The findings suggest peer leaders assist transitioning students to confront change; develop strong social networks; make connections within and across curriculum; and learn how to learn in the new academic context. It was found that peer leaders valued peer support in their own transition (or wished for it) and saw its ongoing significance for others in transition.

Keywords: First year experience; Transitions; Peer learning; Peer leaders; Student voices

Peer learning and support for transition

The best answer to the question, "What is the most effective method of teaching?" is that it depends on the goal, the student, the content, and the teacher, but the next best answer is, "Students teaching other students." (McKeachie, 1994, p.144)

Peer learning is not a new concept in educational contexts. It has been speculated that it began as early as any other collaborative or community activity, either implicitly or intentionally (Topping, 2005). Although its origins are not well defined, there seems to be universal agreement on its meaning, purpose and effectiveness. Peer learning is understood as a two-way reciprocal learning activity (Boud & Lee, 2005) between people of similar social groupings (Topping, 2005). When a student is teamed up with another with 'advanced' understanding or experience, important knowledge, skills and conceptions can be unpacked and transferred. Peer learning can also offer socio-emotional support, affecting changes in beliefs, attitudes and behaviours (Schunk & Zimmermann, 1997). Targeted peer support can build a student's 'educational resilience' especially when utilised through important

transitions (Topping, 2005). A decade ago, and in the context of higher education, Boud and Lee (2005) described peer learning as one of the key trends in the past 20 years. This 30 year conversation speaks directly to the sustainability and viability of peer learning as a pedagogical activity.

For the purposes of this paper we have used the term *peer learning* as an umbrella term to describe the activities of university students supporting current or future students. In the multiple peer learning practices described in current literature, ‘peer’ has been taken unequivocally to refer to activities between students in the same cohort as well as activities between more ‘advanced’ students and newcomers or those seeking further assistance (Boud & Lee, 2005). Many of the theoretical explanations for peer learning strategies draw on Vygotskian (1978) notions that deeper understanding and problem solving skills can be afforded through aided instruction. Through collaboration with a more capable peer, Vygotsky (1987, p.211) espoused, “what the [student] is able to do in collaboration today he will be able to do independently tomorrow”. In this paper, *peer leaders* are those who, having made the transition to university, are currently supporting others to do the same through participating in peer learning.

The aim of this paper is to explore transition from high school into the first year of higher education through the reflections of peer leaders. Although peer leaders play a critical role in the support of new students, to date very little has been heard from the perspective of peer leaders on their transition and how this informs their engagement with new students going through transition. We were interested in the challenges and experiences of peer leaders both in their own transition and as leaders assisting others going through transition. To this end, two programs at UOW were investigated: one that reaches into high school, supporting the early stages of transition into university; and a second program that supports students enrolled at university.

This paper begins with a brief discussion on the importance of focusing on transition before moving to outline two synergetic peer learning programs at UOW that support transition from high school and into university. The second half of the paper presents the study including findings and considerations of peer learning for student support during transition.

Focusing on transition

The last decade has seen a plethora of research on transition in higher education. In Australia, the starting point for many contemporary literature reviews of transition builds on the scholarly work by Kift, Nelson and Clarke (Kift & Nelson, 2005; Kift, 2009; Kift, Nelson & Clarke, 2010) who maintain “the first year of university study is arguably the most crucial time for engaging students in their learning community and equipping them with the requisite skills, not to persist, but to be successful” (Kift, 2009, p.1). Kift (2009) details *Transition Pedagogy* as a set of six principles for best practice learning and teaching for first year students. These first year curriculum principles focus attention on the areas of transition, diversity, design, engagement, assessment, and, evaluation and monitoring, as key areas of the curriculum for teachers to consider in orienting students into university culture. These principles are designed to help teachers build engaging, supportive, intentional, relevant and social first year curriculum.

While transition pedagogy looks at the first year, a second common starting point for Australian studies considers the diversity and potential of high school students for higher education pathways. This effort has been driven by a federal government agenda to increase

the access, retention and success of students from low socioeconomic or underrepresented backgrounds (Bradley, 2008). Research suggests that students from low SES backgrounds are less or differently prepared for entry into university compared to those from high SES backgrounds (Gale, Sellar, Parker, Hattam, Comber, Tranter, & Bills, 2010; Tinto, 2006-7) and face barriers not only accessing higher education but also becoming successful learners in a university context (Thomas, 2011). School outreach programs as well as university and school partnerships have shown to strengthen students' capacities to cultivate networks, shape their aspirations and encourage others towards university pathways (Sellar & Gale, 2011), thereby addressing some barriers to tertiary access and success.

To investigate issues around student access and success, a number of recent studies have given voice to the student experience of transition. Bowles and colleagues (2014) found that students' perceptions of aids to success during transition fell into two categories: student-led enablers and university-led enablers. Student-led enablers were those things that students identified as significant internal activities that students had to initiate and control in order to succeed in the new environment. These included 'willingness to seek academic support, effort and commitment toward study and embracing university culture' (Bowles *et al.*, 2014). Those initiatives the university led, which were perceived to enable students to gain greater access to support and resources, included online learning resources, faculty support and social contact. These were noted by the students as important to success. A second study by Brooman & Darwent (2014), investigating student perceptions of the factors contributing to success in first year, calls for longer term strategies for transition. They conclude "it is clear that more research needs to be carried out to justify the resources committed to transition and to avoid uncontrolled 'scattergun' interventions" (Brooman & Darwent, 2014, p.1539). These studies highlight the necessity for further investigation into transition interventions or programs that are coordinated, integrated, explicit and cumulative (Kift & Nelson, 2005; Kift, Nelson & Clarke, 2010).

Partners in arms: Two peer learning programs supporting transition

The University of Wollongong recognises the importance of supporting students in the transition from prior learning to higher education. Two programs utilising peer learning and designed to support the successful transition to UOW are the In2Uni and PASS programs.

In2Uni Program

In2Uni is the umbrella name for nine outreach programs offered by UOW to schools that employ peer leaders, known as In2Uni Mentors. In2Uni began in 2011 with 64 mentors, almost doubling this number in 2014 to 111 mentors. In 2014, 9,034 school students participated across these programs and of these students 45% did not have a family member who had previously attended university.

In2Uni reaches into primary and high school, targeting individuals who are typically underrepresented at university. These programs aim not only to increase students' aspirations and capacity to attend higher education, but also to build their social capital so they can successfully navigate the transition to higher education. Specific programs such as the Year 12 University Preparation Program and Year 12 Summer Master Class provide school students with the opportunity to enroll as a university student during their senior years. As part of these programs, students are able to engage with university activities increasing their understanding of how they learn; access university systems to build familiarity of both the physical and online environments; and increase their social networks by working with a

number of students across different schools in the region. Throughout these activities, the school students are guided by their In2Uni Mentors who build their knowledge about university, with the goal of enhancing their success in the transition to higher education.

In2Uni programs engage enrolled UOW students, who have similar backgrounds to the school cohorts, including alumni from the same high school or from a similar area, as mentors. These mentors are offered training and professional skill development. As mentors, their role is to build relationships with participating school students, opening up their own experiences of transition to higher education. In addition to developing study skills, mentors share obstacles that they encountered during transition and how they overcame them, building aspirations and encouraging these younger students to consider university as a post-school option, and providing students with the knowledge and skills of how to get there.

Internal data collected between 2012 and 2014, with over 145 mentors, report a range of advantages gained from participating in the program. These include: increased confidence in facilitating learning and leading class groups; increased knowledge of study skills that could also be applied to their own studies; enhanced problem solving skills; ability to establish and maintain social networks; increased self-reflection of their own learning practices; increased social and support networks; and, increased employability upon university completion. Further, an evaluation project run by UOW researchers found In2Uni mentoring had assisted high school students to understand the steps required to achieve their career goals (Harwood, O'Shea, Howard & Cliff, 2014). In2Uni mentors were found to "impact students' perceptions of the accessibility of Higher Education, largely due to their role-modeling capabilities" (Harwood *et al.*, 2014, p.10).

In2Uni participants, who go on to enroll at UOW, continue to be supported throughout their degrees. In addition to co-curricular activities, these students are encouraged to engage with a second transition program at UOW, The PASS program, which supports students in their academic studies. Following the mandate from Kift, Nelson & Clarke (2010; and Kift & Nelson, 2005), these programs work in partnership, and demonstrate a considered, cumulative approach to transition into university.

PASS Program

Peer Assisted Study Sessions (PASS), also known as Supplemental Instruction (SI), has been utilised as a collaborative peer learning strategy at UOW since 2002. In 2014, PASS employed 92 peer leaders in 115 subjects across the university, recording 40,400 hours of student contact. PASS is attached to a large proportion of first year subjects and is central to the UOW first year experience strategy. It also supports a significant number of second year subjects, particularly those that act as key points of transition for students who are entering a course using other pathways into university. Since 2005, UOW has also acted as the National Centre for PASS, providing accredited PASS Supervisor Training to staff from institutions across the Australasia region.

PASS/ SI was developed in 1973 at the University of Missouri, Kansas City by Dr Deanna Martin, with the aim of increasing student success in difficult subjects (Malm, Bryngfors & Morner, 2011). It is a voluntary, academic peer learning program, which assists student's to master subject content while integrating discipline specific learning skills. It targets subjects with historically high failure rates, or those that are perceived as difficult by student participants (Martin & Arendale, 1993). Although some researchers are interested in the effects of PASS for students from underrepresented backgrounds (see Dawson, van der Meer,

Skalicky & Cowley, 2014), PASS doesn't target at-risk students. Rather, it targets at-risk subjects, offering non-remedial support to all regardless of socioeconomic status, previous education or entry level of knowledge. PASS seamlessly integrates with the existing teaching structure of the identified class. The PASS Leaders form a partnership with existing academic instructors in order to support students to further consolidate the information covered in more traditional educational environments, such as the lecture or tutorial.

Students participating in the regularly scheduled one hour PASS sessions, are encouraged to take an active role in their learning, with the goal of becoming an independent learner. In a PASS session, students are required to examine what they know and understand, and are challenged to build new knowledge and understandings in collaboration with peers (McGuire, 2006). The peer-to-peer nature of PASS also provides a forum to make personal connections and create a sense of community (Wilcox, 1993).

PASS is a nonthreatening learning environment due to its facilitation by peer leaders (Wilcox, 1993). In this context, peer leaders focus on encouraging students to develop sustainable learning skills and study activities. Therefore, a key component of the leader's role is modelling positive learning behaviours (Dawson *et al.*, 2014; Hurley, Jacobs & Gilbert, 2006). In a recent study reviewing literature on PASS (SI) from 2001 – 2010, Dawson and colleagues (2014, p.610) describe the unique role of PASS leaders:

“The leader is not a tutor or teaching assistant; their role is not to introduce new content or to reteach lecture material. Instead, the leader is responsible for facilitating discussion around course content and related study skills, and for preparing learning activities such as worksheets, group work, problem-solving exercises, or mock exams for their students”.

In this study, Dawson *et al* (2014, p.634) also call for further research in the areas of PASS (SI) and transition, stating that PASS “is one piece of the transition puzzle that deserves attention, given its longevity and breadth of application across the globe”.

The Study and Findings

Expanding on Dawson *et al*'s (2014) call for further research, this investigation was conducted to explore transition to university from the perspective of peer leaders. Peer leaders were invited from both the In2Uni and PASS programs to participate in focus groups in order to reveal the voices of students' experiences. This qualitative approach was chosen to elicit deep, rich accounts of transition from the participant's perspectives (Denzin & Lincoln, 2011). Peer leaders from In2Uni and PASS programs were selected for this research, as they play a key role in transition for new students as well as having recently faced this crucial period themselves.

Fifteen peer leaders from the two programs participated in focus groups. These students included international and domestic students across faculties and year groupings. Data was transcribed and analysed using constant comparative method (Glaser & Strauss, 1967). As with small scale studies, although findings are not broadly generalisable they open windows onto emergent themes, allowing insights and understandings of the field to be developed further.

Over the last three decades transition has been investigated for various purposes and from multiple perspectives (Boud & Lee, 2004). In this study, analysis of the data revealed four strong themes from the viewpoint of peer leaders in regard to their experience of transition and support which indicated the significant value of peer learning in HE. The four themes

that emerged from this study: confronting change; developing strong social networks; making connections; and, learning to learn at university.

Confronting change

The first of the four themes revealed in the data highlighted both the multifaceted character of the changes transitioning students face, as well as the confrontational nature of these changes. The concerns that these transitioning students faced were felt before study had even begun, with one student stating “I was a bit worried about my study, does my brain still work?” (S4, p.17). This type of concern continued as students entered university, with a PASS leader noting “we’re being dropped in the deep end and [we had] to be independent” (S8, p.28). This idea of independence permeated peer leader responses across the focus groups. Another student expressed that their experience was “pretty stressful” (S11, p.51) as they did not know what would be expected or how much they needed to know for each subject.

Other changes that confronted new students included the isolation of the first weeks due to the reduced social networks and stress, related to the new environment. One student reflected, “I found in first few weeks I was sort’ve ‘oh my goodness’ I don’t know anyone, what am I doing?” (S10, p.47). A PASS leader who was an international student stated, “when I first came it was all very different environment to Vietnam... [it] was a challenge because everything’s new and everything’s strange” (S1, p.2).

Supporting students during this considerable period of change can have significant implications for their transition. Emerging from the voices of peer leaders was that while each espoused considerable change, this change was different for each student. These findings are in support of Gale and Parker’s (2014) recommendations that transitional support needs to be cognisant of students’ lived realities, rather than limited to exploring ways to make the student ‘fit’ with pre-existing structures and curriculum, assessment and pedagogical practices. They suggest university’s explore concepts and issues of transition to enable “more robust ways of resourcing students’ capabilities to navigate change” (Gale & Parker, 2014, p.748).

Developing strong social networks

Building on the first theme, the second emergent theme revealed the importance of finding secure and ongoing social contacts within the new study environment and balancing these to develop networks and to support study. In contrast to Bowles and colleagues’ (2014) study that found weak connections between university-organised social activities and achieving a successful first year transition, the findings of this research support others who report social integration as a strong predictor of transition success (McKenzie & Schweitzer, 2001).

One word continued to surface in the talk of these focus groups – isolation. Whether it was experienced or avoided, this concern was central to the transition experience. One international student stated, “I was a bit shy at first so I didn’t really talk much to people. I was a bit isolated in class at first” (S1, p.2). Somewhat surprisingly, a domestic student who relocated to attend university reflected, “I moved up with 5 or 6 of my closest friends... [I didn’t] initially feel isolated” (S14, p.65). While a local-area student noted, “It wasn’t as big a jump as I sort of wanted. To be honest, it felt like nothing really changed, same support network, same environment” (S13, p.65). In a twist to these considerations of their relative isolation, the local-area student, S13, added,

“it’s actually a bit isolating when you’re a local... All the people I know on campus now – they developed relationships with the people they live with, they didn’t develop them through the classroom in the first year. It was actually pretty hard to crack any of that... You have to be involved outside the classroom” (S13, p.66).

Many of the peer leaders considered that these necessary networks were either gained or strengthened by meeting people through class and particularly when involved in PASS. Peer leaders agreed that PASS supported their transition to university, with one leader concluding “as a student in my first year I got that support network [from PASS] and it was subject specific... that was really, really helpful” (S9, p.48). Further demonstrating the integrated nature of these programs, an In2Uni mentor stated, “PASS was like the best thing I ever did in first year. I went to PASS every week and that’s how I met the majority of my friends in my degree (S14, p.68). One peer leader noted that both the scholastic and social connections she made during her experience of attending PASS sessions aided her transition to university. She stated, “I think that I’ve become much more confident. I remember in my first year I didn’t know much people and I was really shy. [Now] I’ve met many new friends who are PASS leaders so it’s really great” (S1, p.11).

Making connections within and across the curriculum

Just as social networks were viewed as significant to making transition easier, so was developing connections academically. Navigating university and making connections between assessment tasks in a subject; subjects in a course; and how the course will prepare the student for the future were all regarded as vital. Speaking to the complexity of navigating first year, one peer leader commented “sometimes I look back and I think ‘how did I even do first year?’” (S3, p.16).

Assisting new students to unpack the university road map was considered an important part of transition, as peer leaders explained how confusion can arise without this,

“My first year was pretty overwhelming... I didn’t marry the point where you need to listen to the lectures and then come to your tutorial and put it all together. So I’m turning up to these tutorials and my head is spinning... for the first five weeks I was lost” (S7, p.19-20).

For those students who built strong social networks, any initial confusion was able to be quickly addressed, “in first year I lived in a college... I just had a network of about 200 people that I could ask at college” (S12, p.64-65).

Within subjects, peer leaders agreed that greater attention to making the purpose of activities and assessments explicit is necessary. The disconnection between assessments and the overall subject were highlighted in the focus groups as PASS leaders spoke about the types of questions they were commonly asked, one recalled, “‘why are we doing this? It makes no sense’ ” (S8, p.45) and “they can’t form the link between what you’ve learnt and what you’re going to learn” (S10, p.44). Another PASS leader explained, “I think a lot of students [ask] ‘why are we doing that?... I’m an accountant why do I need to know about social responsibility? Or why do I have to write an essay?’”(S10, p.45).

Related to making connections within subjects, peer leaders expressed greater need for integrating activities or subjects with vocational purpose. While some leaders felt their pathway was made clear by the composition of their subjects, others expressed the need for greater support in their first year, “I’d found that prior to choosing my subjects in this degree I had no idea. They give you a vague ‘Oh you might want to do some philosophy or you

might want to do this'... I was kind of just picking and choosing whatever. So I did find that a little bit challenging" (S5, p.17). A second leader concurred, "I found there wasn't any career help... Second year is too late" (S6, p.24).

Making these connections is at the heart of Kift's (2009) transition pedagogy which emphasises first year curriculum should mediate and support learners to enable successful transition into first year, through first year and into later years of work and career. The curriculum plays a vital role in this transition as it is unavoidably the one place all students encounter. It is with this notion in mind that Kift (2009, p.40) states "The first year of university study is arguably the most crucial time for engaging students in their learning community and equipping them with the requisite skills, not only to persist, but to be successful and independent in their new learning throughout their undergraduate years and for a lifetime of professional practice in which they will be continually required to learn and to engage with new ideas that go beyond the content of their university program". Peer leaders echoed these sentiments and suggested teachers could better help students make these connections and that this would impact their overall perception of their subjects and their degree (S13, p.69).

Learning to learn at university

The fourth theme pointed to the ongoing process of becoming a university student, as leaders disclosed their difficulties with learning how to learn at university. Transitioning into university means learning a new set of study practices, rules and norms (Gale and Parker, 2014), which for one student meant, "getting used to a new method, where you're not expected to do homework each night" (S15, p.67).

As students who have made it through first year, peer leaders revealed the challenging nature of learning in a new way. Leaders shared their own experience acknowledging this difficult point of transition, "I didn't have any study techniques, where a lot of the other students in the cohort did. But even if I hadn't been a school leaver just the fact that I came from, not the best schooling background... you don't necessarily get told how to learn" (S2, p.15). Not being 'told how to learn' or encouraged to think about strategies for learning early in a students' course of study, has implications for the transition to becoming a university student.

Those participants who were PASS leaders, expressed the importance of developing study skills and routines during the first year. They also noted the vital role that modelling these skills for PASS students plays. Reflecting the views of a number of PASS leaders, one leader stated, "looking back at my study notes from the first four weeks of my first year of uni, when I went through [subject name] and had to facilitate PASS for it, I had no idea what I was doing. So I think it's critical in those first four weeks that students have that support" (S6, p.19).

Conclusion

The purpose of this paper was to explore transition using the voices of peer leaders as they reflected on their own experiences of the changes, challenges and connections involved in becoming a university student. Peer leaders were selected as the participants in this study due to their proximity to their own FYE, affording them unique provision of support to students in this crucial transition period. McKeachie's (1994, p. 144) findings state that one of the most effective methods of teaching was "students teaching other students". However, the

literature in this area is limited, rarely highlighting student voices or how personal experiences inform engagement with new students going through transition.

Peer leaders were found to value peer support in their own transition (or wished for it) and saw its ongoing significance as they support other students in transition. Connecting their present support role with their past experience, one student stated, ‘I went through those struggles’ (S13, p.61), thereby identifying and connecting the peer leader with the new students. Peer learning is critical for the transition of new students, not simply because it appears to be an effective institutional strategy or because the benefits it offers as a learning method, but because, as we’ve heard straight from the horses’ mouths, peer learning “was like the best thing I ever did” (S14, p.68).

References

- Boud, D. and Lee, A. (2005). ‘Peer Learning’ as pedagogic discourse for research education. *Studies in Higher Education*, 30(5), 501-516.
- Bowles, A., Fisher, R., McPhail, R., Rosemstreich, D. and Dobson, A. (2014). Staying the distance: students’ perceptions of enablers of transition to higher education. *Higher Education Research and Development*, 33(2), 212-225.
- Bradley, D. (2008). *Review of Australian Education: Final Report*. Available at http://www.deewr.gov.au/HigherEducation/Review/Documents/PDF/Higher%20Education%20Review_one%20document_02.pdf. Accessed 15th August, 2012.
- Brooman, S. and Darwent, S. (2014). Measuring the Beginning: A quantitative study of the transition to higher education. *Studies in Higher Education*, 39(9), 1523-1541.
- Dawson, P., van der Meer, J., Skalicky, J. and Cowley, K. (2014). On the effectiveness of supplemental instruction a systematic review of supplemental instruction and peer-assisted study sessions literature between 2001 and 2010. *Review of Educational Research*, 84(4), 609-639.
- Denzin, N. and Lincoln, Y. (2011). *The Sage Handbook of Qualitative Research* (4th ed.). Thousand Oaks, CA: Sage.
- Gale, T. and Parker, S. (2014). Navigating Change: A typology of student transition in higher education. *Studies in Higher Education*, 39(5), 734-753.
- Gale, T., Sellar, S., Parker, S., Hattam, R., Comber, B., Tranter, D. and Bills, D. (2010). Interventions early in school as a means to improve higher education outcomes for disadvantaged (particularly low SES) students. A design and evaluation matrix for university outreach in schools, The University of South Australia.
- Gale, T. and Sellar, S. (2011). Confronting perceptions of student equity in higher education. *The Australian Educational Researcher*, 38(1), 1-3.
- Glaser, B. and Strauss, A. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. New York: Aldine de Gruyter.
- Harwood, V., O’Shea, S., Howard, S. and Cliff, K. (2014). *Final Report: Evaluation of the In2Uni Program*. School of Education & Early Start Research Institute, Faculty of Social Sciences, University of Wollongong.

- Hurley, M., Jacobs, G., and Gilbert, M. (2006). The basic SI Model in Stone, M., & Jacobs. (Eds.). *Supplemental Instruction: New Visions for Empowering Students Learning. New Directions for Teaching and Learning* (Vol. 106), 63-72 San Francisco: Jossey – Bass. DOI 10.1002/tl.234
- Kift, S. (2009). Articulating a transition pedagogy to scaffold and to enhance the first year student learning experience in Australian higher education: Final Report for ALTC Senior Fellowship Program. Strawberry Hills, NSW, Australian Learning and Teaching Council.
- Kift, S., Nelson, K. and Clarke, J. (2010). Transition Pedagogy: A third generation approach to FYE a case study of policy and practice for the higher education sector. *The International Journal of the First Year in Higher Education*, 1(1), 1-20.
- Kift, S. and Nelson, K. (2005). *Beyond Curriculum Reform: Embedding the Transition Experience*. Higher education in a changing world, Sydney, 28th HERDSA annual conference.
- McKenzie, K., and Schweitzer, R. (2001). Who succeeds at university? Factors predicting academic performance in first-year Australian university studies. *Journal of Higher Education Research & Development*, 20(1), 21–33.
- Malm, J., Bryngfors, L., and Morner, L. (2011). Supplemental Instruction for improving first year results in engineering studies. *Studies in Higher Education*, 1-12. DOI 10.1080/03075079.2010.535610.
- Martin, D. C., and Arendale, D. (1993). Foundation and theoretical framework for Supplemental Instruction. *Supplemental Instruction: Improving First-Year Student Success in High Risk Courses* (pp. 41-50). Columbia SC: National Resource Center for the Freshman Year Experience and Students in Transition.
- McKeachie, W. (1994). *Teaching Tips: A guidebook for the beginning college teacher* (9th ed.) Lexington, MA: Heath.
- McGuire, S. Y. (2006). The impact of supplemental instruction on teaching students how to learn in Stone, M., & Jacobs. (Eds.). *Supplemental Instruction: New Visions for Empowering Students Learning. New Directions for Teaching and Learning* (Vol. 106), 3-10. San Francisco: Jossey – Bass. DOI 10.1002/tl.234
- Quinn, J. (2004). Understanding working-class ‘drop-out’ from higher education through a sociocultural lens: Cultural narratives and local contexts. *International Studies in Sociology of Education*, 14(1), 58-73.
- Schunk, D.H. and Zimmermann, B.J. (1997). Social origins of self-regulatory competence, *Educational Psychologist*, 32(4), 195-208. DOI: 10.1207/s15326985ep3204_1
- Sellar, S. and Gale, T. (2011). Mobility, Aspiration, Voice: A new structure of feeling for student equity in higher education. *Critical Studies in Education*, 52(5), 115-134.
- Tinto, V. (1993). *Leaving College* (2nd ed.). Chicago: The University of Chicago Press.
- Tinto, V. (2006-7). Research and practice of student retention: What next? *Journal of College Student Retention*, 8(1), 11-19.
- Thomas, L. (2011). Engaging students to improve retention and success. *Institutional Transformation to Engage a Diverse Student Body*, Book Series, Volume 6, 41-55.

- Topping, K.J. (2005). Trends in peer learning. *Educational Psychology: An International Journal of Experimental Educational Psychology*, 25(6), 631-645.
- Vygotsky, L.S. (1978). *Mind in Society: The Development of the Higher Psychological Processes*. Cambridge MA, MIT Press.
- Vygotsky, L. S. (1987). Thinking and speech. In L. S. Vygotsky, *Collected works*, vol. 1, pp. 39–285 (R. Rieber & A. Carton, Eds; N. Minick, Trans.). New York: Plenum.
- Wilcox, K. (1993). Reasons educators and students choose SI. In *Supplemental Instruction: Improving First-Year Student Success in High-Risk Courses*, D. C. Martin and D. Arendale (eds). Columbia: National Resource Center for The First-Year Experience and Students in Transition, University of South Carolina.