



SERVICE-LEARNING AND ACADEMIC SUCCESS: THE LINKS TO RETENTION RESEARCH

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Synopsis

Emerging research on service-learning validates a long standing philosophy: integrating academics and community service delivers greater student leadership development, enriched learning, and improved academic performance. By relating the growing evidence of service-learning's benefits to the theoretical explanations of student retention, we can craft an even clearer vision of how each field may enhance the other. By fusing the best of both disciplines, we can begin expanding the boundaries of student retention to make visible new ideas; create stronger, more seamless institutional practices; further embed effective practices of civic engagement; and establish new, positive relationships among different departments of higher education. This brief provides a general overview of the relationship that exists between these two fields. It argues, that service-learning should be thought of as a *process* that creates greater student *engagement*, which in turn results in the *product* of student retention. The overall intent is to provide a clearer foundation in the research that supports the way that service-learning is related to student success. In doing so, we will encourage dynamic collaborations between our offices of civic engagement and our institutional initiatives to improve retention.

Engagement, Retention, and Service

The field of student retention is a complex and widely discussed topic in higher education. A rising number of scholars and businesses are working to establish theories of retention and translate them into practical suggestions for college campuses. Vincent Tinto, considered a foremost expert in the field, has contributed a wealth of knowledge to the advancement of the subject. Specifically, Tinto (1998) states that, "Students who are actively involved in learning activities and spend more time on task, especially with others, are more likely to learn and, in turn, more likely to stay." Along with George Kuh, another prominent scholar in the study of student persistence, there has emerged an extensive collection of research about the educational environments that create conditions vital to student success. One common underlying theme is the notion that socially active and academically alive environments encourage the participation of the students, which in turn, establish a more inclusive and co-creative curriculum. By being actively involved in their learning experience – as opposed to passively receiving it – the students view the material as relevant, interesting, and absorbing. They develop a sense of

competence in using the knowledge and are able to broaden, build, and connect their understanding through application, dialogue, and reflection. Upon graduation, the most involved students tend to be more confident, socially adept, and versatile in applying creative solutions to complex problems. In essence, continually improving long-term success requires educators to focus on more ways to actively *engage* students in the learning process, which, subsequently, arms them with a greater thirst for life-long learning and commitment to the community.

The research on student engagement strongly supports its relationship to student persistence and achievement (Kuh, 2007, 2005; Tinto, 2006; Astin, 1987, 1992). Engagement, by definition, is described as “commitment,” “involvement,” “participation,” “attraction,” and “active.” In higher education, engagement tends to be conceptualized as an index of student’s time and energy invested in educationally purposeful activities, such as class discussion, active learning, and independent studies. These activities are rooted in the culture of the campus and grow through participation, interpersonal relationships, and/or intellectual advancement.

Practices to increase engagement are multiple and varied, but most entail immersion in, and pursuit of, the material being learned. Service-learning, one such promising practice, is a pedagogy that links community service and academic study so that each strengthens and transforms the other (Eyler & Giles, 1999). Grouped within the motif of civic engagement, service-learning provides authentic involvement in real issues and facilitates the integration of the student into the academic and social life upon campus (Wolff & Tieney, 2006). It provides multiple opportunities to develop meaningful relationships and, in addition, enhances content-driven scholarship by focusing upon the application of knowledge to solve complex community problems. Students are able to integrate knowledge with experience and develop a better understanding of themselves, as well as an understanding of their role within the greater context of a democracy. Service-learning is recognized as one among many effective practices that stimulate greater levels of student involvement in “educationally purposeful activities,” which, in turn, produce greater retention (Kuh, 2005). In effect, service-learning creates and refines the social and learning connections thought to be important to institutional commitment and educational success.

Service-Learning’s Mediating Relationship to Success

Currently, the growing research on service-learning is shifting its focus from measuring direct effects, such as graduation, towards the study of indirect effects, such as personal and social outcomes, which can explain the connection between service-learning and student success (Furco, 2007). Understanding and measuring this indirect link involves identifying the intervening variables that mediate this relationship: increased interaction with faculty, greater participation in campus activities, greater satisfaction with the campus environment, increased active learning, and so forth. In other words, it is the student outcomes resulting from service-learning that have an impact upon student success, such as positive gains in personal, social, and critical thinking skills. Intervening variables are useful in understanding relationships because they help explain why many different programs, services, or practices might be successful. For instance, it could be hypothesized that learning communities, study abroad, and service-learning are useful strategies in improving retention because they all improve *student engagement*. Using engagement as the mediating variable, we can formulate a better explanation of how and why service-learning might be linked to greater student success.

The literature on student engagement suggests it is complicated and involves the interrelation of several different concepts (Fredericks, Blumenfield, & Paris, 2004). In order to better conceptualize these complexities, the following research on service-learning is divided into four frameworks of engagement: behavioral, cognitive, emotional, and social. Furthermore, each type of engagement is connected to one of the four objectives of Minnesota Campus Compact's shared efforts to improve student retention: creating meaning, purpose, belonging, and relevance. Each objective is a precondition to student success, and each can be more easily grasped by understanding how different forms of engagement move us towards these objectives:

- *Cognitive Engagement* – the mental investment, expended effort, processing of information, and use of personal strategies to learn material – is connected to a greater *purpose* through how we understand and use our knowledge in the world.
- *Behavioral Engagement* – the actual involvement, participation, and application in educational activities – expands the *relevance* of material by demonstrating how our actions can help others and positively impact society.
- *Emotional Engagement* – the student's feelings, interests, values, and reactions towards a discipline, individual, or institution – relates to greater *meaning* by establishing stronger attachments and bonds.
- *Social Engagement* – the degree and magnitude of relationships and interactions with individuals on and off the campus – generates greater *belonging* through the establishment of caring, accepting, and supportive relationships.

These concepts should not be thought of as independent from the other, they are overlapping and work together to create synergistic engagement. They are simply subdivided for simplicity of understanding and do not necessarily reflect any taxonomy or theoretical orientation. Each concept of engagement is, in addition, tied into our organization's objectives in order to develop a sense of how the extant research is related to our overall vision of creating a more successful, prosperous, and equitable Minnesota.

How does it relate to Retention Research?

There is a great degree of interconnectedness between service-learning activities and suggested retention practices, such as a shared emphasis upon creating a more positive institutional experience for the student. Even with such seemingly intuitive connections, there is a relative dearth of literature seeking to expound on this degree of overlap. By creating a more intentional and coherent understanding of the commonalities that exist between these two fields, we can begin to see how each informs the other.

To further explore the similarities, the remainder of this document parallels the specific outcomes of service-learning – grouped by specific layers of engagement – with the tenets of retention theory. For instance, it can be pointed out that Kuh and Astin constantly stress the importance of cooperative, collaborative, and active learning in the classroom, all of which are quite common practices in the service-learning field. By establishing concrete and distinct connections between the principles of both fields, a greater realization of both their potentials may be achieved.

Purpose

Students discover greater purpose of their learning through their cognitive engagement. This is, in essence, how students think about what they are learning and formulate a deeper understanding of the material's significance.

COGNITIVE OUTCOMES OF SERVICE-LEARNING

Service-learning can enhance the educational experience for students by creating a seamless education environment where students connect the content of their learning with the challenge of a real situation.

- Experiential education allows students to identify pressing problems, formulate appropriate solutions, test assumptions, evaluate outcomes, and synthesize knowledge (Kolb, 1984).
- The personal experience serves as a concrete reference for understanding the application of course material. Students can build upon preexisting knowledge, create a more defined schema of understanding, more effectively transfer their learning to novel situations, and utilize metacognitive strategies in learning (Eyler & Giles, 1999; Steinke & Buresch, 2002).
- Students develop greater aptitude in applying course content to new problems, a deeper understanding of course material, improvement in writing skills and essay exams, and gains in critical thinking skills (Eyler & Giles, 1999; Conrad & Hedin, 1991; Strage, 2000; Markus, Howard, & King, 1993; Astin et al., 2000).
- While some research has shown an absence of significant improvement in GPA (e.g., Kendrick, 1996), more recent publications are providing stronger support for a connection between service-learning and improved academic performance (Hart & King, 2007; Kamuche, 2006; Strage, 2000; Astin et al., 2000; Fredericksen, 2000).

CONNECTION TO RETENTION THEORY

Vincent Tinto (1987, 1993) postulates that the intellectual congruence between the student and the academic system is an important element of integration into the campus environment. By feeling academically competent – either through objective indicators or subjective experiences – the student will be confident in continuing their studies.

- Service-learning stimulates greater conversation amongst students about their academic service experience (Astin, 2000).
- Those who participate in service-learning engage in greater interaction with faculty and staff on campus (Keup, 2005).
- Service-learning students indicated having significantly more academic participation and faculty-staff interactions than non service-learning students (Wolff & Tinney, 2006).
- Service-learning can serve as an antecedent to strategies of active and collaborative learning, which requires students to construct knowledge and do so in ways that requires learners to connect and share understanding. Both strategies improve learning outcomes, generate greater academic integration, and can improve retention (Braxton, 2000; Tinto, 1998).

Relevance

The material becomes more relevant to the student through their degree of behavioral engagement, which involves students discussing and using their knowledge within and beyond the classroom.

BEHAVIORAL OUTCOMES OF SERVICE-LEARNING

Service-learning requires that students become quantitatively and qualitatively invested into their educational experience.

- Students involved in service-learning tend to perform better on the complex, applied aspects of the course (Rose, Rose, & Norman, 2005).
- Service-learning places students in a novel community environment that is characterized by the organic and changing nature of an organizational atmosphere. In essence, students are placed in a “constant state of learning.”
- The 2008 Association of American Colleges and Universities undertook discussion about how combining civic engagement and student engagement in the first year has made both efforts more successful (Jaschik, 2008)
- Service learning can prompt many elements that increase student’s decision to invest more time in learning the material (see Brewster & Fager, 2000; Hart & King, 2007):
 - Assigns challenging but achievable tasks
 - Stimulates student’s curiosity about the topic being studied
 - Highlights ways that learning can be applied to real life situations
 - Allows students some control over their learning
 - Provides a collaborative project where students share knowledge with one another

CONNECTION TO RETENTION THEORY

Involvement, also known as student engagement, is gaining increasing recognition and empirical validation as an important element to student development and persistence (Astin, 1984, 1992; Kuh et al., 2007; Tinto, 1997, 1998).

- Engagement, which is an index of student’s time and energy invested in educationally purposeful activities, has been shown to have a positive impact on student persistence and first-year grades. Service-learning is cited as one strategy for creating greater levels of engagement. (Kuh et al., 2007).
- To enhance student learning, institutions must make classroom experiences more productive and also encourage students to devote more of their time outside the classroom to educationally purposeful activities (Kuh, Schuh, Whitt, & Associates, 1991).
- Service-learning students scored significantly higher on measures of interpersonal, academic, and community engagement (Gallini & Moeley, 2003).
- Integration of coursework and clinical experience through service-learning was reported as improving student’s speech pathology competency and professional preparation for their clinical practicum. Students reported they enjoyed the experience because it allowed hands-on-experience; observation of techniques; development of writing, speaking, confidence in the field; and a more critical questioning of general assumptions (Goldberg, Richburg, & Wood, 2006).

Meaning

A student's college experience becomes more meaningful through emotional engagement, which involves a clarification of and commitment to personal values, beliefs, and feelings about their education.

EMOTIONAL OUTCOMES OF SERVICE-LEARNING

Service-learning places students in control of their own learning process and can provide a relevant, concrete, and attainable goal. Thus, Service-learning creates a *real* and *meaningful* learning environment, one that transcends the classroom and improves students' attitudes and motivation.

- Teachers agree that learning environments which foster academic achievement through hands-on, authentic learning can motivate students by engaging them in their own learning (Brophy, 1986).
- Service-learning students report increased satisfaction with courses and curriculum (Gray et al., 1996).
- Service-learning can build student's resiliency by improving their interactions with others, strengthening their character, and allowing them to model the positive behaviors of others (Kraft & Wheeler, 2003).
- Hatcher, Bringle, and Muthiah (2004) found that clarification of values through service reflection was related to a higher quality learning environment.
- One study found that an embedded service-learning experience in pre-service teacher education generated autonomy, control, and ownership of the learning process (Hart & King, 2007).

CONNECTION TO RETENTION THEORY

Emotional reactions to the learning environment influence a student's intrinsic motivation, adaptive strategies, resiliency, and intensity of behavior (Bean & Eaton, 2002; Pekrun, Goetz, Titz, & Perry, 2002).

- Learning is best when it truly matters to the individual, when he/she feels the material is authentic and important (Zull, 2002). Many student reports reveal that they found the service-learning experience satisfying and meaningful (Keup, 2005; Moely, McFarland, Miron, Mercer, & Ilustre, 2002; Grey et al., 1998)
- Service-learning can help build approach coping strategies (i.e., confront problems rather than avoid), internal loci of control, and academic/social self-efficacy. These are the psychological processes that underlie a successful retention program (Bean & Eaton, 2002).

Belonging

A student finds greater belonging through service by developing multiple relationships with individuals on and off the campus

SOCIAL OUTCOMES OF SERVICE-LEARNING

The development of interpersonal relationships – in and out of the classroom – is important because it is against this backdrop of a supportive network of peers that other academic support mechanisms can begin to operate.

- Students in service learning gain socially from the experience, develop a common sense of purpose, and diminish feelings of isolation (Greenberg, 1997)
- Service learning increases prosocial behaviors, promotes greater tolerance for diversity, and improves cultural understanding (Eyler & Giles, 1999; Batchelder & Root, 1994).
- Service learning can increase self-esteem, social competency, and self-confidence (Eyler & Giles, 1999; Switzer et al., 1995; Osborne, Hammerich, & Hensley, 1998).
- Students perceived themselves to be more socially skilled, were kinder to one another, improved their communication skills, built a strong understanding of self, and developed leadership skills (Astin et al., 2000; Scales & Blyth, 1997; Morgan & Strebb, 1999; Weiler et al., 1998; Eyler & Giles, 1999).

CONNECTION TO RETENTION THEORY

Tinto's social integration (1987, 1993) involves a sense of belonging on campus which is created by the informal connections with peers and faculty outside of the classroom.

- Treisman Uri (1983) found that Asian students were likely to study and socialize together in a mathematics course while Black students were isolated and more likely to study alone. The Asian students prospered, the Black students suffered. This study showed how social systems are unequivocally linked to academic success.
- Specifically, Tinto (1987) has stated that, "incongruence with one's student peers proves to be a particularly important element in voluntary departure" (p. 57).
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- Service-learning students indicated they were more socially active and engaged with peers (Wolff & Tinney, 2006).
- Experiential learning techniques have been associated with improvement in longitudinal retention rates. The increase in retention is attributed to the stronger socialization that results due to this pedagogy (Prussia & Weiss, 2004).

Results

RETENTION OUTCOMES OF SERVICE-LEARNING

More evidence is supporting service-learning as an innovative learning strategy which facilitates the creation of meaningful connections to people and academics, hence improving integration and improving student retention.

- Service-learning students reported greater academic challenge and had a greater intention to persist. Service-learning had its greatest influence on intention to persist through its relationship with academic challenges and engaging course content (Gallini & Moely, 2003).
- Service-learning students were more likely to report greater intention to persist and reenrolled the following fall at a higher rate than nonservice-learning students (Hatcher, Bringle, & Muthiah, 2002).
- Service-learning appears to have an impact upon student's intention to persist through its ability to create faculty interactions and encourage positive academic experiences (Keup, 2005).
- *Service* in general, which included service-learning and regular volunteerism, was positively associated with persistence, student satisfaction, and a sense of personal success (Vogelgesang, Ikeda, Gilmartin, & Keup, 2002).

IMPROVING RETENTION WITH SERVICE-LEARNING

For service-learning to have an optimal impact upon retention it must be of high quality, collaborative, well placed, directly tied into the course content, structured, and consistently employing the 5 C's of good reflection: Connection, Continuity, Context, Challenge, and Coaching (see Eyler & Giles, 1999). Mundy & Eyler (2002) provide a logical argument of why service learning can improve student retention. They tender ten guidelines to increase the likelihood that service-learning will have a positive effect on student retention:

1. Design service-learning to maximize the number of meaningful interactions amongst individuals from diverse backgrounds.
2. Create service-learning projects that provide frequent and close contacts with faculty
3. Provide service-learning projects that encourage involvement of many faculty, students, and staff. This helps build a greater network and infrastructure of student support.
4. Incorporate reflection that promotes both cognitive and personal development – use the aforementioned five C's in guiding the development of such reflection activities.
5. Use reflection activities that are active, interactive, and engage students within the classroom.
6. Connect service reflections to skills or knowledge that students may use as part of their career development
7. Build service-learning into the freshman year to quickly establish community connections and a diverse campus

8. Utilize Chickering and Gamson's (1991, 1987) "seven principles of good practice" in service-learning programs.
9. Design service-learning activities to meet diverse student learning needs.
10. Create a meaningful service-learning experience by explicitly focusing on quality in regard to placement, reflection, and application.

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