LITERATURE REVIEW OF STUDENT SUCCESS COURSES

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Introduction

Community colleges are often described as open doors or gateways for improving students' quality of life. These metaphors focus on the entrance point of the educational experience. Increasingly, however, researchers, educators and policy makers are focusing on the desirable exit points: successful course completion, degree or certificate obtainment or transfer. In regard to these goals, another metaphor often surfaces: the revolving door—implying that many students enter, but too many also exit without having achieved their stated goal. According to O'Gara, Karp, and Hughes (2008), only 45 percent of community college students earn a degree or certificate or transfer to a four year institution within 6 years of initial enrollment, and 47 percentleave school without having earned a credential. (p.1)There are many reasons why this condition exists. In part, the doors continue to revolve because they are designed for students to leave and re-enter as their life challenges get in the way. In addition, Astin asserts, "Community Colleges deal with the double edged sword of losing their students who are prepared to four-year public and private universities before they have attained a transferable degree, while at the same time losing those students who may drop out because of insufficient remediation."(1984) Unfortunately, some students exit the system because it is not poised to assist them with all of the issues that stand in the way of their desired outcomes. So researchers and educators continue the grail quest for answers to what might keep students engaged in their educational journey and lead to successful completion.   Any solution needs to recognize and address the volatile life conditions and under-preparedness of so many community college students. The widespread presence of the student success class— most often a combination of study skills, life skills, and career exploration—is an acknowledgement that is the educational task is not solely cognitive. If reading, math, English, and ESL courses are the "meat" of America's developmental education programs, student success courses are the "potatoes." They are presumed necessary partners in any successful developmental program. Although formal research on student success classes is limited there is a pervasive and intuitive sense that such courses are an absolute good—so self-evidently efficacious that neither the need nor the effects have been widely studied. Of course,

the research questions are not just about whether or not the courses contribute to student achievement, but if they do, why do they promote achievement? What other aspects of student development do they also facilitate? Do the varieties of courses promote varying results for varying reasons?

The research literature to date indicates that there is strong theoretical support for a student success course curriculum, provided that the curriculum is comprehensive. However, when studies are conducted on the impact of such courses, it is difficult to isolate specific effects with particular elements within the total intervention. One more limitation in the research is that there are few details on the demographics of students who participate in these experiences. In some cases they are identified as incoming students, but beyond that they may have little in common. Absent a clearer picture of the student populations being served, differential measurement of the impact either by class components or by sub-population is difficult to discern. Moreover, much of the current research regarding student success courses is comprised of general observations often involving small unique populations or anecdotes about affective impact. The dearth of formal research may be due, in part, to the endless variations in curriculum and philosophies that student success courses employ. No matter the reason, the discourse regarding the efficacy of student success courses lacks the compelling data to make the practice an irrefutable necessity to the college experience.

The research is generally silent as well on the faculty training and preparation for teaching the student success course. Many studies suggest that the instructors are probably counselors, but that conclusion is communicated through inference rather than careful analysis, and given the influence of the instructor on the quality on the students' experience, this also seems to be an area requiring more meaningful consideration. The professional development and support of this instructional activity is also absent from most research.

Finally, research on success courses also treats the course curriculum as implicitly understood. While there are oblique references to study skills topics and personal development, it is difficult to distinguish course topics in a specific and comprehensive way. This, along with the instructor and instructional delivery, is probably the most significant factor in determining the impact on students' behavior and psychology.

Despite the limits of the research, student success courses are widespread and illustrate a college's commitment to student persistence, retention and achievement. The models for student success courses are as diverse as the student populations they serve and they are often called orientation courses, first-year seminars, freshman seminars or study skills courses. However, there are widespread practices. The 2006 National Survey on First-Year Seminars indicates that 57.9 percent of community colleges and universities offer extended orientation seminars; 21.6 percent report offering basic skills seminars; 4.4 percent indicate they offer some other form of first-year seminar. Clearly, the practice is widely accepted and used.

Goals of the Student Success Course

Although the course curriculum and methodologies may vary widely, some thematic values emerge in the literature. First, these courses are viewed as a way to help students "identify campus resources, establish relationships with other students and with faculty members, and assess and improve their academic and life management skills." (Stovall, 2000, p. 46) By implication, these goals suggest that without an intervention, students would be much less likely to acquire these skills or behaviors on their own, and the course is a way to engender and promote the knowledge, skills, and behaviors necessary for college success.

Nationally, the research indicates that most first-year students at the community college or university have difficulty transitioning into the academy, for both educational and personal reasons. Levitz, Noel, and Richter (1999) assert that students require more individualized services than many institutions are poised to provide. These services should address the "affective variables" that most significantly impact success and retention such as study habits, academic confidence, motivation to complete, attitudes toward educators, self-reliance, and emotional support (p. 37).

An educator interacting with developmental students may get a range of positive responses – smiles, nods, agreement—but more involved interactions will lead to a deeper understanding. Despite the apparently positive cues, students are often bewildered, frightened, and frustrated by the explicit and implicit rules of higher education and they lack the cultural, educational, and

personal capital to navigate the system without a clear understanding about this new environment.

Levitz and Hovland (1998) have identified five categories—notably described in negative terms and as barriers—that students typically face and may have an impact on their retention in college:

- Personal: lost, stressed, closed to new ideas and experiences, undisciplined, unmotivated, insecure, uniformed, unrealistic expectations, student-institution mismatch
- Social: Alienation and social isolation, subject to negative peer pressure, uninvolved in college activities, little involvement with faculty members or advisors
- Academic: underprepared, under-challenged, poor study habits, does not see value in assignments and courses, low academic performance, part-time course load, lack of educational and career goals, feedback that is too little too late
- Life issues: insecurity about financial circumstances, job and school time conflicts, home and family difficulties, personal problems, health problems, college not necessary to meet career goals
- Institutional issues: experience the run-around; experience operational problems; experience negative attitudes in the classroom, advising centers, administrative offices; experience poor or indifferent teaching; encounter instructional equipment or technology that is out of date; academic program not available (p. 39-40)

  It is important to note that these issues are not limited to students who are academically under-prepared; however, students who require developmental support are certainly more likely to be directed to such offerings. On the whole, the issues articulated by Levitz and Hovland include but also transcend the issues often considered "remediation." Instead, the list includes a number of psychological, sociological, personal and economic challenges that threaten any student's ability to achieve in college. In varying degrees, student success or orientation courses are designed to address all of these.   Perigo and Upcraft (1989 in dissertation) concluded that any comprehensive success or orientation course should be based on theories of student development, be accessed early in the students' academic career, promote interaction within the peer group, with faculty and in

the campus community, include strategies to familiarize students with campus resources, and be centrally coordinated.

Overall, students indicate that student success courses satisfy their academic and personal goals. As part of the Survey of Entering Student Engagement supported by Community College Survey of Student Engagement (CSSE), students reported the following:

- 63 percent said they enhanced their learning skills
- 69 percent said they improved their time management habits
- 75 percent reported that they better understood their academic strengths and weaknesses
- 80 percent said that they learned about important college services
- 81 percent reported that they learned about critical college processes and deadlines

(*Imagining Student Success, Engaging Entering Students: SENSE Survey, Field Testing Results*, 2008, p. 11). These results indicate that students perceive that student success courses generally achieve what they are designed to do: promote awareness and support successful student behaviors.

A Sense of Community and Belonging

At its core, the student success course is designed to create a supportive landscape for learning, to provide an opportunity for students to interact with each other and with their instructors, and to develop a sense of commitment to their future goals and to the institution. These learning goals point to a number of significant psychological needs among first-year students that go beyond the ability to study and learn. Instead, research indicates that most students require a way to transition psychologically into college by both joining the college community and also developing a sense of self as a student. The intent of transformation of self is positive—affirming the students' sense that they are on their way to becoming something better than they were. However, in some cases students may experience a negative transformation which has an impact on the construction on their self-perception. (Kaufman and Feldman, 2004)   When students feel challenged by college life or their academic experiences, their "felt identity" may transform and influence them to think of college as a threatening place, rather than a place where they socially and psychologically develop for the better. (p. 491)

Although it might appear that college provides an opportunity for expansion of the students' sense of well-being and self-worth, "such outcomes are not mechanically ordered simply because the student moves from one grade level to the next….Progression through college and perceived intellectual identity may be inversely proportional for a certain group of students" (Kaufman and Feldman, 2004, p. 477) Students who struggle to meet the demands of a rigorous academic schedule may feel that their challenges affirm their suspicions that they are not as smart or as worthy as their peers. For these students, a college experience may, in fact, damage their sense of security and self-worth. The student success course can, when effective, "provide a safe place for students to ask questions and discuss fears so that they can become secure in their new environment." (Stovall, 2000, p. 48)

Having a sense of belonging has a demonstrated impact on student success. According to a recent study by Hausmann, Schofield, and Woods (2007), peer-group and faculty interaction significantly increase a students sense of belonging. (829) The study also revealed that the "early social experiences students have when they first enter college and the social support they receive during that time are likely to be better determinants of initial levels of a sense of belonging," which then impacts the students overall integration into the college community and students' persistence intentions (831).

However in practice, the counseling experience for many students can be more confusing than clarifying, which may undermine or decrease the sense of belonging. Students may see whoever is available when they are rushed and confused. When they have follow-up questions, they probably see a different person and may receive contradictory or inaccurate information. In one study, O'Gara, Karp and Hughes (2009) concluded that students felt they got good advice from their success course instructors; interaction with the instructor of the study skills course may be a positive point of connection.

A relationship with the instructor from a student success course can be the basis for other interactions with other instructors once that initial experience is forged and students are less intimidated. According to Pascarella and Terenzini, "evidence strongly suggests that faculty have an influential causal role in students' educational aspirations." (1991, 394) As theorized by

Tinto (1997) these relationships provide a foundation of connectedness that influences how students will respond in the future and may foster greater confidence because of that sense of connectivity. (O'Gara, Karp, and Hughes 2009) This is consistent with the social learning theories that suggest that meaningful relationships enhance both motivation and learning.

Using Astin's Student Involvement theory that states as students "increase their physical and emotional investment on their college campus, their retention increases," Derby and Smith (2004) studied students who enrolled in a college orientation program and concluded that orientation courses may help students acclimate to campus life by providing them a formal structure to express their concerns and learn together about their own goals and the services available to help them achieve those goals. In one study, a student remarked that a student success course helped her "talk to more people" and that the experience made her feel like "It's okay to talk." (O'Gara, Karp, and Hughes 2008, 14) The socialization helped students then feel more comfortable being a more prominent part of class discussions in other courses.

The national literature on student retention and success affirms that the students who are invested and engaged in the campus or class community are statistically more likely to thrive and achieve. More specifically, some of the research on Student Involvement Theory demonstrates that participation in a student orientation course in the community college had a significant impact on graduation rates, as well as retention and persistence rates. (Derby and Smith, 2004, p. 771) Additionally, students who completed the orientation course were statistically more likely to re-enroll even if dropped out briefly and then persist "beyond the traditional two year period for degree obtainment." (p. 771) Researchers conclude that the course promoted a greater sense of participation in the learning process and the learning community, resulting in increased academic performance. (Tinto 1985; Terenzini and Pascarella 1977)

Organization and Delivery

Despite a widespread sense that student success courses are of value, students are often not automatically attracted to such offerings; thus, colleges are challenged to invent ways to make the student success course relevant and attractive to the students who need it. It is widely accepted that colleges must examine three critical course optional aspects: the credit awarded for the course; the class size; and the interaction level between students and faculty. According to

the Community College Survey of Student Engagement , approximately one-half of surveyed colleges provide letter credit toward the degree for general education for the student success course—the other half allow credit to apply as an elective. Nearly all of them use letter grades with only 2.5 percent reporting seminars that are not graded. Approximately 40 percent of the reporting colleges require some kind of success or orientation course for all students, one-third require it for some students, while another 20 percent do not require it at all.

The timing of the students' enrollment in a success course also seems to be a critical issue. Though it may be conceptualized as an introductory course, if students fail to access the course early in their academic careers, they are less likely to reap its benefits. For instance, students in one study (O'Gara, Karp, and Hughes 2008) were less likely to report positive feelings about the effectiveness of the success course if they took it their second term. One student remarked, "It probably would have been more meaningful if I took it in the fall because [the instructor] discusses a few things you might need when you're first coming to college, like how to pick your major and make sure you have one, and where certain things in the buildings are." (19)

The instructional delivery of this information seems to be a critical feature of the overall effectiveness of the course; however, in the literature regarding student success courses, studies rarely mention important information about the instructors. Presumably, the instructors are also counselors; however, their level of experience or professional development is seldom reported in studies that attempt to measure the efficacy of the practice. Additionally, since faculty/student interaction is also a common theme as one of the reasons why a student success course positively impacts student achievement, the nature of that contact also appears to be an important detail to any research analysis. For instance, Stovall (2000) makes the point that the quality of faculty/student interaction is more important than the quantity. (48) However, in national studies, there is little specificity reported about the "amount" of contact, the nature of the contact, or the training necessary to facilitate meaningful contact.   While the Community College Survey of Student Engagement, 76.8 percent of the participating colleges reported that they offer training to instructors teaching first-year seminars. However, the nature of such training is rarely described.

Explicit Curriculum—Implicit Philosophy

The traditional course content for the student success course generally involves the following major content areas: introduction to college resources, which includes college policies, tours, services like financial aid and tutoring; college transition or study skills, which includes learning styles and memory techniques as well as study skills techniques; career development, which includes course planning and the evaluation of aptitudes, personality and interests; and life or personal development, which includes strategies for managing stresses, and relationship skills developing campus networks. (Stovall, 2000, p. 49; Derby and Smith 2004 p.767)

The Community College Survey of Student Engagement (2008) reports that when colleges were asked to rank the top five most important topics for a student success course, the following issues were identified in order of importance:

- Study Skills (40.8%)
- Critical Thinking (40.6%)
- Academic Planning (36.7%)
- Time Management (28.6%)

This curriculum is very clearly designed to address either under-prepared learners or struggles that may manifest while otherwise capable students are in transition. While colleges may address these topics to varying degrees, this structure is a common framework for both university and community college approaches. The most interesting aspect of the framework for the student success course is the well-accepted assumption that the transition to higher education is such a dramatic life shift that it requires some intervention to ease the passage into this new student experience, and secondarily the presumption that students will not successfully navigate this experience because they lack the fundamental skills necessary to navigate this experience without the instructional support of the course.

The presumption of the students' deficits situates the student success course as a means to fill the gaps— to provide a resource based on the belief that the student either does not have those resources or does not know how to operationalize the resources without explicit instruction. Therefore the goals of the student success course are defined by its curriculum: to cultivate the students' sense of themselves as students; to engender a sense of personal responsibility for their

own learning; to help them internalize the use of resources and behaviors that promote success; and to engage in the academic community.

Cognitive Theory and Study Skills

The traditional student success curriculum is founded in behaviorist philosophy that "learning is any…permanent change in behavior which is the result of experience." (Jarvis, Holford, and Griffen, 1998, p. 21) The experience of the student success course is intended to modify or enhance the students' behavior by imparting the skills that they need to enhance success: note-taking, time management, critical reading etc. Depending on the delivery method, this approach also may reinforce the traditional roles of student and instructor, which invests the instructor's methods as the "right" ones and rewards those that conform to the strategies defined in the curriculum. When positive outcomes result with appropriate choices, positive reinforcement may also be used to encourage the change in the learner's behavior. However, some instructors might also present the same material within the context of problem-based learning situations, which reinforces the learner's freedom and choice, thereby promoting self-efficacy.

In either case, the goal is the same: improve academic performance by providing students with a kind of academic tool kit and the wherewithal to make appropriate choices when faced with the struggles associated with learning. Some researchers make the point that this instruction, however, is most successful within the context of a specific discipline rather than a more generic approach to studying. Wingate (2006) argues that teaching study skills in a general way is like teaching someone to ride a bicycle by showing the student a picture of one. (457) To that end, some study skills courses are often connected to discipline skills courses like mathematics or English. Another common approach is to imbed study skills strategies within the disciplines themselves. Study skills instruction needs to consider ways to make the transference of skills and knowledge a key feature.

For example, Nolting (1990) studied the impact of a one unit study skills curriculum attached to a math class. In one aspect of the evaluation, the research focused on students who only received instruction on study strategies for math without personal counseling. Those students reported feeling more relaxed, and their final grades were significantly higher than the control group. Students who received the study skills intervention improved their overall average by a

difference of 26 points.   In 1992, Lewis and Clark compared the results of students who were required to participate in a math skills course that was paired with a developmental arithmetic\pre-algebra course. The historic success rate for this course had been approximately 58 percent. However, after students engaged in the study skills course, their overall successful completion rate rose to 78 percent.   These studies reveal that study skills curriculum can be a powerful tool to assist in the success rates of under-prepared students. While most student success courses incorporate more than just study skills, these results suggest that when taught in context, study skills are a powerful complement to student achievement efforts.

Emotion and the Brain

The curriculum of most student success courses implies the belief that behavioral habits engendered in a study skills course can support the transformation of the students' sense of self. In that sense, some of the approaches that promote positive reinforcement also include dimensions of behaviorism, which is supported by brain research and psychological research on hope and optimism. Zull (2004) asserts that emotion is a powerfully transformative aspect of the learning process, indicating that brain chemistry associated with positive learning experiences promotes motivation. (70) Damasio (1994) explains that emotion creates a "somatic marker" that matches experiences. When these "background feelings" are associated with learning, the motivation for learning is also stronger.

Recent research in behavioral psychology reinforces this theory. DeCuir-Gunby, Aultman, Shutz (2009) researched emotional conditions as it relates to academic stress and testing and discovered that emotional regulation is a key feature for successful students. Because tests are such a significant aspect of academic performance, they also become a kind of emotional proving ground, and the anxiety associated with this type of evaluation can be sufficient to erode the motivation to continue goal pursuits.   When students approached testing situations with hope and pride, they were more likely to be effective. However, when students were more anxious or angry, they were more likely to demonstrate "approach-avoidance" behavior of wishful thinking or self-blame. These emotions, in turn, compromised the students' ability to refocus on the task. The study suggests that one potential benefit to some study skills curriculum may be to assist students in developing emotional regulation strategies, since effective test takers are not just

those who can manage time, but who can effectively manage despair and fear (Pedrun, Maier, Elliot, 2009; Dweck 1986).

To some extent, then, the curriculum of some success courses is implicitly designed to sell belief—belief that the student has the capacity to utilize, strengthen or discover the talents and strengths that will be needed to achieve in college. Some student success curriculums focus on the students' existing assets rather than addressing their skills deficits. Dweck (2007) terms this approach a "growth mind-set message." (38) This framework is distinguished from the "asset model," which implies that students are endowed with specific "abilities" that are fixed. Dweck's theories support the idea that ability can be cultivated and changed. This perspective is contrasted with a fixed mind-set in which students worry about how they will be judged. Students with this fixed frame of mind avoid learning opportunities if they fear that they will make mistakes. When those mistakes are identified, students are more likely to hide them rather than address them (Hong, Chiu, Dweck, Lin, and Wan 1999). However, students with a "growth mind-set" are more likely to view effort positively and "escalate" learning efforts when faced with challenging situations. (Dweck, 2007, 36) This tendency is directly related to motivation and resiliency, which leads to increased persistence and achievement.

One curriculum that is designed to approach students from this framework is so-called "strengths-based" education. The program designers consciously departed from deficit philosophies that are built on the assumptions that students lack the fundamental tools to succeed, contending that this approach demoralizes and demotivates. Instead, the curriculum is developed around the philosophy that "achievers are not all alike" and that the essence of achievement is understanding one's personal unique talents and capitalizing on those talents. (Anderson 2005, 185) Students assess their thematic strengths through an initial assessment and then learn how to best maximize those strengths in various academic situations. According to Hodges and Harter (2005), a recent study of first-year students at UCLA suggests that students who participated in the curriculum significantly raised their confidence levels. One student remarked, "I think learning my strengths gives me much more confidence and hope for myself. I am able to be optimistic about what my future holds for me." (195)

Teaching Motivation

Because motivation is such an elemental aspect of the impact of a student success course, it is a key research consideration. Many students who self-select such a course may already be motivated enough to discover the resources and strategies that that would enhance their success, even if the course is designed for so-called "at risk" students. For students who struggle with motivation, the student success course appears to be designed to introduce students to helpful resources and assist in the development of will to seek those resources— internal or external— when necessary.

Educational theorists acknowledge the contradictory proposition that while adult learners are motivated differently from children, they are also sometimes unable to access what motivates them, which is especially true for inexperienced or underprepared learners. Philosophically, the student success course is designed to help students develop strategies for approaching the emotional and intellectual process of learning independently. This is sometimes referred to as "self-regulated learning." (Svinicki 2004)

According to Young and Ley (2005), self-regulated learning is synonymous with meta-cognition, which includes consciously engaging in activities like minimizing distractions, sustaining study efforts, and employing effective and appropriate learning strategies. (60) In interviews with both underprepared and prepared students enrolled in a success course, developmental students tended to report self-evaluation as their primary "self-regulating" activity, while prepared students reported many more potential strategies such as reviewing materials, organizing materials and self-monitoring. (72) In addition, developmental students tended to report more frequent behavior that was unrelated to studying while they study, such as getting a drink or talking on the phone. (72) Obviously, the skills course is intended to address these issues by making the invisible threats of these behaviors more visible.

In addition to self-reflection, researchers also discuss the need for the learner to develop a sense of control over the thinking and learning process. (Hartman 2001) Both goal-orientation and self-efficacy have been strongly tied to student achievement in the national literature about student success. Hsieh, Sullivan, and Guerra (2007) report that "students in good academic standing [report] having higher self-efficacy and … more mastery goals toward learning than

students on academic probation. Among students who [report] having high self-efficacy, those on academic probation reported adopting significantly more performance-avoidance goals than those in good academic standing."(455)

Bandura asserts that self-efficacy reveals a person's perceived ability to "organize and successfully complete a task." (in Hsieh et al. 2007) The confidence to complete a goal is related to a student's tendency to work harder to pursue the completion of a challenging task. A lack of motivation, then, is tied to a student's fears that the task is beyond reach. These fears often foster what are termed "performance-avoidance goals." In other words, students become motivated to avoid challenges because of fear of failure. This self-protection leads to "maladaptive patterns of learning" that are driven by concerns that they will be viewed as incompetent, which then increases their risk for dropping out of college altogether. (470)

Turning Thought into Action

The student success course must provide the students with the navigational tools to find resources to help them be more successful, but first students must be inspired to seek and use these resources. The awareness of their existence is likely insufficient to change student behavior without the internal catalyst simultaneously enhanced.   O'Gara, Karp, and Hughes (2008) report that student success courses can provide an introduction to services that promote a greater sense of familiarity and comfort, which then leads to increased access. They cite tutoring as a prime example. In their study, 58 percent of students in the success course accessed tutoring; whereas, 23 percent of the students who were not enrolled in the course used the service. (16) Students reported that this increase in access was due to encouragement and personal contact made by the tutoring personnel during the success course. (16) The personal contact limited the sense of risk students may have felt about demonstrating a need for help, which, therefore, increased help-seeking behavior.

The study also indicates, however, that learning about resources was not always enough to promote use. For instance, students in the study learned about the transfer center during the success course, but few visited it. Career planning and goal articulation have been tied to overall achievement results (Grubb 2001 in O'Gara). Even so, students seemed more likely to seek academic help than planning assistance. The researchers theorize that because students may

have felt a sense of urgency about improving their grades, they were more likely to seek tutoring help; whereas, transfer planning was a far more futuristic goal and less urgent (20). This conclusion suggests that illustrating the connection between specific behaviors and success is critical to promoting motivation. The logical connection between knowledge and behavior, however, does not appear to be linear.

Shaping Identity

The national literature on student development suggests that student success courses can also be powerful tools to helping students shape their sense of identity. There is a wealth of compelling research regarding the impact of college on students' psychosocial development, which appears to be one of the key goals of the student success curriculum. (Pascarella and Terenzini 1990). This issue is critical to the students' overall success because without a contextual and social framework shift, students are more likely to feel lost or alienated, which may heighten their "at-risk" status. According to Scanlon, Rowling, and Weber (2007), "situated interaction with significant others in the new learning context is a critical ingredient in the formation of new student identity. (237) As first-year students enter college, they are "decontextualized" from their previous learning paradigms and expectations, and this process of reorientation often heightens anxiety and fears of failure.

A student success course provides an opportunity for students to make the psychological transition to college, while they adapt within a context of safety and support. As previously noted, the social interaction between peers and with the instructor is a critical component to promoting engagement. However, these interactions also provide a pivot point for the development of the students' self-concept as a student. In order for this growth to occur, students' discontinuity with the new environment must be addressed. A successful transition requires students to acquire the cultural capital necessary to navigate their new surroundings independently and with confidence. (Read 2003) As noted before, connectedness to the environment is critical to identity formation and a sense of control. Once students feel less anonymous and more in control of their environment, they are more likely to persist and succeed. (Thomas, 2002, 435)

In addition, because the student success course often emphasizes the career path, the students wish to pursue, the course curriculum also provides an opportunity for students to establish an occupational identity. (Kaufman and Feldman 2004) Interacting with peers in a safe space allow students to "try out various roles that coincide with specific occupations." (479) This experimentation and networking allows students to develop relationships while also modifying their sense of self in terms of their future goals.

Promising Models of the Student Success Experience Embedded Approaches

While student success courses uniformly provide some study skills curriculum, some colleges are experimenting with approaches that embed the study skills curriculum within foundation disciplines. This approach minimizes the number of courses required to promote student success and also provides a contextual format for the learning. Many theorize that this contextualization makes the skills development more transportable as well as more relevant. (Grubb and Badway 1999; Bond 2004; Berns and Erickson 2001)

Another model of an embedded approach can be found in colleges using "Learning to Learn" strategies. Learning to Learn is recognized by the Department of Education as an Exemplary Program for its approach and its results at Boston College and Roxbury Community College. Both colleges focused on students who were socially, economically and educationally underprepared for college, relative to the rest of the college population. Fundamentally, this approach seeks to help students develop their "internal dialogue" when they encounter new information. Students are trained to develop metacognitive awareness through questioning techniques. These techniques help students engage in deeper learning by engaging inquiry-based habits that lead to greater success and achievement. This approach is contrasted with students who tend to be more passive learners. As passive learners enter the rigors of higher education, they may find that they are less likely to "get" school and begin to see college as "hopeless" because their natural tendencies are failing to help them achieve. The data surrounding Learning to Learn evidences some promising results for both university and community college students. In both cases, students who engaged in the Learning to Learn curriculum had significantly higher grade point averages (approximately.50 higher) and completed more credits than non-participants (approximately 3 credits more). Retention also seems impacted by the experience.

For instance, students at Boston College who participated in Learning to Learn had a 98 percent retention rate, while non-participant students maintained an 80 percent retention rate.

Learning to Learn has been applied to developmental coursework as well as transfer curriculum in English, math, as well as orientation classes. For instance, Eastman Kodak conducted a research study to evaluate the efficacy of Learning to Learn strategies in an adult reading class. Program participants and non-participants met three hours per week for 13 weeks. Students who received the intervention, however, were given Learning to Learn reading and writing exercises in addition to their traditional literacy instruction. After 13 weeks, program participants gained 86 weeks in reading comprehension, while the control group gained 13 weeks. Program designers credit the students' internal dialogue with the text as a primary reason for such significant gains. However, students must be able to read at least at the sixth grade level to engage the Learning to Learn curriculum.

Learning to Learn is being used experimentally in algebra courses. Some unique features of the curriculum include frequent word problems because of the step-by-step skill building necessary to complete the problems as well as verbal fluency required to translate each step before doing it. In addition, the program emphasizes mastery learning in which a student must demonstrate 100 percent accuracy before moving on to the next skill. Finally, students are not engaged in repetitive drill practice. Although practice is essential, students are required to demonstrate the metacognitive rationale of each step while they complete practice problems, requiring that students become increasingly able to verbalize their decisions.

Outside of a disciplinary context, Learning to Learn is also being used in orientation and student success curriculums. The curriculum includes learning skills, learning styles, and life skills instruction. The main focus, however, is on building students' natural abilities to think critically, develop visual learning skills, and foster inquiry habits. This course curriculum also emphasizes "academic socialization" to help students integrate into the college culture by addressing ways to manage time, build relationships, and plan careers while they adjust to life in college. In a recent study at the University of Texas, San Antonio, the retention rates of first year students in Learning to Learn orientation courses and standard orientation curriculum were compared. Students in both groups were comparable in preparedness and aptitude assessments and similar

in age, race, and gender. Students who engaged in the Learning to Learn orientation were 28 percent more likely to be retained at the college than students who participated in the more traditional course. (Ryan and Glenn 2007; Wingate 2007)

Stand Alone Success Courses

The research of Zeidenberg, Jenkins, and Calgano (2007) and O'Gara, Karp, and Hughes (2008) point to the efficacy of the student success course model, even as a stand-alone course. Both of these studies focused on stand-alone courses designed to improve the success rates of underprepared students within the community college. Zeidenberg, Jenkins, and Calgano concluded that students in Florida who participated in the student success curriculum were 8 percent more likely to earn a degree or credential. (3) Students who were not enrolled in developmental coursework were nine percent more likely to succeed, while developmental students were five percent more likely to succeed. The study also indicates positive impact on retention and persistence. Despite promising indicators, the researchers caution that the study correlates student success course-taking behavior and increases in completion, persistence, and transfer. It does not, however, show a direct causal effect because of the limits created by variables among students in their socioeconomic status, academic readiness, and high school background.

O'Gara, Karp, and Hughes (2008) found strong relationships between increased student achievement and satisfaction with enrollment in a traditional student success course. Their interviews with students showed that students felt generally positive about their experiences, and they reported the usefulness of the course on their learning. However, the researchers were unable to isolate discreet aspects of the course with specific benefits. In addition, they could not conclude whether participation in the course impacted progress toward a credential. Even so, the positive reports from students indicate that their experiences seemed to support the conclusions that they felt more integrated into the college community, that they felt more confident about their learning and study skills, and that they acquired useful information about college services and incorporated them in their routines. (20)

Similarly, Valencia Community College has incorporated a student success course as a three unit elective since the late 1980s. In a recent study as part of the Achieving a Dream Initiative (Valencia College, Achieving the Dream Data Team, 2009), researchers correlated the course with significant increases in success rates. In fact, the research was part of a global initiative to support the achievement of underprepared students and students of colors, as their completion rates tend to be lower than other students. The class proved to be particularly effective for students who tested into all three discipline areas of college preparatory classes (reading, writing and math). The data indicates that the course affected persistence positively for all student groups, and it seems to significantly impact overall completion rates among Hispanic students (p. 7). In focus groups, students revealed that they were not aware of the student success courses until they were introduced to them by a counselor, and when the goals of the courses were explained to them, they felt better about taking them (p. 9).

The stand alone student success course remains the primary vehicle for providing students and access point to services, advising and enculturation. This format is traditionally taught by a counselor or someone with the appropriate training to advise students, and typically contains the breadth of the study skills pantheon, as well as personal development elements, life skills strategies, as well as an introduction to college services. Most often, students are encouraged, if not required, to enroll in the course within the first year of their college experience. Most stand-alone success courses utilize either the *Becoming a Master Student* by Ellis or *On Course* by Downing as the core curriculum. While both provide different approaches, they also contain some common elements: focus on successful behaviors and the acknowledgement that successful students share some common values and strategies.

Both texts incorporate study skills, self-management, and motivational training; however, the emphasis on each differs. Ellis's text, *Becoming a Master Student*, is in its 10th edition and represents the traditional curriculum of the student success course, focusing on successful behaviors and strategies. The text is clearly designed to provide both inspiration and guidance by showcasing successful real-life models of key strategies (e.g. note-taking, reading, critical thinking etc.). The reinforcement of these models provides a framework for students to strive and modify their own thinking about learning, studying, and achieving. The emphasis on

exercises also underscores the notion that with models and practice students will adopt more effective learning tools as their own.

Like Ellis' text, Downing's *On Course* curriculum provides similar strategy models; however, the emphasis extends beyond student skills to life skills based on a model that is more intensely therapeutic and dependent on the students' self-reflection on their life paths and the psychological history that they bring to bear on the academic experience.

The *On Course* experience requires the students to explore the feelings that often sabotage success, rather than primarily focusing on successful behaviors. The training workshops associated with the texts are based on the following principles:

- "Students construct learning as a result of what they think, feel, and do and less so by what their instructors say and do.
- The most effective learners are empowered learners, those characterized by self-responsibility, self-motivation, self-management, interdependence, self-awareness, life-long learning, emotional intelligence, and high self-esteem.
- At the intersection of a well designed educational experience and an empowered learner lies the opportunity for deep and transformational learning and the path to success—academic, personal, and professional" ("*On Course* Principles" 2009)

The *On Course* Program and *Becoming a Master Student* are both girded by what is sometimes termed "skills theory" which "provides a framework for understanding the challenges students face when making new connections or learning new ways to make meaning of old connections." (King and VanHecke, 2006, 13) Skills theory attempts to explain the progression of a student's cognitive development from "functional levels" to "optimal levels." (13) This progression, however, is not linear and is highly dependent on context and the mindset of the learner. Constructing new knowledge and performing at optimal levels requires high levels of support, students need pathways for understanding and connecting new knowledge and understanding. *On Course* attempts to help the students develop the emotional and metacognitive context for the personal fluctuations that inevitably occurs as they build and rebuild new learning; whereas, *Becoming a Master Student* focuses on helping the students develop the intellectual tools for the

learning journey. Both *Becoming a Master Student* and *On Course* have been aspects of successful programs with promising indicators in retention, course success, units completed, and overall satisfaction.

While the field is primarily dominated by a standard curriculum, there are other experimental curriculums with some success in stand-alone courses. Koehler and Burke (1996) assert that basic study skills are an essential element of any student success course; however, they also state that "a holistic approach to both intrapersonal and interpersonal development" is also critical. (5) This component, though, is often most implicit. In order to make accomplishing this goal are more explicit aspect of the student success course, Choate and Smith (2003) recommend the *Wheel of Wellness* model. This model provides an extension beyond the study skills curriculum by providing a holistic approach to emotional, physical, spiritual and intellectual balance.

The program is comprised of five "life tasks" of healthy people. The five task areas include spirituality, self-direction, work/recreation/leisure, love and friendship. Each area is divided into subgroups, and students are expected to use this framework as both an assessment instrument and an instructional tool. Choate and Smith (2003) assert that the framework can be integrated into any traditional curriculum as an enhancement or be implemented alone.   Some preliminary research shows that students gained awareness about the interrelatedness of the program components, thereby promoting an enhanced sense of responsibility for themselves and their own learning.   This self-direction is precisely the kind of result that impacts both success and retention. While this model does not appear to be widely used, its components parallel those of more popular models.

Plus Packages

There is a growing body of evidence that demonstrates that some of the influence of the student success course is not confined to the limits of the curriculum. Some studies show that participation in success courses in conjunction with other services can have a powerful impact on the ability of even the most challenged student populations to achieve. In essence, it appears that when services are "packaged" for students, their capacity to discover their potential as achievers is exponentially improved.

Bender (1997) contrasted the success rates of underprepared students who participated in a student success course with those who participated in a success course enhanced by tutoring services. Both groups participated in the *Becoming a Master Student* curriculum by Ellis, but the "enhanced" program students were required to attend tutoring sessions in addition to the study skills framework. The students in the enhanced program had significantly higher grade point averages than the other student participants. Additionally, their instructors reported that the students who received both services "exhibited more of the behaviors related to student success" than their counterparts. (8) Nolting had similar findings by correlating the interrelated impact of tutoring and counseling interventions on developmental math students. (1992)

Scrivener, Commo, and Collado (2009) recently published a study of a California community college that constructed a student success experience designed to assist its probation/dismissal students and improve their academic standing as part of an effort sponsored by MDRC. The initial program, called "Opening Doors to Excellence," featured two components: a student success course framed around the *On Course* curriculum by Downing and a series of loosely organized academic support activities in the college's Success Centers. The initial results concluded that the intervention did not significantly improve students' academic standing when randomly assigned students from the control group were compared to program participants. However, when the intervention was revised by strengthening the connections between the support activities and the success course, the program resulted in the following effects:

- The program almost doubled the proportion of students who moved off academic probation into good academic standing
- The program increased the proportion of students who earned a cumulative GPA of 2.0 or higher
- The program increased the number of credits that students earned (8-9)

The changes in the results were attributed to the experience of the instructors after the program was revised, as well as the improved structural connectivity to the support experiences in the Success Centers. As part of the Achieving the Dream initiative, MDRC is continuing to study the impact of similar interventions at other community colleges.

In another example of a "packaged" approach, the Digital Bridge Academy at Cabrillo College in California, links a student success course (termed a "foundation" course) for the first two weeks of the program with an accelerated academic program that contextualizes learning. The foundation course is designed to address "counter-productive" behavioral patterns and thinking. The curriculum is designed to "bolster a sense of belonging in the college community and improve…academic readiness for transfer-level coursework." (43) The faculty are trained to work with students as mentors and expected to inspire, encourage, and model the strengths-based framework being instilled in the foundation skills component.

However, the foundation component is just one aspect of the intervention. Once students complete the foundation course, the "bridge" component, they transition to a transfer-readiness curriculum that includes mathematics and English courses. As part of a cohort, the students learn academic skills, as well as accountability and professional competencies that enhance their marketability, while simultaneously cultivating their esteem and professionalism.

An evaluation supported by the National Science Foundation concluded that students who participated in the "Digital Bridge" experience were more likely to complete courses and advance toward their goals (DeLott-Baker, Hope, and Karandjeff, 2009, 45). Interestingly, the Community College Research Center recently evaluated the efficacy of the practice and concluded that students in the accelerated model of the intervention experienced better results than the students in the non-accelerated model (Jenkins et al, 2009). The results are particularly meaningful considering that the program is geared toward students who are not only underprepared but who are traditionally in the extremes of the "at risk" student population.

Reflections of a Practitioner

In so many ways, cultivating student success is equal parts magic and science. Every day, we strive to be the alchemists of the perfect formula that will preserve the motivation so prevalent early in the term, promote the light of understanding just beginning to glimmer, or build on a success that is often so hard-won for many students. In an effort to capture all of that, we look for interventions that have all of the ingredients that seem to make a difference: study skills, motivational modeling, counseling advice, faculty-student interaction, and structured support. An evaluation of the efficacy of student success courses is indicative of just that condition.

Generally, student success courses incorporate all of those components that work, but because it is greater than the sum of its parts, it is difficult to research how the components work together.

The research indicates that the curriculum of the student success course, while containing a set of core values, is mixed differently according to the penchant of the individual college, department or instructor. Given the variety of approaches, it is difficult to compare research among various institutions. Further, comparisons between individual instructors using the same curriculum are equally unfair, given the uniqueness of instructional delivery. Anyone familiar with classroom environments knows that meaningful gains in student achievement are often the result of ineffable interactions that are impossible to quantify. Even slight idiosyncrasies in instructional style can be subtly meaningful; for instance, the depth and dynamic of faculty student interaction may be quite specific to individual instructors and provide a pivot in students' success. Future research should focus on contrasting curricular differences as well as varying approaches in order to provide insight as to what aspects of the course are making a difference.

Another dimension of the research on student success courses is the assumption that teaching students about success is necessarily a pathway to success. The dominant curriculums for student success courses depend on direct instruction about the behaviors of successful students. This approach assumes that these are teachable skills. At the core of all successful student behavior is the will to take responsibility for learning and engage it as a process. In that sense, instruction devoted to inspiring motivation is just as critical as more "surface" issues like note-taking. Even so, teaching motivation is complex. The research emphasizes the need for instructors to create the conditions for students to discover success on their own, either within the context of the college course or within their own hearts.   But again, the research is focused on the holistic experience of those conditions rather than individual elements, and yet more specificity on those issues might be helpful signposts as colleges plan and develop student success experiences.

The student success course attempts to create a singular experience from all of the components that the research supports for student achievement. Every educator has been witness to a parade of students who have their educational goals within their grasp, but for whatever reason, they slip out of reach. What is missing? It may be one thing that could be easy to address: a tutoring

referral, a motivational talk, a coping strategy. Or it may be a combination of factors: a lack of funds combined with a combustible life scenario and a lack of academic preparedness. The philosophy of the student success course is that these factors, whatever the combination, can be addressed with one solution. The course, then, is a way to package a tipping point that situates the student toward success. The research broadly supports that notion, but additional investigation may help inform educators and administrators about how to balance the components more powerfully and more effectively.

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A series of background papers was prepared for Carnegie to support its work in developmental mathematics in community colleges, to devise measures for student success, and to help identify problems of practice for potential future work.

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