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Knowledge Area Module V: Theories of Organizational and Social Systems

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Abstract

Breadth

In this section the theories of Perry, Erikson, Kegan, Parks, as well as Belenky, Clinchy, Goldberger and Tarule are compared and contrasted. The significant ideas of each theorist on the stages of human development are analyzed and assessed in terms of their underlying assumptions about meaning making and the internal motivation to learn. The strategy that guided this examination focuses on the process of learning and its relation to the stages of development from infancy through adulthood.

Abstract

Depth

For the Depth component of this KAM, research in the field of education of children, adolescents, young adults and adults is explored. The focus of this literature review includes intrinsic and extrinsic motivation to learn and educational practices conducive to the development of adults who are self-directed learners.

Abstract

Application

In the Application section the theories examined in the Breadth and Depth portions of the KAM are utilized to develop a series of workshops. The immediate objective of these workshops is to persuade faculty to commit to a Faculty Learning Community on self-directed learning. The long term objective is to transform the teaching culture on the Silicon Valley State University campus into a constructivist learning and teaching community.

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Section 1: Breadth

EDUC 8510: THEORIES OF INTELLIGENCE, LEARNING AND MOTIVATION

Introduction

The goal of this section is to compare and contrast the theories of Perry, Erikson, Parks, as well as Belenky, Clinchy, Goldberger and Tarule to expose patterns of similarity and discover where they differ in their basic assumptions on the stages of human development. Further, these theorists' stages of development theories will be synthesized to construct a comprehensive portrait of human development across the lifespan. Lastly, the theories will be analyzed in terms of their underlying assumptions about meaning making and the internal motivation to learn.

The theorists highlighted in the Breadth portion of this KAM have explored the stages of human development from different angles. In his book, *The Life Cycle Completed* (1982), Erikson featured a chart spanning the eight stages of life: infancy, early childhood, play age, school age, adolescence, young adulthood, adulthood, and old age. He stated that at each stage the individual is faced with a psychosocial crisis that results in developing either a *basic strength* or *core-pathology*. Erikson attested that the earliest of experiences have a profound and lasting impact on the individual which they carry into adulthood. In his book, *In Over Our Heads* (1994), Robert Kegan discussed the mental demands of modern life. His theory includes five stages or levels of consciousness which an individual can potentially achieve provided they have the support system necessary to face life's demands, an education geared towards supporting transformation, and the inherent ability and willingness to continue to grow throughout their lifetime. In *Forms of Intellectual and Ethical Development* (1970), William Perry, Jr. outlined the research efforts that he and his colleagues made in studying the

perceptions and growth of college students through extensive interviews. Based upon this study, the researchers created a classification scheme of nine positions of human development, ranging from basic duality through developing commitments. In *Big Questions, Worthy Dreams* (2011), Sharon Parks took Perry's nine positions and grouped them into five primary positions or forms of *knowing*: 1) Authority-bound/Dualistic; 2) Unqualified relativism; 3) Commitment in relativism; 4) Tested commitment; and 5) Convictional commitment. With a focus on emerging adults, she examined seven mentoring communities capable of helping shape the individual: professional education, the workplace, travel, families, religious faith communities, the media, and social movements. Through a series of narrative interviews, Belenky, et al. (1997) traced *Women's Ways of Knowing* (1997) from *silence* through *received, subjective, procedural*, and *constructed knowledge* - building a strong case for a change to the educational curriculum to a more constructivist pedagogy.

Following an in depth examination of each theorist's view of the stages of development, I explore the process of meaning making from the point of view of each author. For growth to come about, so must learning. One way that learning occurs is a result of an individual making sense or meaning out of their experiences. Thus, meaning making is essential for transformation to take place, allowing the individual to move towards a higher level of thinking and interacting with others. In Mezirow's (1991) *Transformative Dimensions of Adult Learning*, the author attempted to addressed the shortcomings of adult learning theory. He stated adult learning theory has demonstrated "a failure to recognize the central roles played by an individual's acquired frame of reference, through which meaning is construed and all learning takes place,

and by the transformations of these habits of expectation during the learning process" (Mezirow, 1991, p. 4).

The Breadth concludes with a look at each theorist's contribution to expanding the understanding of an individual's motivation to learn. From Erikson's focus on the impact of the psychosocial crisis at each stage of development to Kegan's examination of traditionalism, modernism and post modernism and the challenges facing the individual to understand and survive the hidden curriculum, the elements necessary to create an environment in which self-directed learning can thrive is scrutinized.

Stages of Development

In *The Life Cycle Completed* (1982), Erikson focused on psychosexuality and the cycle of generations, major stages in psychosocial development, and ego and ethos. He stated that three processes of organization must work together to ensure that a child grows into a healthy adult: the *soma* or body, the ego or *psyche*, and the beliefs of the community or *ethos.* Erikson believed that how the ego develops is based on both biology and the psychosocial experiences of the individual. In *Big Questions, Worthy Dreams* (2011), Parks stated that Piaget "discerned that, in interaction with their environment, human beings develop increasingly complex structures (or capacities) to receive, compose, and know their world" (Parks, 2011, p. 53). She remarked that Piaget would have agreed with Erikson in regard to the correlation between biological maturation and human development. Parks stated that Erikson and Piaget were the grandfathers of constructivist-developmental psychology. In regards to Erikson's theory, Parks agreed that each of the eight stages of human development brings a unique pyschosocial crisis.

Erikson (1982) turned to embryology to guide his understanding of the stages of development. He spoke of epigenesis as the guiding organismic principle for developing a clear understanding of these concepts. Epigenesis refers to the sequential growth of various organs in the body and the importance of their development prior to the appearance of the next dominant organ in the development process. Erikson further stated, that if an organ is superseded by another organ before it has reached its proper stage of development, the organ never fully reaches its potential. However, once born, the child continues to grow, influenced by its experiences and by the culture in which it is raised.

According to Erikson (1982), infants are at the oral-respiratory *psychosexual stage,* and in the sensory-kinesthetic mode. Erikson theorized that during a *psychosocial crisis,* the individual has both positive and negative experiences that directly relate to the development of both a particular strength and core pathology. Parks (2011) stated that this first crisis lays the foundation for the remaining stages. She stated that "resolving these tasks in a positive direction honors the potential of human life" (Parks, 2011, p. 50). For example, in infancy a child can learn to trust or mistrust, based upon its experiences. Erikson (1982) stated that hope, is the *basic strength* developed during this period, with the opposite, withdrawal, as the *core-pathology/basic antipathy*. As an infant is completely dependent upon its mother or female surrogate as its *radius of significant relations*, and is evolving based upon its interactions, developing trust or mistrust, it could be surmised that the infant's ability to survive is tied to blind faith in their mother to provide love and sustenance. According to Erikson (1982), the *ritualism* of idolism is developed in infancy, with the *related principle of social order* being the Cosmic Order, and the *binding ritualization* being numinous or sacred. A ritualization is the

positive social pattern that develops in relationships, whereas ritualisms are negative patterns and create an imbalance in the relationship. Although Erikson does not define social order, it can be construed from his related categories that he is referring to the social institutions or practices which have endured overtime and are accepted by society as having value and cultural significance.

Erikson (1982) stated that during early childhood, when the child is in the anal-urethral psychosexual stage with its corresponding retentive-eliminative mode, it is being toilet trained. The child will face a psychosocial crisis of autonomy vs. shame or doubt, with the related strength of will and the core-pathology of compulsion, as they interact with their parents or caregivers as the main radius of significant relations. During this phase, the child is learning to take responsibility for its training as the caregiver reinforces positive behavior and discourages negative behavior. Children begin to learn right from wrong. Thus, the related principle of social order is law and order, with the binding ritualization of judiciousness, and the ritualism of legalism. Legalism exemplifies a dualistic mentality of black versus white, unlike the ritualization of judiciousness which implies fairness and understanding of gray areas in the law.

Play age, according to Erikson (1982), brings the psychosocial crisis of initiative vs. guilt, which results in a sense of purpose as the strength, and inhibition as the core-pathology. Children are discovering and exploring their genitalia through the locomotor mode. During this period, the basic family is the radius of significant relations. Moralism is the ritualism that governs the play age - as the child's sphere expands to include toys and imagination, and as they learn to play games and follow or break the rules. Kegan (1994) stated that young children up to the age of six generally fall into the category of the first order of consciousness. They act on

impulse, live in the moment, cannot differentiate between fantasy and reality, or fiction and non-fiction. Rules are a difficult concept and must be repeated, as they are not committed to memory. Erikson (1982) stated that the binding ritualization at play age is that of drama as children create and role-play. They begin to idealize role models or prototypes, such as firemen, athletes, and celebrities. Thus, Erikson categorized the related principle of social order during play age as that of ideal prototypes.

Erikson (1982) stated that school age brings a crisis of industry vs. inferiority, while the child ideally develops competence, rather than the core pathology of inertia. The child is in the latent psychosexual stage. Attending school expands the radius of significant relations to include peers at school and members of the child's neighborhood. With school, comes the related principle of social order which is labeled technological, the binding ritualization of formal (technical) and the ritualism, formalism. In Erikson's day, no doubt the technological social order was demonstrated by the child's preoccupation with television. Whereas today, children of this age group might gravitate towards video games, computers and cell phones - not only for entertainment, but also for communication. Also, at this age, schools are bringing computers into the classroom - so, technology is an even greater influence than it was in the past.

According to Kegan (1994), children enter the second order of consciousness between the ages of seven and ten and “undergo a qualitative change in the way they organize their thinking, their feeling, and their social relating” (Kegan, 1994, p. 20). They are able to understand or organize objects into what Kegan referred to as *durable categories*. Things are seen as having properties distinct from the child’s perception of them. Children at the second order of

consciousness see others as having intentions that may be different than their own. Lastly, they begin to discover their personal preferences and abilities. These preferences are more enduring, rather than momentary, as they were in the first order. Their point of view is one of simple reciprocity or cause and effect. They are focused on their needs and their preferences. They can understand that their parents expect them to behave in a certain way, and they have the ability to say what parents want to hear, but, they don't have the ability to subordinate their desires to that of their parents. According to Erikson (1982), at school age, children are experiencing the psychosocial crises of industry versus inferiority, developing competence versus inertia. Kegan (1994) theorized that children from the ages of seven to ten through adolescence are not capable of thinking or feeling at the third level of consciousness. Parks (2011) stated that a nine year old uses *concrete operations* to understand reality, whereas a fifteen year old has developed *formal operational structures* of thought - and experiences life's events much differently.

Erikson (1982) considered stage five of development, adolescence, to occur approximately between the ages of thirteen to twenty. He stated that adolescents struggle with their identities and often experience identity confusion during the psychosexual stage of puberty. The strength that emerges from this crisis is fidelity, as adolescents consider loyalty to their chosen group to be paramount to the exclusion of anyone different in their way of thinking. However, the core-pathology that could likely develop during this stage is repudiation. An ideological worldview is the related principle of social order with ideological binding ritualizations, or rituals of belonging. The ritualism that could potentially develop in this stage is totalism, which constricts the ideological into a narrow framework of ideas. The radius of significant relations for adolescents includes peer groups, outgroups and models of leadership

(Erikson, 1982). Kegan (1994) stated that as adolescents begin expecting more freedom and start to physically resemble adults, parents and authority figures expect them to also progress to a more complex way of interacting with the world, exhibited through more responsible behavior - basically, expecting them to engage in cross-categorical meaning making. Parents expect adolescents to behave as adults, with an adult understanding of loyalty to something larger than the self. However, according to Kegan (1994), the underlying structure of cross-categorical meaning making occurs at the third level of consciousness, which generally manifests from age 21 up. Kegan referred to this expectation that society has for youth as the *hidden curriculum.* Therefore, it appears that Erikson's theory of the stages of development support Kegan's notion that expecting an individual before the age of 18 or 20 to act as an adult does not allow them the time they need to focus on what it critical to their personal growth - mainly, surviving a struggle to establish their identities and develop meaningful relationships outside the family structure - with peers and friends from their neighborhoods. Parks (2011) believed that the adolescent's form of knowing falls into one of two positions, the first being Authority-bound/Dualistic, and the second, Unqualified relativism - which supports Kegan's theory that adolescents are not capable subordinating their needs to the greater good, as they haven't reached a level of probing commitment, which generally manifests in the older, emerging adults.

According to Erikson (1982), during young adulthood, the psychosocial crisis is one of intimacy vs. isolation, as young adults enter the psychosexual stage of genitality. The strength learned is love, with the core pathology being exclusivity. The radius of significant relations expands to include partners in friendship, sex, competition and cooperation. Young adults embrace the ritualism of elitism, with the binding ritualization being affiliative. The related

principles of social order are patterns of cooperation and competition. Many of these young adults move out of the home and enter college or the work world, teetering between Kegan's second and third level of consciousness. According to Perry (1970), many young adults remain at the adolescent level of Basic Duality, the first position in his scheme of development, upon entering college. Belenky, et al.(1997) interviewed women who also fell into this category, labeled as received knowers - that is, their knowledge is received from others, thinking dualistically, seeing things as right or wrong. According to Belenky, et al. (1997), received knowers are more comfortable with the powers of their voice and mind when speaking with friends, although they feel that in regard to truth, most knowledge comes from authorities. The authors compared men and women as knowers, citing Perry's study of college age men who saw things as *authority-right-we* against the alien world of *illegitimate-wrong-others* (Belenky et al. 1970, p.59). Whereas, Belenky, et al. (1997) determined that women do not feel a kinship to authority. Women seem to see things as *authority-right-they*. This could be attributed to the fact that women are less privileged. Also, the received knowers interviewed rarely came into contact with women as authority figures. So, even though society has progressed, as a whole it still seems to treat women with less respect than men. Women from the perspective of received knowledge feel capable of hearing, understanding, and remembering. They have faith that if they listen well, they will be able to do things right, and most importantly get along with others. These women look outward for moral knowledge, their moral judgments conform to the conventions of society, or to the dictates of the nonconventional ways they'd like to emulate.

Though some of the women interviewed by Belenky, et al. (1997) fell into the silent or received knowledge categories, almost half were subjectivist in their thinking. The authors stated

that subjectivist thinking is a sign of growth in women in that it indicates a move from passive to active, "from silence to a protesting inner voice and infallible gut" (Belenky et al, 1997, p. 54). However, women in this category still are dualistic in their thinking as they believe there are right answers. The authors said that “for women, the freedom from social convention and definitions implied in the shift into subjectivism represents a move toward greater autonomy and independence" (Belenky et al., 1997, p. 55). Further, it leads to the maturity necessary for connected knowing, which allows for understanding and truth through a joining of minds (Belenky et al., 1997, p. 55).The group of subjectivist knowers interviewed were diverse - cutting across all classes, ethnicities, ages, and educational settings. Most did not come from supportive, stable, and achievement-oriented families, but from families that were either disadvantaged, more permissive, or more chaotic than average. The women in this group who attended colleges were mostly from experimental and community educational settings. Many were school dropouts when they were younger, and had recently returned as adult learners to complete their degrees. Some of the women in this group were from the invisible college - clients involved with social agencies who sought help in parenting. Most of the women classified as subjectivists grew up without their fathers due to divorce, neglect, or abandonment. These women painted a dim picture of male authority figures in their lives, despite the fact that society teaches women to put their trust in men as protectors, sources of financial support and interpreters of the public will. Women learn early in life that men hold the power - and, from society’s perspective have the ultimate authority. They see that men are teachers of the highest order, as well as religious, medical, military, and corporate figures - the respected creators in the world.

According to Perry (1970), students in position two, Multiplicity Pre-Legitimate, understand that there are many opinions, but still believe there is one right answer that the authorities know, but which the student is expected to discover. Parks (2011) discussed the transformation of an authority-bound form of meaning making to the next level and stated this shift is not only one of cognitive development, but also of emotional development. She expanded her chart to include corresponding forms of *dependence,* stating that dependence relates to how the individual feels. Parks spoke of inner dependence, which should not be confused with independence or autonomy. Inner dependence "occurs when one is able to consciously include the self within the arena of authority" (Park, 2011, p. 101). Thus, the adolescent, according to Parks, is at a dependent/counterdependent level and moves to a state of fragile inner-dependence as an emerging adult. The last form that Parks included in her chart of human development is *community*. She stated that the adolescent exists in the conventional community, or a community of "those like us." Parks further explained that "this form of community corresponds to the authority-bound and dualistic form of cognition, in which Authority defines us and them" (Parks, 2011, p. 119). As the individual grows, and develops the ability to reflect and realize the world is vast and their understanding of it is limited, the form of community becomes diffuse. The emerging adults enters the world of the mentoring community, where is it safe to question and reassess his or her sense of trust and power. Parks stated that a mentoring community "offers a network of belonging in which emerging adults feel recognized as both who they are and who they are yet becoming" (Parks, 2011, p. 123). This critical need to support the emerging adult was also found in the work of Perry and Erikson who both realized that educators must

incorporate this into their method of teaching and communicating with their students to further their growth towards mature adulthood.

According to Perry (1970), students in position three, Multiplicity Subordinate, continue to accept diversity of opinion, but still consider it temporary. They believe the authorities have not yet found the right answer. But, by questioning the ability of authority to know all the answers, students begin to struggle with their previous level of comfort experienced in position one - where authority was all knowing. A sense of unease between faculty and students develops as the student no longer idolizes the instructor as having all the right answers. And, faculty being used to being the authority with the right answers can feel challenged. This causes friction. But, with friction there is growth.

Perry's position four is divided into two sections: Multiplicity Correlate or Relativism Subordinate. In Multiplicity Correlate, the student sees uncertainty to be large-scale and elevates it to the understanding that everyone has a right to their opinion. Students now can entertain the opinion of others as legitimate, such as students from different religions or socioeconomic status. This leads to Relativism Subordinate, in which a student just begins to realize that truth is relative and not absolute, that truth can vary between people and cultures. Belenky, et al. (1997) compared *procedural knowing* to stage four, Relativism Subordinate in Perry. Women who are at the level of procedural knowing can "construct arguments powerful enough to meet the standards of an impersonal authority" while believing that authority expects them to think in a certain way, that is "how they want them to think" (Belenky et al., 1997, p. 101). Procedural knowing falls into two categories: separate and connected knowing. Most of the women interviewed who fell into the category of separate knowing attended traditional liberal arts colleges, with the majority

at a women's college. Separate knowers tended to break the rules of feminine stereotypes, being tomboys in their younger years and embracing impersonal reason and critical thinking as their methods of operation. Conversely, connected knowers express empathy and use it as a means to understand and learn from others. Unlike separate knowers, they believe that personality adds to perception, rather than creating bias.

In Perry's position five, Relativism Correlate, Competing or Diffuse, the understanding of knowledge and values as relative is strengthened. Dualistic thinking only occurs in special cases. Position six, Commitment Foreseen, introduces a shift in reasoning or a transformation, as the concept of commitment is foreseen and continues to be strengthened through the final position of nine. In position six, the student realizes that he or she must adjust to a relativistic world by making a personal commitment. In position seven, Initial Commitment, the student makes this commitment. Position eight, Orientation in Implications of Commitment, t is a time in which the student experiences the results of what their commitment means, and makes connections to the responsibilities inherent in that commitment. Perhaps this position most closely relates to Kegan's (1994) belief that mutual reciprocity occurs on the third level of consciousness, as the individual begins to understand their role in the community and their responsibility to that community., towards ideas bigger than the self. This of course, also corresponds to Perry's position nine, Developing Commitment(s), as the student realizes that commitment is continual and a way of life. Parks (2011) also examined commitment as a sign of transformation - referring to a tested adult engaging in tested commitment, and a mature adult capable of convictual commitment. Parks stated that the tested adult operates at a level of confident inner-dependence, evolving into an interdependent state as a mature adult.

Belenky, et al. (1997) describe the transformation in women from procedural knowing to constructed knowing. Women who construct knowledge begin to ask questions of themselves ranging from "Who am I" to "What are the rights and responsibilities that I have to myself and others." They engage in a self-examination that "leads to the construction of a way of thinking about knowledge, truth, and self that guides the person's intellectual and moral life and personal commitments" (Belenky, et al., 1997, p. 136).

Women who embrace constructed knowledge no longer shy away from conflict, but understand that it is inevitable. Constructivist thinkers embrace all pieces that constitute the whole of who they are: mother, daughter, partner, friend, as well as other roles they play. "Ultimately constructivists understand that answers to all questions vary depending on the context in which they are asked and on the frame of reference of the person doing the asking" (Belenky, et al., 1997, p. 138). The authors stated that constructivists engage in "real talk" which includes careful listening and involves participation of all members of the group. Although Belenky, et al. (1997) do not draw any correlations between women who embrace constructed knowledge and Perry's positions, a case could be made that these women have reached position nine on Perry's scale, as they have accepted "changes of mood and outlook within the continuity of identity." They have a "sense of being *in* one's life" (Perry, 1970, Chart of Development, position nine).

According to Erikson (1982), as the individual ages and reaches adulthood, the psychosocial crisis manifests as generativity vs. stagnation, with the strength being the ability to care and be cared for and the core pathology being rejectivity. During this time, adults become parents in the psychosexual stage of procreativity. Provided that the adult is living with family

and not alone, the radius of significant relations would be a shared household with divided labor. Currents of education and tradition are the corresponding related principles of social order. With care being the basic strength, adults are poised to care for the young, acting not just as caregivers, but also as educators or mentors. In adulthood, authoritism is an overbearing sense of authority,whereas the binding ritualization of being generational is one of being a guide or tutor. Kegan (1994) pointed out that "for the first time in human history, three mentalities exist side by side in the adult population...the traditional, the modern, and the postmodern (Kegan, 1994, p. 303-304). According to Kegan, it is during adulthood, generally in their forties, that some individuals reach the fourth order of consciousness. Those who do are modernists. They have the ability to self-regulate, possessing an internalized system of rules. They are not controlled by other's opinions of them. They can make decisions based upon their set of rules. Their underlying structure moves from cross-categorical meaning making to a complex system.

Kegan (1994) introduced the diversity movement as a mechanism for growth into the fourth order of consciousness, with its fourth order demands of modernism. He spoke of communities of ideology, such as the movements of feminism and Afrocentricism. Kegan stated that these communities require their members to reanalyze their values and loyalties by constructing a "theory of their own oppression" and disjoining themselves from an "identification with one's cultural surround and refashion these materials into the critical elements of a personal identity or authority, a reinterpretive ideology for authorizing reality" (Kegan, 1994, p. 342). For those who are in a position to affect change at the university level, but are not necessarily themselves members of these diverse communities, opportunities arise to

improve the curriculum. Students and faculty who demand representation, to see their people in the history being taught, to hear the voices not only of the dominant culture in their studies, but of their culture, push all who embrace this change to approach the fourth order of consciousness. Faculty can use the diversity movement "to enhance the context of the class and make it an even more fertile environment for supporting development to the fourth order" (Kegan, 1994, p. 347).

According to Erikson (1982), in the final stage of old age, the crisis is one of integrity vs. despair, which brings the strength of wisdom or the core pathology of disdain. The radius of significant relations expands to that of all humankind, and psychosexuality is a generalization of sensual modes, as the individual begins to face their mortality and their physical limitations. Dogmatism becomes the guiding ritualism, with the binding ritualization being philosophical, and wisdom being the related principle of social order. Kegan (1994) stated that few people reach the fifth order of consciousness, but cited the fact that we are living longer as making it possible that more of us will be able to achieve this level. To do so, an individual's underlying structure must transform from a complex system into a trans-complex system, wherein they see "conflict as a signal of our overidentification with a single system" and focus on the "transformative process of our being rather than the formative process of our becoming" (Kegan, 1994, p. 351).

Meaning Making

> We human beings are unable to survive, and certainly cannot thrive, unless we make meaning. If life is perceived as utterly random, fragmented, and chaotic - meaningless - we suffer confusion, distress, stagnation, and finally despair. The meaning we make

> orients our posture in the world and determines our sense of self and purpose. We need to be able to make some sort of sense out of things; we seek pattern, order, coherence, and relation in the dynamic and disparate elements of our experience. (Parks, 2011, p. 9)

Based upon the human necessity for meaning making, as stated in Parks (2011), it is critical for infants to make meaning - not only survive, but also to thrive. That said, the infant's world at first is tied directly to its relationship with its mother. Basically, the child's biological needs create an environment that requires social interaction with the mother in order to satisfy those needs. The mother provides sustenance and warmth to feed and protect the infant. Repeated feedings create an environment with ritualistic elements, as the mother follows certain steps sequentially and behaves and speaks in a certain way, thus providing the groundwork for the infant to connect the dots of the experience cognitively, thereby creating meaning.

Erikson (1982) stated that ritualization is one of the most important characteristics of the psychosocial development of the individual. He defined it as "informal and yet prescribed interplay between persons who repeat it at meaningful intervals and in recurring contexts" (Erikson, 1982, p. 43). Ritualization is used by mothers to teach their infants, and can be highly individualized based upon each mother's style. It is during this time that the child begins to differentiate itself and recognize on some level the "primal Other" or the "I's" (the child's) counterpart (Erikson, 1982, p. 44). Erikson stated that the infant treats his mother as an idol. Thus, the ritual of idolism can be tied to faith in the mother and translated later in life to the individual's religious beliefs or faith in a supreme being.

According to Erikson, the significance of interplay between the adult and infant has "deep and lasting cultural connotations" (Erikson, 1982, p. 34). He also mentioned that child

rearing differs amongst cultures in regard to the meaning placed on the body and social interplay occurring during the child rearing process. To support this, he relayed his study of the Sioux and the interaction between a nursing mother and child - as the mother provoked the child during the teething stage. Erikson drew a correlation between the mother's evocative teaching and the cultural expectations of breeding a warrior with instincts towards ferocity.

William Perry's (1970) view of meaning making seems closely aligned with that of Piaget, as he recognized that making sense of an experience is a balance between two processes: assimilation and accommodation. Perry stated that meaning making occurs when an individual's expectations interact with the environment, be it physical, social, or internal. The meaning derived will be determined by the degrees of congruence and incongruence the individual experiences in relation to their expectations, with the "degree and nature of the incongruence" determining how much work a person has to do to "make sense of the experience" (Perry, 1970, p. 42). That said, it can be concluded that the more challenging the experience, the more work required to make sense of it, the more likely the individual is to experience personal growth. However, if the mental demands of modern life are too overwhelming, and sense cannot be made of the experience, then the individual could fall into despair. Consider the silent women in Belenky, et al. (1997) whose narratives focused on their struggle with family violence and despair. Not making sense of their situation, their only recourse for change was to reach out to the community for support. Kegan (1994), Perry (1970), and Parks (2011) all recognized the need for community when demands placed on the individual were too great to bear. Community support when an individual reaches this critical stage, can elevate them and result in personal growth and transformation to the next stage of their development.

In the last section of his book, Erikson (1982) addressed the ego and ethos by referring to a panel discussion in which he participated in 1973 that focused on Anna Freud's work on defense mechanisms. He reiterated that her work dealt with the methods the ego used to defend itself from unpleasant situations and how the ego contained the individual's negative impulses. The discussion took this a step further, by questioning whether defense mechanisms can be shared "and thus assume an ecological value in the lives of interrelated persons and in communal life" (Erikson, 1982, p. 83). Erikson used the adolescent inclination towards *intellectualization* as an example of a shared or communal defense mechanism. He concluded that defense mechanisms are part of the individual, but also shared through "ritualized interplay of individuals and families as well as of larger units" (Erikson, 1982, p. 85).

Parks (2011) discussed Kegan in relation to meaning-making, stating that he believed that "growth involves a process of emergence, from embeddedness in the assumed truth of one's perceptions to the dawn of a new consciousness in which those same assumptions become available for more conscious assessment" (Parks, 2011, p. 57). In other words, as the individual moves to the next level of consciousness, the subject becomes the object. In his book, Kegan (1994) credited Piaget and others as the inspiration for his expansion of their principles of mental or meaning organization to include not only the logical-cognitive, but also the social-cognitive and intrapersonal-affective domains. He also extended the age range to include adolescents and adults. Kegan (1994) outlined in Table 1.1 the child's ability to make meaning from ages two to six in the logical-cognitive domain, stating that at this level the child can recognize that objects exist independently of themselves. In other words, the child understands object permanence. However, they cannot see the difference between their perception of the object and its actual

properties. In the social-cognitive domain, children at this age recognize that people exist separate from themselves, but they cannot understand that those people have a purpose that may be different than their own. Lastly, in the intrapersonal-affective domain, the child can distinguish between outside stimulation and their own inner sensations, but they have no impulse control. Once the child reaches six years of age and up till their teens, Kegan (1994) stated that they have the ability cognitively to understand the relationship between cause and effect, but they cannot form hypotheses. In the social-cognitive domain, they can manipulate others on behalf of their own goals and make deals, plans and strategies. However, they cannot construct obligations and expectations to maintain mutual interpersonal relations. In other words, their worlds revolve around their needs and wants. Intrapersonally, they can identify enduring qualities of self according to social or behavioral manifestations, such as their abilities and preferences, but they cannot do so in regards to inner psychological manifestations, such as realizing they feel conflicted. In Table 1.1 (Kegan, 1994), the third principle of meaning organization relates to individuals in their teenage years and beyond. At this point, although they can logically think hypothetically and deductively, they cannot systematically produce all possible combinations of relations, or systematically isolate variables to test hypotheses. In the social-cognitive domain, they are aware of shared feelings, agreements and expectations that take primacy over individual interests, but they cannot construct a generalized system regulative of interpersonal relationships and relationships between relationships. Lastly, on the intrapersonal-affective domain, this age group can internalize another's point of view in what becomes the co-construction of personal experience, however, they cannot see themselves as the author of their inner psychological life.

After looking at Kegan's (1994) table of the logical-cognitive, social-cognitive, and intrapersonal-affective domains, an examination of meaning making in relation to belief versus faith is worth investigating. In Perry's (1970) scheme of nine positions, commitment surfaces at position six and continues to grow through position nine, when the individual realizes that commitment is a way of life. Perry also mentioned the phenomenon of humans to engage in unexamined commitments - the state of being committed to a goal without a cognizant basis for this commitment, relating it to Socrates' belief that an unexamined life is not worth living. Perry further made a distinction between belief and faith, stating that "belief may come from one's culture, one's parents, one's habit," whereas, "faith is an affirmation by the person" and can only exist "after one realizes the possibility of doubt" (Perry, 1970, p. 34). Parks (2011) noted that faith is not limited to the religious, but is something that all human beings engage in. She referred to Perry's contributions to our understanding of meaning-making in young adults, with their purpose being to organize meaning. Parks described meaning-making as an activity to find connections, order and patterns using the example of our basic perceptions of what we see when we look at a tree - its parts, as well as its totality. Parks reminded the reader that as individuals we each make our own meaning, although we may all be observing the same tree. Thus, faith to Parks is meaning-making in its most comprehensive dimensions (Parks, 2011, p. 28). Additionally, Parks quoted Richard R. Niebuhr, a Harvard theologian who described faith using metaphors such as "shipwreck, gladness, and amazement" (Parks, 2011, p. 39). Parks equated this shipwreck to the suffering of a loss or collapse in one's life - be it illness, or the end of a relationship that causes an irrevocable reordering of one's life (Parks, 2011). By surviving a

shipwreck, the individual experiences a rebirth of sorts that results in gladness. And, with gladness, Parks stated comes transformation. Thus, faith is a vehicle for transformation.

Internal Motivation to Learn

In infancy, according to Erikson (1982), the infant learns to either trust or mistrust their caregivers. In an environment where the child learns to trust, it continues to thrive, and hopefully proceeds to the next stage in its development without any damage to its ego or ability to relate to others. From the ages of two to four, the child encounters the psychosocial crisis of autonomy versus shame, as it is toilet trained. Erikson (1982) related problems in later life with the parent's handling of toilet training and other challenges the child faces at this age. He stated that the child can learn to be autonomous and begin believing in its own ability when allowed to dress itself and master toilet training without fear of ridicule, or, it can experience shame and begin to learn to doubt its ability. If doubt arises as early as the age of two, is this not a potential deterrent to taking responsibility for one's self and one's future learning?

At age four or five, Erikson (1982) said the child enters the play age, where the psychosocial crisis is initiative versus guilt. Initiative can flourish if the child successfully navigated through the autonomy versus shame psychosocial crisis. The child has the potential to embrace initiative and diminish feelings of guilt. With initiative comes exploration - a time when the child can nurture the joy of learning while exploring their world and testing its boundaries - or they can fear that taking risks leads to guilt, potentially keeping them from internalizing the joy of learning through an increased sense of purpose. Once the child enters school and is no longer within the family unit for the entire day, they make friends at school and have the potential to continue flourishing, becoming industrious or feeling inferior, as comparisons to

classmates is inevitable. Lack of encouragement by teachers or instructors who do not practice a constructivist approach can create an environment where the child's learning style is incongruous with the teaching method. If the child cannot learn a particular subject due to the teaching method, their sense of inferiority will increase - and learning and school may be rejected. How can a child experiencing inferiority then entertain the concept of interest-driven learning if learning makes them feel badly about themselves? According to Kegan (1994), educators should be concerned with the school system and its curriculum in regard to the education of young people. Questions should be asked such as "What is it, really, that we are asking of our students here? Are these expectations sensible, fair, or appropriate? What capacities is the curriculum assuming and are these assumptions warranted?" (Kegan, 1994, p. 3). Kegan (1994) cited the benefit of research that highlights the complexity of a child's mind, examining their mental capacity and how it enables or restrains their emotional and social understanding. Information gleaned can lead educators and administrators to think about whether curricula is appropriate for the mental capacities of children at any given age - whether it's reading readiness, determining when they are ready to learn about the U.S. Constitution, or in the case of a Catholic child, knowing when it's appropriate for them to make their first confession. Kegan (1994) mentioned the harried preschool teacher and her insistence that her pupils understand how she feels when they expect her to answer all their questions simultaneously. Yet, what of the children and the stressors they experience? Kegan (1994) stated that educators and parents may have too many expectations, and place too many mental demands on children, giving them more responsibility than they can handle. Therefore, to expect children to think about education for the sake of getting a job, potentially robs them of the joy of discovery that learning can be. Basically, it

shifts the focus to the end result, rather than on the journey or process. A focus on the journey then equals learning for the sake of learning, which requires ongoing input and reflection over an extended period of time. According to Kegan, (1994) too many stresses and demands on children may make them lose interest in education. According to David Elkin (as cited in Kegan, 1994, p. 4), these children are considered "hurried children" with demands being an unnatural way of teaching for the teachers and an unnatural way of learning for the children. Elkin (as cited in Kegan, 1994, p. 4) stated that these practices are a violation of nature to "not to give childhood its due, its proper freedom from too much responsibility and need for self-protection or self-promotion."

Enter adolescence, when hormones and peer pressure both are causing a tremendous strain on the individual, with the additional pressure of parents expecting adolescents to behave as adults - even though their brains have not yet fully matured. According to Erikson (1982), the adolescent has entered the psychosocial crisis of identity versus identity-confusion. Can we really expect that, if upon entering adolescence, the child has not yet internalized the motivation to learn, they would consider it a priority to do so? Or, would surviving acne and ridicule and first dates take precedence? If the adolescent is rebellious, and believes they know more than their parents or teachers, what internal navigation system is going to guide them? But, what if this same adolescent had in their early years, learned to become autonomous, to trust themselves and their elders, to appreciate exploration and discovery? Would they not then be more capable of successfully surviving adolescence with a sense of purpose towards continued education? Perhaps, they might even rely upon that internal desire to learn to act as a shelter, giving them a sense of pride in themselves, so that they could grow to maturity.

According to Kegan (1994), as adolescents graduate from high school and prepare to enter college, they may still be operating on the second level of consciousness. This can cause tremendous demands on the individual, as professors may very well expect them to have already reached the fourth level of consciousness with the ability to be self-directed learners. Unfortunately, according to Kegan (1994) many adults never reach the fourth level in their lifetime, so to expect an eighteen or nineteen year old to do so is not feasible. Instead, Kegan (1994) would have the professor act as a guide for the student by educating them for "the order of mental complexity that enables self-directed learning" (Kegan, 1994, p. 275).

Kegan (1994) stated that students at the third order of consciousness are traditionalists. They lack self-esteem, because how they feel about themselves is directly tied to what others think about them. Working under the direction of William Perry, Kegan taught a course that purported to help students become better readers. Actually, the exercise the students engaged in involved skimming mass quantities of readings with the purpose of finding answers to specific questions of their own choosing. The ultimate goal was to change the students' way of understanding, so that they could begin to formulate their own questions to guide their reading, thus priming them to trust their ability to read and conduct research with purpose – on the road to self-directed learning.

However, there are obstacles to successfully preparing students to become self-directed learners. Perry's (1970) study included observations of students who veered or stalled on the path from positions one through nine in the stages of development. He stated that in any one of the stages it is possible for an individual to "temporize, retreat, or escape," possibly suspending or reversing the growth process (Perry, 1970, p. 177). Perry (1970) described this phenomenon of a

pause in the growth process as *temporizing.* He stated that this suspension of growth may last for more than a year, with the individual knowledgeable of the future, but in need of time to be prepare to face it. According to Perry (1970), temporizing can occur in any one of the positions in the developmental scheme. Not necessarily negative, temporizing sometimes occurs due to a recent ascension to a new position in the scheme, and the need for lateral growth within that position before the individual is able to move forward. Perry (1970) cited several interviews with students who were temporizing. Their reasons for this pause in their growth were varied. They included facing the inner challenge of Commitment, their excellent academic skills allowing them to coast through a course in combination with the fear of moving forward and facing the draft board, and waiting for fate to inform their next steps.

Another alternative to growth is *retreat,* which is described as a "retreat into previously prepared positions" (Perry, 1970, p. 183). During the course of this study, retreat occurred in several of the positions, but tended to be most obvious when the individual regressed to positions two or three in duality. For example, Perry (1970) cited yearly interviews with one student from his freshmen through his senior year. He was rated as position two in his freshman year, being adherent and defensive and resistant to multiplicity. He reached position three in his sophomore year and remained there through his junior year. However, he unfortunately retreated to position two during his senior year.

According to Perry (1970), individuals who temporize and do not continue to grow, may eventually *escape,* which is the third alternative to growth. Escape can manifest in one of two ways - dissociation or encapsulation. When dissociating, an individual becomes passive, leaving their responsibilities up to fate. Unlike dissociating, encapsulation involves competent activity

that is devoid of deep values. Perry (1970) further divided escape into four areas: 1) Dissociation in Multiplicity; 2) Encapsulation in Relativism; 3) Dissociation in Relativism; and 4) Encapsulation in Multiplicity. Although he stated that the third and fourth were rare, all four give a more comprehensive picture of alienation. Perry (1970) stated that alienation is not necessarily permanent and varies widely. Alienated individuals seem to share a sense of nostalgia for what was, what might have been, or what could be - if only things were different. According to Perry (1970), alienation can't be prevented. He therefore recommended that educators focus their efforts on something that can be done, namely - providing "sustenance for care" (Perry, 1970, p. 200).

Perry (1970) noted that his developmental scheme had both administrative and instructional implications. Grouping, selection and guidance of students all need to be considered by administration. He stated that “in grouping it confirms the desirability of cultural diversity while pointing towards ways of identifying and supporting those most vulnerable to culture shock” (Perry, 1970, p. 209). Perry asked the question "What environmental sustenance most supports students in the choice to use their competence to orient themselves through Commitments - as opposed to using it to establish a nonresponsible alienation" (Perry, 1970, p. 213)? He stated that the majority of students benefit most from a "special realization of community." Erickson (as cited in Perry, 1970, p. 213) is recognized for understanding that this sense of community is "derived from reciprocal acts of recognition and confirmation." Perry (1970) recommended two guidelines for educators: 1) they share their struggles, their thinking, and their style of Commitment with the students; and 2) they confirm the student in his community by recognizing his contributions as a colleague-to-be (Perry, 1970, p. 213). Belenky,

et al. (1997) also cited a similar approach when speaking of a connected teaching environment in which the instructor is willing to expose their thought process - basically allowing the student to observe them without the benefit of producing a finished product. This teaches students to trust their own thought processes, and to also realize that the professor does not have the one right answer. Belenky et al. (1997) stated that women in school need to observe both male and female professors modeling this thought process, so that they see it as "a human, imperfect, and attainable activity" (Belenky et al., 1997, p. 221). Additionally, the connected class provides an environment for growth - allowing students to express uncertainty and work in groups "in which members can nurture each other's thoughts to maturity" (Belenky et al., 1997, p. 221).

According to Belenky et al. (1997), the majority of colleges and universities were designed and run by men, with curriculums and pedagogy that do not support the female student. Women interviewed by Belenky et al. (1997) expressed the need for recognition for the knowledge they were bringing into the college experience, which aligns with a constructivist approach to teaching. The authors stated that to design a curriculum that would work for women's ways of knowing is to consider first the students' knowledge, as opposed to the instructor's knowledge - which is the traditional method for design. Additionally, the women interviewed tended to favor knowledge that emerges from firsthand observation, as opposed to learning out of context (Belenky et al., 1997, p. 200). In other words, experiential learning methods would create a more positive learning environment for women - including discussion, group work and the application of information learned to the real world.

Designing a curriculum with a constructivist pedagogy creates an environment that welcomes both genders, as well as a diverse student population. It allows for active discourse,

exploration, collaboration, and multiple learning styles. It is in keeping with the vision of Sharon Daloz Parks (2011) who stated that imagination is a process which has embedded within it the power "to give form to our knowing" (Parks, 2011, p. 139). It is "an act of creativity that matters because it manifests as embodied action in the world" (Parks, 2011, p. 140). She further stated that it is the "core process by which transformative learning occurs" (Parks, 2011, p. 141). Parks also tied the imagination to the ability to lead. Lastly, she stated that the mentoring community of emerging adults has the "power to shape or misshape the promise of emerging adulthood" (Parks, 2011, p.164). This supports both Perry's and Kegan's theories, in that the educational community must nurture students so that they have the ability to learn, grow and transform.

Mentorship programs within the educational community can be ideal for facilitating transformational growth. Parks (2011) asserted that mentors provide five key gifts to their mentees: "recognition, support, challenge, and inspiration - in ways that are accountable to the life of the emerging adult" (Parks, 2011, p. 167). She explored the mentor's role in higher education, including not only faculty, but also administrators, professionals and students as well. Lastly, she looked at culture as a mentor - considering the effects of globalization on the emerging adult, considering that at its best globalization could "awaken and stir new generations of meaningful discovery and commitment, grounded in more vital forms of inner- and interdependent faith" (Parks, 2011, p. 227). In the coda of her book, Parks outlined a total of seven environments that can serve the emerging adult in a mentoring capacity: professional education and the professions, the workplace, travel, families, religious faith communities, the media, and social movements.

Throughout the book, Parks encourages the emerging adult to ask the big questions and have worthy dreams. Parks expressed that big questions must stretch the emerging adult. When asking them, they expose "gaps in our knowledge, in our social arrangements, in our ambitions and aspirations" (Parks, 2011, p. 178). Whereas, worthy dreams are born from "transformative dialogues with otherness, critical and connective thought, and the practice of contemplation" (Parks, 2011, p. 190). The mentors of emerging adults should ask them if their dream "aligns with their values and contributes to the lives of others: (Parks, 2011, p. 190). Parks concluded that:

> A worthy Dream coalesces a relationship between self and world that recognizes the reality and needs of the world and honors the authentic potential of the emerging adult in practical and purposeful terms, yielding a sense of meaningful aspiration. It might be said that the formation of critical-connective thought is the threshold achievement of emerging adulthood and that the formation of a worthy Dream is the central work of emerging adulthood. (Parks, 2011, p. 190).

According to Belenky et al. (1997), constructivist thinkers have a strong sense of self. The authors stated that "when asked about how they feel about experts disagreeing, many constructivists say that they are challenged, not daunted, by contradiction and conflict" (Belenky, et al., 1997, p. 140). An individual who is challenged continues to grow. A correlation between Kegan's individuals who have achieved the fourth order of consciousness could be drawn here. According to Kegan (1994), individuals on the fourth order are not overwhelmed by conflict because they have their own, internalized decision-making system. They are self-evaluative and self-directed. It should then follow that formal education, Pre-K through grade twelve and

beyond, in institutions that embrace constructivist teaching pedagogy would facilitate an environment in which students are self-directed learners, capable of transformation and growth. Once free of the institution, the constructivist thinker would then continue to use the challenges inherent in living to seek additional knowledge, regardless of whether they are formally enrolled in an educational institution. For these constructivist learners, learning is intrinsic, interest-driven, and self-directed.

Conclusion

Does crisis lead to transformation from one stage to the next, if an adequate support system is available to help the individual face the challenges of the mental demands of modern life? Erikson (1982) noted that each step in the life cycle is fraught with vulnerabilities and evils, which require of us healing insights and redeeming values of universal belief systems. Noting Erikson's revelation of the crises involved in human development, educators must look for ways to intercede when interacting with students who are in the midst of crisis or transformation - providing support, insight and guidance. Perry (1970) stated the importance of educators to recognize that students thrive from a special realization of community. Therefore, students benefit from those instructors who share their own thinking process with the students and also recognize the student's potential as a future colleague. Belenky et al. (1997) express similar insights when describing the ideal teaching environment. Kegan (1994) reminded educators that students need a strong support system in order to face the challenges of the hidden curriculum. Also, he urged them to guide the students to achieve the order of mental complexity that enables self-directed learning. He created a course that challenged them to risk by having them formulate their own questions to direct and guide that which they wished to study, as in a constructivist

learning environment. Similarly, Parks (2011) believed that mentors need to guide students to ask the big questions - questions that will stretch them, and expose gaps in their knowledge, social arrangements, ambitions and aspirations. Through transformational dialogue the emerging adult can develop worthy dreams that recognize the needs of the world and the individual's potential to contribute to that world. Parks (2011) and Belenky, et al. (1997) both mention that crisis, be it "shipwreck" or inability to face family violence leads to reaching beyond oneself for assistance - seeking community. According to Kegan (1994), for transformation to take place from one order to the next, the individual must have a strong support system. Support ideally comes from a variety of sources – family, friends, school and the community. Community support may take the form of organized religion or clubs. School support can come from teachers as well as peers when the individual participates in team work, such as group sports or clubs, like math club or scouts. Kegan (1994) stated that what strains parent-adolescent relationships is that parents at the third level of consciousness, require fourth order consciousness to adequately parent. In order to help the adolescent through the transformational growth process, parents need to be able to set limits, maintain boundaries, create and preserve roles, and exercise executive leadership. Thus, the hidden curriculum causes tremendous strain on both sides – as the adolescent is expected to behave as an adult, and the adults in the relationship often cannot adequately guide them through the transformation necessary by providing a stable environment with limits. Kegan (1994) further stated that support in situations such as this often comes from the community – where church leaders or elders are the role models, and perform the fourth order tasks necessary that the parents do not have the capacity to perform.

Provided that the individual successfully transforms and reaches the next position in Perry's scheme, the next order of consciousness in Kegan's theory, or a more active participation in their way of knowing according to Belenky, et al. - will that be enough to transform them into self-directed learners? Further research into the current literature on intrinsic and extrinsic motivation to learn, self-directed learning, and successful educational practices in guiding students to become self-directed learners will be examined to answer this question.

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Section 2: Depth

EDUC 8520: EDUCATORS AS FACILITATORS OF LEARNING

Introduction

Below is an annotated bibliography of journal articles and book chapters, followed by a literature review. The latter delves into an examination of the relationship between motivation to learn and self-directed learning and the elements necessary to nurture behaviors in the young that could manifest into behaviors of self-directed learners in adulthood. With a focus on college students in the 21st century, I also examine the impact of technology on self-directed learners and the role of the educator in guiding students to be successful self-directed learners.

Annotated Bibliography

Abar, B. & Loken, E. (2010). Self-regulated learning and self-directed study in a pre-college sample. *Learning and Individual Differences, 20,* 25-29. doi: 10.1016/j.lindif.2009.09.002

This article documented Abar and Loken's (2010) study of 205 eleventh and twelfth grade students who volunteered to participate in a college preparatory program that met for ten sessions. These sessions included reviews of math and English, and help with college applications and study skills. In this study, the authors used a two-pronged approach. First, at the beginning of the program they administered to the students a self-report survey which contained seven broad indicators cobbled together from two separate pre-existing surveys: the Motivated Strategies for Learning Questionnaire (MSLQ) and the Patterns of Adaptive Learning Scales (PAL). Second, in addition to the information covered in the sessions, they offered the students access to supplemental instruction via the web in the form of online tutorials and practice tests.

This second method was included so that the authors could gather observational data on the students' academic behaviors, rather than relying solely on the data gathered from the self-reported surveys, as previous researchers had done. The authors used the students' responses to goal orientation on the self-reports to determine their potential for self-regulated learning (SRL). Based upon results, the authors determined the students fell into one of three categories: high SRL group, low SRL group, and average SRL group. Of the 205 students, 15% fell into the high SRL group, 37% into the low SRL group, and 48% into the average SRL group.

Abar and Loken (2010) had three goals for this study. Their first goal was to create profiles of self-directed learners utilizing a variety of indicators and a relatively unique methodology. Secondly, as past researchers have done, they wanted to use goal orientations to validate the groups they identified and prove a correlation between a mastery orientation and the likelihood that the individual would have the capacity to become a self-directed learner. Lastly, they wanted to examine if potentially self-directed learners differed greatly from each other in regard to their study behaviors. This is a useful and scholarly article from a peer-reviewed journal. This source is an actual research project involving students of economically disadvantage families and their potential for self-directed learning. The authors followed research protocols to produce an objective result.

This article focused on the adolescent's potential for self-directed learning. In order to address the question of self-directed learning potential across the lifespan, it is important to investigate every level of human development. It is also important to understand the behaviors of self-directed learners in order to create an environment in which self-directed learning is encouraged and nurtured. One potential shortcoming of this study is that the participant

population was not a random sampling. The students in the study had entered a voluntary college preparatory program and were all from economically disadvantaged families - potentially producing results that are not indicative of the general adolescent population. However, studies conducted by other researchers on self-directed learning up until this point relied on findings from self-reporting questionnaires. Whereas, Abar and Loken's approach of using results from self-reporting questionnaires combined with observation of self-directed learning behaviors strengthened the validity of their findings.

Bandura, A. & Schunk, D.H. (1981). Cultivating competence, self-efficacy, and intrinsic interest through proximal self-motivation. *Journal of Personality and Social Psychology, 41*(3), 586-598.

In this article, the authors reported on a study they conducted on 40 children, ages seven to ten, whose arithmetic skills were significantly under par and who also displayed little interest in mathematics. The researchers hypothesized and proved that proximal goal setting leads to perceptions of efficacy and increased intrinsic interest.

The researchers followed strict protocols to ensure that the study was not compromised. The children were randomly divided into four groups, three treatment groups with variations in goal setting including proximal, distal, and no goals, and a non-treated control group. They individually participated in seven thirty-minute sessions in a room with other children also performing the same tasks individually, but they were focused away from each other to avoid visual contact. Over the course of the seven sessions they were tasked with trying to solve 258 math problems.

This is definitely a useful source, as the researchers proved that proximal goal setting is far more conducive to progressing through self-directed learning than distal goal setting or not setting goals at all. Additionally, setting and achieving attainable goals leads to satisfaction and a sense of mastery which can subsequently increase interest in an activity that once held little or no interest for the individual.

Barton, S.M., Sargent, J., & Novotny, D. (2010). Aligning blended culture and blended learning: Toward enhancing teacher and Learner performance outcomes. In Z. Abas et al. (Eds.), *Proceedings of Global Learn 2010* (pp. 1382-1393). AACE. Retrieved November 18, 2013 from http://editlib.org/p/34354/.

This article was based on a qualitative study conducted by researchers from three Australian universities focused on a blended learning business course taught across five campuses in two formats: face-to-face and online. Although the title of the article implied a balanced exploration of blended culture and blended learning, the article primarily addressed a blended culture of diverse international and domestic students and the necessity of the instructor to adapt their teaching approach to accommodate cultural differences. The researchers collected data through four different methods: interviews, questionnaires, observations and online surveys. They also conducted a literature review on four areas they believed were related to their study: social capital, communities of practice, culture theories and blended learning.

The researchers' goal was to gather data on students' opinions of teaching and learning in a cross-cultural setting and to identify patterns amongst international students in their attitudes and motivations in regard to trust and socialization. Perhaps the most useful aspect of this article is that it shed light on student preferences for teaching and learning based upon culture -

highlighting the importance of the instructor to develop a toolkit of strategies to enhance social connectivity and trust in the classroom. It also reinforced the importance of a learning environment that is conducive to collaboration, which cannot successfully occur without a base of social connectivity and trust.

This article emphasized the differences in attitudes and perceptions between domestic and international students. It highlighted the comfort level of the domestic students who felt no need to embrace diversity because they are submerged in a protective environment in which they were raised with plenty of social capital for support. The authors defended the Asian students who use repetition for learning, claiming that it is an honored method of gaining knowledge, and not merely rote learning - again, a comfort zone for these students in which to learn. An educator then must understand the importance of their role as facilitators, guiding the students to expand beyond what is comfortable in order to enhance student learning.

Brophy, J. (1998). *Motivating students to learn.* Boston, MA: McGraw Hill.

Written for K-12 teachers, this book provides strategies for socializing the student's motivation to learn. Brophy stated that motivation to learn differs from extrinsic and intrinsic motivation, though concedes that there is some overlap. The author argued that given the imposed curriculum in schools and the expectation of attendance, intrinsic motivation and flow theory do not apply to the classroom, but the teacher can embed some choices for the students and opportunities for autonomy. A student who is motivated to learn is cognitively engaged. They may not find the topic pleasurable, but they will find it to be meaningful.

The bulk of the strategies presented in the beginning chapters focus on motivating students to adopt learning goals rather than performance goals. Also, Brophy argued that key

cognitive insights should be nurtured at home and at school so that students are motivated to learn. In chapter 8 he focused on strategies to socialize the uninterested student, citing the motivational techniques from researchers studying the workplace environment. Unlike other educators, Brophy does not believe that extrinsic rewards necessarily undermine intrinsic motivation. In fact, he believes if used properly, they can enhance it.

Though written as a tool for K-12 teachers to motivate students to learn, this book provided valuable insights into the myriad of reasons why students are motivated or unmotivated to learn. Also, Brophy limited his examples to the motivational research literature that he believed directly applied to teaching, thus focusing on practical application, rather than on theories alone. Brophy's strategies provide a solid, thoughtful approach for instructors from suggesting a flexible framework for developing instructional plans to establishing a classroom as a collaborative learning environment.

Chu, R.J-C., & Tsai, C-C. (2009). Self-directed learning readiness, Internet self-efficacy and preferences towards constructivist Internet-based learning environments among higher-aged adults. *Journal of Computer Assisted Learning, 25,* 489-501. doi: 10.1111/j.1365-2729.2009.00324.x

In this article, the authors reported on a study they conducted in Taiwan involving 541 adult learners from 26 community colleges and senior centers. The authors looked at factors that influenced adult preferences for constructivist internet-based learning, including internet self-efficacy and self-directed learning readiness. Over 95% of the participants had a computer in their homes and knew how to log onto the Internet. The participants completed a printed version of a survey of 63 questions that utilized a Likert scale. Fifty items focused on the constructivist

Internet-based learning environment (CILE), six questions dealt with self-directed learning readiness (SDLR), and seven with Internet self-efficacy (ISE).

This article was useful as it examined adult learners from ages 32 to 87, with a mean age of 50.67 years. Additionally, Chu and Tsai (2009) discussed self-efficacy and motivation in adult learners and offered useful strategies for educators to employ when working with this population. The authors utilized several methods to ensure that their study results were valid, and built upon previous research conducted in these areas. Chu and Tsai cited four goals for their study: 1) establishing an instrument for assessment of adult learning preferences in a constructivist Internet-based learning environment; 2) looking at gender differences and determine preferences for learning in this population; 3) exploring the interactions between internet-self efficacy, Internet use, and self-directed learning; and 4) examining the role of Internet-self efficacy as a mediator between adult internet use and adult preferences for learning in a constructivist Internet-based learning environment. The authors conducted a thoughtful study of adult learners in an internet learning environment. The questions utilized to determine CILE were comprehensive. The examples provided for the questions on ISE, though significantly fewer in number, were thoughtfully written and capable of producing meaningful results. However, only six questions were used to determine SDLR, and the questions posed did not accurately address the behaviors of self-directed learners that the authors were investigating, especially personal motivation, self-discipline, and critical reflection. Therefore, conclusions drawn regarding self-directed learners may not be as sound as those drawn regarding adult learners and their preferences for a constructivist Internet-based learning environment.

This source built upon research conducted in the area of CILE, as most previous studies focused on secondary schools and colleges. Also, the authors highlighted the benefits that older adults could glean from learning in an online environment, such as convenience, cost effectiveness, self-paced learning, and continuing education without having to travel - a definite benefit to adults without adequate transportation, those living in rural areas and adult-learners with disabilities. It would be interesting to administer this survey to adults in the United States, as the authors' findings may have been limited by focusing on a homogenous, eastern culture with preferences towards behaviorist teaching and learning methodologies. This source provided insight into the adult population, human development and its relation to self-directed learning and self-efficacy for individuals of advanced years and their potential to transform into self-directed learners. It also highlighted adult learning preferences, providing a good base to determine instructor's strategies for motivating students to self, building self-efficacy, and ultimately, supporting the adult self-directed learner.

Eccles, J.S. & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology,53*, 109-132.

This article is a review of theories on motivation, beliefs, values, and goals with a focus on developmental and educational psychology. It is divided into four sections covering theories of 1) expectancy; 2) the reasons for engagement; 3) expectancy and values combined; and 4) cognition and motivation.

This source is useful in that the authors succinctly highlighted the leading theorists and theories of motivation in educational and developmental psychology. However, she did not touch

upon other branches such as humanistic psychology, having refrained from any mention of Abraham Maslow and his theory of human motivation.

What is most useful about this source is that it emphasized the connection between complimentary theories and introduced theories not yet considered for inclusion in this KAM. Additionally, the literature cited stimulated leads to supplementary and relevant resources.

Froiland, J.M. (2011). Parental autonomy support and student learning goals: A prelimary examination of an intrinsic motivation intervention. *Child Youth Care Forum 40,* 135-149.doi:10.1007/s10566-010-9126-2

This article is a report of a study conducted by the author to determine if parents practicing parental autonomy support could improve intrinsic motivation in their children and teach them to set learning goals. Fifteen children and their parent or parents participated as the treatment group, with 15 also in the comparison group. Over the course of seven weeks consultants worked with the parents in the treatment group in 30 minute sessions, teaching them 19 inspirational motivational style (IMS) techniques. For the last five minutes each session the parents would be observed practicing their techniques on their children playing an educational game. Parents also submitted a weekly report of how they utilized the techniques when interacting with their children outside the weekly sessions.

Limitations of the study include factors such as the size of the treatment and comparison groups, and the fact that it was conducted on white middle class children only. Also, the majority of children participating in the treatment group were male, though the author did cite examples from literature that male children are more likely to require intervention at a similar ratio. Although the study has limitations, it does excite interest in parent autonomy support

interventions for this age group - a possibility of instilling in children the intrinsic motivation to learn before they reach adolescence and their academic intrinsic motivation or lack of becomes fixed.

This source provided useful information in regards to children aged approximately nine to eleven. Also, the author also gave clear examples of intrinsically versus extrinsically motivated children and parental autonomy support versus controlling parent communication. He provided a concise description of Ryan and Deci's self-determination theory, defining the various levels of motivation from extrinsic regulation through intrinsic motivation. Lastly, he strengthened the argument for the importance of the proper form of parent involvement in the education of their children and the difference it can make in shaping the child's appreciation for learning.

Gillet, N., Vallerand, R.J., & Lafreniere, M.A.K. (2012). Intrinsic and extrinsic school motivation as a function of age: The mediating role of autonomy support. *Soc Psychol Educ, 15,* 77-95. doi10.1007/s11218-011-9170-2

The authors presented the results of their study of 1,600 children examining the childrens' motivation or lack of motivation towards school activities. They cited previous studies that revealed a linear decrease in intrinsic motivation of students from ages eight to fourteen in Grades 3 to 9. The authors had three goals: 1) to assess intrinsic and extrinsic motivation and amotivation in children ages 9-17; 2) to test the role of autonomy support by teachers and parents as a potential mediator for the age effect on motivation towards school activities; and, 3) to assess the impact of parent and teacher autonomy support on the students' motivation.

The authors adapted and simplified one scale of measurement that could be filled out by

all the students in the study, regardless of their age. It posed questions on three school related experiences: attending school, homework, and listening to their teachers. Using a five-point Likert scale, students responded with their perceptions, choosing from a range of "strongly disagree" to "strongly agree." The study conducted by Gillett et al. resulted in findings that proved a decrease in intrinsic motivation of students as they progress in age from eight to fourteen. One of the limitations of this study is that it focused on an all white population from one ethnic group, French Canadians. It would be beneficial to administer this study on a diverse population of students for comparison.

This article reiterated the fact that intrinsic motivation assists in student performance, persistence, and satisfaction during the learning process, whereas extrinsic motivation does not. The authors also argue for increasing autonomy support for high school students, as their overall perception is that their teachers maintain too tight a control of their learning experience. The authors conclude that a number of mediators can positively affect the age-school motivational relationship including providing structure for the child's education, the psychological maturity of the growing child, and school-promoted goal setting.

Greenhow, C., Robelia. B., & Hughes, J.E. (May, 2009). Learning, Teaching, and scholarship in a digital age: Web 2.0 and classroom research: What path should we take now? *American Educational Research Association, 38*(4), 246-259. Retrieved from http://www.jstor.org/stable/20532540

Greenhow, Robelia and Hughes (2009) discussed Web 2.0 and the impact, challenges, and opportunities it has created for both students and educators. The authors highlighted the importance of the educators' presence in this online environment, as youth today formulate their

identities online. They cited the numerous ways that students currently use the Web and look at how students' regular use of the Web presents opportunities for teaching and learning. Research projects focused on digital youths are also described, citing their potential results as useful for educators to help bridge the gap between learning in and outside the classroom. The authors posed several questions for future research on what learners actually do on the Web, equity and access in use of the Web, and lastly, theory, practices and policies of web use. Greenhow, Robelia and Hughes provided examples of how academics use various available technologies to engage their students and suggested ways that academics could strengthen their roles in the academic community with their peers.

Although the authors did not report on research they had conducted, the article was a good overview of the capabilities of Web 2.0 technology and its use by students, as well as its potential for use by educators to engage students. The authors' goal was to educate the reader on students' use of the Web and the importance of educators' capitalizing on students' interest and proclivity to this collaborative environment.

This source was useful as it highlighted the importance of communicating with students in the forums in which they regularly engage. In order to help students develop behaviors that lead to self-directed learning, their chosen behaviors must be incorporated into such a plan.

Gureckis, T.M. and Markant, D.B. (2012). Self-directed learning: A cognitive and computational perspective. *Perspectives on Psychological Science,7,* 464-481. doi:10.1177/1745691612454304

Gureckis and Markant (2012) discussed self-directed learning from two different perspectives, the cognitive and the computational. They cited numerous researchers from both

cognitive and computational science to support their argument that recent advances in both of these fields can contribute to a new viewpoint of how people harvest and retain information during the learning process. In this article the authors examined memory encoding, category and causal learning, and decision-making based upon information gathered. They also cited research on the yoked or passive learner who is not in control of the learning experience and compared this to the active or self-directed learner who controls the learning process. They closed with an examination of optimal environments for self-directed learning and a look at the benefits of assistive training in the learning process.

The goal of this article was to examine active and passive learning from both the cognitive and computational perspective. Although Gureckis and Markant did not conduct a study to support their argument, they synthesized the work of several prominent researchers on information acquisition. The information in this article is useful in that it brings a unique viewpoint to the study of self-directed learning - the computational perspective.

In the conclusion, the authors cited studies in which computational models selected examples for the learner that resulted in 20% higher learner recall versus recall based upon user selection. They also proposed future research on active information acquisition and the development of assistive training tools customized to the individual learner. This article highlighted the possible union of self-directed learning with machine learning. When studying the best means to support self-directed learning, it is important to consider tools that might be utilized to enhance the learning experience.

Higgins, R., Hartley, P., & Skelton, A. (2002). The conscientious consumer: Reconsidering the role of assessment feedback in student learning. *Studies in Higher Education,27*(1), 53-64. doi: 10.1080/03075070120099368

In this article the authors reported their findings from a research project conducted over a three-year period in which they examined the role of formative assessment feedback on students' work, with a focus on written comments from instructors on students' papers. The authors utilized both qualitative and quantitative methods, in the form of interviews and surveys. They interviewed 19 students from two institutions, and analyzed the data from 94 surveys. Their findings revealed that although students were extrinsically motivated to get good grades, they also were intrinsically motivated because they enjoyed learning. The authors examined a number of issues related to this topic including the part that formative assessment feedback can play in encouraging deep learning. Additionally, they reported on how and why students use feedback. The authors concluded the article with suggestions for instructors on how to improve their use of formative assessment.

The goal of this article was to make an argument for the importance of formative assessment feedback in the learning process. The students that participated in this study were diverse in age, gender and background and were from two different areas of study - business and the humanities. They all participated towards the end of the semester after having experienced some assessment from their instructors. The authors used qualitative and quantitative means in their research which substantiated the results garnered from both methods.

This article contributed to the research conducted for this KAM as it focused on an area often overlooked in the learning process - the role of formative assessment on student learning.

In order to encourage self-directed learning in students at the university level, the impact that assessment can play in nurturing deeper learning must be taken into consideration. This article highlighted the importance of making that assessment both timely and meaningful to maximize its potential for use by the student both in their current coursework and throughout their education.

Kicken, W., Brand-Gruwel, S., Merrienboer, J.V., & Slot, W. (2009). Design and evaluation of a development portfolio: How to improve students' self-directed learning skills. *Instr Sci, 37,* 453-473. doi: 10.1007/s11251-008-9058-5

In this article Kicken, Brand-Gruwel, Merrienboer, and Slot (2009) reported on a case study they conducted in the Netherlands on self-directed learning in on-demand education within a secondary vocational education environment. The authors designed an online portfolio tool called the Structured Task Evaluation and Planning Portfolio (STEPP) to assist students with self-directed learning. The authors gathered both quantitative and qualitative data. Statistics from the use of the tool provided the quantitative data. Qualitative data was gathered from interviews with the students and the instructor on the perceived usefulness of the STEPP formative assessment tool and its' effectiveness in improving their self-directed learning skills. Ten first year students in a hairdressing school participated in the study. At the beginning of the study, all the students completed a prior skills questionnaire, which covered eight hairdressing skills. The questionnaire used a four-point scale in which students reported on their previous experience in these eight areas. Students had varying levels of prior skills in the area of hairdressing before participating in the study. The use of STEPP in the course of the 10-week program was optional. Frequency of use was higher amongst the students who had very little previous experience in

hairdressing. The researchers discovered that students sometimes experience problems taking the lead in their own learning process, an ability that is critical in an on-demand educational environment. In particular, the findings indicated the need for the instructor's guidance in helping students develop three self-directed learning skills. These were the skills of self-assessment, recognizing learning needs, and choosing relevant learning tasks. The researchers also learned that students who met with their instructor regularly and received feedback and guidance during these sessions were perceived by their supervisors to have a better understanding of their learning needs and the tasks necessary to master to meet those needs. Supervisors also noted that students who used STEPP frequently knew which standards to use for self-assessment, which was not the case with the infrequent users.

This source was useful as it provided a unique perspective on self-directed learning in a vocational setting. The study was objective and used scholarly peer-reviewed sources to back up the research. A major limitation to this study was the low number of participants, thus limiting the validity of the findings. Also, detailed information on the guidance provided in the instructor-student feedback sessions would also be helpful to better determine the impact of these sessions on the overall educational experience. The goal of the study was to assess the effectiveness of the STEPP tool in helping students develop self-directed learning skills in an on-demand educational environment. The findings, though limited by the small number of participants, did present a compelling argument for online learning tools in the enhancement of the students' educational experience and the possibility that such tools used in tandem with an instructors' guidance may help a student to grow as a self-directed learner.

This source provided relevant information in the study of self-directed learning as the findings can easily be applied to higher education. As more universities are offering hybrid courses, a combination of instructor guidance and online tools will be critical to ensuring that students can thrive in these new learning environments. Also, once students graduate and seek employment, they will be expected to conduct themselves and grow professionally through continuing education. Both corporations and educational institutions expect employees to be self-directed learners, as it is often the case that professional development opportunities available include completely online environments in the form of online tutorials.

Lee, Y.M., Mann, K.V., & Frank, B.W. (2010). What drives students' self-directed learning in a hybrid PBL curriculum. *Adv in Health Sci Educ, 15,* 425-437. doi: 10.1007/s10459-009-9210-2

In this article Lee, Mann and Frank (2010) investigated the effect of a hybrid problem-based learning curriculum on the development of self-directed learners. The curriculum was defined as hybrid in that it contained elements of both problem-based learning and more traditional curricular elements, such as lectures and labs. The participants were first and second year students in the preclinical years of medical school in Canada. The researchers used a mixed methods approach involving both an online survey and focus group interviews. The questionnaire in this study was administered to 64% of the first year students or 119 of 186 students, and 56% of the second year. It included questions of demographics, 14 questions on self-directed learning, and 34 items designed to determine the curricular elements that impacted self-directed learning. The focus group interviews involved 10 students, five from the first year and five from the second year students. Eight tutors participated in a faculty focus group

interview. The most significant finding in the study was that students perceived each component of their curriculum to positively impact their self-directed learning.

The researchers pilot tested the survey instrument on third year medical students prior to the launch of the study. Based upon feedback, questions were modified before administering the final survey to the first and second year students. This study adhered to research protocols. It received ethical approval. Participants were volunteers who gave their informed consent. Data gathered from the questionnaires drove the development of the interview questions. Perhaps the most useful information in this article were the direct quotes from students which, by their content, support a constructivist approach to teaching and learning and the value of an environment in which intrinsic motivation drives learning and impacts the self-directed learner. Other useful information included student perceptions of the impact of the components of their curriculum on their self-directed learning skills. The goal of this study was to determine the influence of the hybrid problem-based learning curriculum on self-directed learning.

Problem-based learning is student-centered. Students thrive in an environment of working collaboratively to problem-solve. Active learning creates a situation that requires the student to be actively involved in their learning experience, thus enhancing their ability to become self-directed learners. This study examined a hybrid curriculum in which students experienced a combination of active learning and a more traditional curriculum of lectures and labs. Students in this study clearly articulated their understanding of self-directed learning and made astute observations about the impact of grading systems and examinations on their motivation. This article was useful as it demonstrated the effectiveness of a hybrid curriculum on the students' abilities to take responsibility for their learning.

Maslow, A. H. (1970). *Motivation and personality.* New York, NY: Harper & Row, Publishers**.**

Originally published in 1954, this second edition published in 1970 has been reworked to more accurately reflect the times and changes in thinking in the discipline of psychology. In the preface, Maslow repeatedly referred to behaviorist and Freudian thinking as limited or partially true. He recommended instead that readers explore the literature on normative social psychology, considering its theories to be a real alternative to Marxian theory. In Chapter 3, Preface to Motivation Theory, Maslow presented sixteen propositions that he believed must be part of any sound theory of motivation. In Chapter 4, he discussed his hierarchy of human needs. In Chapter 11, he described a study he conducted on self-actualized people, having discovered only one college age student out of 3,000 that fit the criteria, concluding that self-actualization occurs among older adults.

This is definitely a useful source as Maslow presented a positive approach to personal growth that is inspirational and uplifting. His goal in this book was twofold. First, Maslow endeavored to encourage readers to believe in the higher nature of man and man's ability to reach the level of self-actualization. Second, he sought to impress upon the reader the holistic nature of human nature, negating the psychology of behaviorists, Newtonians, and Freud.

In order to guide students to become self-directed learners, it is essential to understand self-actualization as well as the basic needs that must be satisfied before students can attain this level of awareness. Maslow's description of the characteristics of self-actualized people to help clarify the elements that need to be in place in order for a student to begin to grow to the maturity necessary to become self-actualized.

Mezirow, J. (1991). *Transformative Dimensions of adult learning.* San Francisco, CA: Jossey-Bass**.**

Mezirow's book outlined his approach to transformation theory which incorporates constructivism and is influenced by cognitive theory in psychology. He stated that his theory of transformation in adult learning can take four distinct forms: learning through meaning schemes, learning new meaning schemes, learning through transformation of meaning schemes, and learning through perspective transformation. He discussed numerous theories of adult learning and meaning making and argued for reflective and transformative learning in adult education. He concluded with recommendations for educators to foster transformative learning in adults.

Unrelated to a specific study, Mezirow cited numerous researchers as he built a case for the development of an adult learning theory that would be of value to all professionals working with adult learners. The final chapter provided a comprehensive list of goals for adult education that would be useful in formulating guidelines for working with adult learners.

Mezirow believed that the adult learner is unique and cannot be understood from a perspective limited to the education of adolescents or young adults, since learning is not necessarily transformative. Learning can be merely the acquisition of new knowledge without reflection or transformation of beliefs or attitudes. It is important to understand what constitutes transformative learning in order to support the growth of young adults as they mature towards adulthood and continue to reach a higher level of learning.

National Association for School Psychologists. (n.d.). Retrieved November 15, 2013, from http://www.nasponline.org/

The National Association for School Psychologists (NASP) website is a resource for a variety of users including graduate students interested in becoming school psychologists, early career school psychologists, parents interested in a quick understanding of family-related issues from a school psychologist's perspective, and educators. The NASP newsletter, *Communique* is freely available through the website. Membership benefits in NASP includes access to an online magazine, a journal, and two databases in the field. The pulldown menus for both Families and Educators link to numerous articles from the NASP Resources page. Written in layperson's terms, these articles published by the NASP include references to scholarly and popular journals and books.

Information on this website is objective and has been vetted by the NASP. Although freely available articles in the newsletter, *Communique,* are not considered peer-reviewed by *Ulrichsweb Global Serials Directory*, they are useful for quick references and a basic understanding of educational concepts and issues related to school age children.

Articles related to school age children and their capacity to be intrinsically motivated to learn are useful and relevant as a starting point for understanding what motivates children to learn and how to encourage children to become intrinsically motivated. As an educator, access from the perspective from experts in the related discipline of psychology is extremely useful to expand understanding of the education of children.

National Association of School Psychologists. (n.d.). *Resources: Early childhood motivation. Motivating learning in young children.* Retrieved November 15, 2013, from http://www.naspoline.org/resources/home_school/earlychildmotiv_ho.aspx.

This article, geared toward the layperson, provides a brief introduction into motivating learning in young children. Areas addressed include the characteristics of motivation, and how to develop and enhance motivation. It concludes with strategies that parents can employ to encourage intrinsic motivation in their children.

Although not a scholarly article, the information was useful as it was written from the perspective of the school psychologist. Also, it provided practical advice for parents who want to be proactive in guiding their children's learning through motivation. Lastly, it laid the foundation for exploring the motivation to learn across the lifespan by focusing on children during a critical time period in their development as they begin to understand and appreciate or disregard their role in the learning process.

What was most interesting about this article is that it solidified the idea that the key to developing and enhancing motivation in children is to introduce challenges while providing adequate support. Thus, an individual who is raised in such an environment, theoretically can grow from an intrinsically motivated child into a self-directed learner as they progress through college and beyond.

Ultanir, E. (July 2012). An Epistemological glance at the constructivist approach: Constructivist learning in Dewey, Piaget, and Montessori. *International Journal of Instruction, 5*(2), 1308-1470.

In this article, Ultanir (2012) provided an overview of constructivist theory, stating that its roots stem from the philosophy of Vico in the 18th century. He focused on the work and writings of Dewey, Piaget, and Montessori. Ultanir argued that all three believed that knowledge is constructed through exploration rather than being a passive activity.

The author did not provide any personal insights into constructivism, but merely reported on the works of major influences in constructivism. Further, as the article was poorly translated from the original language, being rife with grammatical errors, the author's intent frequently was unclear.

Being a historical overview, the author provided numerous quotes from various authors as to the definition of constructivism. He also touched on self-direction in learning, citing both Knowles and Dewey. Overall, the comparison between the theories of Dewey, Piaget and Montessori were the most useful aspect of this article.

Wang, V.C.X. (2012). Understanding and promoting learning theories. *International Forum of Teaching and Studies, 8*(2), 5-11. Retrieved from http://libaccess.sjlibrary.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=82187857&site=ehost-live

Wang (2012) provided a brief history of learning theory covering some of the major theories beginning with behaviorism and concluding with Gardner's theory of multiple intelligences, but failed to mention constructivist theory. However, she did speak to elements of constructivism, as she demonstrated an appreciation for the instructor as a facilitator or guide, rather than a sage on the stage. Additionally, she argued that a good theory specifies the role of the educator and the learner, as well as their relationship.

Overall, this source was an incomplete review of the history of learning theories. However, the author did mention some of the contributions of the major theorists, such as Dewey, Maslow, and Mezirow. She made repeated references to reflective thinking, citing both Dewey's pragmatism and Mezirow's theory of transformative learning. Given the limited scope

of this article, it did not further understanding of learning theory, but merely highlighted some of the key players.

Perhaps the most useful aspect of this article is the fact that it brought some elements of major theorists into one source for quick reference.

Zimmerman, B.J., Bandura, A. and Martinez-Pons, M. (1992). Self-motivation for academic attainment: The role of self-efficacy beliefs and personal goal setting. *American Educational Research Journal,29,*(3), 663-676.

In the article, the authors reported on a survey administered to 102 ninth and tenth grade students from lower middle-class neighborhoods. The survey was taken in a social science course as the course was required, but not tracked according to academic ability. The authors combined two self-efficacy scales to create the survey - resulting in eleven items addressing student perceptions of their self-efficacy with self-regulated learning strategies and nine items on perception of self-efficacy for academic achievement. The results of the survey supported the authors' hypothesis that there is a causal path between student perceptions of self-efficacy for self-regulated learning and academic achievement. Based upon results, the authors concluded that self-efficacy can motivate the learner to set personal goals that contribute to academic achievement.

The goal of the researchers in this article was to demonstrate a correlation between self-regulation, motivation to learn, and self-efficacy. This study supported the importance of helping students build confidence in their own ability to succeed in academic pursuits.

Self-efficacy beliefs need to be strengthened in individuals across the lifespan. Helping students set personal goals and challenge themselves is one of the major roles of educators.

Finding ways to nurture motivation so that students grow into self-directed learners is equally critical.

Literature Review

It is naive to believe that all students at the university are intrinsically motivated to be there. Many among those directly out of high school may have felt coerced to continue their education or have been given extrinsic incentives by their parents to attend college to get a better job and become self-supportive. In my experience, many come to the reference desk at the library with no curiosity whatsoever and little interest in completing their assignment - even when the assignment allows them the flexibility to select a topic of their own interest. The librarian's reference interview entails asking questions that stimulate thought, especially if the instructor has not done so prior to the student's visit to the library. Assisting ill-prepared students at the reference desk requires time: time that should have been spent in the classroom, time the instructor should have spent stimulating the students' thought process, time the student should have spent reflecting on their assignment and their personal interests. However, if the student was absent and missed a lesson involving this very important step, they approach the reference librarian and expect them to do not only the student's job, but their instructor's job as well as the librarian's job. The librarian's interview often includes questions that help guide the student to select a topic, when assignments allow for this flexibility. Questions such as "What do you enjoy doing when you're not in school? What are your hobbies? What type of music, television shows or movies do you like?" All these interest-related questions help the student to take a closer look at their interests. Once they share an interest, then the reference interview delves deeper on that topic. "Does your interest in that topic meet with any resistance or criticism from your friends,

parents, instructors? What evidence might you find to support your interest in this past time?" This last question creates an opportunity for the librarian to share vetted article databases with the student, leading them away from quick internet searches through Google or Wikipedia. Use of pro/con databases, such as *Opposing Viewpoints* help stimulate the student's critical thinking skills as they are able to read short opinion pieces that look at a topic from two entirely different angles. Helping a student transform from confused and disinterested into an actively engaged researcher takes time. Patience is required. When there is a line at the desk and no time for conducting a complex interview or what is referred to as a reference consultation, the student is encouraged to meet with a librarian subject specialist during their office hours, so that they can provide the student with an hour or more of one-on-one time to guide the student's exploration. Some students are not motivated to take advantage of this opportunity because they have to wait for an appointment. Others simply don't want to invest the time it takes to engage in critical thinking - and would rather seek out distractions with their friends or on social media sites. These students are unfortunately programmed to fail at the university - without serious intervention. Something did not occur during their K-12 years that would stimulate thought, intrinsically motivate them to learn, and lead them on the path to developing self-directed learning skills. If they are fulltime students, they need to reconsider and reduce their workload. They need to realize the amount of time it will take for them to complete their education. They need mentors, tutors, instructors that put them in touch with the resources available, counselors, guidance and parents who continue to take a proactive interest in their college education.

Students arriving at the university ill-equipped to take responsibility for their education leads to further questions, such as "Does the capacity to become a self-directed learner begin in

childhood? And, if nurtured, does this capacity evolve into an approach to learning utilized throughout one's lifetime? If so, what environment is necessary to begin a child on this path?" To answer these questions, a foundation in learning theory is critical, as it provides an understanding of the major theories and theorists in the disciplines of education and psychology and their contributions to the study of human development. In his article "Understanding and Promoting Learning Theories," Wang (2012) provided a review of the major learning theories, tracing their historical development to behaviorism and the experiments of Watson, followed by Skinner. He noted the works of Dewey and tied learning theory to Bloom's taxonomy of learning objectives stating that "all learning theories strive to lead to change in basically three domains: cognitive, affective and psychomotor." He outlined Carl Roger's work on effective learning and Knowles' work on andragogy. Lastly, he cited the contributions of Gardner for his theory of multiple intelligences. This overview of learning theory provides a foundation upon which to examine the educator's role in the learning process.

Ultanir (2012) also reviewed learning, but limited his focus to constructivist theory and its impact on the education of children. He focused on Dewey, Piaget and Montessori. Ultanir concluded that the learner in a constructivist environment must actively construct their own knowledge, building upon their current knowledge, using constructivism to solve problems presented by their environment. He reflected, "Dewey's belief in the learner's experience is tantamount to his belief in the need to foster self-direction as a way to self-realization of the learner, a way of recognizing the voice, dignity and high self concept of learner" (Ultanir, 2012, p. 201). Further, Ultanir noted Dewey's principles of progressive schools, citing the emphasis on learning skills and techniques to achieve goals, rather than the traditional methods of learning by

rote in isolation. In regard to Piaget, Ultanir placed importance on the educator's ability to understand that each child learns at its own pace, based upon its cognitive development, evolving through four major stages from infancy to adulthood: the sensorimotor, pre-operational, concrete operational, and formal operational stages. Lastly, he noted that the Montessori school is based on the process of guiding the child through self-direction, emphasizing the child's right to make choices and work autonomously with the teacher in the role of facilitator. He also highlighted the Montessori school as providing a cooperative student-centered group learning experience with an environment that nurtures children to be motivated to learn. Ultanir's reflections on the education of the young support the argument that to help children on the path to becoming self-directed learners the first step is to immerse them in an educational environment of constructivism.

Motivation to Learn

In the 1940s, Abraham Maslow (1970) introduced his theory of human motivation in the form of a hierarchy of five levels of needs: physiological, safety, love, esteem, and self-actualization. According to this theory, the first four are considered lower order needs. The first need, physiological, which includes breathing, eating, sleeping and other basic physiological functions must be satisfied before a human being can consider the subsequent needs. Maslow stated that lower order needs are based on striving to gratify those needs by "doing, coping, achieving, trying, purposiveness," whereas, being-becoming involves "existing, expressing, growing, self-actualization" (Maslow, 1970, p. 229). He stated "self-actualization, the coming to full development and actuality of the potentialities of the organism, is more akin to growth and maturation than it is to habit formation or association via reward" (Maslow, 1970, p. 233). In Appendix A of Maslow's *Motivation and Personality* (1970), the psychologist touches upon

learning, questioning why educational psychology is more concerned with *means*, which he equates to grades and degrees, rather than with *ends* or wisdom, understanding and good judgment. He argued that a "positively oriented education concerns itself more with the growth and future self-actualization of the child" rather than on forcing the child to adapt and be controlled for the "convenience of adults." He concluded prophetically "we know very little about purposeless, unmotivated learning, e.g., latent learning, learning out of sheer, intrinsic interest" (Maslow, 1970, p. 282).

In the article "Motivational Beliefs, Values and Goals," Eccles and Wigfield (2002) provided a review of the major theories of motivation, divided into four broad categories. The first category included theories of expectancy that address the individual's belief in their ability to succeed or fail, citing Bandura's social cognitive model of motivation and his distinction between outcome expectations and efficacy expectations. The authors stated that outcome expectations are based on the premise that certain behaviors result in certain outcomes, whereas efficacy expectations are beliefs about whether the individual has the ability to effectively perform the behavior necessary to achieve the desired outcome. They credited Bandura for his theory of self-efficacy and its relationship to goal setting, types of activities an individual chooses to engage in, a disposition to undertake an activity, and their level of persistence (Eccles and Wigfield, 2002).

Control theories are based on the concept that feeling in control of one's ability to succeed or fail determines the level of expected success. Control theorists, Connell and Wellborn incorporated control beliefs into a larger framework which includes the fulfillment of three psychological needs: competence, autonomy, and relatedness (Eccles and Wigfield, 2002). They

believed that all three needs must be met in order for a child to be completely engaged in an activity and remain motivated. The authors also spoke of Skinner's theory of control in relation to goal-directed activities and the individual's beliefs, noting the influence that belief has on the performance of achievement tasks.

The second set of theories the authors examined dealt with reasons for engagement including intrinsic motivation, interest, and goal theories. Within the realm of intrinsic motivation, the work of Deci and Ryan is cited in regard to their theory of self-determination which is based on the premise that individuals seek a certain level of stimulation and have the need for competence which drives their intrinsic motivation, maintaining this motivation when feeling competent and self-determined. Flow theory, proposed by Csikszentmihalyi provides the individual with intrinsic motivation because they are emotionally and holistically involved in an activity in which they excel - such as performers and athletes. Eccles and Wigfield further stated that research into the traitlike characteristics of intrinsic motivation have gained popularity with educational and sports psychologists - noting the individual's desire for facing challenges, interest-driven learning, and the need to master an activity.

According to Eccles and Wigfield (2002), researchers in interest theory distinguish between individual and situational interest - considering individual interest to be more constant, and situational to be driven by emotions related to the task. Individual interest also contributed to deeper learning, as individual behaviors exhibited from interest-driven learning include being able to remember large concepts and respond to questions on a deeper, more comprehensive level. Goal theories covered by the authors include the work of Bandura and Shunk in relation to proximal goals, self-efficacy and an improvement in performance. They also looked at ego-

involved goals and task-involved goals as researched by Nicholls et al. When an individual's goals are ego-driven their focus is on appearing competent. They are concerned with their performance. An individual who sets task-related or learning goals focuses on the tasks necessary to master an activity. They challenge themselves. Therefore, task-related goals foster personal growth and learning on a deeper level.

Theories that integrate expectancy and values include attribution theory, modern expectancy-value theory, and self-worth theory. The authors cited Weiner's work on attribution theory which purports that the "individual's interpretations of their achievement outcomes, rather than motivational dispositions or actual outcomes, determine subsequent achievement strivings" (Eccles and Wigfield, 2002, p. 117). Both Eccles and Wigfield have written on what they've coined "modern expectancy-value theory," which is based on Atkinson's expectancy-value model but has been modernized to include more elaborate expectancy and value components. In this model, "the relative value and probability of success of various options are key determinants of choice" (Eccles and Wigfield, 2002, p. 118). According to Covington's self-worth theory, as cited in Eccles and Wigfield, "some children will not try, precisely because trying and failing threatens their ability self-concepts" (Eccles and Wigfield, 2002, p. 123).

Theories cited that integrate motivation and cognition include the social cognitive theories of self-regulation and motivation, theories that link motivation and cognition, theories of motivation and volition, and theories that integrate self-regulation and expectancy-value models of motivation. Theorists studying motivation and cognition are concerned with "how motivation gets translated into regulated behavior, and how motivation and cognition are linked" (Eccles and Wigfield, 2002, p. 124). The authors cited the work of Zimmerman in regard to the

characteristics of self-regulated learners, their motivations and their strategies. According to Zimmerman, as discussed in Eccles and Wigfield, self-regulated learners are efficacious, engage in active learning, and set goals for themselves. The authors discussed the link between motivation and cognition in the works of Borkowski, Winne and Marx and Pintrich et al. These researchers believed that motivation is ruled by the same principles as cognitive psychology. Pintrich also believed in the influence of the social construct on self-directed learning. Eccles and Wigfield highlighted Kuhl's observation that theorists studying motivation often ignore the importance of volition in motivation. Merely to intend or be motivated to accomplish a task does not ensure that it will be completed. Kuhl believed that individuals with the necessary will can utilize a variety of strategies to overcome distractions including cognitive, emotional, motivational and environmental control strategies. He also differentiated between action and state-oriented individuals, believing that an action-oriented individual has a stronger inclination towards using volitional strategies to avoid distractions. The authors, Eccles and Wigfield, have conducted their own research and proposed an integrated theory of self-regulation with expectancy-value models of motivation. They state that goals are critical in self-regulated learning, and those goals with a higher value in the individual's estimation will be the goals that the individual will be most likely motivated to achieve.

This overview on motivational theories highlighted a number of insights that could be of use to the educator when working with students in the classroom. There are many factors that influence whether or not a student will remain motivated in their studies. But, what the educator can do to help the student persist, regardless of the topic of study, is to ask the student "What goals have you set for your learning?" When the student sets individual goals, they can begin to

internalize the fact that they do exercise control over their learning and have some degree of autonomy. This realization can lead to the student's sense of self-efficacy and achievement, resulting in the setting of more challenging goals as each goal is achieved. Eventually, the student may begin to see themselves as a stakeholder in their own education on the path to becoming a self-directed learner.

Intrinsic and extrinsic motivation.

The National Association of School Psychologists (NASP) has provided both parents and educators a website with excellent resources on issues related to children from kindergarten through high school. In the resource entitled "Motivating Learning in Young Children," the author stated that newborns have a great deal of intrinsic motivation which is related to their ability to effect their environment, being motivated to continue behaviors that produce results, the results providing the reward that stimulates continued action. Further, during early childhood, "children form attitudes about learning that will last a lifetime" (National Association of School Psychologists, n.d., Resources, Early Childhood Motivation). Four behaviors are cited that are indicators of highly motivated children: persistence, choice of challenge, level of dependency on adults, and emotion. Extrinsic rewards, such as sweets, money or disproportionate praise, are cautioned against as they can actually impede the child's development of motivation and result in a child who judges their self-worth by the amount of praise they receive from others, rather than from a confident, internal sense of satisfaction from having accomplished something. Several ideas are presented for parents to help nurture a child's intrinsic motivation. These include an environment with toys and activities for the child to engage in that produce an effect based on the child's actions. Children also need enough time to learn persistence without being interrupted.

Parents need to set limits in most venues, but playtime should be a time of exploration. Children need challenges that are age appropriate to motivate them, challenges that result in a sense of accomplishment when met, thus leading to the acceptance of more difficult challenges to stimulate growth and nurture intrinsic motivation. Children should be encouraged to reflect on what they've done - evaluate their achievements. Although these are recommendations for encouraging intrinsic motivation in the young, they easily translate to recommendations educators can use at the university level, challenging and supporting students as they face increasingly more difficult tasks, guiding them to achieve their dreams while encouraging their intrinsic motivation to learn.

In his book *Motivating Students to Learn,* Jere Brophy stated that "the development of motivation to learn and related self-actualization motives is especially depending on modeling and socialization by adults." He referred to higher-level cognitive insights and strategies for motivation that require a combination of teaching in the classroom and socialization in the home. Without such experiences, children may have difficulty learning - finding tasks as "imposed demands rather than as learning opportunities" (Brophy, 1998, p. 14).

Brophy also cited the importance of the social setting in Deci and Ryan's self-determination theory of intrinsic motivation. Provided that the classroom supports three psychological needs: competence, autonomy, and relatedness, students are more likely to be intrinsically motivated to learn. Certainly then, a classroom designed to support constructivist teaching pedagogy would also support these same needs in the children.

Seeing the classroom as a learning community, according to Brophy, includes encouraging "students to adopt learning goals rather than performance or work-avoidant goals"

(Brophy, 1998, p. 28). Brophy outlined in a table format a program entitled TARGET which is based upon this premise. Developed by researcher Carole Ames, this program was influenced by Joyce Epstein's research on the family and motivation in the home. There are six elements in the TARGET structure: task, authority, recognition, grouping, evaluation and time. Column two of the table includes traditional teaching practices, with the final column being recommendations for the TARGET method. The first TARGET structure, *task*, allows for more variety in learning activities, rather than being strictly based on textbooks and memorization of facts as in the traditional classroom. Students learn how to set goals and develop self-regulating skills. In the TARGET program, the second structure, *authority,* allows for a shared collaborative environment in which the children have a degree of autonomy and make decisions. *Recognition* differs from the traditional method of encouraging competition amongst students by creating an environment in which all students who make progress are recognized for their individual efforts to reach their individually set goals. *Grouping,* the fourth element in the structure, involves a collaborative arrangement in the class - a cooperative learning community, rather than the traditional arrangement where students work individually and compete with each other or are divided by their levels of achievement. *Evaluation* in the TARGET program makes allowances for poor performance and gives students an opportunity to revise work and improve upon their initial performance. It uses a variety of instruments to assess students, rather than conventional tests. The last element in the structure, *time,* gives the students autonomy to manage their time and resources, rather than being limited to a set schedule. The structure of the TARGET program utilizes several of the principles of constructivist teaching methods, creating an environment for active learning, critical thinking and autonomy. The flexibility in the methodology allows for

students with different learning styles or multiple intelligences to thrive - as they are not restricted by traditional, behaviorist methods of instruction. Children who are exposed to education that follows such a program should be well on the road to taking personal responsibility for their learning with the potential to become self-directed learners.

Unlike other educators, Brophy does not completely dismiss extrinsic incentives in the classroom. However, he does warn against rewards designed to decrease either the quality of student performance or their intrinsic motivation. He cited three characteristics of rewards that fall into this category: *high salience, noncontingency*, and *unnatural/unusual* rewards. He refers to high salience rewards as rewards that are "very attractive." Noncontingency rewards are those given simply for the act of participating, rather than rewards related to the achievement of goals. Unnatural/unusual rewards relate to an artificial tie between behavior as a means of control, rather than the rewards being "natural outcomes of the behaviors." Brophy cited a positive use of extrinsic rewards when they are unexpected and follow the completion of a task, thus being "seen as expressions of appreciation rather than as delivery of promised incentives" (Brophy, 1998, p. 110).

Brophy stated that above all and regardless of motivational influences, both the teacher and the students need to be aware of and guided by goals. In chapter seven he recommended numerous teaching strategies for inducing motivation to learn, including stimulating curiosity in students by creating suspense and controversy. He also suggested scaffolding students' learning efforts by structuring learning goals around key concepts, planning activities that help students develop and apply ideas, modeling task-related thinking and problem solving, inducing

metacognitive awareness, and teaching self-regulated learning skills and volitional control strategies. (Brophy, 1998, p. 184-198).

Although meant for K-12 students, Brophy's teaching strategies would be equally useful on the college level, as they spark the students to use their critical thinking skills, thus providing opportunities for growth and transformation, given that the subject matter on the college level requires deep thinking and the diverse environment forces reflection and re-evaluation of preconceived notions of learning and of peoples.

Brophy also described six strategies for helping young students become self-regulated learners. First, he suggested that instructors show their students how to *actively prepare to learn* by preparing to concentrate, review objectives, and develop plans. Then, if *memorization* is necessary, teach techniques such as underlining key words or repetition. Third, for *elaborating on the information presented*, he suggested teaching strategies for recognizing main ideas by having students relay the information in their own words, reflect on past knowledge, and ask themselves questions about what they've read so that they learn how to assess their own understanding of an idea. The fourth strategy, *organizing and structuring the content,* involves teaching students how to outline content and take notes. *Monitoring comprehension* is the fifth strategy. Students need to be aware of goals and the strategies they have used to achieve them, as well as the adjustments they've had to make when their efforts were not effective. This involves reminding students to reread material, look up definitions, and look for overall patterns covered, and re-strategize when necessary. The sixth strategy, *maintaining appropriate affect,* involves modeling behaviors that are positive and relaxed and teaching students skills to cope with

frustration, such as appreciating their accomplishments and refocusing efforts on the task at hand.

Although very basic, Brophy's aforementioned skills if not mastered in K-12, will leave a child unprepared to effectively pursue and achieve academic success in college. Interventions are critical throughout the K-12 experience to ensure that students have the skills necessary not only for college, but if they choose, to enter the work world and remain gainfully employed.

Brophy also cited the work of Newmann who examined the concept of developing *thoughtfulness* in classroom discourse. He reported that students who practice thoughtfulness in discourse find these classes more difficult than traditional classes, but also more interesting - thus, keeping students engaged and more intrinsically motivated. During his research, Newmann observed high school students in social studies classes and discovered patterns that revealed six main indicators of thoughtfulness. The first indicator is that the number of topics discussed were limited, but they were covered in depth. Second, the dialogue was logical and unbroken. Third, students had time for thought before discussion. Fourth, students were expected to clarify and justify their positions. Fifth, the teacher modeled the behavior of thoughtfulness. Sixth, the students produced new thoughts and alternative ideas.

Newmann's findings illuminate a potential bridge between the K-8 instructor modeling and teaching very basic self-directed learning skills as outlined by Brophy to children and the high school instructor challenging adolescent students to engage in critical discourse. A student who has been immersed in both of these environments from K-12 should be primed to continue on to college capable of continuing to develop self-directed learning skills and face an increasingly challenging curriculum.

In chapter eight of *Motivating Students to Learn,* Brophy (1998) addressed the socialization of uninterested or alienated students. He referred to the concept of the possible or ideal self and moving towards this through the development of self-schemas, which "represent one's domain-specific abilities and one's experiences in the domain" (Brophy, 1998, p. 216). Based upon his assertions, it is important for individuals to develop a clear idea of who they want to be in the future. He stated that students with well-developed self-schemas in the domain of learning can use their self-schema to make confident decisions, adapt and be flexible with goals, and correctly retrieve pertinent information. Whereas, students who are aschematic in the learning domain, may have the same amount of ability or competence, but are less likely to seek, recognize or take advantage of opportunities that could stimulate their competencies. Brophy suggested that instructors working with the latter need to create opportunities for these students to experience the socialization necessary to help them understand what it means to be motivated to learn and to value this experience so that they can transform into self-actualized individuals. He recommended scaffolding their experiences and using strategies that induce reflection on their accomplishments and how those accomplishments have the potential to positively alter their futures. Brophy stated that the best method to reaching apathetic students is not extrinsic incentives. Instead, he recommends to help students "to appreciate the empowerment and self-actualization outcomes that result from consistently engaging in school learning activities with motivation to learn" (Brophy, 1998, p. 219).

College students who lack motivation may be new to higher education, feel overwhelmed and inadequate to face the challenges - thus backing away from learning, rather than embracing it. They need to feel empowered and believe in their ability to succeed. Lacking a history of self-

efficacy, students will be forced to play catch up throughout their time in the college setting. Without intrinsic motivation they may not survive and become another statistic in declining student retention rates. More colleges and universities are embracing numerous intervention strategies and teaching methodologies to improve students' chances for success. A constructivist andragogy, programs targeting first generation students, peer mentoring, and universal design for learning all help to strengthen a student's ability to develop successful learning methods. Above all, these students need to feel supported by their instructors, family and friends in order to grow and envision the possibility of transformation through education and a future where self-actualization may be a reality.

Autonomy support.

Froiland's study on parental autonomy support with children ages nine to eleven highlighted the importance of intervention in shaping a child's feelings towards the learning process. At this critical age, children are malleable and still capable of being intrinsically motivated to learn before the difficult years of adolescence shift their focuses. Froiland stated that autonomy support is the most important factor in helping a child to develop the intrinsic motivation to learn. Froiland warns against parents who practice psychological control over their children or "controlling parent communication" (Froiland, 2010, p. 137) as this is the opposite of autonomy support and will only further impede the child's ability to become an autonomous self-directed learner. Controlling parent communication methods theoretically could translate to educator's methods in the classroom. For example, a parent might insist that a child immediately engage in studying while the child was at that time in the process of thinking or problem solving. Interruptions in the child's process can lead to depression and a decline in intrinsic motivation.

Therefore, an educator's classroom should allow for autonomy and an adequate amount of time for their students to process information. As with other motivational researchers, Froiland also believes that setting learning goals opens up a myriad of possibilities for children, including personal growth, increased competence, and "deeper levels of conceptual understanding" (Froiland, 2010, p. 137). In Froiland's study, the parents were taught 19 inspirational motivational styles to help them provide their children with autonomy support. Parents learned to use empathic statements and more helpful responses to their children's poor grades. By shifting the focus from rewards associated with the child achieving good grades to the child taking a positive approach to learning while doing homework, the interventions also had the potential to increase the child's self-efficacy and thereby, their potential for intrinsic motivation to learn.

Gillet, Vallerand, and Lafreniere (2012) also conducted a study on the mediating role of autonomy support. However, their study included a wider age range and a much larger sampling. They surveyed 1600 students on their motivation to learn using a five-point Likert scale. As expected, the high school students in particular felt that their teachers exercised far too much control in the classroom. The authors believe that a decrease in autonomy support during adolescence results in a decrease in the students' intrinsic motivation and also in their self-determined extrinsic motivation. These findings also bolster Kegan's argument that during their teens, students require a supportive community to help them face the mental demands of modern life while giving them room to become more independent. As with other studies conducted on motivation, the authors also discovered a decrease in intrinsic motivation in students in this age range. They argued for an increase by the instructors for autonomy support of the teenagers, implying that strategies such as this could increase the students intrinsic motivation to learn. The

authors cited the importance of future research to determine the causes for this decrease as intrinsic motivation is "linked to a host of positive educational outcomes including performance, school satisfaction, and persistence at school" (Gillet, et al., 2012, p. 89).

Self-efficacy.

Cognitive psychologist, Bandura has devoted much of his career to the study of self-efficacy. In 1981, Bandura and Schunk reported on their study of forty children aged seven to ten in which they set out to determine whether "self-motivation through proximal goal setting serves as an effective mechanism for cultivating competencies, self-precepts of efficacy, and intrinsic interest" (Bandura and Schunk, 1981, p. 586). In this study, the children were randomly assigned to one of four groups, with the fourth being a control group that did not undergo treatment. The three treatment groups involved proximal goal setting, distal goal setting, and no goal setting. Children in the proximal goals group were encouraged to set goals that were reasonable - such as attempting to complete a small but doable number of pages in each session. Whereas, children in the distal goals group were encouraged to focus on completing the entire 42 pages of instruction in the distant future, or seven weeks hence. As hypothesized, children who were encouraged to set proximal goals "progressed rapidly in self-directed learning, achieved substantial mastery of mathematical operations, and developed a sense of personal efficacy and intrinsic interest" (Bandura and Schunk, 1981, p. 586) in math, whereas prior to the study, held little interest for them. Another positive result from the proximal goal treatment group was a 90% increase in persistence, a behavior recognized in self-directed learners. As children in this group over the others displayed the highest degree of efficacy and intrinsic interest, the critical importance of teaching children to set proximal goals was supported by the study.

Zimmerman, Bandura, and Martinez-Pons (1992) conducted a study involving 102 ninth and tenth grade students in social studies classes to examine the relationship between self-motivation, self-efficacy and goal setting on final grades. They administered a survey designed to determine perceptions of self-efficacy for self-regulated learning and for academic achievement. Students' self-regulated learning was found to be most jeopardized by distractions the students thought were more interesting than what they were learning. The highest scores for self-regulated learning skills was the students' perceived ability to take notes in class. Students' self-efficacy for academic achievement was lowest in foreign language studies and highest in reading and writing.

If these results are representative of most high school students, then instructors might ask these students to reflect on those skills in which they believe they excel in order to motivate them to challenge themselves to address those that they believe are more difficult to cultivate. Earlier I noted that college students with minimal interest in their assignments are easily distracted by more enticing pursuits. According to Zimmerman, Bandura, and Martinez-Pons, high school students reported distractions to be the most difficult obstacle to developing their self-directed learning skills. As with any obstacle, recognizing its existence is a large part of overcoming it. It is imperative that librarians and instructors recognize the opportunity for intervention when students' motivations to learn are weak. Students need to be reminded of what they have accomplished thus far, including being accepted into college to pursue their studies. Providing acknowledgement for their accomplishments should help them gain perspective on the challenges they believe they are facing. Encouragement and strategies to help students feel

empowered may get them through the crisis of distractions and re-energize their efforts to continue their studies and increase their intrinsic motivation to learn.

Self-Directed Learning

In Abar and Loken's (2010) study, the authors investigated the potential of adolescents from economically disadvantaged families to engage in behaviors typically present in self-directed learners. Using a combined survey and an observation, the researchers demonstrated their hypothesis that students with the potential for being high self-regulated learners (SRL) scored lowest in performance-avoidance and highest in mastery of goal orientations. Thus, the students categorized as high SRL had a desire to master academic tasks and were not unduly concerned with appearing incompetent as were the students falling into the low SRL group. In this study, all the students were offered the opportunity to increase their knowledge by taking advantage of additional online instruction. In regard to observational data, the high SRL students used the supplementary online instruction more than the low SRL group. They also tried to answer more questions in the practice quizzes and in many instances, accessed the subject specific tutorials more or nearly as often as the two other groups (low and average SRL) combined. One of the results in this study indicated that the low SRL group was the least likely to take advantage of the online supplemental activity. These were however, economically disadvantaged students - so there could have been factors not discussed by the authors that contributed to this behavior other than a lack of initiative or fear of failure. Perhaps, the students did not have access to a computer at home, or perhaps the hours that the computers at school were available were less than convenient hours. Also, given their low socioeconomic status, students might have had jobs or family responsibilities that also made demands on their free

time. Given that the supplemental activity was voluntary, it's possible that the results were affected by the authors themselves in their effort not to unduly influence the students to use the materials. Perhaps if these students were told of the benefits of online tutorials - such as the fact that they are 1) self-paced and allow plenty of time for learning and reflection, 2) results are anonymous so students don't experience humiliation of failure in a public forum, 3) may be repeated so that students can reinforce and solidify their learning - maybe then, these students might have been more likely to use the supplementary instruction.

If incoming college students previous educational experiences were limited to behaviorist teaching pedagogy, then their ability to function as self-directed learners is questionable. Students today spent considerable amounts of their personal time on the computer, engaged in social networking. Therefore, this current technological age may present an excellent opportunity to enhance a student's ability to become a self-directed learner by encouraging the use of online tools, such as eportfolios.

Kicken, Brand-Gruwel, Merrienboer, and Slot (2009) presented an interesting study of students in a vocational learning setting - hairdressing school. The authors' online tool, STEPP, provided the ten students in the study to use the tool to develop their self-directed learning skills. What is interesting to note is that students who identified themselves as having little prior hairdressing experience were actually more likely to use the tool than students with more experience. They remained undaunted by low self-efficacy, and instead took advantage of the opportunity to use a tool to help guide their study. This appears to be contradictory to other studies in which low self-efficacy resulted in less intrinsic motivation. It's interesting to speculate that students who choose a vocation over the traditional career route of college and perhaps

graduate school, may actually be more inherently and intrinsically motivated to succeed. Perhaps, the length of a typical vocational program of approximately two years translates the distal goals of the four-year college bound student into proximal goals for the vocational student? It certainly could reinforce past researchers' recommendations that all students set proximal goals to keep intrinsically motivated. Studies on motivation and proximal goals focused on other vocations, such as firefighters, might support the hypothesis that two year educational programs help to keep students intrinsically motivated. The STEPP tool itself proved to be invaluable to the students who used it with higher frequency as the instructor found those students to have a better grasp of standards, better ability to formulate learning needs and stronger ability to select more appropriate learning tasks to achieve their goals.

Students today in higher education often find themselves in hybrid courses that involve an online component, despite the fact that they signed up for a traditional brick and mortar experience. These courses require that the student take responsibility, log into the course on a recurring basis, complete assignments without the standard benefit of face-to-face interactions in every session - basically, there is an assumption that the student is ready to work independently with the ability to self-regulate. The study conducted by Kicken, et al. (2008) makes a strong case for supplementing the student learning experience with an online tool, such as an eportfolio that guides the students to make decisions and self-assess. The authors found that in combination with face-to-face guidance by the instructor, students who used STEPP were more successful at being self-directed learners. Thus, students who perhaps have not cultivated self-directed learning skills before reaching college might benefit from an online tool that helps them do so while pursuing their education.

As with the Kicken et al., the study conducted by Lee, Mann, and Frank (2010) also included data gathered from a perception-based survey. However, the survey in this study specifically asked questions about the students' perception of their self-directed learning ability versus an assessment of their skills in their chosen field of study. Additionally, this study investigated the students' perceptions of their case-oriented problem-stimulated (COPS) curriculum and its relationship to self-directed learning. As stated by the faculty, the students in this study were highly motivated and independent before being exposed to the COPS curriculum. In other words, they already had attributes of self-directed learners upon entering the preclinical years of medicine. As with the students in the Kicken study, students in this study did not focus on distal goals. The proximal goal of medical school could have provided a very strong motivator for them to accomplish the tasks necessary to achieve their dreams. Additionally, the curriculum at the school involved a pass/fail system. As one student is quoted as saying "I think having a pass-fail is really important ... I think it is easier to be less focused on the exam and more focused on learning what is clinically important or interesting to you because it is pass-fail" (Lee et al., 2010, p. 432). With a focus on learning, and not on grades, these students have had time to reflect on knowledge gained, and consequently have excelled in becoming self-directed learners.

As Mezirow stated in the *Transformative Dimensions of Adult Learning* (1991), reflection involves a critique. He stated "there are distinct advantages in seeing reflection as the intentional reassessment of prior learning to reestablish its validity by identifying and correcting distortions in its content, process, or premises" (Mezirow, 1991, p. 15). Thus, is the case with the medical students in the study who discovered that when focused on their clinical rotations

without the pressure of grades, true learning and deep thinking can occur, thus creating the opportunity for further development of self-directed learning skills and transformative growth. Mezirow spoke of the obligations of the educator in adult education, stressing two main responsibilities. First, he spoke of the necessity to encourage learners to reflect upon their own beliefs and meaning schemes. Second, he stated that educators "create communities of discourse with norms that are consistent with the ideal conditions of learning" (Mezirow, 1991, p. 225). By actively supporting and fostering these responsibilities, the educator makes possible an environment in which transformation can occur.

Self-actualization.

When Maslow conducted his study on self-actualization he purported to have screened 3,000 college students but only found one he believed to be self-actualized. He determined that self-actualization occurs in older individuals. He defined self-actualization as "full use and exploitation of talents, capacities, potentialities, etc." Other criterion includes an absence of various personality disorders and the gratification of all of the basic needs of "safety, belongingness, love, respect, and self-respect, and of the cognitive needs for knowledge and for understanding" (Maslow, 1970, p. 150). Maslow described in detail several characteristics of the self-actualized. These include, but are not limited to the ability to perceive reality without the need to alter it, self-acceptance, and spontaneity. Self-actualized individuals do not center on themselves, but on problems outside themselves, i.e., they are mission-oriented. They also require time alone, are autonomous, and appreciate life with continuing wonder. Many self-actualized individuals report mystic experiences, though not all. Self-actualized people genuinely care about the human race and have deeper interpersonal relationships than the average

individual. One critical observation he made is that they are strong and may appear ruthless as they operate "independent of the opinions of other people" (Maslow, 1970, p. 175). This last characteristic is also reflected in the observations of Kegan (1994) when he referred to the fourth order of consciousness and individuals who are not controlled by the opinions of others.

If Maslow's observations are valid, then why examine self-actualization when focusing on the self-directed learning potential of college students? Maslow stated that while searching for self-actualized individuals he discovered among those 3,000 college students one or two dozen that were "growing well" (Maslow, 1970, p. 150). And, that is the key - to be *growing well* is to exhibit the capacity to evolve into a self-actualized adult. If the goal of educators is to help students reach their maximum potential, then we must nurture them throughout their journey - from birth to death. We must understand what is possible when we support students as they face new challenges and question past knowledge. We must help them to continue to reach beyond what they believed to be possible.

The teacher's role in self-directed learning.

As stated earlier, students who engage in thoughtful discourse are more intrinsically motivated to learn. Mezirow (1991) described the optimal conditions for rational discourse which included the ability of participants to "weigh evidence and assess arguments objectively," be critically reflective and have an equal chance to participate. More importantly, he claimed that they "become the bridge between the *is*, the present nature of the adult learning process, and the *ought*, an educational and social philosophy" (Mezirow, 1991, p. 78). He stated "the ideal conditions for participating in critical discourse also constitute the ideal conditions for adult

learning. (Mezirow, 1991, p. 225). Thus, if the educator is to help students reach their maximum potential they must create a classroom that cultivates rational discourse.

In Barton, Sargent, and Novotny (2010), the researchers conducted a study on blended learning in Australian business courses across three universities. They gathered qualitative data on student preferences for teaching and learning using a combination of methods, including interviews, surveys and observation. The findings proved marked cultural differences in preferred teaching and learning methods and highlighted the need to create an atmosphere of trust and social connection between students to optimize learning. As Australian educational institutions serve diverse populations, their findings serve as a reminder that a traditional behaviorist approach to teaching only caters to those students who thrive in an environment where knowledge is disseminated by the teacher and absorbed and repeated back by the student. The need for re-examining the curriculum to address multiple learning styles is critical for all students to have an equal chance to be assessed for the knowledge they have assimilated during a particular course.

Online Learning Environments

As stated earlier, we live in a technological age and students will be increasingly exposed to online learning environments. College students will need to be able to excel in these environments and in order for this to occur, they need to develop their self-directed learning skills. In their article on Web 2.0, Greenhow, Robelia, and Hughes (2009) discussed student/teacher communications using social media and the potential of the environment to support collaboration. They stressed the importance of the digital competencies required of students who will grow to live and work in a world that expects them to ethically and

competently communicate using a variety of Web 2.0 technologies. On the opposite end of the spectrum, Chu and Tsai (2009) examined self-directed learning readiness in adult learners in an internet-based learning environment. This group is of interest in that much of academia began teaching in college before the explosion of the internet. Despite years of exposure to the shifts in education to include online environments, faculty across the globe lag behind in becoming technologically savvy - thus impeding their ability to communicate with their students where they live, be it on Facebook or other social media sites. Allowing students adequate time is a recurring theme across all research on developing skills for self-directed learning. In this study, the adults needed time to practice on the internet in order to motivate them to continue to engage in internet activities that could then increase their self-efficacy. Whereas, the NASP cited that children need time to develop persistence without parental interruption. Brophy stated the one of the structures of the TARGET program, time, is important for students to manage their resources. Newmann's research on thoughtfulness requires that students are given adequate time before engaging in discourse. The medical students in Lee, Mann and Frank's (2010) study benefitted from time to reflect during their studies, resulting in stronger self-directed learning skills.

Since time is critical to helping students develop self-directed learning skills and to maintaining an intrinsic motivation to learn, what can the education do to assist students in the technological age. Earlier, the eportfolio was presented as a tool that can be used to strengthen students' self-directed learning skills and their ability to self-assess utilizing standards. Gurekis and Markant (2012) suggest that the time has come to examine self-directed learning from both a cognitive and computational perspective. The authors state that not all individuals make the best

decisions in relation to self-directed learning. They recommend that computer assistive training can optimize learning by creating models that predict human information needs based upon strengths and weaknesses of individual learners, creating a customized learning environment that allows users to bypass information they have already assimilated and focus on information that is new and requires more time.

Computer programs such as this have the potential to enhance student learning by providing education on demand and enhancing the classroom experience by providing supplemental asychronous instruction. Though nothing can replace human interaction, students who feel pressured to catch up with classmates might benefit from programs customized to address their individual learning needs.

Assessment

No examination of learning theories is complete without a discussion of assessment. Self-directed learning includes the ability to assess one's own progress. But, where does instructor feedback fit in this scenario? In the Kicken et al. (2009) study with student hairdressers, the instructor believed that formative assessment was key to helping students develop self-directed learning skills. Higgins and Hartley (2002) believe that a constructivist approach to teaching and learning requires formative assessment feedback from instructors to "encourage the kind of deep learning desired" (Higgins and Hartley, 2002, p. 53). Students in their study wanted feedback that advised them on how they might improve as well as feedback that assesses how they've laid out arguments. This implies that students want more than information on why they received a particular grade, but also on how they might grow. The authors concluded that surface concerns like grades relate to extrinsic motivation, whereas the desire to receive feedback for

improvement implies that students are more intrinsically motivated. Recommendations for instructors include providing timely feedback for students so that there is adequate time for reflection and providing students with an explanation when they are working under misconceptions so that they can move forward towards improvement.

Conclusion

What changes need to occur in teaching strategies to improve the college students' ability to develop into self-directed learners? Is it merely a change in curriculum, or a change in the culture and attitudes of students, teachers, parents, administrators and the workforce that will eventually hire these students? We as a society need to decide to invest in our young people and allow them the time necessary to make discoveries and revel in the benefits of intrinsic motivation in the pursuit of knowledge. Certainly, educators are aware of the massive preponderance of the evidence that proves that students who are intrinsically motivated are more likely to succeed academically. Thus, it only makes sense that we as educators unite to nurture them in an environment that supports intrinsic motivation. Moving towards a curriculum change that supports a constructivist approach to teaching is necessary. But, what else can be done to affect this change? How can educators become part of the solution? Working collaboratively with stakeholders is key to ensuring that students are equipped with all the tools necessary to thrive in academia and throughout their lifetimes, as they themselves join the network and become part of the solution once self-actualized. Bringing together the collective knowledge of academia to problem solve is a step towards change. Therefore, developing a faculty learning community that investigates these questions is the next step in this process. It is anticipated that a faculty learning community has the potential to propose viable solutions and tangible activities

that help facilitate this change. The development of such a community will be proposed in the Application portion of this KAM.

Section 3: Application

EDUC 8530: Professional Practice Using Learning Theories

Introduction

The theories of human development, meaning making and internal motivation were examined for the Breadth section of this KAM. Further exploration in the Depth included an analysis of the current literature and studies on motivation and self-directed learning. Reflection upon student retention and graduation rates at SVSU led to the hypothesis that if SVSU students could develop into self-directed learners, they would have a better chance of completing their education, thereby improving retention and graduation rates at the University. This hypothesis is based on the realization that a transformation in the teaching culture at SVSU needs to occur. Faculty members and administrators need to be educated as to the benefits of designing courses that are student-centered. The first step in this process of transformation will be the project I have designed – a series of five workshops marketed to the faculty for the purpose of improving student retention and graduation rates. The first four workshops will focus on issues relevant to student learning: 1) retention and graduation rates; 2) constructivist teaching; 3) motivation to learn; and 4) self-directed learning. The last workshop introduces participants to the creation of a Faculty Learning Community (FLC) at SVSU devoted to helping students develop into self-directed learners. During this final workshop of the series, participants will be asked to join the FLC and become part of the solution by acting as innovators and early adapters in the self-directed learning movement on campus. Transformation is a process with many layers. It requires time and persistence. This project will serve as a starting point for the transformation of

the SVSU teaching culture, and ultimately contribute to the solution for improving student retention and graduation rates at Silicon Valley State University.

In *Institutional Factors Affecting Student Retention* (2003), Lau clearly outlined the role that administrators, faculty and the students themselves play in retention rates. She stated that administration can support retention through funding, providing academic support, taking multiculturalism and diversity into consideration and providing adequate physical facilities to keep students engaged and up-to-date with technologies. Lau stated that faculty have many avenues to support retention including using technology in the classroom, allowing students time for hands on activities, emphasizing teaching and learning, and designing their courses to include cooperative and collaborative learning situations, and by acting as an academic advisor. Lastly, in regard to student accountability she stated that "Students have a social and academic responsibility to participate actively in the learning process, and to adapt to their new learning environment" (Lau, 2003). Additionally, students must be motivated by setting clear goals and believing that they can accomplish the tasks set before them. She also cited the importance of them taking advantage of opportunities on campus such as mentoring, group tutoring and actively seeking out positive role models.

Context

Silicon Valley State University is located in the downtown metropolitan area of one of the largest cities in the United States. It offers over 130 bachelor's and master's degrees with 110 concentrations. In Fall 2013, SVSU had a student headcount of 31,049 with over 18,000 students classified as a minority population. Conversely, the instructional faculty headcount

totaled 1,612 with 460 minority faculty, 959 white faculty, and 193 other faculty (undisclosed and mixed race).

The mission of SVSU is: "to enrich the lives of its students, to transmit knowledge to its students along with the necessary skills for applying it in the service of our society, and to expand the base of knowledge through research and scholarship" (Silicon Valley State University, 2014). Faculty are responsible for ensuring that the mission is carried out. They have the power to be change agents, to shape students and make a considerable difference in how they think and apply the knowledge they learn. Thus, to improve the students' ability to take control of their education, to see themselves as stakeholders in their education, I believe the faculty need to be fully-engaged and look critically at the way they teach to ensure that they are doing all they can to help the students at SVSU succeed.

At Silicon Valley State University (SVSU), students entering in Fall 2006 were tracked for the purpose of determining retention and graduation rates. In that semester, 2,728 first-time freshmen entered the University. By Fall 2007, only 79.1% of those incoming first year freshmen returned to the University. Of this group only 68.5% returned in Fall 2009. This trend continues with only 208 students of the 2,728 graduating within the traditional four year plan. By the end of seven academic years, only 52.8% of the Fall 2006 incoming first-time freshman class had graduated. "Preventing students from withdrawing without completing a prescribed course of study has become a major preoccupation for Silicon Valley State University (SVSU). We believe the initial step in constructing a successful student-retention program is research" (Silicon Valley State University, 2013).

Researchers at SVSU are investigating the decline in retention and graduation rates by focusing on three areas: 1) the degree of the retention problem, 2) the student populations in which the retention problem appears, and 3) the variety of factors that could be contributing to the problem. I have chosen to examine one of the factors that may be affecting student retention and graduation rates: the culture of the institution in regard to its reluctance to aggressively investigate innovative teaching pedagogies and strategies that would contribute to its students' ability to become self-directed learners.

As faculty at SVSU are teachers first and researchers second, they are aware of the importance that teaching plays in student retention. As a commuter school, with students who have little time to spend on campus other than to attend classes, faculty are uniquely poised to have a tremendous impact on student persistence, as they are the ones who see students on campus on a continuous and repetitive basis. They are respected for being knowledgeable and directly contributing to the students' ability to excel in their chosen discipline, when that knowledge is shared. Faculty need to be educated as to the wide variety of teaching methods that are most conducive to the promotion of critical thinking and knowledge retention. They also need to be reminded of the influence they themselves have on their students' motivation to learn and its relationship to student retention. It is for this purpose that I have outlined a series of workshops geared toward educating the faculty on these issues. It is expected that faculty who take their teaching responsibility seriously will be willing to participate and fulfill one of their academic responsibilities stated in the SVSU Academic Freedom and Professional Responsibility policy which is to "develop and improve their instructional and scholarly competence" (SVSU Academic Senate, 1999).

This project will be implemented on the SVSU campus. The five workshops will be added to the roster of professional development opportunities marketed to the faculty members at SVSU through the Center for Faculty Development. This series of workshops has been designed to support my project. Although the scope of this project is limited to the creation of workshops to educate faculty, and ideally begin the process of changing the teaching culture - its overreaching purpose is to positively affect the students at SVSU. It is believed that faculty who understand their role in guiding students in the process of becoming self-directed learners will directly impact student engagement, retention and graduate rates.

Project Importance: The Need

SVSU continues to increase the number of online and hybrid courses in the curriculum. By their design, these courses cast the instructor as a facilitator, removing them from the traditional, behaviorist role of sage on the stage. In these courses, instructors guide students in a collaborative learning environment with the expectation that they will make equal contributions with their peers as they solve the problems faced in the course. However, students who have only been exposed to more traditional teaching methodologies, instead find themselves feeling isolated and ill-equipped to either collaborate or take responsibility for their learning. Students who do not have the ability to be self-directed learners in this environment are at a distinct disadvantage and far more likely not to succeed academically or even complete college with a degree. This project is based on the hypothesis that if a student learns and incorporates the behaviors necessary to become a self-directed learner, they will be more likely to be academically successful and capable of continuing, monitoring, and critically-assessing their learning progress through graduation and beyond.

Scope of the Project

Project Objective

This project will directly contribute to the campus wide research efforts at SVSU to find solutions to the low student retention and graduate rates. The immediate objective of this project is to bring faculty across campus together to participate in a series of workshops focused on exploring teaching methods and strategies that enhance the students' ability to become self-directed learners. The objective of the fifth workshop in the series is to recruit faculty to join a Faculty Learning Community focused on self-directed learning. The long term objective of this project is to affect change in the teaching culture at SVSU, encouraging faculty members to redesign their courses, incorporating the principles of constructivist teaching pedagogy.

Deliverables

The project deliverables are as follows:

- Introduce faculty to the student retention rates at SVSU and at comparable institutions and provide evidence from research of the critical role they play in student retention
- Model a constructivist teaching approach to demonstrate the benefits of student engagement and learning
- Share teaching strategies designed to intrinsically motivate students
- Educate faculty on the behaviors of self-directed learners and present strategies to develop students into self-directed learners
- Invite faculty to be innovators and early adopters by actively participating in a Faculty Learning Community designed to help faculty guide students to become self-directed learners

Milestones

- Recruit one member of the Student Success Committee to participate as co-leader of these workshops and assist in endorsing and marketing
- Receive a minimum of 25 faculty members to commit to participation in the workshops
- Persuade five to ten of the workshop attendees to function as the core group of a Faculty Learning Community devoted to designing, implementing and assessing instructional activities pertaining to self-directed learning

Technical Requirements

- Laptops, internet access, and media support will be available during the workshops and will be provided by the Center for Faculty Development

Limits and Exclusions

- The workshops will focus on presenting the deliverables over a period of five sessions lasting one hour and 15 minutes each, between Monday through Thursday from either 12-1:15pm or 3-4:15pm
- As these workshops are designed to introduce faculty to various strategies and research in education, there will be no time during the sessions to practice application of these strategies
- Neither refreshments nor stipends will be provided for participation

Cost Estimates

Each workshop will be planned by two facilitators. I will serve as one of the facilitators and a member of the SVSU Student Success Committee will join me as the second facilitator. Faculty members at SVSU have exempt status and are expected to work a minimum of 40 hours per

week. There is no maximum. This project is not eligible for release time. Therefore, these workshops will increase the number of hours the workshop facilitators work per week above 40 hours without additional pay.

- However, were an outside consultant hired to conduct these workshops and spend 15-20 hours in planning at $85 per hour, the cost of planning for each workshop would be approximately $1,700, for a total of $8,500
- If this theoretical consultant also ran the workshops, given travel time, set up and take down, an additional $1,020 would be needed for payment, bringing the cost of the five workshops to just short of $10,000

Ethical Considerations

At SVSU, approval by the Institutional Review Board is required when the research being conducted involves research development, testing and evaluation. It is also required when the research involves human subjects being solicited for personal information through surveys, interviews and observation. The workshops I have designed to support this project do not fall into these categories. According to Academic Senate policy, Centers at SVSU are considered "organized research and training units" whose main purpose is to "facilitate communication, planning, and coordination of investigative efforts among faculty members and students" (Silicon Valley State University. Academic Senate, 2005). Therefore, these workshops will be marketed as learning opportunities through the Center for Faculty Development.

The Project

Working with a member of the Student Success Committee, I will market a series of five workshops entitled "Improving Student Retention Rates" to faculty. The marketing will appeal to

the faculty's desire to not only develop and improve their instructional methods, but also by doing so, become part of the solution for raising student graduation and retention rates at SVSU. Each workshop will address one of the deliverables stated. Key articles and books on student retention, motivation, collaborative learning, and self-directed learning that were used to help shape these workshops will be provided to the faculty to consult.

The first workshop, entitled "Improving Student Retention Rates: Student Retention at SVSU" will begin with a short power point presentation outlining the SVSU retention rates versus comparable institutions. Faculty will then be asked to reflect on at least one success story in which they played a role in encouraging a struggling student who later met with success (be it on one assignment, by the end of a course, or at the end of their time in college). They will be asked what they believe they had done that made the difference. A few faculty members will be asked to share their stories. Then, the participants will be divided into groups of five and asked to brainstorm and share their ideas on what they believe to be the problems students face that affect retention rates. While brainstorming, one faculty member from each group will list ideas on the whiteboard. The entire group will be asked to speak to the trends and unique suggestions elicited in the brainstorming session. At this point factors affecting retention rates outlined in Lau (2003) that were not cited by participants will be added to list for consideration and discussion. Faculty will discuss all these obstacles that students face and propose solutions. The purpose of this activity is to raise awareness of the need for faculty to be proactive in recognizing students at risk and providing them with the support or referrals to resources on campus, as well as reminding them of the critical role they can play in student retention.

Faculty will be given brochures from the various services on campus to share with their students. These include handouts from Peer Mentoring, Academic Counseling, the University Library, the Tutoring Center, the Writing Center, the Career Center, and other services geared toward academic success and support. Before the second workshop, faculty will be asked to bring two assignments from courses they currently teach to the workshop to share - one that meets with student success and one that they'd like to improve.

In the second workshop, "Improving Student Retention Rates: Constructivist Teaching Pedagogy," faculty will watch a short video in which one teacher uses both a behaviorist and constructivist approach to teaching the exact same material to a group of students. Faculty will then be asked to reflect on the differences and asked to discuss both methods and their thoughts on student engagement and knowledge retention. They will then be asked to reflect on the assignments they have brought with them. One or two faculty members will be asked to share an assignment that has continuously met with positive student engagement and success, and one they'd like to redesign. Participants in the workshop will be asked to offer suggestions for making the assignment more successful.

Next, participants will be introduced to the in-class group activities outlined in *Teaching Strategies for Constructivist and Developmental Counselor Education* (Eriksen, Uellendahl, Blacher, & McAuliffe, 2001). In this book, the authors made a strong case for beginning the first day of the semester with group activity so that, from the onset, students begin to see their peers and themselves as leaders with prior knowledge, capable of intelligent opinions. They stated "group work can counter the tendency for students to assign to the instructor the sole role of expert and knowledge-giver" (Eriksen, et al., 2001). Other activities outlined in the chapter on

group activity will also be presented. These include the first activity, a card-sorting exercise. In this activity the students first individually list what they expect to get out of the course, then they work as a group and examine all the cards submitted to develop consensus about the direction the course should take, thus taking responsibility for their learning and honing their skills in decision making and conflict resolution. The next strategy presented in the book will also be highlighted in the workshop: the benefits of engaging students in group debate to build critical thinking skills. The last group activity in the chapter involved students using prior knowledge and knowledge gained throughout the course to create a program. With this activity students began to realize that coursework is directly applicable to the work they will be doing after they complete their education and pursue their career. This activity then helps them work toward their professional and personal goals, keeping them not only engaged in the course, but helps them to remain intrinsically motivated. This leads to the subject for the third workshop.

The third workshop, "Improving Student Retention Rates: Intrinsic Motivation to Learn," will address the students' motivation to learn. Faculty will be asked to share what motivates students in their classes to learn and excel - both the extrinisic and intrinsic motivations. They will be asked to brainstorm ways that they can connect with their students' intrinsic motivation. Topics that will be addressed to assist in this connection will be introduced by discussing the students needs for autonomy, competence, and relatedness. Faculty will be asked to think about how they can build choice into their assignments so that students can select which method to present information that proves they have increased their knowledge and understanding of a particular topic. Faculty will discuss competence building by reflecting on how they can introduce a topic to their students that allows for active responses and immediate instructor

feedback. Other competence building techniques will be discussed, such as building gamelike features into activities that challenge students to problem solve, avoid traps and overcome obstacles to reach their goals (Brophy, 1998). Lastly, the need for relatedness through group activity presented in the third workshop will be reinforced through a discussion on various cooperative learning methods. Faculty will be encouraged to continue their exploration on motivation to learn on their own time by accessing the recommended readings, including Brophy's chapters supporting motivation in low achievers and strategies to stimulate motivation to learn.

The fourth workshop, "Improving Student Retention Rates: Self-Directed Learning," will focus on the behaviors of self-directed learners and strategies that faculty can use to help students become self-directed. "Self-directed learning demands a fresh look at assumptions about the learner, learning, self-motivation, and the classroom environment" (Self-Directed Learning, 1999). With that statement as a guide, participants will be asked to brainstorm for what they believe are the behaviors of a self-directed learner and the differences between a teacher-directed and self-directed learning environment. Through this exercise, the participants should come to recognize why it is critical for students to develop these skills. According to Thomas, Strage and Curley "a classroom environment that would support effective self-directed learning is described with respect to 4 components: demands, supports, opportunity, and goal structure" (1988). Demands refers to an appropriate level of academic challenge, support includes instructor feedback, opportunities refers to the frequency that students practice self-directed learning, and lastly, a personal goal structure versus a competitive goal structure. Participants in the workshop will be introduced to the conditions that encourage self-directed learning and student motivation,

teacher-learning activities designed to foster self-direction in students, and student learning activities to foster self-direction in students as outlined in Self-Directed Learning (1999). It is anticipated that exposure to this material will educate the participants as to the benefits of self-directed learning and serve to inspire and encourage them to explore ways to incorporate these guidelines into their classrooms, instructional design, and teaching pedagogy.

In the fifth workshop "Improving Student Retention Rates: Next Steps," faculty will be invited to be innovators or early adopters of self-directed learning practices by actively participating in a Faculty Learning Community (FLC) designed to help faculty guide students to become self-directed learners. In this workshop, faculty will be introduced to the definition and goals of an FLC and be presented with evidence that FLCs can have a direct impact on student learning (Cox, 2004). Impact on students comes from the deep learning experienced by faculty in the FLCs. In a survey conducted by Richlin and Cox (2004) of 132 institutions with FLCs, 72.6% cited course redesign as the "most frequently reported activity." As course redesign is related to faculty awareness for the need to change the way they are presenting material, this is evidence that a FLC provides the support and momentum necessary to help faculty face the daunting task of course redesign. Thus, faculty who have participated in the series of workshops on "Improving Student Retention Rates" will be primed and ready to face the challenges of rethinking their teaching and instructional design.

Faculty Participation: Obstacles, Strategies and Potential for Success

Obstacles

The familiar.

In his book *Our Underachieving Colleges*, Bok (2006) stated "No faculty ever forced its leaders out for failing to act vigorously enough to improve the prevailing methods of education. On the contrary, faculties are more likely to resist any determined effort to examine their work and question familiar ways of teaching and learning." Familiarity is comfortable. Humans often resist change and fear the unknown. Faculty are no different. Unless their degrees were in education, the majority of university instructors come to teach in higher education without ever having taken a course in teaching pedagogy or instructional design. They come to the university with knowledge from their chosen discipline and the experience of being a student. Suddenly, they are expected to teach - and they rely on the methods to which they were introduced as students. Many come from traditional schools in which teachers used a behaviorist approach. So, they teach as they were taught. As approaches to teaching in K-12 become more innovative, so will the students who eventually become teachers. However, the current prevalent approach to teaching at SVSU still remains behaviorist, benefiting a handful of students that are comfortable memorizing and repeating facts, questioning little.

The teaching culture.

"Freedom in teaching is fundamental for the protection of the rights of the student in learning and of the faculty in teaching" (SVSU, Academic Senate, 1999). This statement located in the introductory paragraphs of the SVSU Academic Freedom and Professional Responsibilities policy has been used whenever faculty feel threatened by pressure of either their

colleagues or administration to re-think or redesign their courses. It gives blanket permission to tenured faculty to remain married to antiquated teaching methods that serve only a portion of the students – those who flourish in a behaviorist teaching environment in which they memorize facts and repeat them on tests as proof that they have learned the assigned course materials. Unfortunately, this means of assessment does not provide evidence that students needed to use their critical thinking skills or even apply what they have supposedly learned. It is ironic that this statement purports to protect "the rights of students in learning" when for many students, it does the opposite. Thus, to make a change in the culture, it is necessary to accept that this University policy acts as a shield, protecting faculty from feeling the need to change their teaching approach if they do not choose to do so. However, it is also stated in this same policy that it is the responsibility of faculty "to develop and improve their instructional and scholarly competence" (SVSU, Academic Senate, 1999).

Strategies

Peer and student evaluations.

Faculty have two methods of being evaluated that serve to educate them as to their teaching effectiveness - direct observation by a colleague and student evaluations. In Fall 2013, SVSU's *Policy recommendation, evaluation in effectiveness in teaching for all faculty* was passed by the Academic Senate (Silicon Valley State University Academic Senate, 2013). According to the policy, tenure track faculty and tenured faculty seeking promotion must be observed by a faculty member of equal or higher rank. Guidelines vary from department to department. However, tenured faculty members are under no obligation to be directly observed, unless they so choose. Therefore, tenured faculty only means of evaluation may be limited to the

Student Opinion of Teaching Effectiveness (SOTE). This instrument has undergone changes over the years, but has 17 core questions using a Likert scale, optional supplemental questions and two boxes in which students may type in direct feedback as to the strengths and weaknesses of their instructor. Direct comments from students can be very useful to instructors, especially when comments are repeated by a number of students over the course of several semesters. They can be a means for an instructor to look at their teaching methods and determine their effectiveness. The Academic Senate policy states that the SOTE is only "one source of information for assessing teaching effectiveness." However, SOTE results can be used by Department Chairs to " initiate contact with faculty to suggest development opportunities that address possible concerns identified by their SOTES, but "additional sources of information pertaining to faculty teaching effectiveness must also be considered when reaching any personnel decision" (Silicon Valley State University Academic Senate, 2013). Informally, an objective instructor can get some sense of their teaching effectiveness by evaluating their students' performance, engagement in the class and willingness to challenge themselves to excel.

Timing.

Faculty workload at SVSU does not allow much time for participating in professional development opportunities. Therefore, workshops need to offer something that faculty believe they really cannot do without. They need to know in advance that there will be a return on their investment of time. Therefore, the objective of each workshop needs to be clearly stated in the advertisements. Also, they need to be offered at times that fit into the faculty's schedules. Therefore, targeting days of the week faculty are traditionally on campus in larger numbers is

also key - at SVSU that tends to be Monday through Thursday, either during the noon lunch period or at 3:00pm after the bulk of the day classes are over and before the commute home.

Modeling.

There is hope that the modeling of more dynamic approaches to teaching does have an impact on faculty who cling to a behaviorist approach. For example, approximately three years ago, SVSU librarians collectively changed their teaching approach from a behaviorist to a constructivist style when instructing students enrolled in the beginning writing course, English 1B. Every semester, approximately 60-90 sections of the course are taught by English professors. For one day out of the semester, these professors bring their students to a smart classroom in the library to learn how to do research. These sessions are facilitated by the librarians, who also have faculty status. Prior to the session, the English professor and librarian discuss the focus of the students' research. On the day of the session, the librarian takes approximately 15 minutes to cover some basics and introduce the learning objectives for the session. Students are then broken into groups of five each and each group is assigned a different database to explore. The students are encouraged to investigate the features that are unique to the database and collectively agree upon which aspect they will individually present to the class when their group takes on the role of instructor. For the remainder of the class each group presents their assigned database to their peers. The librarian sits in the class and helps guide the students in the event that they've missed a key feature that is critical to the database. What is interesting to note is that overall, this method has met with resounding approval by the English faculty who have been bringing their students to these sessions for years. They report that their students are actively engaged in learning, rather

than texting or checking email. Students report a sense of satisfaction from the confidence built in this active and collaborative learning environment.

Innovative and influential leaders.

Since freedom in teaching is protected, changing attitudes towards teaching will need to be inspired by the leadership and instructional successes of faculty innovators and early adopters. In order for change to occur, it is essential that respected campus innovators lead the way. It is anticipated that the evidence of the successes demonstrated by these leaders will eventually bring the early and late majority on board. In his book *Diffusion of Innovations,* Rogers stated that the four main elements in the diffusion of innovation are the innovation, communication channels, time and a social system. He defined diffusion as "the process by which an innovation is communicated through certain channels over time among the members of a social system" (Rogers, 1995).

Instructors are typically drawn not only to the topic of a workshop, but the speaker. A well-respected and knowledgeable workshop leader or their endorsement will help to increase the number of participants in a workshop. Therefore, I will approach my unit's current representative on the Student Success Committee to take the pulse of the committee's activities and determine whether they might consider either actively endorsing these workshops, or working with me in the presentation of the workshops. The Student Success Committee is one of the operating committees of the Academic Senate. Its charge is stated below.

> Reviews and recommends changes to academic policies, practices and procedures, including instructional concerns, and their implementation as they relate to all aspects of student enrollment, retention, learning and success. This charge includes but is not

> limited to the following matters: integration into the University community; improvement of skills and competencies; time to degree; and implications of enrollment, registration, and academic renewal policies (Silicon Valley State University Academic Senate, 2012).

This committee includes the Assistant Vice President (AVP) for Student Success Services, AVP for Enrollment and Services, AVP for Undergraduate Studies, Directors from Academic Advisement, Counseling, Disability Resources and the Career Center, faculty representatives from several colleges and four students. Ideally, in my capacity as a faculty member I could serve on this committee once the member from the General Unit (includes librarians) finishes her term.

Potential for Success

Given the current focus at SVSU for faculty to engage in research on student retention rates, this series of proposed workshops can serve as the catalyst necessary to inspire faculty who have not yet found an angle for their research. Certainly the concern for students has driven campus wide discussions and inquiry in a number of relevant areas. For example, since 2003, SVSU faculty, students, alumni and community members have participated in an ongoing dialogue, both in person and face-to-face on what it means to be an educated person. During these dialogues participants discuss a number of timely articles and proposals all focused on ensuring that students have the education necessary to develop into lifelong learners. Dialogue can lead to change as well as collaborations across the curriculum with like-minded individuals. Faculty who have over the years been actively involved in this dialogue have tended to be the well-informed and well-respected leaders on campus, who take the time to meet at

lunch and share ideas and brainstorm to instigate change. Faculty have also formed communities to address student success through the Teachers Scholar Program, investigating topics such as classroom learning communities, diverse learners, the reasons students pursue a degree, and student engagement. Lastly, Faculty Learning Communities have gained popularity in the areas of Affordable Learning Solutions for students and Gaming. As the FLCs on campus have continued to flourish, be visible and attract funding for faculty grants and programming, a new FLC devoted to Self-Directed Learning has the capacity to be both self-sustaining and productive.

Reflection

The decision to initiate this project was influenced by my identification of a need at SVSU as well as my study of human development through the works of Erikson and the eight stages of development and Perry's classification scheme of nine positions, from basic duality through the development of commitment. In regards to Parks, I was influenced by her theory of emerging adulthood and examination of seven mentoring communities with the capacity to shape and help students. Although Belenky, et al. were focused on women, they opened the door to the type of thinking necessary in education that allows for diversity amongst students and in approaches to teaching and learning. Kegan also saw the diversity movement as an opportunity to make the classroom experience a "more fertile environment for supporting development to the fourth order" (Kegan, 1994, p.347). Kegan's description of the demands of modern life and the five levels of consciousness demonstrated that humans are capable of transformation given adequate support and are capable of continuing to grow as lifelong learners. Lastly, Maslow's detailed description of all aspects of the self-actualized individual confirmed my belief that

students in college require guidance and support so that they can take responsibility for their development beyond their time in college and be equipped with the tools and behaviors necessary to continue the process of growth and transformation throughout their lifetime.

The theories examined during the Breadth highlighted the complexities of human development and the importance of being mindful as educators, administrators, and care givers of how and when we present challenges to the learner. There is no "one size fits all" in education - students have unique needs and learning styles. The influences of these theorists helped me focus on what is needed and important to student development. What I realized is that educators, too, need assistance in their growth process and a community to support them as they face the challenges necessary for transformation. Thus, I began to realize that learning communities are key to challenging and supporting instructors so that they can challenge and support the students.

SVSU is a teaching institution, which means that our students are the reason we as faculty are here. Creating an environment in which students can thrive and succeed requires constant reinforcement. Students need to know that we as faculty believe they will succeed. We need to let them know that we are here not only to help them further their education, but to support them in their efforts to do so. We need to tell them we see their potential and build their confidence so that they are willing to face increasingly difficult challenges and pass the milestones on the road to graduation.

Reflecting on knowledge gained during the Breadth portion of this KAM, a number of themes rose to the surface that support the direction of my project. First, all the theorists placed an emphasis on the need for community as a support system throughout human development. Kegan's book focused on the mental demands of modern life as the individual develops and is

challenged by the expectations of their parents, their educators and society. Being challenged is necessary for growth from one level of development or consciousness to the next. For students to be successful as they face the challenges in college, they will require the support of their community of friends, instructors, and family. As Lau stated in her article on retention rates, students have to be accountable. They need to take advantage of opportunities and seek the support they need. She also stated that they need to believe they can accomplish their goals. To this end, the educational system needs to do its part. Faculty need to encourage students to take risks to challenge themselves and then supply the support needed as they struggle for understanding and experience failures along the way. A competitive learning environment is counterproductive. The challenges need to be within the grasp of the student, they need to have choices and they need assistance in setting goals and in determining the tasks necessary to achieve them. Again, faculty and advisors must act as facilitators, guiding students to determine the tasks that will help them succeed. By doing so, the student will experience autonomy and support. They will remain motivated to learn.

Focusing on the problem of keeping students in school by helping them to develop the behaviors necessary to become self-directed learners resulted in my decision to consider the faculty and their classrooms as the means to achieve this end. Further reflection on my experience at SVSU and on the students I have encountered and the committees on which I served, has led me to believe that the classroom provides the community students need as they struggle to comprehend concepts and build their knowledge base in their chosen discipline. This led to the question, are the classrooms on the SVSU campus Student Learning Communities (SLCs)? As stated earlier, the librarians at SVSU have redesigned the information literacy

sessions for the undergraduate writing course, English 1B, transforming them from lecture style to active learning style. The librarians realized that a constructivist approach is student-centered and creates an atmosphere where students experience some degree of autonomy, with the librarian acting as a guide through the students' exploration of the unique features of five different databases. Students work in groups of five, helping each other find answers to the questions posed by the librarian. They collaborate, make decisions and build competence in their ability to find reputable sources as evidence to support their research papers. Through English 1B, librarians teach about 140 sections every academic year, accounting for approximately 3,500 undergraduates, a small fraction of the 31,000 students attending SVSU. Another limitation to the librarians' reach is that these sessions are called "one shots," meaning that each one of the 140 sections of English 1B only come to the library as a class once in the semester for an information literacy session lasting one hour and 15 minutes.

However, through these sessions, English faculty members who have traditionally embraced a behaviorist teaching approach have been able to witness an active learning approach modeled by a colleague. Modeling approaches to active learning is one way of introducing colleagues to the benefits of a constructivist teaching pedagogy. As faculty members witness the level of student engagement, they can better envision the possibilities of active learning and the contributions it can make to raising student retention rates. It is a slow process from observing active learning to a willingness to embrace a new way of teaching. Instructors need time and guidance once they decide to redesign their courses to incorporate the elements of collaborative learning. Besides faculty buy-in, what is needed at SVSU is a change in the culture and attitudes towards what works in the classroom and what leads to student success.

The benefits of a constructivist approach surfaced as another theme during the readings for the Breadth. "Ultimately constructivists understand that answers to all questions vary depending on the context in which they are asked and on the frame of reference of the person doing the asking" (Belenky, et al., 1997, p. 138). Parks understood transformation was tied to imagination and imagination to leadership. Parks believed in the power of a mentoring community to support transformation. Building a community in the classroom is constructivist - and learning to work with a variety of personalities, establish consensus is part of the learning process. Belenky, et al. pointed out that constructivists understand the inevitability of conflict as they engage in real talk and careful listening. Maslow also stated that the self-actualized person find artificiality distasteful and sees reality for what it is. Constructivist classrooms are student-centered with the instructor acting as a guide. Students understand that there are certain topics they need to master to "pass" the course, but they are allowed to create their own personalized game plan to achieve this end. For example, students at the beginning of an instructional design course might be asked, "What do you know about learning theory, curriculum development, technology or information literacy?" These students may then be asked to reflect on this question and grade themselves as to their belief of what they know in these areas. Students realize they must gain sufficient knowledge in these areas to truly master the course. Based upon the grades they've given themselves, they will seek information to expand their knowledge base. The instructor helps guide the student by examining the sources they have found to assist their quest. The instructor may make suggestions to supplement their learning. The student sets their personal goals, thus taking personal responsibility for their learning, accepting their accountability and perhaps, experiencing an increased intrinsic motivation to learn based upon

their autonomy. By the end of the course, students have immersed themselves in areas of study that they personally needed to learn more about in order to master the course. At that point, students are once again asked to objectively grade themselves on the four topics they were assigned to learn. This entire process casts the student as master of their fate, with their instructor facilitating from the sidelines, providing regular feedback to promote competence and to nurture the student's intrinsic motivation to learn. In designing the five workshops, cultivating faculty interest in a constructivist teaching approach was necessary to meet the ultimate goal of creating a faculty learning community on self-directed learning.

Another concern I had driving this project was the continued and growing interest by campus administration to increase the number of hybrid and online courses offered to students. As stated earlier, students who are not self-directed learners cannot possibly thrive in an environment with the potential to alienate and distance the student from face-to-face, human interaction and support. Erikson described the young adulthood's psychosocial crisis as one of intimacy versus isolation. Yet, isolation is a very real possibility for the college student who is not a self-directed learner. Granted, some online courses have a synchronous, online, live component. However, this requires the student to log into their computer to participate in a live discussion at a prescribed time, despite the distractions inherent in the location from which they participate. When queried, students repeatedly site the importance of the SVSU library extending its hours because studying in dorm rooms is next to impossible. Many students who live at home have family responsibilities - either to their own children, or to their parents. A self-directed student is a student who is focused on the task at hand and does not allow distractions to defeat their efforts. As students enter the university, they may or may not have acquired the skills or

behaviors necessary to be self-directed learners. Therefore, intervention is necessary to improve the students' chances for academic success. Intervention can occur through modeling, peer mentoring, tutoring, information literacy programs, and in the classroom itself when instructors embrace a constructivist teaching pedagogy. If the new SVSU continues to grow its online courses, students will need to have the behaviors necessary to thrive in this environment. Faculty teaching in these courses need to encourage and assist students to develop these behaviors to ensure that students can successfully complete their course.

As I moved into the Depth portion of the KAM, I realized the importance of gaining a deeper understanding of the motivation to learn. I found the research of Bandura and Shunk to be very useful. In the study they conducted with children, they discovered the impact of proximal goal setting on keeping the children motivated. This reinforced my belief that faculty must introduce goal setting in every course they teach, so that students have a firm understanding of what they want to accomplish, thereby providing a means to nurture their intrinsic motivation to learn.

Brophy's book geared toward motivation in students from kindergarten through the twelfth grade provided practical strategies for instructors to promote the intrinsic motivation to learn. He also reinforced my belief that the classroom should be a learning community with a focus on learning goals versus performance goals. He emphasized the importance of goals being moderately challenging to the abilities of the student, as this will directly contribute to their effort and persistence, as well as keeping their focus on achieving success rather than on avoiding failure. In keeping with a constructivist approach, Brophy believed in the student competing with themselves, rather than with their classmates. Another key component to keeping

students motivated that Brophy reiterated is the importance of providing feedback to reassure the student as to their progress and to keep them focused on their goals. Students need to know their strengths and weaknesses, so that they can continue to challenge themselves to improve. Brophy, unlike other researchers on motivation, does not completely dismiss extrinsic rewards as undermining the intrinsic motivation to learn. He instead cautioned educators to offer rewards after a task has been completed in appreciation for the student's work versus as the incentive to complete a task. In analyzing students with higher levels of motivation to learn, Brophy identified four factors that were present in all the teachers' practices: 1) opportunities to learn; 2) pressing students to think and justify their answers; 3) supporting students' efforts by using modeling and scaffolding techniques; and 4) an evaluation system focused on understanding and learning rather than on comparison or right answers. Brophy stated "all four of these factors need to be present and working together in order to develop motivation to learn that includes higher levels of cognitive engagement in the content and learning activities" (1998, p.167). Brophy believed that the ultimate goal of the teacher's motivational efforts is self-regulated learning. He cited Rohrkemper and Corno, stating that the instructor can "set the stage for development of self-regulated learning by using teaching strategies that foster intrinsic motivation and motivation to learn" (Brophy, 1998, p. 197). Strategies cited included allowing students choices that speak to their individual differences and working collaboratively toward deep understanding of a topic and application of that knowledge, and providing students with timely and informative feedback. I realized that this last strategy of regular instructor feedback or formative assessment has been a recurring theme in a number of the articles I have read, including Higgins, et al. and Kicken, et al.

Gureckis and Markant (2012) examined self-directed learning from both a cognitive and computational perspective. I found the possibilities of guiding students in self-directed learning with online tools to be in line with my belief that for every student there is one method that might work better than other, giving the variety of learning styles students may have. Therefore, providing students with supplementary online instruction can help students who benefit from repetition of information and reinforcement of concepts to which they have been introduced. Although I don't believe in a completely online environment for young adult learners, I do believe that online tools can enhance the learning experience and build competence in students and their ability to become self-directed learners. This leads directly into the Kicken, et al. (2009) article on self-directed learning among students in a vocational program. The online portfolio tool designed by the authors for the students to use to enhance their self-directed learning experience further strengthened my belief in supplementary tools for building both knowledge and competence. In this article, the supervisor noted that the students that used the tool had a better understanding of the standards necessary for self-assessment and the learning tasks necessary to achieve their goals. Additionally, these students were more likely to take advantage of optional meetings with the supervisor and benefited from regular feedback. Lee's (2010) article on self-directed learning in a hybrid course touched on my belief that students who succeed in online or hybrid environments not only need to be self-directed learners, they also require a certain level of maturity, as evidenced by the fact that these students had already attained a level of academic success and were in the pre-clinical years of medical school.

Abar and Loken's (2010) study on adolescents in a college prep course provided evidence that students who were classified as low self-regulated learners used the supplemental online

instruction tool significantly less than the high self-regulated learners. As this tool was voluntary, only students motivated to increase their knowledge took advantage of the opportunity to do so. As stated by Lau in her article on retention rates, motivation is critical to student success as is the students' willingness to seek out and take advantage of all opportunities. Lau also reinforced the belief that students need to set goals and believe in their ability to achieve them. Thus self-efficacy is critical to their success, as is also evidenced in the study conducted by Zimmerman, et al. (1992), who found a correlation existed between students who believed in their ability to be self-regulated learners and their academic achievement. The research presented in these articles strengthened my resolve to encourage SVSU to explore the benefits of self-directed learning through the creation of a faculty learning community focused on self-directed learning. My project grew out of my understanding of human development and the realization of the importance of guiding students to develop self-directed learning behaviors as a means to enhance intrinsic motivation to learn and counteract the disinterested behaviors which place students at risk for academic failure.

Impact for Social Change

The United Negro College Fund launched a campaign in 1972 that has since raised over 2.2 billion dollars. The slogan associated with this campaign? "A mind is a terrible thing to waste" (AdCouncil, 1972). In order to practice social change, we as educators must do more than talk about the change we'd like to see, we need to be part of the solution. Educators make a difference. We can be change agents and contribute by not allowing even one student to become a statistic on the University's website for retention rates. Some faculty at SVSU choose to live downtown and are therefore immersed in the community that surrounds the University. They

witness the impact that the homeless population has on the campus. They may have first-hand experience with the crime in the area. Certainly, they are aware of the shootings and Amber alerts if they have signed up for Alert SVSU that sends text messages and voicemails to members of the SVSU community. But whether faculty live in the area or commute, they are all aware of the need for education to change the community - to elevate the community out of the ills in society to a new life with hope for a future. SVSU attracts students from these backgrounds, and with grants and scholarships and a caring faculty community, these students can give back to their community and also become part of the solution. Therefore, it is imperative that faculty make every effort to ensure that the courses they have designed speak to all their students with their various learning styles and intelligences. The series of workshops I have designed are meant to intrigue and inspire faculty - to rethink their approach to teaching and to collaborate and unite with their colleagues to begin the process of positive change. By participating in an FLC, faculty can experience the positive effects of a learning community and then establish the same environment in their classrooms, creating Student Learning Communities (SLCs). Communities have the power to uplift the individuals that comprise them. Students in SLCs learn how to work as a team, they learn how to deal with conflict constructively, and they learn how to lead. FLCs and SLCs are a beginning on the road to positive social change. They are a means of support that contribute to a healthier community and society.

Future Developments

MacGregor, Tinto and Lindbald as cited in Cox (2004) examined several studies on Student Learning Communities (SLCs) and made numerous, promising observations as to their usefulness. The first discovery made was that SLCs support retention, especially in at risk

students. Second, students learn at a deeper level as they are exposed to complex ideas and opposing viewpoints. Third, faculty benefit personally and socially from their involvement in the SLCs as well as from the professional development opportunities SLCs produce. Fourth, members of SLCs develop respect for different perspectives and cultures, thus improving the campus climate. Fifth, students involved in SLCs also tend to participate in higher numbers in student government and service learning programs.

It is anticipated that the fifth workshop, which introduces the concept of a faculty learning community on self-directed learning will meet with success. Faculty who have participated in the workshops will understand the need to continue working in a collaborative spirit in a community focused on student success. The members in this faculty learning community will investigate the methods and strategies necessary to develop in their students the behaviors of self-directed learning. Faculty concerned about student retention rates who have also been exposed to the solutions that a constructivist approach to teaching provides will be drawn to a community of colleagues who will support them in their efforts to affect change in their classrooms, and eventually, across campus as news of their students' success spreads. As these innovators and early adopters continue to attract additional faculty to the community and provide them with the support necessary to take risks and meet challenges, an understanding will develop that learning communities are the kind of environment in which success becomes the responsibility of all its members. The benefits of learning communities, the cooperation and collaboration that define them, will result in an acceptance that they are a viable means of directly impacting student success and consequently, student retention rates as well.

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