

Adult Learning Theory and Dropout Prevention

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Introduction

In the time that it takes you to read this paper, nine students will drop out of high school. The statistics are alarming, and according to the National Center for Educational Statistics (IES) more than three quarters of a million high school students, 289,675 males and 209,818 females, dropped out during the 2004 – 2005 academic school year (Laird, DeBell, Kienzl, & Chapman, 2007). School systems around the country are attempting to address this issue through high school reform initiatives. The intent of this paper is to explore the possibilities of adult learning theories being integrated and applied into instruction at the high school level to assist in reducing the dropout rate.

What Alison King (1993) first presented as a shift from the “sage on the stage” to the “guide on the side” for college teaching should now be considered in the world of K-12. Adult learning theory shifts power and control from the instructor to the student. The theory rests on constructivist assumptions that for adult learning to take place, the learning process and context must be relevant or meaningful to the student. The 2006 *Silent Epidemic* report found that almost half of high school dropouts leave school because they find it uninteresting and irrelevant to their lives (Bridgeland, Dilulio, & Morison). Incorporating elements of adult learning theory into our high school teaching practices and curriculum is a viable approach to addressing our nation’s dropout crisis.

The Drop-Out Crisis

West Virginia Governor Bob Wise, executive director of Alliance for Excellent Education in Washington, D.C. recently indicated that “high school dropouts from the class of 2008 will cost the country \$319 billion over their lifetime” (Turner, 2009). While stakeholders consent that this is an

issue in need of national attention, the actual national drop-out rate is somewhat under dispute.

A February 2009 report from the National Center for Educational Statistics put the “on time graduation rate” for 2002 sophomores at 82% (Hampden-Thompson, Warkentien, & Daniel, 2009, p.2). The Everyone Graduates Center (John Hopkins University) 2009 report showed that trends from 2002-2006 data indicate that the national graduation rate has flat-lined at 74% (Balfanz & West, 2009). An April 2009 report by America’s Promise Alliance, a nonpartisan youth advocacy organization, found the graduation rate for America’s 50 largest cities to be just 53% (Swanson, 2009, p. 13).

Reliable longitudinal data on the drop-out rate is difficult to attain because up until 2005, there had been no national standardized method for reporting high school drop-outs. In some instances, students who earn a GED were considered graduates, whereas other states used only enrolled 12th graders when reporting graduation rates and excluded a large number of students who dropped out prior to entering the 12th grade. Other states have reported data using enrolled 9th graders and monitor students until they graduate. “To make matters worse, official dropout statistics neither accurately count[ed] nor report the vast number of students who do not graduate from high school” (Orfield, Loosen, Wald, & Swanson, 2004).

In 2005, however, the National Governor’s Association (NGA) signed a compact agreeing on a national formula for reporting drop-out statistics. In March of 2009 Virginia was able to report its first data set according to this formula. The on-time state graduation average for the Commonwealth was 82.10% for all students, 73.91% for African-American students, and 71.45% for Hispanic students (Virginia Department of Education, 2009). The NGA compact, coupled with recent new regulations from the US Department of Education, will require that all states report the agreed upon on-

time graduation rate data by 2012 (Balfanz & West, 2009). In 2013 we will be able to make much more valid data supported claims regarding the national drop-out average.

What we do know is that students drop out of high school for a variety of reasons, including lack of student engagement, academic failure, truancy, and challenging family and economic circumstances. The Bill and Melinda Gates Foundation commissioned *The Silent Epidemic* in 2006. This report took an in depth look at the motivating factors behind the dropout rate from students' perspectives. Young adults who identified themselves as dropouts ranging in age from 16-25 from 25 different locations across the nation were surveyed. Of those surveyed, sixty-nine percent indicated they were not motivated or inspired to work hard. Students indicated that school for them was boring, unchallenging, and uninspiring. While family and economic conditions do contribute to the dropout crisis (Taylor, 2005), the majority of respondents indicated dropping out of school due to academic reasons. Thirty-five percent said they were failing in school and forty-five percent said they were unprepared for high school. Approximately one-third of all public high school students will fail to graduate with their class and half of those are African American, Hispanic, and Native Americans (Bridgeland, Dilulio, & Morison, 2006).

The consequences are harsh for those who fail to graduate. According to statistics provided in *The Silent Epidemic* (2006) report, compared to high school graduates, dropouts are:

- Eight times more likely to be incarcerated
- Three times more likely to be unemployed
- Twice as likely to live in poverty
- More likely to be on public assistance and in bad health
- Four times less likely to volunteer
- Twice less likely to vote or become involved in community projects

High school dropouts are then more likely to be negative economic pull rather than a positive

contributing force. There is no reason to wait until 2012 when the on-time graduation rates are standardized for every state in order to make this a national educational and economic priority. Educators should begin experimenting with innovative school and curriculum design in order to engage students at risk of dropping out of high school.

Adult Learning Theory

Adult learning theory has been around for more than 75 years but recently there is a renewed interest in this theory of learning and the possible benefits it could bring to adolescent learning. Adult education emerged as a professional field of practice in 1926. In 1928, Thorndike, Bregman, Tilton, and Woodyard published the first book on this topic, *Adult Learning* (Merriam, 2001). Adult learning theory had its beginnings in behavioral psychology when research was focused on learning as measured by intelligence tests. In the 1940's, Lorge's research took a more cognitive view turning attention to the adult's *ability* to learn rather than the rate in which they learn. Then in 1968, Malcolm Knowles contrasted the concept of andragogy, "the art and science of helping adults learn" and pedagogy "the art and science of helping children learn" (p. 5). Knowles asserted that adult learners were different from child learners and therefore required a different learning model. Knowles's description of andragogy has five assumption to describe the adult learner: (1) they can direct their own learning and have an independent self-concept, (2) have accumulated a wealth of life experiences, (3) have needs closely related to changing social roles, (4) is problem centered and need immediate application of knowledge, (5) are motivated internally rather than by external factors.

There are four major models in adult learning, Experiential Learning, Project Based Learning, Self Directed Learning (SDL), and more recently, Action Learning (Conlan, Grabowski, and Smith, 2009). All of these styles of learning can be applied to both early childhood and adult learning.

Experiential Learning. The Experiential Learning model originated from Carl Roger's humanistic approach to psychology. His theory of adult learning addressed the needs and wants of the learner and emphasized the importance of applied knowledge in the learning process. The role of the teacher is to facilitate learning by (1) setting a positive climate for learning, (2) clarifying the purpose of the learning, (3) having resources available and organized, (4) balancing both the emotional and intellectual aspects of learning, and (5) sharing feelings and thoughts with the learner (Conlan, Grabowski, & Smith, 2009). Emphasis is placed on the importance of learning to learn and to being open to change. Experiential Learning as described by Conlan, Grabowski, and Smith (2009) "is a cyclic process involving setting goals, thinking, planning, experimenting and making decisions, and finally action, followed by observing, reflecting and reviewing" (p. 4). The Experiential Learning model values and builds upon the learner's experiences in the world.

Project Based Learning. Project Based Learning (PBL) involves learners working in collaborative groups to solve authentic problems using an interdisciplinary approach. There are two major components to Project Based Learning: (1) A question or problem that drives the activities, and (2) A culminating product or presentation that address the driving question. The learners decide how to approach the problem and develop activities by collecting information from a variety of sources, then synthesizing and analyzing that information to derive meaning and new knowledge. In the Experiential Learning Model, the teacher is more of a facilitator and advisor rather than a manager or direct instructor (Conlan, Grabowski, & Smith, 2009). An example of PBL in common practice is the Learning by Design approach. PBL also rests on social learning and constructivists assumptions that knowledge is acquired through self creation and invention in a social context.

Self Directed Learning. Self Directed Learning (SDL) emerged in concert with Knowles's theory of andragogy. The goals of self-directed learning were threefold: to further students' capacity to be self-directed, to engage in critical reflection and

transformational learning, and to encourage "emancipator learning" through social action (Merriam, 2001). Educational philosopher Robert Maynard Hutchins once said that "The object of education is to prepare the young to educate themselves throughout their lives" (as cited in Scott, 2007). Such is the first goal of self-directed learning. This "training" for life-long learning is a humanistic perspective that recognizes the highest human need is self-actualization (Maslow, 1954). If education fails to produce a life-long learner, then according to Robert Maynard Hutchins's perspective, it will have failed its objective. In addition to this humanistic perspective, threads of critical inquiry and constructivism can be seen in self-directed learning. That transformational learning can occur through critical reflection and potentially result in social or political action is reflected in the work of Brazilian educator and theorist Paolo Friere. Through dialogue with impoverished students, Friere attempted to eliminate the traditional teacher-student power dichotomy so that teacher and student become learners together in "reflective participation" (Crotty, 1998, p. 155). As such, students take "control" of their language and learning, with "emancipator knowledge, knowledge in the context of action and the search for freedom" (Crotty, 1998, p. 159) being the ultimate goal.

Action Learning. A related and more recent theory of adult learning is Action Learning. Action Learning borrows from each of the other three models and theories of Adult Learning (Marquardt & Waddill, 2004). Similar to PBL, the action learning model suggests organizing students into groups and giving them a real problem to tackle that may produce real results. The teacher serves as an action learning facilitator, a learning coach, rather than a director or deliverer of instruction. Similar to Friere's methods and SDL, reflective inquiry is essential to positive outcomes in action learning. As in Experiential Learning, students question not only what they want to know or do not know about the problem at hand, but also their own perspectives, experiences, biases, decisions, and actions. Students construct their own knowledge through this experience, which has the potential to be both

transformative and emancipatory, much like self-directed learning.

Action Learning pulls from each of the models of adult learning theory. The following lesson plan serves as an example for Action Learning and as such incorporates elements of each of the other models discussed above. Imagine an ethnically diverse U.S. History classroom in an urban setting. Using the action learning model, a teacher groups students into diverse groups in order for them to tackle a problem or issue within their community. Let's imagine that students have been asked to compose letters to the local school board regarding the school board's recent proposal to make community service a mandatory requirement for graduation. The action learning coach (teacher) is tasked with covering state objectives covering the Civil War. In this fictional action learning lesson, the action learning coach uses Alfred M. Green's 1861 speech to his fellow African Americans encouraging them to enlist in the Union Army. Students are tasked with not only contextualizing the document in history, but also asking questions of themselves. *Should Green's audience join to fight for a country that had hitherto excluded them from service and participation? Did they? What were the outcomes? Did they have a moral obligation to African-Americans living in the South?* Using this historical context, the action learning coach might then connect the school board's proposal to the themes of community obligation and disenfranchisement. The resulting letters to the school board would be the product of group debate and reflection regarding Green's speech, the context of the Civil War, student perspectives of their community, and obligations of citizenry.

What each of these theories of adult learning has in common is a shift in the locus of power from the teacher to the student. While the 2006 *Silent Epidemic* report makes clear that the reasons for dropping out of school are complex, one common theme that emerges in survey responses from high school dropouts is that they felt no connection between school and work, or the next chapter of their lives. Sixty-nine percent of respondents indicated that "their school did not do enough to

make them work hard" and eighty-one percent indicated that "opportunities for real world learning" would make school more relevant (Bridgeland, Dilulio, & Morison, 2006, p. 4, 13).

Challenges to application. Certainly, educators cannot reasonably consider applying adult learning theory without first seriously considering whether these theories are appropriate for students who may not yet be developmentally adults. According to Jean Piaget's stages of development, adulthood begins around age twelve at the formal operational stage. At this stage of development, humans are able to engage in abstract thought and consider the moral implications of their actions. At the very least, in order for high school students to make relevant real world connections to the curriculum, the ability to engage in abstract thought is required. Yet, this ability alone may not predispose a student for success in a problem-based or self-directed classroom.

More recent cognitive studies have indicated that the frontal lobe of the adolescent brain does not fully develop until the early 20's (National Institute of Mental Health, 2001). The frontal lobe controls human emotion, specifically, impulse control, judgment, problem solving, and social behavior (Centre for Neuro Skills, 2009). Educators then must be mindful that Adult Learning Theory for adolescents might not necessitate complete freedom to direct learning and evoke action. The role of the learning coach then is critical for application of adult learning theory in the adolescent classroom. There is no "one size fits all" learning style that will decidedly produce academic achievement. Educators must be mindful of this and should not assume that borrowing from adult learning theory alone can safeguard all students at risk of dropping out of high school.

At the same time, adult learning theory poses a theoretical framework that can serve as a foundation for alternative methods of instructional delivery. Consider that one out of every three American children drops out of school; one out of every two minority American drops out of school (Bridgeland, Dilulio, & Morison, 2006). An African-American student drops out of school "every forty-nine

seconds of the school day” (qtd. in Nelson-Smith, 2008, p. 32). In a review of research on learning styles of African-American students, Young, Wright, and Lassiter (2005) found that African-American students tended to be “global” learners as opposed to analytical learners. Global learners thrive under “cooperative learning groups, classroom discussion, experimental learning, student’s evaluating each other's work” (Young, Wright, and Lassiter, 2005, p. 522). While a teacher may not have control over a Eurocentric curriculum, he or she might utilize action learning or experiential learning to foster connections between content and real world experiences and outcomes.

The ability to blend and integrate seemingly disparate subjects or information is crucial for success in the global economy. In fact, the synthesis that takes place between content and self-knowledge is one of the most important skills for 21st century workers, according to economist Thomas Freidman (Freidman, 2006). Richard Mextorf, Superintendent of the Loysock Township school district, recommends that future best practices “flip” the focus of the classroom from content to learning experience. He asserts that teachers shape learning experiences that encourage critical thinking, problem solving, collaboration, communication, and a sense of awareness (these areas are closely aligned to the 6 steps in the action learning model). In Mextford’s model, “The emphasis would shift from teachers covering content in the traditional subject-centered vertical format, to students “uncovering” essential skills horizontally in a cross-curricular format, with content serving as a means for students to develop the core competencies of the synthesis-thinking model” (Mextford, 2008, p.4). Elements of each of the adult learning theories are evident in Mextford’s model for the 21st century classroom.

Each of the adult learning models shifts the power structure in the classroom so that students become more responsible for their learning experience. For teachers, particularly those who must meet state objectives and end of the year benchmarks, this might seem an alarming and subversive shift. Self-directed learning, for example, might not be tidily scheduled in the same

way that the instructor led lecture/test routine is scheduled. Standardized tests do not wait for self-directed learners to “catch up”. Yet, some, like educator and activist Jonathan Kozol, see a negative correlation between standards based reform and increased dropout rates: “Nationwide, from 1993 to 2002, the number of high schools graduating less than half their ninth grade class in four years has increased by 75%” (Kozol, 2005, p.282). Others criticize No Child Left Behind warning that “the law will have the unintended effect of giving schools an incentive to “push out” low-performing students” (Bridgeland, Dilulio, & Morison, 2006, p. 18). Whether standards based reform has directly influenced the increased drop-out rate is an issue that deserves to be considered through research. Borrowing from adult learning theory may better engage students in the curriculum than practice assessments and reassessments, thereby increasing the level of content learning. While adult learning theory does not necessarily mirror standardized assessments, it does connect the content to the student’s own sense of self, thereby increasing the likelihood of participation and individual knowledge construction.

Application for High School Reform

While the application of adult learning theory alone cannot alleviate the drop out crisis (to address the crisis completely, we must also address social issues like poverty and health care), drawing from adult learning theory can support instruction that increases student engagement and perceived relevance. School-to-work programs and computer-based learning are two areas of application that can support the learning styles and needs of potential dropouts.

School-to-work Programs

Students continue to indicate that it is difficult for them to see the connection between what they do at school and what they will do post-graduation. Among the *Silent Epidemic* report’s recommendations for school reform is the suggestion to “improve teaching and curricula to make school more relevant and engaging and enhance the connection between school and work”

(Bridgeland, Dilulio, & Morison, 2006, p. 11). Educators and policy makers might look to adult learning theory in creating new real world learning experiences for students, and in improving and extending existing school-to-work programs. School-to-work programs might take the form of vocational education, internships, dual enrollment, or service learning opportunities. Policy makers might look to the “mutuality” inherent in adult learning theory, and specifically to problem-based and self-directed learning to facilitate program choices that make secondary learning relevant to college, work place, and real world experiences. Adult learning theory can serve as a scaffold for bridging the gap between high school and what comes after high school.

Facilitating this engagement requires sweeping organizational change in our schools’ organizations—a change from an industrial classroom to a more technologically equipped and innovative one. The 2006 report from the National Center for Education and the Economy (NCEE) “Tough Choices, Tough Times” proposes some drastic restructuring of our high school system in hopes of creating a system that graduates more students and that produces a competitive workforce for the 21st century global economy. The 2006 report recommended controversial changes in our current K-12 structure, including ending standardized testing at grade 10. By grade 10, the commission asserts that students are ready for work at the community college level. If students do not meet the grade 10 Board Exam, they may have another year or two to remediate and reattempt. In this model, students on the AP/IB track will remain in high school for two more years in preparation for studies in 4 year colleges and universities. Other students who score well enough on 10th grade Board Exams will be guaranteed admission at the community college level. Upon completing the Board Exams at grade 10, students may choose the AP/IB route, community college, or technical certificate programs. The National Center for Education and the Economy’s report argues that “The core problem is that our education and training systems were built for another era. We can get where we must go only by changing the system itself” (NCEE, 2006, p.8). Recently (March 10th,

2009), the National Education Association, the U.S. Chamber of Commerce, and National Association of Manufacturers have become partners in NCEE’s reform proposals (Gewertz, 2009).

Inherent in the drive to make school more “meaningful” is the assumption that students have individual needs, skills, and goals. A resulting goal for high school reform is providing more opportunities for student choice in their program and degree planning. The “Tough Choices, Tough Times” (2006) reform efforts recognize that at grade 10, students and parents should have more choice into program pathways. Students admitted to technical certificate programs or community college two year degree programs will have the opportunity to learn skill sets in an adult setting, often in a “hands on” environment. In these more adult classrooms, students may explore their content areas using problem-based learning or action learning, juxtaposed to the traditional lecture/test routine.

Under this model, educators must be careful to avoid “tracking” at risk students into non-academic programs. One necessary component to the post grade 10 pathway choice must be informed parental consent. Students, parents, and school counselors should have a face-to-face meeting regarding the student’s school or career pathway choice. Not only will this facilitate more parental support for potential dropouts, it will also ensure that students are provided equal opportunity for each pathway.

While the massive restructuring advocated by the National Center for Education and the Economy must be approached carefully, viewed through the lens of adult learning theory, states should consider exploring this reform initiative. The report suggests that under this model, “student could challenge these Board Exams as soon as they were ready, and they could keep challenging them all their lives, if necessary. No one would fail. If they did not succeed, they would just try again” (NECC, 2006, p. 12). Self-directed learning, then, is part of this restructuring formula. This more individualized approach to secondary education appeals to the humanistic and constructivist tenets of adult learning theory.

Computer-based Learning

The recent explosion of computer-based learning and virtual education reflects the need for more individualized and self-directed learning approaches for many students. At the moment, online learning has found its “niche” in expanding choices and opportunities for AP courses. Providing rigorous courses to students who would not otherwise have access to them is one way of encouraging equal access and opportunity for students across the board. Research indicates that by 2019, half of all high school classes will have an online component (either completely virtually, or hybrid) (Christensen, 2008). Distance and computer-based learning is growing exponentially, and in the near future, will hold even more potential for engaging students who may be at risk of dropping out of school. Computer-based learning provides credit recovery opportunities, opportunities for students to work at their own pace, and additional course and college/career pathway choices.

More than one third of high school dropouts indicated that not being able to “keep up”, either due to failing grades or attendance (Bridgeland, Dilulio, & Morison, 2006). Research indicates a correlation between high school dropout rates and failing grades for 9th graders: “Over 60% of students who eventually dropped out of high school failed at least 25% of their credits in the ninth grade, while only 8% of their peers who eventually graduated had similar difficulty” (as cited in Watson & Gemin, 2008, p. 4). Computer-based instruction is emerging as a viable alternative for some students at risk of dropping out.

However, educators must be wary of offering low-quality computer-based learning programs that offer little student engagement and teacher interaction. Such programs “are used primarily because they are inexpensive, and they allow schools to say students have ‘passed’ whether they have learned anything or not” (Watson & Gemin, 2008, p. 15). Administrators and technology departments must be cognizant of best practices and current research in online learning and distance

education. In 2006, the Southern Regional Educational Board (SREB) published *Standards for Online Courses*. The standards cover course content, instructional design, student assessment, technology, course evaluation and management (Southern Regional Education Board, 2006). Educational leaders should look to programs that are modeled and evaluated based on standards like those published by SREB in order to offer courses and programs that are most likely to engage at risk students in a meaningful learning experience. There are already several model programs that have reported marked success in using online learning to reach out to at-risk students. One such program is The Florida Virtual School.

Florida Virtual School. The Florida Virtual School (FLVS) is the oldest and largest virtual school in the nation. Like most virtual programs, the original intent of FLVS was to expand AP course offerings. Now, 20% of FLVS students are attempting credit recovery (Watson & Gemin, 2008, p. 8). Students complete courses fully online and work at their own pace. Under this self-directed model, students can accelerate through material that has already been mastered, and slow down through material that they are having difficulty with, all while getting individualized support and guidance from their online instructor. Instructors are not aware which students are credit recovery students, thereby removing the stigma of having “failed” from a student. Additionally, students can work at home or in mixed labs or classrooms with students working through a variety of courses. Again, part of the social construct of “failure” is taken out of the equation using this model.

Self-directed learning environments may be better suited for at-risk students. FLVS public affairs liaison Brenda Finora indicates that “Some people still raise the question ‘If the students are not motivated enough to pass the course in the classroom, how can we expect them to be self-motivated in an online course?’ We find very little difference in the level of motivation between students seeking credit recovery and other FLVS students” (as cited in Watson & Gemin, 2008, p.

10). In fact, “In the 2006-2007 school year, FLVS students who self-reported taking courses for credit recovery had a passing rate of 90.2%, similar to the 92.1% passing rate for the entire FLVS student population” (Watson & Gemin, 2008, p. 10).

Educators must avoid using online learning as a “dumping ground” for at-risk students who might also be “behavioral problems” in mainstream classes. One characteristic of effective online instruction is connecting a face-to-face course mentor or facilitator who serves as a “physical” learning coach. The ideal online learning situation, then, doubles the student-teacher relationship. Students work not only with an online instructor, but also with a face-to-face mentor who serves as their learning coach. Schools then must provide physical and human resources to support online instruction. Additionally, students must be willing to work in a self-directed learning environment and teachers and mentors must work to support and facilitate student computer-based learning. There must be a student orientation period and direct individual communication between students and teachers and learning coaches. Learning coaches and building facilitators should look for warning signs for students who may falter in the self-directed environment.

If educators approach computer-based instruction as an authentic method of course delivery, then this area can provide worthwhile alternative programs that are rooted in adult learning theory for all students, including those at risk of dropping out. In adult learning theory and in online instruction, the teacher becomes more of a facilitator or “learning coach.” Critical inquiry and reflection have been identified as components of self-directed and action learning models. Asynchronous discussion boards work to encourage student participation and collaboration, but also allow time for reflection and thought. To counter the perspective that online learning is somehow “lonely” or dehumanizing, course designer and adult learning theorist Deborah Waddill noted in 2006 that “a sense of community can be built through “purposeful design of activities that are self-directed, reflect real-life experiences, and provide for collaboration and bonding” (Waddill,

Milner, & Stinson, 2006, p. 2). Teenage students are more familiar with social networking and even content building (through pages like MySpace and Facebook) than many of their classroom teachers. The online environment comes “naturally” to many of them. Today’s students have grown up with the Internet. It is as much of a reality to them as the radio was to their predecessors. Surely to many educators chagrin, “Today’s average college grads have spent less than 5,000 hours of their lives reading, but over 10,000 hours playing video games” (Prensky, 2001). There is some suggestion that this immersion into new media has changed the thinking patterns of the younger generation. While this is still an area that requires research, it can be concluded that the use of 2.0 and 3.0 technologies in the classroom can make the learning experience more relevant to the student’s existence than the traditional classroom lecture.

The absence of physical presence and associations in a virtual classroom also provides possibilities for students to transcend any “labels” or assumptions that their face-to-face classroom teacher or peers might have of them. This constructivist, and potentially transformational, approach to learning assumes that “knowledge evolves through social negotiating and through evaluation of the viability of individual understandings” (Waddill, Milner, & Stinson, 2006, p. 3). In an ideal computer-based learning situation, the at risk student may not only “recover credit”, but might also make potentially transformational reflections on herself, her place understanding of culture and community, and her place in the world.

Conclusion

This paper has offered paths for school reform and instructional designs based in adult learning theory that will provide alternative programs, support systems, and methods of content delivery that will better engage students who are at risk of dropping out of school. It must be understood, though, that instructional design alone cannot solve the dropout crisis.

The Silent Epidemic (2006) report recommends other non-instructional methods, like implementing an Early warning System based on student attendance and creating mentoring programs so that at risk students develop at least one constant and meaningful relationship with an adult in their building throughout their high school progression. Additionally, the report suggests first tackling the issue by ensuring that data on high school dropout rates is adequately and uniformly reported. In July, 2005 the National Governor's Association, in concert with the Quality Data Campaign, signed a compact agreeing to methods for collecting accurate data on state and district high school dropout rates. This marks the beginning of a serious and collective effort to reach the one third of American children who do not graduate in our current system.

Adult learning theory proposes that the learner be able to construct knowledge for him or herself, thereby making the learning process more relevant. Practical applications like offering more choices in program planning and offering quality computer-based instruction offer instructional models based in adult learning theory that may serve to keep many of our bored students engaged in both instruction and their personal educational paths. What Merriam indicated as indicative of the "adult learner" may also be said of all of our potential dropouts:

The learner is more than a cognitive machine processing information. He or she comes with a mind, memories, conscious and subconscious worlds, emotions, imagination...The learning process is much more than the systematic acquisition and storage of information. It is also making sense of our lives, transforming not just what we learn but the way we learn, and it is absorbing, imagining, intuiting, and learning informally with others.(Merriam, 2001, p. 96).

Shifting the traditional power structure in the classroom and making the learning process a more constructivist one considers the student holistically. These alternatives for school reform and instructional design may not only "catch" our students at risk of dropping out of high school, but

also better prepare them for participation in the 21st century global economy.

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