Students at Risk: ON-Line Digital Literacy in Art Appreciation Reading, Comprehension and Writing

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Abstract

On-line course offerings are steadily rising as universities compete for the virtual student. Students are available and willing to take whatever courses colleges and universities places before them. According to 2009 Sloan Survey of Online Learning enrollments were up 17 percent in 2008, a year earlier there were approximately 4.6 million students taking at least one class online. Many students taking on-line courser have no idea what to expect when enrolling, they know the name of the course but they do not take into consideration what is expected of them or required to successful complete the course. It is ironic in that many students anticipate on-line classes will entail less preparation and knowledge. This assumption seems to be most prevalent from students taking art appreciation classes for the first time and with minimum discipline in their self regulation of study. Entering a course with this pre-set cavalier attitude often leads to students missing the first assignments and finally realizes by the second or third assignment or discussion forum that assignments or discussions have closed. As time progresses it becomes clear to students that the ability to read comprehend and write is an important aspect of this type of art course. Theresa Cullen and Inger Cobb (2011), University of Oklahoma, researched the importance of the ability to read and write in a digital age. "Living in a digital age requires adults to be capable of tasks beyond simply reading, such as using a computer or other technology to complete day-to-day tasks." It has been the experience of this writer that as students progress through an on-line course it become obvious that the demanding consistent process challenges and increases skill levels in all students and especially at risk students.

Key Terms: At Risk students, Art Appreciation, Digital Literacy, On-line environments, On Line Learning, Digital Learning, Digital environments, Virtual Class room

Introduction

Motivation is critically important to student learning (Pintrich & Schunk, 2002), and in an on line learning environment it is especially challenging for students who are at risk to be motivated. (At-risk students are defined as having difficulty in reading, understanding, writing and or maneuvering through an on line course.) Students who are at risk taking on-line art classes must adjust to a new environment. The digital environment requires constant reading, comprehension, analyzing and writing; although difficult it is manageable for struggling at-risk readers. At risk students must learn to pace their learning and set goals for on-line self –regulated studying. Many students prior to entering an art appreciation on-line art classes already have challenges with understanding art. This challenge is coupled with difficulty, reading, analyzing and writing about an area with a language of its own. Trying to understand art terms and mastering their meaning as they relate to the arts are difficult for non-majors. Many times the only reason, students enroll in an on-line art appreciation art class is the assumption that the online art class will be an easy "A", there are believes by some students that they can hide in only classes, seek refuge avoiding embarrassments from deficiencies by entering the virtual class.

Many have the assumption that less work and thinking will be required and thus they will be able to succeed. Many times to their amazement, the at-risk students discover, the challenge is appealing, and success is possible in a demanding art course. The Challenge becomes a stimulus to compete with peers and prove to self it is possible and they are significant as a learner, and as an individual student has the ability to influence their own motivation. This is an important component in a virtual classroom (Wolters, Pintrich, & Karabenick. The digital class can be a positive catalytic influence for achievement and improving literacy skills.

As a working definition for literacy, this writer uses the language by Pianfetti (2011); " The definition of literacy has expanded from traditional notions of reading and writing to include the ability to learn, comprehend, and interact with technology in a meaningful way", for the sake of this article, digital literacy is defined as "a person's ability to perform tasks effectively in a digital environment, with 'digital" meaning information represented in a virtual environment (Jones-Kavalier & Flannigan, 2006). Eshet-Alkalai and Chajut concur suggesting digital literacy extends beyond the ability to read and write, it includes the ability to analyze visual images, reproduce digital content, judge the validity of content, and view and create content in a non-linear fashion.

Working towards Accomplishments

In order for at-risk students to obtain any level of success in virtual art classes, the course must be well planned to assure that challenged students' outcomes are reachable. Students must be able to move freely in the environment from various modules without obstacles of small print, errors or links that are difficult to locate; most importantly the course must be built on differential learning; providing students with multiple opportunities to explore, create, and solve problems. Research has demonstrated that providing people with choices as to how they pursue activities increases intrinsic motivation; externally controlling influences can have the opposite effect (Enzle, Wright, & Redondo, 1996), **and** that building upon students' strengths with a differentiated approach in on-lined environments may enrich and improve learning, (Beecher, M., & Sweeny, S. (2008). In fact, according to (Dillon-Marable, (2006) computers significantly improve certain aspects of instruction and learning. It is believed by researchers that students engaged in online activities have consistent brain stimulation while on-line as they think through reading , comprehension and writing, and thereby become more literate through the integration of online learning, It is noted by Caine and Caine in a 1990 study on the brain that learning is experiential and because it is , the sense that what students make of their learning depends how much they learn.

This type of learning is similar to the whole language approach to reading. If students are able to organize or sort thoughts from their reading, they comprehend what has been read and thereby are able to connect dots through the writing process and the analytical process required to analyze works of art. Caine and Caine describe the brain as a scientist and artist that attempts to differentiate and understand patterns as they occur and as a creative expression. As in an organized design the brain resist from having a meaningless or out-of-order pattern it makes sense from familiarity uniting with challenges in order to understand new concepts. Motoko (2008) concurs with Caine in an article on investigating the future of reading; he state that neurological studies show that learning to read changes the brain's circuitry and that scientists speculate reading on the Internet may also affect the brain's hard wiring in a way that is different from book reading.

Basically, on-line art appreciation classes may stimulate the brain and yield improved on line literacy and thus be an important means toward increasing general academic achievement" (Judson, 2010). Researchers have studied the paradigm of computers and learning for years. Heines, J.M., Greher, GR., Ruthmann, S.A., Reily, BL. (2011) at the University of Massachusetts are researching how to bridge the gap among different disciplines by using computers. The aim is to introduce arts majors to computing, and science and engineering majors to the arts, and explore within their perspective majors the two concepts with the assumption is that this will increase understanding in the student's discipline. As a participant this writer will investigate utilizing math and the arts on-line as a means to improve comprehension in both disciplines. Similar programs are being explored in K-12 systems. A projects funded by Geometry of Nature LLC is an educational company located in Marshall, NC, that designs a range of experiential programs ; Global Literacy programs and classroom tools for middle school, high school, and college student.

The purpose is to increase contextual knowledge in the subject, assist students in examining and understand more globally; art, geography, science, social studies, math, technology and literacy. Pilot programs are taking place at Ashville, NC and Alice Deal public middle school in DC. The piloted Aboard Spaceship Earth Global Studies project emphasizes particularly integrating Science, Social Studies, and Art. It's an exciting program using digital technology. Although the project is a land project the program utilizes some of the same techniques as on-line programs to improve student learning, computers to project, explore information and engage students. The project has been documented by The Sunshine Lady Foundation. All students in both programs start on the same level of expectancy, the key is to assume learning is important to all students and to making learning important to all participants.

Adjusting an art class that requires analytical skills and understanding, similar to an art appreciation class is not difficult on-line in order to meet the needs of at-risk students. It requires support, engaging and communicating with students frequently and giving explicit instructions samples of art work with examples of critiques and responses.

The Process

Students learn differently, in their understanding, processes, styles, talents and ability; and instruction need to accommodate those difference and needs, this gives at-risk students the opportunity to interact with the text and artifacts in different ways: visual, tactile, and auditory. Research suggests that for instructors to become effective digital literacy professionals they must understand differences in student learning and be responsive to it. Since many at-risk students have problems reading, analyzing art and writing, visuals are important for them to maintain brain order and comprehension. In order to analyze what the text and or artifact are communicating here there must be a visual engagement that holds the students' interest. ` According to Woodill (2011) and Mayer (2005) "People can learn more deeply from words and pictures than from words alone," by "words" Mayer means either text or spoken words, and by "pictures" he means illustrations, photos, animations, or video. Epic LMS, is as an example of a comprehensive instructional system integrating online student learning with faculty control and academic support. Epic audio videos integrate text within the videos and alongside visuals. This gives at-risk students a simulation of the face to face visual assurance that is comfortable in part, as in the brick and mortar class.

According to Hanover Research (2009) students must be actively engaged with class, peers, teacher and the internet in order to be successful in an on line class. In an article on Best Practices in on-line Teaching Strategies Hanover Research reports that The Sloan Consortium's Award for Excellence in Online Teaching went to Bill Pelz, a Professor of Psychology at Herkimer County Community College. After receiving this award Pelz shared his three ―Principles of Effective Online Pedagogy in a 2004 report: His principles focus on letting students do most of the work by spending time engaged in content on-line. He states the more they are engaged the more they learn. Students must be interactive in effective asynchronous learning, stressing that interaction must stretch beyond simple student discussion; and students must strive for a Social Presence, and Cognitive Presence, and there must be a strong teaching Presence.

Many on-line instructions fall short on Mr. Pelz's principles. In a survey measuring LMS tools used by instructors, Bonk found that only 23–45 percent of online instructors surveyed actually used online activities related to critical and creative thinking, hands-on performances, interactive labs, data analysis, and scientific simulations. However, forty percent of the participants said those activities were highly important in online learning environments. It is important for students to engage with interactive components within the course in order to gasp the total content of the lesson. Jacobs, (2008), contends that such online activity improve e-literacy achievements.

On-line art appreciation classes with all visual components working is a perfect platform for at risk students to self pace and gain confidence in the learning process. Students in the twentieth first century are savvy with technology and are visual learners for the most part. They are considered the digital generation many however upon entering on-line classes for the first time view the environment experience and print as foreign and not familiar to what they know, and it become imperative that the friendly visual meets them to comfort their stress zone. Sutherland- Smith (2002) observed students interacting with text resulting from an internet search, and reported that students "perceive Web text reading as different from print text reading ." In a similar observation this writer instructed hybrid at-risk students to read information on an artist and gave students open ended questions on information to read. Student responded overall below satisfaction; articulated verbally and in writing using visual from their text book. However, when placing the same information on-line, asking the same questions, at-risk students for the most part fared much better and attached visual to emphasize their point.

The difference it seems, at risk student were able to revisit the assignment and ponder at length and perhaps felt more in control with the ability to explore their personal theory and stimulated critical thoughts. At risk students in the land class few responded and many fed from less challenged students and were able to thrive minimally.
In an on-line art environment at-risk students need time to pace their literacy skills; visit and revisit discussions, notes and images. Motoko (2008) contends that the internet has created "a new kind of reading, one that institutions and society should not discount as a viable tool for educating challenged students.

He states further that the web inspires and challenges students to find different points of view on a subject and gives an opportunity for challenged students to open up to converse with others peers online. Prior knowledge is an area that must be taken into consideration when attempting to strategize on how to improve online literacy skill in art appreciation classes. There are several areas that make assessing prior knowledge difficult. Instructional scaffolding is one type of provision of sufficient support to promote learning when concepts and skills are introduced in an art appreciation on-line class. These supports may include art resources, study-guides. Guidance support by the instructor is needed on the development of cognitive and analytical skills, supports may be gradually removed as students develop autonomous learning strategies, thus promoting their own cognitive and analytical skills and knowledge. It is important to relate some assignments to students culture and interest so they can identify or an incidents in which they may relate; example. If African American students have transferred from another region one lesson may include The Great Migration painting by Jacob Lawrence's or the Great Wall of Los Angeles designed by Judith Baca to analyze the social cultural implications while analyzing the paintings.

Teachers help the students master a task or a concept by providing support. The support can take many forms such as outlines, recommended documents, storyboards, or key questions. The results showed an effect on acquired individual knowledge. Specifically, "on transfer of individual domain knowledge and on the individual knowledge acquired" (Molenaar, Boxtel, and Sleegers 2011) To assure at-risk students have an equal chance of accomplishments in an on-line class, institutions need to chart a new direction in digital literacy. First, clearly recognize that some student have challenges reading, analyzing , and writing; secondly develop a differential on-line course that engages students of various skills and levels, and thirdly, require faculty to use and engage all interactive activities within the course. This will ensure that faculty and students are accountable and are aware that on-line learning is a joint effort in achieving success.

Charting A New Direction

Various interventions are necessary to assist at-risk students, Resources must be readily available and in sight, (library assistance, tutoring, writing centers and technical assistance) . Faculty assisting at risk students must understand how to facilitate, control, and promote confidence in at-risk students.

Dr. John Campbell Associate Vice President of Academic Technologies at Purdue University, has been involved for several years in studying how to improve success of students on-line. He has examined higher education pedagogy styles and methods in obtaining information on how to best identify at-risk students. At this writing the author is participating in a multi-university project with Sakai Tools under Marist College, Poughkeepsie New York ; Sakai is a management system similar to e-learning courses used by institutions**;** such as WebCT, Blackboard, and DesireL2. The project, similar to John Campbell's research will investigate the use of intervention strategies in an online environment. The study will, for example, analyze "event log data" such as how often students read forum postings and post replies. Project classes must be hybrid freshmen/sophomore courses using outcomes that will be tracked. The investigative team will look for freshmen and sophomore level students who tend to struggle for success. The project hopes to determine from the study which methodology has an impact on student success. Faculty involved teaches three sections of the same course, one is a control group, one class will receive one type of intervention, and the third class will receive another type of intervention. In this study the writer will examine data from three art appreciation classes to determine best ways to engage at-risk students by and through intervention.

Another program aimed in improving young adult literacy on line is a program titled literacy works; Western/Pacific LINCS (part of the National Institute for Literacy's LINCS Project) has partnered with various news agencies in San Francisco, California, there is a Learning Resources site offering web-delivered instruction from current and past CNN San Francisco bureau and CBS 5 - KPIX (CBS Broadcasting) news stories. Intervention resources are key elements in steering at-risk students; they need to know how to make meaning from what they read and visualize; how to communicate what they understand and how to use those media to learn, inform, investigate, reveal, advocate, and organize (Rheingold 109). Other advocates (Kajder, Adolescents and Digital Literacies: Learning Alongside Our Students, 2010), Asheville Middle School in NC, has focused their curriculum on engaging all students. The school uses on-line programs with at-risk students through the Paideia Seminar Cycle project. Paideia Seminars students study and analyze complex texts using active reading strategies, discuss the text from open-ended questions, and write in responses discussed.

Teachers measure students' critical thinking comprehension and literacy skills. Professor on-line are constantly using ongoing formative assessments to evaluate student learning and determine opportunities for differentiation, assignments, discussion forums, chat-rooms and quizzes. Students falling in the at-risk category need continuous practice, review, and assessment. On-going assessment helps determine strengths and weaknesses. This requires fitting the LMS and/or content delivery to the type of students served not students fitting to the system.

Lastly, at risk students in art appreciation classes need to be taught skills on how to locate information and more importantly discern whether the information is research/fact based or opinion based on the internet. Digital-literacy is more than just being able to read tools and comprehend lessons, it is about being able to construct meaning from the text and from visuals, relate for better understanding, organize and create. Students need to gain meaning from all "images" to help construct logic to meaning, make predictions, reread, segment, blend and find familiar word chunks to decode words (Fisher, 2008). .

Student Satisfaction

Students in general should be prepared to perform all digital- literacy skills on-line – technical maneuvering and understanding of tools, reading, writing, and thinking before entering a class. This writer recommends a tutorial for students entering on-line art appreciation classes. Studies conducted to determine why there is a high drop rate among at risk students in on-line courses have summarized students are bored, confused and overwhelmed with text and few visuals. It is wee documented that there are at-risk students and significant class drops in land classes, but research indicates the numbers on-line are higher. According to Kim and Bonk (2006) the reason is that students are bored . Drop rates from e-learning courses were documented around 25%–40% as compared to 10%–20% in on-campus courses in 2004. (Xenos, 2004). Penagiltakopolos and Vergildls (2004) examined the topic doing a comparative study of two classes that included over 1, 230 undergraduates of which 349 dropped. Their findings indicated that there was a larger percentage, 57.4% of drops of students, who were first year students, the remainder ranged in age 30-39. The team surmised that the first-time students had not adjusted to college study and the second and older group had occupational obligations. Most students taking art appreciation classes are freshmen; and t is the contention of this writer that basic literacy of reading, analyzing and time management is the major cause of high drop rates among Freshmen in on-line classes.

According to Levy (2005) student's satisfaction with e-learning is a key indicator in student's decision to drop e-learning courses. He further states that persistent student's over-all drops are significant less. Persistent students usually send e-mail, contact faculty, seek make-up work, and other means to try and survive in the system. Some students' inattentiveness is due to not being stimulated by the wordy or the interactive platform. Research indicates that in the brick and mortar classroom at-risk students needs are satisfied on several levels with several engaged activities; professor provide face to face student learning strategies and stimulation, classroom social and cultural interaction. In e-learning art appreciation classes, at-risk students are at a disadvantage and thirst for that special attention; and unless some attention is given in this area the students may slowly drift. According to Bonk (2004), an effective e-learning environment facilitates student engagement with a community of learners. Engagement of students is an important main principle in any environment, however responsibility of success should not be totally on the student's back; institution delivery of content are important factors.

Implications and Conclusion

At-risk students require e-learning activities that are challenging, visual and actively engaging focusing on the objectives of the lesson going beyond the basic proficiencies. Intervention is believed will improve retention in on-line classroom. The level of intervention will depend on the individual student needs. Research projects similar to Marist College Sakai projects that require an astronomical amount of resources and support are important in order to equalize learning on –line. As universities invest and grow on-line programs, how the course is delivered and presented to assure student learning outcomes must be addressed. Courses must address the same differential needs as brick and mortal classrooms; adjusting on-line courses to meet the need of at-risk students is not difficult, it requires engaging and communicating with students frequently and giving explicit instructions, visuals and responses. Some may consider differentiating instruction time-consuming, citing difficulty monitor all the different groups of students, the wide-range of student ability levels, the modifications not always working, student groups not always working well together. These issues are just as valid in the brick and mortar classrooms and less in cyber classes One of the major components of the cyber class is the ability for the individual student to explore and investigate on their own while strengthening communication with peers.

Students are able to express themselves individually without threatening interference or bias competitive attitudes from peers. Faculty works in the same mode on-line while facilitating the course. Using "internet-based technology" for differentiating instruction avails: for assessing individual student's analytical ability of artifacts frequently; ability to use and recommend more easily diverse supplements and visual images; ability to have individual ongoing summative assessments; and to individualized small group instruction (Cobb 2010). According to The Hanover Research (2009) small group instruction has been shown to be more effective than whole group instruction The same has been proven by this writers in over thirteen years of on-line art appreciation classes involving at-risk college students. The According to the Hanover research article The Times Educational Supplement (2002) reported that e-learning research must involve a mixture of course design issues and pedagogical issues, and that "in order to entice students to participate, a course must offer group activities, structure, stimuli, cajoling by tutors and peers…[and] a purpose or a reason to go online."

The digital generation is motivated and stimulated by new discoveries and technological challenges. An on-line course can offer an aggravated interactive learning challenge; recalling the great educator Piaget who considered students to be like scientists, discovering the world and coming to an understanding by interacting with their environment (Piaget, 1969), the theory rings bells today as institutions investigate e-literacy among at-risk students. With any challenged student they must be motivated to explore and discover, to use support and resources available; their peers must be seen as one of those resources as they understand that virtue classrooms are similar to brick and mortar classes requiring engagement and hard work. On-line art teachers, need to equip students with a new set of skills, which will enable them to locate, analyze, evaluate, and synthesize the vast amounts of information available. Students must become information managers; they must become critically literate in an on-line art appreciation class.

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