The Power of Simulation: Models of Motivation for the Instruction of Information Literacy at Community College Libraries and Learning Centers

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"Tertiary education is more critical the flatter the world gets, because technology will be churning old jobs, and spawning new, more complex ones, much faster than during the transition from the agricultural economy to the industrial one"—Thomas Friedman, The World is Flat.

I.L. in C.C.s

Community Colleges are increasingly becoming the vanguard in the battle for Information Literacy. And, they are doing so in a time of unprecedented growth and diffusion for C.C.s, "Between 1974–75 and 2006–07, the number of community colleges in the United States increased by 17 percent, from 896 to 1,045" ("Institutional Characteristics," 2008). According to *The Condition of Education* (2008), an analysis funded by the National Center for Education Statistics, "In fall 2006, over 6.2 million students…were enrolled in community colleges across the country" ("Executive Summary," 2008). Simply put, if C.C.s can emboss IL competencies into each and every one of their students, C.C.s could produce "over 6.2 million" self-directed, skeptical, curious, IL-competent students a year. These students could in turn "claim higher-value-added work in…new niches" and "shrink the pool of people able to do lower-skilled work" so that the rates with which we remunerate that "lower-skilled work" remains constant (2005, Friedman, pg. 289).

IL instructors at C.C.s are going to have to succeed in motivating students who might be entering college after several years of academic hibernation; or, they will be expected to generate success with students that may not have had the most positive interactions with Education's agents; or, they will have to play "catch up" with students who have graduated from underfunded and poorly-run high schools. Therefore, IL instruction offered at C.C.s must prove fluid and dynamic—motivational—; in addition, it must prove manifold because characteristics that used to apply to the "traditional" college student have little currency with the current iteration. And last, popular studies by several library researchers working in C.C. libraries suggest that if IL instruction is

to prove engaging it must present students with motivational simulations and scenarios culled from the activities and assignments embedded in the curriculum.

The competencies mastered by the IL student take time and effort; the skills transpire throughout the life of the student, and are not mastered in one session. Nor can we afford to relegate them to oblivion once they have been learned, "Information literacy is more than a framework of knowledge and a set of skills, it is an attitude" (2004, Small, Zakaria, and El-Figuigui, pg. 97). Learning to become an IL student is much like learning to decipher the learning style that most influences you as a learner; IL students assess their behaviors through reflexive prompts because a large part of being an IL student involves a critical, evaluative nature. However, whether instructors transmit curriculum in one-on-one sessions or through library tours disguised as scavenger hunts influences the motivation students apply in learning IL lessons and modules. Therefore, IL instruction in C.C. libraries will have to prove motivational, and embed the "search within a relevant problem-solving context" (2004, Small et al, pg. 115).

Studies on Motivation

There were five studies in particular that were deemed to hold specific gravity on the topic of motivation and IL instruction in C.C.s. Ruth Small, Nasriah Zakaria, and Houria El-Figuigui conducted a study that "explored the motivational aspects of information literacy skills instruction delivered by librarians in community college libraries" (2004, pg.96); their study is comprehensive and well-versed on standards used by A.C.R.L. (Association of College and Research Libraries)—and popular, as it appeared in *College and Research Libraries.* Jeff Wahl's study, "Front Range Community College: Increasing Student Database Use Through Library Instruction" was published in *Colorado Libraries* in 2007. The study details how Wahl was able to

increase “database usage…by 372% in one year at a small community college” (2007, pg.13). Similarly, Suzanne Mannan and Jessica Placke’s study, “Reinventing Library Instruction: The Ivy Tech Story,” in *Indiana Libraries* encounters a great deal of success “Mapping” the “ACRL performance outcomes and objectives to library instruction class activites” (2006, Mannan & Placke, pg. 38). Jan Zastrow’s study concerning the “Emergency Medical Services Document Delivery Pilot Project took place…at Kapiolani Community College in Honolulu, Hawaii” (1996, pg.20); it was published in *Computers in Libraries* and discusses “specifically teaching students how to search the CINAHL allied health database on CD-ROM” (1996, pg. 20). Last, Sandra Marcus and Sheila Beck’s study conducted at Queensborough C.C. contrasted the “results of a traditional librarian-led orientation tour” with those of a “self-guided treasure hunt” to effectively introduce students to the full range of services at their disposal (2003, Marcus & Beck, pg. 23).

Methods, Results, & Implicit Comparisons

Sandra Marcus and Sheila Beck’s study conducted at Queensborough C.C., “A Library Adventure: Comparing a Treasure Hunt with a Traditional Freshman Orientation Tour” (2003), concludes that a scenario involving a treasure hunt successfully motivates students to familiarize themselves with the library and its services. Moreover, they recommend treasure hunts as an anti-“prosaic,” or activity that generates great student interest while at the same time proving out of the ordinary and unorthodox (2003, pg.25). Marcus and Beck attribute the success of their study to discovering that “theorists did strongly support hands-on activity in the presence of adequate motivation” (2003, pg.25). A simulation, disguised as a “mystery,” that can “focus on locating a missing student,” or present students with “Clues…located at seven stations” seems like an innovative venue for bibliographic instruction (2003, pg. 27).

But, is it educational? Marcus and Beck assure us that the "authors designed the clues with careful attention to educational objectives" (2003, pg. 27). They measured their effectiveness by administering a short comprehensive test of eight questions to students that completed the treasure hunt: "The first four items measured educational outcomes; the second four items gauged attitude" (2003, pg. 28). Their findings indicate

> The students who took the self-guided tours did score higher on the first four questions. Fifty percent of the students on the self-guided tour answered at least three of the four questions correctly whereas only 40 percent of the students on the traditional tour achieved this result. (2003, Marcus & Beck, pg. 31)

But, let us not mistake the delineation of a library's physical and logistical borders with bona fide Information Literacy. In other words, just because a person enters a library and knows that the Circulation desk is located behind Security, doesn't mean that they exhibit the hallmarks of an Information Literate student.

However, there have been several researchers that have had great success collecting quantitative data on how best to motivate students to engage with the library and take full advantage of its services, like inter-library loan and on-line databases. For example, Ruth V.Small, Nasriah Zakaria, and Houria El-Figuigui conducted a study that "involved observations of ten teaching episodes of ten librarians at seven community college libraries over a one-year period" (2004, pg. 102). Their study, "Motivational Aspects of Information Literacy Skills Instruction in Community College Libraries," published in the March 2004 edition of *College & Research Libraries* examines "Instructional methods used to effectively present information and motivate student learning" (2004, pg. 96). More succinctly, their study attempts to delineate whether students are more affected by extrinsic or intrinsic motivators by surveying actual students that have just had IL sessions, and by surveying the instructors, that have just facilitated IL sessions, as well.

The most successful of the five studies discussed centers around a single librarian increasing database usage by “372%” at Front Range Community College in Boulder, CO (2006, Wahl). But Wahl has to earn his increases, which do not come easy; Wahl manages to be successful with the IL program he creates because he allows for self-reflexive assessments does so by assessing the functionality of the program he has created for the FRCC library high degree of reflexive thought

The idea that community colleges should effectively incorporate computers and technology into their curriculum is not new. The degree to which they do so is still a matter of debate and controversy. This matter was pressing even in 1971, years before the personal computer, Internet, and technological literacy were a part of the higher education landscape. That was the year, however, that J.R. Hill published "The Computer: A Versatile Tool for the Community College," in the *Peabody Journal of Education.* In this article, Hill posits many prescient points. Among them is the idea that "the community college has a responsibility to promote computer literacy, i.e. to provide all students with a general understanding of computers and the ways they are used" (1971, par.2).

Moreover, Hill argues that there are really "two diverse uses in the computer as instructional environment...(1) as a subject of instruction;(2) as a tool for instruction" (1971, par. 4) In addition, the curriculum of Hill's two educational directives would emphasize "(1) the basic concepts of a computer, its development and use, (2) the uses, and consequent effect on the student, in his discipline or field of interest, (3) the social impact of advances in computer technology" (1971,par. 8). Hill's last two educational directives could be seen as precursors to information literacy instruction because they stress the importance of "the uses, and consequent effect on the student" and "the social impact of advances."

In other words, as early as 1971, Hill presaged that showing students how to utilize a computer was not enough; Hill was also advocating that community colleges

engage with the “social impact” and the “uses” of computers as they relate to that students’ “discipline or field of interest”. What Hill was telling us was that we were going to get over the technological awe associated with computers pretty quickly. In fact, the personal computer would only really become popular and accessible in 1981 (IBM's 5150) and then in 1984 with Apple's Macintosh. Before that, computers were gigantic calculator lockers cooled by tons of ice with crazy acronyms like ENIAC for a name. If we take the production of the Apple Macintosh as the starting point of the personal computing revolution, then the advances that have transpired in personal computing have done so in more or less 15 years.

Perhaps, the largest skill that information technology instructors can lend to students is how to properly scour databases and perform cogent searches. In the 2007 issue of *Colorado Libraries* (v.33, No. 3) “Front Range Community College: Increasing Student Database Use Through Library Instruction,” Jeff Wahl talks in great detail about teaching to increase information literacy, especially as it relates to increasing database usage. Wahl discusses how he "increased by 372% in one year at a small community college" (2007) the use of electronic databases. And, Wahl did by creating a strategy of instruction and services that would be offered by Wahl. Wahl was able to offer "75 presentations to a total of 1,519 students" (2007, pg. 14) and offers some very good, useful tips on bibliographic instruction. One of those tips are to "present for a few minutes and then stop to allow students to run their own searches fora few minutes" (2007, pg.15). Another great tip deals with presenting less information and databases at the same time, "the lesson would be more effective if the search examples I demonstrated were related to actual topics that students would be required to research for classes" (2007, pg. 15).

Information literacy instruction at community colleges sets a premium on how technology is prescient and ubiquitous. In the Fall 2003 of *Florida Libraries* Edward Erazo wrote an article titled "Using Technology to Promote Information Literacy in Florida's Community Colleges." Erazo is an academic librarian at Broward Community College. Erazo is very erudite about new technologies being used and established in Florida Community Colleges. By far, the most effective way to "promote information literacy" would be with "web sites"(2003, par.3). Erazo also found power point presentations useful and talked in great detail about online tutorials;but, the topic that grabbed my attention and seemed most to interest Erazo was virtual reference and streaming video. Erazo makes a strong argument that at least community college libraries should have streaming video and that "A ten minutes video orientation at Seminole Community College covers much of the information that would be addressed in an in-person orientation in a library or learning resource center" (2003, par. 15).

The cost of tuition at New York public colleges has been increasing at an alarming rate since the 90's. In 1991, "tuition at public colleges increased by 12 percent, the biggest single-year jump since 1983" ("Bargains…," 1991). By 2008, the College Board was affirming what U.S. parents had already been feeling in their pockets for almost 20 years: "tuition costs rose slightly faster than the Consumer Price Index";"the average in-state tuition and fees at public four-year institutions increased by 6.4 percent" ("Downturn…," 2008). This means that price of tuition at New York public colleges rose at a higher rate than the rate of inflation.

Students in the U.S. already shell out thousands of dollars for their college education. Should they also have to give an arm, a leg, and a spleen to get a college education? Indeed, one of the preliminary criteria guiding students' (and their parents')

decisions to attend an institution of higher education (regardless of type, i.e. private college, senior college, or junior college) is the economic impact that the tuition to attend that institution will have on the rest of their lives. It is no surprise, then, that many students have found creative ways to dodge the tuition bullet, or that community colleges are facilitating a symbiotic solution.

According to Beth Frerking, a correspondent for the *NY Times*, "as four year universities have become more expensive, good students who want to save money are turning to community colleges to earn their core undergraduate credits" (2007, par.2). More importantly, "according to a report in October by the College Board, community colleges charge an annual average tuition of $2, 272 compared with $5, 836 at state universities and $22, 218 at private institutions" (2007, par.2). So, graduating high school seniors are saving thousands of dollars by completing their core curriculum at community colleges. Then, after having demonstrated they are senior college "material," they are transferring to four-year state or private institutions that have articulation agreements (which delineate the protocols for "reciprocity" between institutions) with community colleges.

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