Does online learning impede degree completion? A national study of community college students

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ABSTRACT

Using a nationally representative sample (The Beginning Postsecondary Student Survey, BPS 04/09), this study examined the associations between enrollment in credit-bearing distance education courses and degree attainment. We sought to determine whether US students enrolled in distance education courses during their first year of study at a community college tend to complete a degree (certificate, associate, or bachelor's) at significantly lower rates than those who were not enrolled in such courses or programs. Consistent with previous large-scale research at the State level in Virginia and Washington (Smith Jaggars & Xu, 2010; Xu & Smith Jaggars, 2011), we hypothesized that community college students who participate in distance education in early semesters graduate at lower rates than students who do not. Contrary to expectations, the study found that controlling for relevant background characteristics; students who take some of their early courses online or at a distance have a significantly better chance of attaining a community college credential than do their classroom only counterparts. These results imply that a new model of student retention in the age of the internet, one that assumes *transactional adaptation*, may be warranted.

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1. Introduction

Numerous recent reports have indicated that the United States is not producing sufficient numbers of college graduates and is thereby losing competitive advantage in the global economy (Hebel, 2006; Kelderman, 2013). These worries are magnified when the subject of investigation is the community college where completion rates are historically lower than in baccalaureate institutions (Goldrick-Rab, 2010). With six year national completion rates of approximately 20%, justifiably or not, community colleges have been the target of a great deal of criticism. This is particularly concerning given that national policy commentators continue to emphasize that community colleges are crucial to supporting the US economy (The College Board, 2008). Furthermore, spending on community college students has had a particularly poor return with regard to degree attainment. For example, the Delta project (Kirshtein & Wellman, 2012) concluded that "nearly half of instructional spending in community colleges goes to students (and credits) that do not attach to a degree or certificate" (p. 16).

Low rates of degree completion raise questions about efforts to increase access to higher education for community college students. We know from more than a decade of research that the fastest growing segment of higher education is distance education carried out through online learning (Allen & Seaman, 2011). Various estimates indicate that between 25% and 33% of the college students in the US are enrolled in at least one online course (Allen & Seaman, 2013; NCES, 2013). These estimates equate to between 5.5 and 7 million college students yearly nationwide, the majority of whom are community college students. In recent years the growth rate of credit-bearing online course enrollments has been roughly ten times the growth rate of US higher education generally (Allen & Seaman, 2011). In the most recent year for which data is available the population of online learners grew at over 9% while higher education generally saw a decline in enrollments (Allen & Seaman, 2013).

The sizable growth in online course and program offerings in community colleges across US coupled with unprecedented low graduation rates among community college students raises a series of unsettling questions such as: Has increased access via online learning simply

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resulted in more college students rather than more college graduates?; Does online learning merely increase a costly population of higher education learners without increasing the efficiency or effectiveness of college degree completion? Given the increased flexibility and convenience that is often cited as an advantage of online learning, this seems somewhat difficult to believe. However, significant evidence exists to suggest that online learning outcomes at the community college level are actually worse than comparable classroom based outcomes.

The purpose of the current study is to examine national data to examine whether evidence exists that can help to address these questions.

1.1. Conceptual perspectives

The attainment of college credentials is closely associated with and contingent on college retention, persistent, and departure. Although no specific model exists for online education, retention research in higher education more generally has been a focus of study for decades (Bean & Metzner, 1985; Pascarella & Terenzini, 1979; Tinto, 1975; Tinto & Cullen, 1973). Two primary models have been developed to explain retention patterns among traditional college students (e.g. Tinto, 1975; Tinto, 1998) and non-traditional students (e.g. Bean & Metzner, 1985). In essence Tinto's model depicts the decision to complete or depart from college as a matter of students' adaptation to the institution of higher education and the achievement of a sense of academic and social integration within the cultural setting of a college campus. Those students who are able to adapt and attain a sense of academic and social integration are retained and those who fail to adapt drop out.

For non-traditional learners, primarily commuter students in Bean and Metzner's (1985) model, the social dimensions affecting the decision to stay or leave college are largely replaced by psychological and environmental ones. Noting that commuter, part-time, and other non-traditional students frequently do not relocate to campus the work in this area focuses on different factors impacting the college departure decision. Encouragement from family, employers, and co-workers and perceived utility of coursework shapes the options and choices of non-traditional students far more than fitting into the social milieu of a college campus (Bean & Metzner, 1985). The retention and success of non-traditional students is thus seen to be dependent on psychological, pragmatic, and financial factors. Non-traditional students who manage to adapt to the demands of work, family, and college are retained and those who fail to make the necessary adjustments that fit participation in college into their lives depart.

An updated and more sophisticated conceptual model is found in the work of Falcone (2011) who adds dimensions absent from prior work. In Falcone's model students bring forms of situational self-efficacy (habitus), various forms of capital (social, economic, cultural), and memberships in internal and external communities that shape goals and commitments to higher education and other priorities. All of these in turn impact students' experiences and perceptions of the academic and social realities of college life in both traditional or non-traditional contexts. These experiences shape the students perception of academic and social fit with higher education which then affects decisions to continue, to transfer, to attain a specific objective (e.g. a degree or certificate), or to depart (see Fig. 1).

None of these models (traditional/non-traditional/updated) explicitly reflect forms of institutional response to students, for example, the provision of online learning environments in higher education. The more flexible pathways afforded through internet-based forms of distance education might, however, enable college students to integrate more successfully the academic, social, psychological, professional, and familial dimensions of college participation. These new pathways and other categories of techno-social institutional adaptation may require a re-thinking of how we view not only retention, but also persistence, degree completion, and other variables related to educational attainment in the rapidly expanding sphere of online learning.

Conspicuously absent from previous accounts of college student retention is the interaction between institutional and individual adaptation. Until recently there appears to be an unexamined assumption in the conceptual literature that individual students, be they
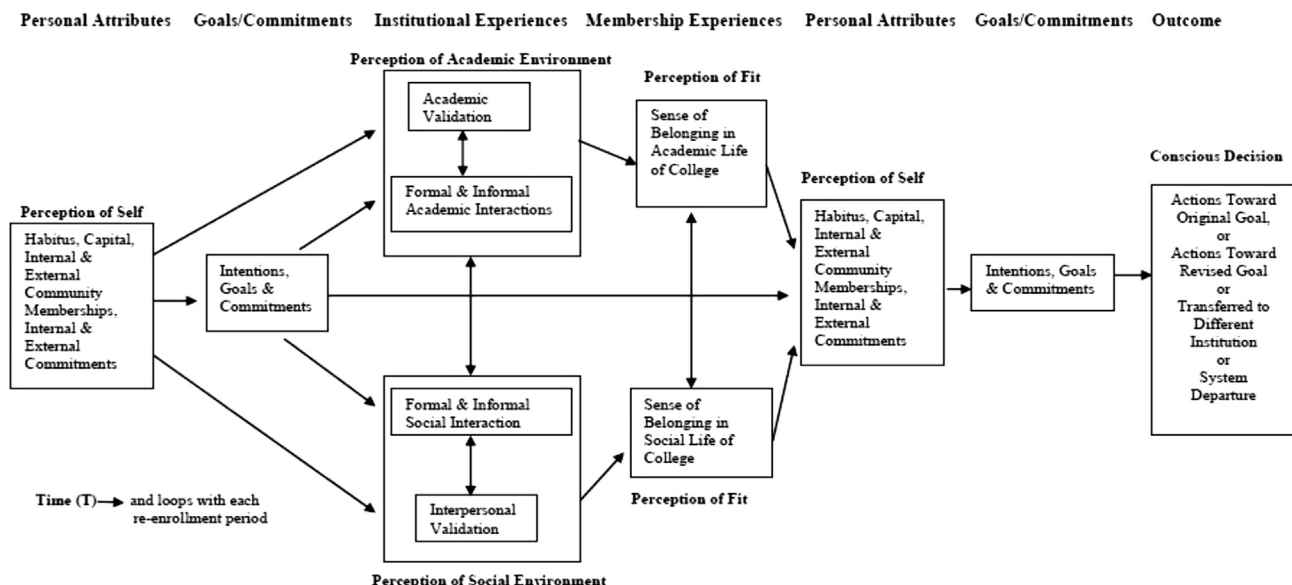

Fig. 1. Falcone's model of student persistence in higher education.