

Mar 26th, 5:00 PM - 6:00 PM

Scheduled Check-Ins Increase Student Completion of Assignments in an Online Non-Majors Science Course at an HBCU

Timothy D. Champion
Johnson C Smith University, tchampion@jcsu.edu

Follow this and additional works at: <http://digitalcommons.georgiasouthern.edu/sotlcommons>

 Part of the [Curriculum and Instruction Commons](#), [Educational Assessment, Evaluation, and Research Commons](#), [Educational Methods Commons](#), [Higher Education Commons](#), and the [Social and Philosophical Foundations of Education Commons](#)

Recommended Citation

Champion, Timothy D., "Scheduled Check-Ins Increase Student Completion of Assignments in an Online Non-Majors Science Course at an HBCU" (2015). *SoTL Commons Conference*. 40.
<http://digitalcommons.georgiasouthern.edu/sotlcommons/SoTL/2015/40>

This presentation (open access) is brought to you for free and open access by the Programs and Conferences at Digital Commons@Georgia Southern. It has been accepted for inclusion in SoTL Commons Conference by an authorized administrator of Digital Commons@Georgia Southern. For more information, please contact digitalcommons@georgiasouthern.edu.

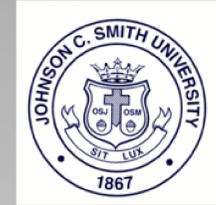
Scheduled check-ins increase student completion of assignments in an online non-majors science course at an HBCU

2015 Scholarship of Teaching and Learning Commons Conference- Poster 1965

Timothy D. Champion

Natural Sciences and Mathematics Department; Johnson C. Smith University; Charlotte, NC 28216

tchampion@jcsu.edu



Abstract:

A continuing problem in online courses is student failure to attempt and complete assignments required in the course. In online classes, participation in assignments assumes an even larger importance than in a face-to-face class. This problem has been observed in online offerings of LS 135, Science, Technology and Ethics, a “non-majors” class meeting the general education science requirement at Johnson C. Smith University (JCSU). JCSU is a historically black university (HBCU) serving a primarily undergraduate population which is predominately African American. A strategy of requiring 4 scheduled check-in dates was implemented in the summer 2014 online offering in an attempt to increase student participation and success in the class. Check-ins could be done by online chat, phone, or e-mail, but were most commonly done via face-to-face meetings (most students were local and taking the online class only for the convenience of no class meetings; many were also taking face-to-face classes). The results obtained were a significant increase ($p < .05$) in percent of attempted assignments (78%) compared to this instructor’s previous summer online offering of the course (33%).

Hypothesis:

Our hypothesis was that student completion of assignments in this online course could be improved by requiring weekly check-ins with the instructor.



History of Course:

LS 135 (Science, Technology and Ethics) is a three credit hour, typically three contact hour distillation of two four credit hour, 5 contact hour courses (LS 241-242). These two courses were designed in the early 1990s as part of a comprehensive redesign of the general education program at JCSU.

The descriptions of the LS 241-242 were largely written by a committee which ignored much of the input from the science faculty. The courses were saddled with the burden of providing comprehensive science content coverage (in the physical sciences in LS 241 and in the life sciences in LS 242) in addition to emphasizing science methods, science-technology-society interactions and ethics training and discussion (in the context of scientists’ practices and societal decisions about technology).

The reduction to a single course occurred once it became clear that the overly large general education program (64 credit hours) was negatively impacting both the quality of majors and the graduation rate.

The new LS 135 course then became a course focused on student understanding of science methods, data analysis, and the decision making in society regarding scientific and technical issues. The content used to illustrate this course became the choice of each individual instructor.

Development of the Online Version of the Course:

The author developed the online version of LS 135 in the spring and summer of 2010 as part of the development of online versions of existing courses for the new Metropolitan College at JCSU, which focused on adult and distance learners. The course is designed to be completed in six weeks. Content for the course is drawn from astronomy, physics, chemistry, and biology.

The most common of the assignments in the new course involved learners collecting data using simulations of lab experiments, primarily selected from those available at the PhET website (phet.colorado.edu). Students are required to collect data (often operating in inquiry mode; i.e., making more choices about experimental parameters and variables) and submit a brief laboratory report in a standard format (data analysis using spreadsheets and graphing are encouraged).

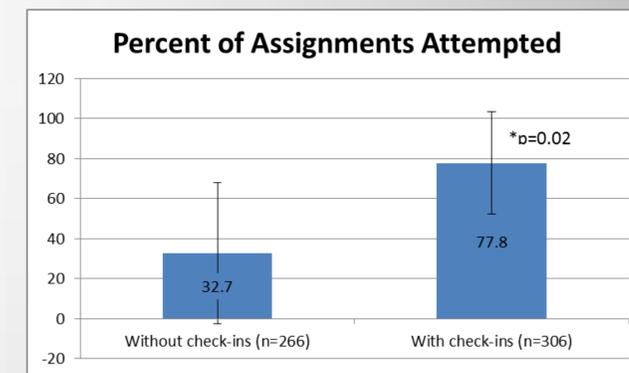
Other assignments include weekly reports on science in the media (broadly defined) and commenting on other student’s posts in this area. Further assignments involve data analysis, critiquing astrology as a science, and demonstrating understanding of specific content.

Observations Leading to the Current Study:

The author offered the course during the fall and spring terms of the JCSU Metropolitan College in 2011-2012. The participants, mostly adult learners from the local area, struggled with the technology challenges of the course. Based on the author’s recommendation, the Metropolitan College switched to hybrid and on-ground offerings of LS 135.

In the summer session of 2012, the author offered LS 135 online. It was noted that all of the LS 135 online students were also taking on-ground courses at JCSU that summer. Despite this, many students still struggled to complete assignments. Thus, in summer 2014, the author instituted the requirement for 4 check-ins distributed across the course calendar.

Results:



Conclusions:

It is clear that check-ins had a profound effect on student completion of assignments. However, as in the past, the students enrolled were physically located near or on campus and the majority of check-ins were face-to-face. A rigorous study of this technique in a online class with more distance learners is desirable.

References:

Wieman, CE; Adams, WK and Perkins, KK (2008). PhET: Simulations that enhance learning. *Science* **322** (5902), pp. 682-683. [DOI:10.1126/science.1161948]

Acknowledgements:

Mott University Professorship