5th International Conference on Higher Education Advances (HEAd'19)
Universitat Politècnica de València, València, 2019
DOI: http://dx.doi.org/10.4995/HEAd19.2019.9234

Old Dogs Can Learn to Like New Tricks: One Instructor's Change in Attitude to Online Instruction from 2009-2017

Thomas V. O'Brien, Holly A. Foster
College of Eduction and Human Sciences, The University of Southern Mississippi, USA.

Abstract

This qualititative case study examined a veteran instructor's change in attitude about university online instruction. After a short review of the literature and explanation of the project, researchers conducted a content analysis of an instructor's annual self-reports about his online teaching of a graduate course in the social sciences. The self–reports were written between 2009 and 2017. The researchers also examined students' end-of-semester evaluation scores about the course and instructor. Results suggest that the instructor began online teaching with a mixed attitude. After four years of teaching the online course (delivered once each spring) the instructor reported more about content issues and less about online delivery. In the final the period (2016-17) the reseachers found that the instructor was invested fully in online delivery. Although the study is not generalizable, its results suggest that instructors who stay with an online system over an extended period of time may gain more confidence in the efficacy of online delivery. The findings complement previous findings in the literature about faculty attiudes toward technology use in instruction.

Keywords: *Faculty Attitudes; Higher Education; Online Instruction.*

1. Introduction

In less than a decade, online teaching and learning has gone from a encouraged option to a default mode of delivery at many conventional colleges and universities around the globe. While methods and systems of online teaching vary considerably—and while some subject areas and disciplines have been impacted more than others—online instruction, for good or bad, is here to stay. That is not to say that there has not been reluctance, if not resistance in moving to a digital pedagogical platform as many professors and students still prefer traditional face-to-face instruction. Neverthless, rapid advances in digital technologies and neoliberal forces in the global economy have combined to make learing online and earning a college or advanced certificate or degree online, regardless of location, an increasingly viable and attractive choice. Meanwhile, higher education administrators, faced with ever-increasing operating costs, have found some relief in online delivery. Courses taught completely online have been found to take pressure off investment in infrastruture; they also can enroll more students per course than in traditional classrooms and be delivered at a twenty-five percent savings (Quinton, 2013). Just as revolutionary is technology's impact on the dissemination of peer-reviewed knowledge, and indeed, information, filtered and unfiltered, of all kinds. In the academic setting, faculty and students alike can now undertake a review of the literature or stay current in their respective fields' review without ever stepping into a library or opening a hardcopy journal.

This paper takes stock of how the online delivery of a graduate level course by one instructor over a nine-year period was viewed over time by that instructor. Making use of content analysis methodology, we reviewed documents produced by the instructor each year about teaching the online course. We also examined end-of-semester student evaluations of the instructor's teaching between 2009 and 2017. The results suggest that from 2009-2011 the instructor had a mixed attitude about online teaching, reporting that online delivery was less effective than face-to-face instruction. During the middle third of the timeframe (2013-2015) the instructor reported less about online delivery issues, and in the final third (2016-7) appeared to be fully invested in online delivery. Although these results are not generalizable, they suggest that instructors who stay with an online system over an extended period of time may gain more confidence in the efficacy of online delivery.

2. Review of the Literature

Psychologists have long held that attitudes—associated beliefs and behaviors towards an object—lack stability because they are vunerable to environmental influences (Davis, 1965). Classic experiments by Asch (1956) for example, demonstrated that *compliance* is a basis for attitude change. Following Asch, other researchers identified other bases for attitude change, such as *identification*, *internalization*, and *emotion* (Breckler & Wiggins, 1992).

Additionally, some attitudes and beliefs are more resilent to change than others. Political scientists Sabatier & Weible (2007), for example argued that deep core, *fundamental* beliefs (such as one's views on human nature) are highly unlikely to change. Similarly resistant (but less so than fundamental beliefs), are *policy core* beliefs (such as the proper balance between government and free market). Sabatier & Weible (2007) concluded that *secondary aspects* of a belief (such as those related to the implementation of a policy) are most likely to change. For example, as one learns about specific effects of, say, regulations versus economic incentives, one may change his attitude about government oversight. Finally, some have suggested that age may be a factor in attitude change; arguing that the older a person is, the less likely it will be that that person is able to accept or undergo a change in belief or attitude as compared to someone younger.

Applying these general concepts specifically to *attitudes toward online teaching and learning*, attitude change may be contingent on: (1) technology's environmental influences, (2) the depth of belief (along the fundamental-to-secondary-aspect coninutum) regarding what constitutes proper instruction, and (3) one's age. Fortunately, several studies have been published that test the veracity of these postulates. Khalil (2013) studied the phenomenon of faculty's emotional and behavioral resistance to technology use in higher education and found that frustration can be minimized and reluctance (or unpreparedness) can be overcome through active participation with the technology. This notion of participation is consistent with the findings of Kahn and Pred (2002) who reported that carefully designed hands-on faculty workshops—that included mastery of software, adaptating technology for specific disciplines, website design, and electronically mediated course delivery—led to faculty satisfaction with the workshops, as well as attitudinal and usage changes. Similarly, Buckenmeyer (2009) and Chen et al. (2017) found that if certain conditions exist, notably professional development and continuous access to resources, university faculty were more likely to accept and use appropriate technologies in significant instructional ways. Taken together, these studies suggest that faculty attitudes about the use of technology for teaching/learning are open to positive change if steps are taken to provide a technology-robust infastructure and continuous technical hands-on support. Although the literature on faculy attiude change *vis-à-vis* online instruction is silent on core beliefs and age, it nevertheless leaves an indirect implication that attitudes/beliefs about "proper" instruction (traditional versus online) are downstream on the fundamental to secondary aspect continum, and that age may be less of a factor than hypothesized.

3. Research Design and Details

3.1. The Online Course

This study focused on a graduate course taught seven times over a nine-year period by one instructor at a mid-sized public university in the southern United States. The course, *Critical Issues in American Education (CIAE)*, is a requirement for students pursuing a Doctor of Philosophy (Ph.D.) in Education and a Ph.D. in Higher Education. The semester-long course, divided into four units, requires students complete weekly readings, view YouTube video content (also weekly), write four papers (one for each completed unit), and write an end-of-semester review of an academic book approved by the instructor. A key feature of the course are weekly seventy-five minute online *voice chats*, when the instructor and students meet synchronously online and discuss the content assigned for each week. An excerpt from the *CIAE* syllabus of a week's schedule of assignments can be found in Figure 1.

Week 14	***Globalization & Education***	***Chat from 5-6:15 pm***
Videos:	*1. Looking to 2060: A Global Vision of Long-term Growth (3:28)* *2. Globalization linked to education (4:10)* *3. Noam Chomsky: Discussion on Globalization? (10:58)* *4. Interview with Gary Becker: Globalization and Inequalities (3:45)* *5. Thomas Friedman | Globalization of Higher Education (45:44)* *6. Joseph Stiglitz on Globalization & Its Discontents Revisited (33:05)* *7. Naomi Klein: Disaster Capitalism (7:07)*	
Readings:	Klein, Chapter 12 (pp. 373-98); Bauman, Chapter 14 (pps. 443-455).	
Writing:	Essay 4 (Globalization & Education) due 4/29 by 11:59 PM CST.	

Figure 1. Excerpt from CIAE syllabus from Week 14, 2018.

From 2009-2016 the course was delivered through the *Blackboard* Learning Management System (LMS) and in 2017 through the *Canvas* LMS. Chats were hosted through *Blackboard's* partner *Horizon Wimba* and then through *Canvas's* partner, *Big Blue Button*. In spring 2016 and spring 2017 the instructor did not teach *CIAE*.

3.2. The Instructor

This study focused on one instructor, a tenured, full professor (white, male) who specializes in the social foundations of education (philosphical, historical, political). The professor had been hired by the university in the summer of 2008. From 2008-2015 the professor also served as head of the department. At the beginning of the period of study (2009) the instructor was 49 years old and in his seventeeth year as a university professor.

3.3. Data from Annual Self-Reports

To assess if a change in the instructor's attitude occurred over the ten-year period, the researchers examined ten annual review reports submitted between 2009 and 2018. These self-reports were written by the instructor and submitted to a faculty departmental review committee annually as required by the institution. In each report the instructor reviewed in writing his performance in the categories of teaching, scholarship and professional service duing the calendar year, and set goals for the upcoming year. To assess any changes in attitude, the researchers looked specifically at the instructor's explanations of performance related to teaching and teaching goals set for each upcoming year.

In the fall of 2008 the instructor agreed to teach *CIAE* in an online format and prepared to offer the course in the spring of 2009. He taught the course every spring semster until 2016 [due a sabbatical and Fulbright semester] and resumed instruction in 2018.

4. Findings

The 2009 Annual Self-Report, written seven months after the course had ended, contained descriptive comments, some indicating hopefulness about learning online instruction, and some identifying it as an inferior means of instruction compared to traditional instruction:

> *[This] was my first opportunity … to teach an online course [in this format and at at this university), allowing me to learn about Blackboard and Horizon Wimba. …. On the official student evaluation of instruction [CIAE] students scored the course a 4.5 [out of 5.0] and [face-to-face] students scored [my other courses] 4.65. Truth be told, face-to-face teaching is superior to online teaching, but online instruction is not as bad as I once thought.*

Also in the 2009 self-report the instructor set three goals for teaching in 2010, including to:

> *Further develop my online teaching ability by increasing my understanding and abilities to use Blackboard and Horizons Wimba*.

Like the 2009 report, the 2010 report also repeated the teaching goal to improve online teaching ability. It also referenced students evaluation scores and repeated a sentence from the 2009 report:

> *On the official student evaluation of instruction, (Item 15) CIAE students scored the course a 4.62 (up from 4.50 in 2009)…Truth be told, face-to-face teaching is superior to online teaching, but online instruction is not as bad as I once thought.*

The 2011 report repeated the teaching goal to improve online teaching ability. The 2011 report once again referenced student evalution scores for their improvement on the five-point

scale. Finally, a new idea (in bold below) was replaced the phrase *but online instruction is not as bad as I once thought* and added to the original sentence stem:

> *On the official student evaluation of instruction, (Item 14) CIAE students scored the instructor a 4.71 . . . In my view, face-to-face teaching is preferable to online teaching,* ***but online instruction has its advantages for students who are not near campus****.*

Similar to earlier reports, the 2012 report noted changes in scores for *CIAE* on the student evaluations relative to previous semesters. The 2012 report also seemed more energized about the *CIAE* course, perhaps because that year a change in the Higher Education Ph.D. curriculum moved *CIAE* from an elective to program requirement.

> *I am changing parts of CIAE in order to broaden its relevancy for the [Higher Education] students who now take the course as a program requirement.*

The goals section of the 2012 report also reflected this new energy. Specifically, for his first teaching goal the instructor used the verb *master* rather than *increase understanding of* a newer version of the Blackboard LMS

> *Master Blackboard 9.0 and further develop materials for CIAE that are more inclusive of education at all levels.*

The 2013 report repeated the 2012 goal stated above. However, for the first time there was no mention of student evaluation scores. Instead the instructor reported on changes in the course content:

> *I changed parts of CIAE in order to broaden its relevancy for* [the new] *HE students who now take the course and the changes have been well-received.*

The 2014 and 2015 reports provided little data on the *CIAE* course, only mentioning it briefly along with another graduate level online course he had developed an taught called *Race and Education in the American South*. In 2016 and 2017 the instructor did not teach *CIAE*. During this time the university dropped *Blackboard MLS* and moved to *Canvas MLS* to deliver courses online. Starting in August of 2017, however, the instructor developed and taught three new graduate courses online, and used a similar design (Common reading, YouTube videos, weekly chats, etc..) to that of *CIAE*. In the 2017 report he wrote:

> *A good amount of time went into the two graduate courses because [k-12 Education Policy] was a new course for me to develop (and prepare for online delivery). While I have taught [History of Higher Educaiton] several times, the course was offered in an online format for the first time, and this required some time to convert to that format.*

He continued:

> *There were some kinks in the delivery of . . . courses.. . , but these problems were worked out during the semester. Student complaints about online are evident in some of the comments in the student evaluations. Nevertheless, in my view, both graduate courses (711 and 722) should continue to be offered in an online format.*

5. Analysis

5.1. Discussion

Taken as a whole, a content analysis of the instructor's annual reports between 2009 and 2017 provide evidence of a change in attitude and perpective about online instruction. At the start of his experience with online teaching the instructor had mixed feelings about the about teaching online. This conclusion is based on his use of the phrase, *face-to-face teaching is superior to online teaching*, which appeared in his 2009 and 2010 reports. In both reports, however, the instructor added to the phrase, *but online instruction is not as bad as I once thought,* an assertion that implies that he was skeptical, but nevertheless trying to keep an open mind about online instruction. By 2011 the instructor had replaced *but not so bad as I though*t with *but online instruction has its advantages for students who are not near campus*, a hint that he was looking more outward toward students and may have even seen more value in the delivery than previously. Throughout the first period (2009-2011) the instructor also set yearly goals, stating his intention to improve on his use of *Blackboard* and *Horizon Wimba*.

The instructor's words about online teaching also correlated with changes in student evaluations of *CIAE* relative to face-to face courses he taught that semester. Specifically the more that scores in the online course aligned with face-to-face courses taught that semster, the more positive the annual self–review *vis-à-vis* online teaching.

Table 1. Comparion of Student Evaluation Scores for online course (CIAE) versus Traditional Courses by Spring Semester, 2009-2013.

Annual Report Year	CIAE Score Item 14*	CIAE Score Item 15*	Score on Courses taught**
2009	4.75	4.50	4.80
2010	4.54	4.62	4.67
2011	4.71	4.71	4.61
2012	4.83	4.33	4.52
2013	4.63	4.18	4.40

Source: Univeristy Student Evalutions, 2009-2013.
* Item 14 - Overall rating of the instructor; Item 15 - Overall rating of the course.
** Mean scores of Items 14 and 15 from face-to-face courses taught in spring of that year.

During the middle third of the period under study (2012-2015) the instructor reported less about online delivery's effectiveness and more about changes he made to course content. During this period he reported less about online delivery issues, and even less about student evaluation scores.

In the final third (2016-17) the instructor appeared to be fully invested in online delivery. Even amidst *kinks in the delivery* and end-of-semester student complaints about the new platforms (Canvas, Big Blue Button), the instructor forged on and called the for the graduate course work to continue to be offered in an online format.

5.2. Conclusions

The results above support Khalil's (2013) finding that active participation can minimize faculty reluctance to new technology. The results also complement the findings of Kahn and Pred (2002) and provide further evidence that mastery of new technology also impacts faculty satisfaction and helps to soften faculty attitudes about its use in instruction. These results are also consistent with studies by Chen *et al.* (2017) and Buckenmeyer (2008) that providing readily available hands-on support factor into more acceptance and use of online technologies for instruction. While faculty may be skeptical about new technologies or new teaching methods, active participation with these technologies or formats may positively impact faculty attiutudes and perceptions.

References

Asch, S. E. (1956). Studies of independence and conformity: A minority of one against a unanimous majority. *Psychological Monographs: General and Applied*, *70*(9), 1-70. doi: 10.1037/h0093718

Breckler, S. J., & Wiggins, E. C. (1992). On defining attitude and attitude theory: Once more with feeling. In A. R. Pratkanis, S. J. Breckler, & A. G. Greenwald (Eds.) *Attitude Structure and Function* (pp. 407–427). Hillsdale, NJ: Erlbaum.

Buckenmeyer, J. (2008). Revisiting teacher adoption of technology: Research implications and recommendations for successful full technology integration. *College Teaching Methods & Styles Journal*, *4*(6), 7-10. doi:10.19030/ctms.v4i6.5554

Chen, K.Z., Lowenthal, P. R., Bauer, C., Heaps, A., & Nielsen, C. (2017). Moving beyond smile sheets: A case study on the evaluation and iterative improvement of an online faculty development program. *Online Learning*, *21*(1), 85-111. doi:10.24059/olj.v21i1.810

Davis, E. E. (1965). *Attitude change: A review and bibliography of selected research*. Paris: Unesco.

Kahn, J. & and Pred, R. (2002). Evaluation of a faculty development model for technology use in higher education for late adopters. *Computers in the Schools*, *18*, 4, 127-150. doi:10.1300/j025v18n04_01

Khalil, S.M. (2013). From resistance to acceptance and use of technology in academia. *Open Praxis*, *5*(2), 151-163. doi:10.5944/openpraxis.5.2.5

Quinton, S. (2013, April 25) How online education saves everyone money. *The Atlantic*, Retrieved from https://www.theatlantic.com/business/archive/2013/04/how-online-education-saves-everyone-money/426024/

Sabatier, P.A. & Weible, C.M. (2007). The advocacy coalition framework: Innovations and clarifications. In P.Sabatier, (ed.). *Theories of the Policy Process* (2nd ed.) (pp. 189-220). Boulder, CO: Westview.