

University of Texas at Tyler Scholar Works at UT Tyler

Education Faculty Publications and Presentations

School of Education

Spring 2016

Looking Through the Webcam Lens: Reflections on Moving Assessment Courses from Face-to-Face to Online


Jessica Rueter

The University of Texas at Tyler, jrueter@uttyler.edu

Frank Dykes

University of Texas at Tyler, fdykes@uttyler.edu

Follow this and additional works at: https://scholarworks.uttyler.edu/education_fac

 Part of the [Educational Assessment, Evaluation, and Research Commons](#), and the [Online and Distance Education Commons](#)

Recommended Citation

Rueter, Jessica and Dykes, Frank, "Looking Through the Webcam Lens: Reflections on Moving Assessment Courses from Face-to-Face to Online" (2016). *Education Faculty Publications and Presentations*. Paper 1.
<http://hdl.handle.net/10950/333>

This Article is brought to you for free and open access by the School of Education at Scholar Works at UT Tyler. It has been accepted for inclusion in Education Faculty Publications and Presentations by an authorized administrator of Scholar Works at UT Tyler. For more information, please contact tbianchi@uttyler.edu.

Looking Through the ebcam Lens: Reflections on Moving Assessment Courses from Face-to-Face to Online

Jessica A. Rueter and Frank Dykes

Abstract

This article presents one university's transition from a traditional face-to-face graduate program of special education with certification as an educational diagnostician to an online format. More specifically, the authors describe the development of assessment courses when teaching norm-referenced instruments in online environments. Strengths and weaknesses are presented and recommendations for other faculty members are discussed.

Keywords: *online courses, video modeling, educational diagnosticians, assessment professionals, higher education, K-12 populations*

Introduction

The increased popularity of online courses has outpaced overall university enrollment for the past several years (Atchley, Wingenach, & Akers, 2013). In order to meet the demand for online courses, institutions of higher education have begun to aggressively encourage faculty to develop online courses and even undergraduate and graduate degrees (Maddux, 2004). This fundamental pedagogical shift from face-to-face courses to online delivery can dramatically affect student satisfaction (Westberry & Franken, 2012) and cause consternation among faculty who have not been provided adequate training and resources and who question the ability of students to achieve specific course goals and learning objectives in an online format. Many researchers agree that the future of higher education is tied to some format of online delivery (Berger & Lyon, 2005).

Benefits of Online Delivery

Online education is beneficial to students, faculty, and the university. Online education meets the needs of both traditional and non-traditional students seeking the flexibility to pursue higher education far from the nearest university while juggling work, scheduling conflicts, and home responsibilities (Cole & Kritzer, 2009). Additional benefits to students include reducing or eliminating commuting time to and from campus, course flexibility and freedom to work at his or her own pace, and the ability to have constant access to course materials from any location with Internet connectivity (Lei & Gupta, 2010).

Online courses allow faculty members to provide “access to resources that, in earlier times, were found in library stacks, if at all” (Percy, 2014, p. 179). Moreover, faculty has the added benefit of teaching at non-traditional times and locations easing already overburdened

schedules. Additionally, Hacker and Niederhauser (2001) reported that instructors found online courses to be more active and student-centered and that a more personal dialogue was established between student and instructor.

Institutions of higher education have also benefited from the establishment of online programs. Gould (2003) noted that online courses allow institutions to maximize resources and reach a much larger audience while decreasing the need for further classroom space. Furthermore, online courses have significantly decreased paper and photocopying costs (Lei & Gupta, 2010). While online courses have provided significant benefits, it is not a panacea. Students, faculty, and institutions have encountered challenges with online education.

Challenges of Online Courses

While there has been increased enthusiasm surrounding online delivery of instruction, there are challenges to this pedagogical shift. Although students and professors may never get to meet, students have noted their need for a sense of community, which often poses challenges in online courses (Kranzow, 2013; Cole & Kritzer, 2009). Both face-to-face and hybrid courses are associated with a greater sense of community than a course that is offered in an online format (Booker, 2008). This challenge requires faculty to develop and utilize instructional strategies and technologies that create a sense of community. Other challenges include the lack of modern computer technologies, the fact that online courses require self-discipline and motivation and because there is often delayed feedback from peers and instructors (Lei & Gupta, 2010).

Along with challenges faced by students, faculty face additional challenges with online course creation. The proliferation of online courses often translates to added pressure for faculty to move courses online. Unfortunately, faculty members often do not have the technical

resources or the training needed to devise effective courses. “ Teaching in an online environment requires more time on the part of the instructor due to the need to organize content, address individual needs and perhaps deliver notes in advance” (Cole & Kritzer, 2009, p. 37). Another challenge is the lack of respect given by other professors to the professor teaching an online course. In some instances, professors have noted that they are concerned with tenure and promotion considerations if they teach in an online environment (Young, 2002). The possibility of students cheating during quizzes and examinations is often another challenge that faces instructors when moving courses online as they want to ensure appropriate levels of control and quality.

Institutions of higher education also face challenges in online education. Gould (2003) found that there are often insufficient physical resources to meet the growing technological needs of faculty and students. Additionally, students from lower socioeconomic homes are often difficult to recruit and retain due to the cost of technology required for online learning including computers, webcams, digital recorders, etc. Training is another challenge for institutions due to limited funding. Due to the recent economic downturn, faculty travel has been curtailed and professional development funds slashed. Therefore, faculty may have little incentive to move to online learning.

Growth of Video Learning in Online Courses

With the advent of Massive Online Open Courses (MOOCs), many institutions are beginning to offer various forms of instruction that are video based. Millions of learners watch videos from different platforms including YouTube, TeacherTube, Opencast Matterhorn, etc. (Giannakos, Jaccheri & Krogstie, 2013). Videos are also used for supervision and assessment and even taking exams with a proctor present via a webcam. One benefit of video based learning

is the fact that it can be offered in an asynchronous format allowing the student to view the information multiple times at the moment the student needs it (Mayer, 2008). Furthermore, students are able to view the videos from desktop and laptop computers or through various mobile devices including tablets and smartphones. Wieling and Hofman (2010) reported that the “emergence of non-linear, interactive video technology allows students to interact with instructional video” (p. 992) which may enhance learner engagement and learning effectiveness. One particular aspect of video learning is a strategy involving the use of videos to provide modeling of particular skills known as video modeling. The premise of video modeling is built on social learning theory (Bandura, 1977), which explicates that students can learn by observing and then imitating the actions of others. Video modeling has been used extensively in working with students with autism spectrum disorders (ASD) to assist with skills including social interactions, conversational skills, and daily living skills (Ganz, Earles-Vollarth & Cook, 2011). Video modeling is particularly appealing to universities moving to online courses due to its cost effectiveness.

Background Information

The role of special education evaluator is one that takes differing forms and appearances. Some states utilize school psychologists, while others recognize educational diagnosticians as the testing expert in assessment. The National Certification of Education Diagnosticians, the premier national credential for special education assessment professionals (<http://ncedb.org>) in conjunction with the Council for Exceptional Children (CEC) has adopted advanced content standards for special education assessment professionals. In particular, Advanced Standard 4: Individual and Program Evaluation states that assessment professionals, who are prepared at the

advanced level, are able to apply their knowledge and skills to all stages of the evaluation process when evaluating students with disabilities (NCED Board, n.d., p. 3).

Currently, twelve states utilize the educational diagnostician for the purpose of special education evaluation (Gibson, Kinnison, & Stephens, 2006). In the state of Texas, educational diagnosticians are qualified to administer and interpret the results of standardized tests of achievement and intelligence. Educational diagnosticians are also part of the multidisciplinary team, that is, professionals from several different backgrounds with unique skills and expertise to make educational decisions regarding the placement of a child for special education services.

Moreover, professionals with expertise in assessment are in high demand in PK-12 settings to assist in developing and implementing large-scale assessment and accountability systems (Bolt & Quenemonen, 2006). In some schools, educational diagnosticians have been given the task of leading Response to Intervention (RTI) teams to ascertain if students are experiencing inadequate response to instruction.

Historically, required coursework for educational diagnosticians has been delivered in a face-to-face format and has included foundations and theories of learning, psychometrics, special education law, norm-referenced assessment, educational interventions, and a school-based practicum. In an effort to recruit more students and to meet the growing demand for educational diagnosticians in PK-12 schools, university-based educational programs have increasingly moved coursework to an online format. While didactic courses are easily delivered in an online format, professors are challenged in the best methods for teaching courses that involve assessment instruments measuring constructs such as intellectual functioning and academic achievement.

Purpose

The purpose of this article is to present one university's transition of moving a traditional face-to-face graduate program of special education with certification as an educational diagnostician to an online format. More specifically, the focus of this article is on the development of assessment courses when teaching norm-referenced instruments in online environments. Johnson-Curiskis (2006, pg. 43) noted four assumptions about online course planning that are relevant to this article's discussion.

1. A decision has been made to teach online (whether by choice or by requirement).
2. The designated course[s] is deemed appropriate for online delivery
3. Your department supports (or requires) this move to an online course environment.
4. There are students who want to take the course[s] online

The Journey from Face-to-Face to Online

The delivery of assessment courses in online environments poses unique challenges. When teaching assessment courses where norm-referenced instruments are taught, whether in face-to-face formats or in online formats, instructors must ensure the integrity of these instruments. That is, they must guarantee that fidelity of administration and standardization requirements are met (Sattler, 2008). In order to make these assurances, modeling exact administration of each subtest is crucial.

In August 2012, the special education faculty at a regional Texas university received a directive from university administration to move the existing face-to-face educational diagnostician program to an online platform due to an initiative by the higher education coordinating board to eliminate low-producing programs. Thus began a series of program

development meetings between the two special education faculty members. The primary concerns in moving to online environments were two-fold. First, ensuring the integrity of the instruments remained intact. Second, navigating the logistics of teaching assessment instruments online.

This process began with the special education faculty researching other online educational diagnostician programs in the state of Texas and consulting with colleagues across the state to see how they addressed online programming for assessment courses. The results of this research suggested that other institutions offering online educational diagnostician programs were not utilizing specific video modeling of testing sessions. Rather, these institutions utilized training videos produced by the major test publishers (i.e. Pearson Clinical Assessments, Riverside Publishing, etc.) that overview test administrations and scoring. As a result, a “Framework for Assessment Courses” was developed by the special education faculty. Within this framework, *Guiding Principles* were stated. The following principles formed the basis for teaching assessment courses online:

- Instructors will video model specific instrument administration and scoring.
- Instructors will evaluate student video recorded testing sessions to ensure fidelity and integrity of instrument administration.
- Instructors will evaluate test administrations according to detailed scoring rubrics designed for each instrument.
- Students will obtain informed written consent prior to testing clients.
- Students will audio-record each testing session to ensure fidelity of administration.
- Students will video-record the summative testing session to be evaluated by the instructor of the course.

Video Modeling

Video modeling each subtest that comprises norm-referenced instruments is critically important as it provides specific guidelines for students to follow during individual test administrations with clients. In March 2013, the special education faculty met with the university's information technology (IT) personnel to begin planning the logistics of presenting norm-referenced instruments in online environments. Next, a dedicated studio-recording site in one of the offices in the university's education building was assembled. In this site, IT strategically placed three video cameras. The first video camera captured an overall video of the test administration from both the examiner and examinee perspective. The second video camera captured the perspective from the examiner, while the third captured the perspective from the examinee.

Once the actual logistics for recording test administrations were arranged, the special education faculty contemplated different methods for teaching norm-referenced instruments. Because norm-referenced instruments are complex, video recording sessions were divided into three distinct recordings. (1) Overview of the instrument and the administration manual. The overview videos consisted of the structure/organization of the instrument being taught and the subtests that comprise the instrument. During these videos, a brief overview of the instrument manual was presented. (2) Video record each subtest individually. In these videos, appropriate test administration such as establishing basals and ceilings, querying, and exact timing was demonstrated. In the case of error, video-recording each subtest was more efficient than rerecording entire test administrations. (3) Video record scoring of instruments. In these videos, appropriate scoring of subtests and results of the test administration was demonstrated.

With the assistance of three graduate students enrolled in the existing face-to-face program, simulated one-on-one testing sessions were video recorded for two weeks in June 2013 and an additional five days during the fall semester of 2013. Each video session was recorded using Tegrity, a “fully automated lecture capture solution used in traditional, hybrid, 'flipped classes' and online courses to record lesson, lectures, and skills” (tegrity.com). The total number of video-recording hours approximated 100 hours.

The graduate students assisting during the recording sessions were scheduled on a rotating basis and acted as an examinee during the testing sessions. Each graduate student was assigned a simulated role to play during the recording sessions. For example, a ten-year-old girl suspected of having reading disabilities. Before each session began, the testing protocols were reviewed, the goals of the testing session were discussed, and the testing environment was arranged. During the testing session, one of the faculty members acted as the examiner administering the norm-referenced instrument to the examinee. The other faculty member was in charge of operating the video cameras, the recording equipment, and managing Tegrity.

Course Expectations

As part of the university's online assessment courses, graduate students are expected to demonstrate competency of test administrations. To ensure that proficiencies are met, students administer instruments to clients during the semester and record clients' responses according to specific guidelines published in the manuals. Students must find their own clients and obtain informed written consent prior to testing sessions. During test administrations, students' audio record testing sessions and utilize the standardized methods of test administration and scoring that were demonstrated in the video-modeled testing sessions. Moreover, students video record the final testing session of the course to ensure that they have met specific competencies in

administering norm-referenced instruments. Testing sessions are scored based on criteria stated on rubrics developed for each instrument. For example, a scoring criterion on one of the instrument rubrics is “begins with correct start point based on age of child” (.5 credit).

To encourage a sense of community among graduate students and to facilitate live interactions with the instructor, four times a semester a videoconference using Zoom, a cloud meeting company (<http://zoom.us>), is scheduled. Prior to each Zoom conference, the instructor provides students with an agenda for the meeting via the course platform (Blackboard), survey students about possible times and dates for the proposed videoconference, then the instructor emails the meeting link that enables students to join the videoconference. Students are scheduled according to time and dates available and are divided into groups consisting of 3-5 students to allow for sharing of ideas about the agenda topics.

Implications to Practice

One of the strengths of having assessment courses online is that it allows graduate students the opportunity to review video modeling of testing sessions as many times as needed. In traditional programs, instruments are typically demonstrated at the beginning of the semester with graduate students being expected to remember the administration. However, in online assessment classes with video modeled testing sessions, graduate students can review the test administration and scoring as many times as is needed. In addition, the instructor can refer graduate students back to specific testing and scoring sessions when warranted.

Another strength of online course instruction in this graduate program is the use of Zoom videoconferences. Kranzow (2013) and Cole & Kritzer (2009) indicated that sense of community often poses a challenge in online course instruction. In order to more fully address this issue,

Zoom videoconferences are scheduled throughout the semester. These videoconferences enable graduate students to interact with each other and with the instructor in a non-threatening environment. In addition, a sense of community and sharing of ideas among students and the instructor was formed.

With respect to course organization and composition, the instructors in this program work collaboratively in designing each course so that all courses in the program are consistently organized regardless of instructor. For example, course modules open Mondays at 6:00 a.m. and close Sundays at 11:59 p.m. All assignments are due Sundays at 11:59 p.m. Moreover, modules in these courses include objectives/student learning outcomes, read/view, and assignments. The read/view tab in each module provides graduate students with a list of required readings, PowerPoints and Tegrity lectures to view. Consistently organizing all of the courses in the program allows graduate students to access course content more easily and efficiently regardless of which instructor is teaching the course.

The first lesson learned is allocating enough time to navigate the different aspects of course planning. The initial course planning began in September 2013 with the first two online courses offered during summer 2013. Because of time limitations, each course is being developed the semester prior to the course being taught with all courses scheduled to be fully online by Spring 2015. Course development for the online program is in addition to faculty members' regular teaching load, scholarly endeavors and expectations, and service commitments. Thus, the time to develop and execute courses online continues to be a weakness that instructors face in this program.

The second lesson learned is related to technology support. Navigating technology and having access to the appropriate equipment are ongoing barriers. Cole & Kritzer (2009)

suggested that faculty often do not have the technical resources and training needed for teaching in online environments. Consequently, faculty must employ proactive strategies and actively seek out professional development opportunities regarding the use of technology and online teaching.

Recommendations for other faculty members include calculating the actual amount of time necessary for course development, planning, and video modeling testing sessions. The video modeling of testing sessions approximated to 100 hours. These hours did not include any other aspect of transitioning courses from face to face to online. Thus, it is extremely important that time is realistically considered. Secondly, understanding and gaining support from the university's information technology personnel is vital. Having available technology support and resources will ease the transition and reduce the time for course development.

Concluding Thoughts

In this article, the authors described the development and subsequent movement of assessment courses from a face-to-face format to an online environment. Graduate special education programs in the area of assessment have direct implications for K-12 population. It is essential that higher education training programs in the area of assessment meet the needs of public schools by producing highly skilled assessment professionals that are able to appropriately evaluate students with disabilities.

At the time this article was written, the graduate special education program had increased from a cohort of 5 students to 50. When the administration directed the special education faculty to move the program online, pedagogical concerns of teaching assessments courses were confronted. These concerns have eased during the past year with the implementation of online

assessment courses as described in this article. Due to the exponential growth, new challenges have been encountered. These new challenges continue to prompt professional development in order to fully meet the needs of the students in the program.

References

- Atchley, W., Wingenbach, G., & Akers, C. (2013). Comparison of course completion and student performance through online and traditional Courses. *International Review of Research in Open & Distance Learning, 14*(4).
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, New Jersey: Prentice Hall.
- Berger, J. B., & Lyon, S. C. (2005). Past to present: A historical look at retention. *College Student Retention: Formula for Student Success, 1*, 1-30.
- Bolt, S. E., & Quenemoen, R. F. (2006). The growing demand for expertise in assessment and diverse learners to inform implementation of large-scale accountability systems. *Assessment for Intervention, 31*(4), 49-62.
- Booker, K. C. (2008). The role of instructors and peers in establishing classroom community. *Journal of Instructional Psychology, 35*(1),12-16.
- Cole, J. E., & Kritzer, J. B. (2009). Strategies for success: Teaching an online course. *Rural Special Education Quarterly, 28*(4), 36-40.

- Ganz, J. B., Earles-Vollarth, T. L., & Cook, K. E. (2011). Video modeling: A visually based intervention for children with autism spectrum disorder. *TEACHING Exceptional Children, 43*(6), 8-19.
- Giannakos, M. N., Jaccheri, L. & Krogstie, J. (2013). Looking at MOOCs rapid Growth through the lens of video-based learning research. *International Journal of Emerging Technologies in Learning, 9*(1). Retrieved from <http://dx.doi.org/10.3991/ijet.v.9i1.3349>
- Gibson, S., Kinnison, L., & Stephens, T. (2006). Discrepancies in the criteria for specific learning disabilities: A state-by-state comparison. *The DiaLog, 35*(2), 8-11.
- Gould, T. (2003, June). Hybrid classes: Maximizing institutional resources and student learning. In *Proceedings of the 2003 ASCUE Conference* (pp. 54-59).
- Hacker, D. J., & Niederhauser, D. S. (2000). Promoting deep and durable learning in the online classroom. *New Directions for Teaching and Learning, 2000*(84), 53-63.
- Johnson-Curiskis, N. (2006). Online course planning. *MERLOT Journal of Online Learning and Teaching, 2*(1), 42-48
- Lei, S. A., & Govra, R. K. (2010). College distance education courses: Evaluating benefits and costs from institutional, faculty and students' perspectives. *Education, 130*(4), 616-631
- Maddux, C. D. (2004). Developing online courses: Ten myths. *Rural Special Education Quarterly, 23*(2).
- Mayer, R. E. (2008). *Learning and instruction*. Pearson: New Jersey.

- National Certification of Educational Diagnosticians. (n.d.). *CEC and NCED advanced content standards*, 1-9. Retrieved from <http://ncedb.org/index.php>
- Pearcy, M. (2014). Student, teacher, professor: Three perspectives on online education. *The History Teacher*, 47(2), 169-185.
- Sattler, J. M. (2008). *Assessment of children: Cognitive foundations* (5th ed.). La Mesa: CA: Jerome M. Sattler Publisher.
- Westberry, N., & Franken, M. (2013). Co-construction of knowledge in tertiary online settings: An ecology of resources perspective. *Instructional Science*, 41(1), 147-164.
- Wieling, M. B. & Hofman, W. H. A. (2010). The impact of online video lecture recordings and automated feedback on student performance. *Computers & Education*, 54, 992-998.
- Young, J. R. (2002). Ever so slowly, colleges start to count work with technology in tenure decisions. *Chronicle of Higher Education*, 48(24), 25-28.

Jessica A. Rueter, PhD is an assistant professor in special education at The University of Texas at Tyler. Dr. Rueter's research interests include best practices of assessment of students with disabilities and translating assessment results into evidence-based instructional practices.

Frank Dykes, EdD is an associate professor of special education at The University of Texas at Tyler. Dr. Dykes research interests include special education assessment, learning disabilities, teacher training, RTI, minority overrepresentation in special education, and LGBTQ youth issues.