Roundtable Discussion:

WHAT WORKED AND WHAT WILL REMAIN AFTER COVID-19
Online and Hybrid Teaching Discussion

ABSTRACT:

This 90-minute session will share some of the key findings from student and faculty focus groups at a private northeastern US university. This roundtable discussion provides an opportunity for faculty and administrative attendees to compare their experiences to the presented results. Participants will be asked to consider 1) technologies, 2) pedagogies, and 3) their organization of content knowledge for online and hybrid courses. The facilitators will share key recommendations and resources learned.

Keywords: Online Teaching/Learning, Hybrid Teaching/Learning, Online Readiness

INTRODUCTION

COVID-19 and Online Teaching and Learning

In March 2020, all schools within the United States were forced to close their doors, due to the COVID-19 pandemic. Everyone went online. Most educators had not previously taught online. Most students had not taken an online course and did not know what to expect. There was a great deal of uncertainty for educators and for students as everyone was forced to go home, shut their doors and go online. What was the impact of this experiment and what will remain when COVID-19 pandemic is behind us?

Description of recent Focus Group exercise

In December 2020, two public university educators were hired by a private northeastern university director of a teaching and learning center to conduct independent observations of online techniques "that worked" and techniques "that did not work" during the COVID-19 pandemic. Focus groups with undergraduate and graduate students, in addition to the university professors were conducted between December 2020 and January 2021. This series of focus groups captured student and faculty perspectives on online and hybrid teaching and learning during the fall 2020 academic semester. Themes of discussion ranged from faculty commitment to student engagement to compassion and care to academic integrity to available technology and resources.

Purpose of this Roundtable Discussion

This session proposes to share key findings and encourage discussion amongst the participants along three main topics: 1) technology; 2) pedagogy; and 3) organization of content knowledge. Most importantly as we all begin to "see the light at the end of the tunnel" with COVID-19 vaccines beginning to be distributed and aspirations to return to "normal", we all begin to assess- What is the new normal in higher education? What will revert and what will change forever?

TEACHING IMPLICATIONS AND THEORETICAL FOUNDATIONS

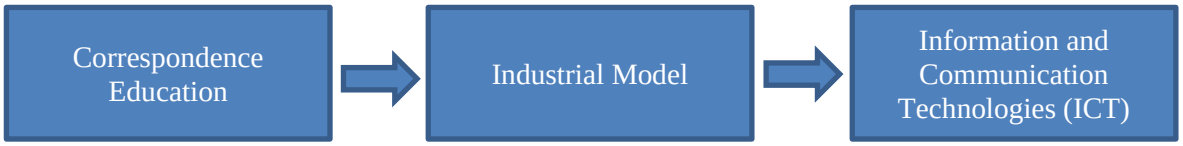
Teaching Implications

Rienties et al. (2013) describes a model developed by Shulman (1986) called the Technological Pedagogical Content Knowledge (TPCK). Teachers need to balance pedagogy, technology and discipline specific needs (Kinchin & Miller, 2012; Lawless & Pellegrino, 2007; Koehler & Mishra, 2009; Rienties & Townsend,2012).

Theoretical History of Online Education

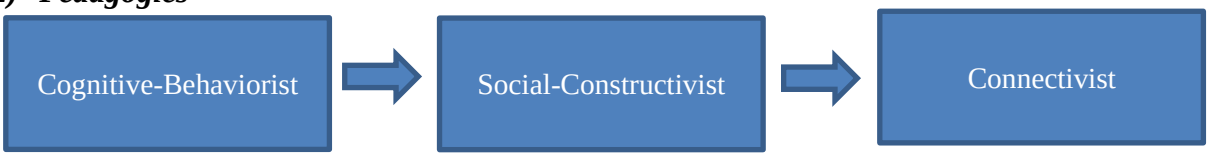
Aoki (2012) gives a historical perspective of distance education along three clusters:1) technology, 2) pedagogy, and 3) organizational models.

1) Technologies



The three generational stages of distance education can be defined by technological evolution (Aoki,2012; Bates, 2005; Peters, 1994). Firstly, correspondence education was originally in print-form and mailed by postal services. The second stage characterized as “the industrial model” (Aoki, 2012) refers to training via radio and television as modes of instruction. The ICT stage of technological generation stage of distance education began first via CD-mode of instruction before progressing to web-based instruction. Key technological failures in online teaching include technological constraints such as data limits, poor connectivity, device issues, non-recordable videos, lack of face-to-face interactions, and professor technophobia (Muthuprasad, Aiswarya, Aditya & Jha,2021).

2) Pedagogies

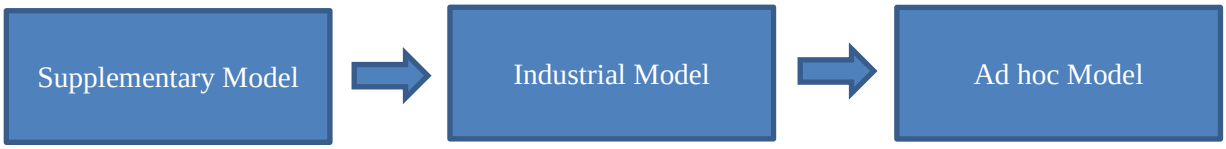


Anderson and Dron (2011) classify three generations of distance education by a pedagogical perspective (Aoki, 2012): 1) cognitive behaviorist, 2) social constructivist, and 3) connectivist. The first-generation stage, Cognitive-Behaviorist is underpinned by the Behavior Learning Theory (Watson,1924) that studies the relationship between humans and their environment. The Cognitive-Behaviorist stage implies that learning stimuli creates behavioral changes. In an online context, curricula could be "chunked in smaller instructional steps" Weegar & Pacis, 2012).

The Social-Constructivist pedagogy stage (Dewey, 1933; Vgotsky, 1980) maintains that social interaction learning is emphasized over pure lecture methods. Constructivist Learning Theory encourages active student participation learning where the professor serves as "a guide or facilitator or co-explorer" (Weegar & Pacis, 2012).

The final stage explains Connectivism in the online environment where students connect flexibly and independently with their professors (Hoskins, 2011; Reese, 2015). The learners are at the center of their knowledge by becoming a participant and creator of their learning via their relationships with their instructors and peers (Reese, 2015) in conjunction with their personal backgrounds (Aoki, 2012). This stage is underpinned by the Activity and Social Learning Theory (Bandura, 1977) which espouses "learning by doing" and utilizing networks.

3) Organization of Content Knowledge



The first stage of the content knowledge organization model is where online education is utilized to supplement traditional education methods (Aoki, 2012; Evans, 2008). Perhaps this was previously known as "extension programs" or independent studies. (Aoki, 2012; Saba, 2011). The industrial model is the same stage as previously described in the technology perspective section where large number of students were reached by television and radio. The Adhoc model refers to a myriad of technologies individualized for specific students and courses to provide specialized consideration for the learning institution and individual learners (Aoki, 2012). Content knowledge success factors have been identified as course structure, accessibility, interactive, comprehensive, flexibility and relevance of course content. (Muthuprasad, Aiswarya, Aditya & Jha,2021).

Aoki (2012) explains that online education is becoming more complex and mulit-faceted and provides the historical context to aid understanding of the future of online education. It is based on the above-mentioned studies that session facilitators have chosen a TPCK framework to lead the roundtable discussion regarding what online teaching techniques will remain in the future.

Future of Online Education

There are previous studies that demonstrate that there is not a significant difference between online and face-to-face instruction in terms of learner satisfaction and academic performance (Bignoux & Sund, 2018; Muthuprasad, Aiswarya, Aditya & Jha,2021). While a 2010 study found that only 63% of US universities' academic officers agreed that online education was critical to their universities long-term strategy (Allen & Seaman, 2010) and despite references to website articles such as Matt Saccaro's "When will the internet replace college?" (Muthuprasad, Aiswarya, Aditya & Jha,2021; Saccaro, 2014), our focus interviews found that students and professors still prefer in-person instruction overall.

Franklin (2015) called for more research on how technology addresses institutional

efficiency and effectiveness in US universities. COVID-19 has shown us this is a global issue that demands global consideration. In fact, studies are already being published that explain students' preferences and perceptions of online education during COVID-19 (Muthuprasad, Aiswarya, Aditya & Jha,2021).

SESSION DESCRIPTION

The following outlines the time allocated to each activity planned for the 90-minute roundtable discussion session. Due to the interactive nature of the session, the timeline can easily accommodate a late start or a change in length.

0 - 5 minutes.	Facilitator self-introductions.
6 - 9 minutes.	"COVID-19 rocked my world- what about you?" recount story
10 – 20 minutes.	Introductions, including participants meeting those sitting near them and a recount of how COVID-19 has affected their teaching and learning experience at a university and their personal lives.
21 - 41 minutes.	Facilitators will share key themes and recommendations of their focus group exercise with participants, in addition to TPCK framework.
42 - 65 minutes.	Facilitators ask participants to identify key lessons learned and what they will do or not do in their online and hybrid classes in terms of technology, pedagogy, and organization of content knowledge.
66--90 minutes.	We solicit additional recommendations and resources from the group and conclude the session with a summarizing story.

TWO APPENDICES

1) KEY MODE OF EDUCATION DEFINITIONS:

Online Learning -distance learning conducted through web-based ICT (Gikandi et. al, 2011).

Hybrid or blended online learning- Courses that blends online and in-person instruction (Allen & Seaman, 2010).

Online Readiness can be reviewed in terms of three components: 1) perception of online delivery method; 2) confidence with e-learning communications; and 3) capability to engage in online methodologies (Muthuprasad, Aiswarya, Aditya & Jha,2021).

2) BRIEF SUMMARY OF SOME THEMES UNCOVERED DURING FOCUS GROUPS

Highlights of Faculty and Student Experiences:

Faculty	Undergraduate and Graduate Students
Faculty Commitment It appears that many of the faculty opted to work long hours to deliver a positive experience for the students in Spring 2020. This makes sense because there was a great deal of uncertainty in Spring 2020. This testifies to the commitment of faculty to the students. **Technology** There appears to be significant variance among the faculty regarding comfort levels with technology. Also, there is variance among faculty with access to the appropriate technology for the classroom. This makes sense because the instructors who are more interested in technology and/or have more disposable income are more likely to have the tools that are needed for a more robust synchronous classroom experience. For instance, many professors found that having an additional screen or two were helpful for synchronous classes. **Faculty Training** The training which was provided to all faculty during summer 2020 helped to mitigate the fears that the faculty had in Spring 2020. This training session was a big hit among the faculty. We believe that after a Spring of high uncertainty, the faculty were eager to meet and share experiences. The faculty would like ongoing training sessions where the faculty can come together to share experiences. Perhaps it is a lesson that worked well or a tool that worked well. This is a good suggestion and would have to be teased out more to ensure that it meet faculty needs. **Hybrid Classes** The hybrid classes are great options, but they are tedious for both faculty and for students. It seems that the hybrid classes provide the human touch in periods of uncertainty, but they are unsustainable because students recognize that they have the option to not go to class. An instructor can potentially end up in the hybrid classroom alone. There should be more discussions on how to make hybrid classes work.	**Graduate Student Perspective** Overall, we did not find compelling differences between the graduate students and the undergraduate students. The key difference between undergraduate and graduate students is who lives on campus and who does not. The graduate students who do not live on campus or near the campus love the online environment because it saves them time. Often the graduate students have families and are multi-tasking and they appreciate the online option. There are other graduate students who prefer to be on-campus because they are keen to network with their professors and with their peers. **Class Participation and Engagement** Both the undergraduate and graduate students prefer professors who are enthusiastic and keep them engaged. They appreciate the tools on zoom such as polling, raise your hand features, breakout rooms. Although the students like the breakout rooms, some want more help from the professors to get the breakout rooms going. Students in online classes do not have incentives to participate. Some students suggest that a higher percentage of the overall grade can be allocated to class participation. Perhaps the faculty can create a rubric guide for meaningful class participation. **Integrity** The students do not believe that the administrators and faculty can prevent cheating in an online environment. The students believe that they will always be many steps ahead of any online monitoring tool. **Exams** Like the faculty, the students prefer exams that require critical thinking. This also will assist with mitigation of cheating on exams.

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