

ONLINE TEACHER EDUCATION DURING COVID: EMERGING FUTURES FOR PRE-SERVICE TEACHER EDUCATION

This study explored & analyzed promising online pedagogical practices that enhanced engagement & learning in one course of an Ontario-based pre-service teacher (PST) education program. A multiple methods Design-Based Research (DBR) approach was used. Theoretical perspectives included: social constructivism, Community of Inquiry, & a flipped classroom model (FCM). Data was collected from three students & one instructor and analyzed using thematic analysis. Key findings & educational implications, outlined below, may be considered in the design of other PST courses.

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INTRODUCTION

Education and curricula need to evolve in radical ways (OECD, 2018).

COVID-19 pandemic made it clear our future teachers need to be prepared to teach in a diversity of settings (Stringer Keefe, 2020).

Now an accelerated need to understand the most effective practices associated with online pre-service teacher (PST) education.

Teachers need the skills, competencies, and knowledge to effectively teach online in order to best serve their future students.



THE LITERATURE

Theory:
Social constructivism - Vygotsky (1978)

Community of Inquiry - Garrison et al. (2000)

Flipped Classroom Model - Bergman & Sams (2012)

Studies:
Authentic learning in tech-related courses (Chien et al., 2012; Luo et al., 2017)

Personalized & detailed feedback in an OLE (Lowenthal & Dunlap, 2018; Ranellucci & Bergey, 2020)

Affordances & constraints of synchronous & asynchronous learning (Borup et al., 2014; Molner & Kearney, 2017; Morge, 2020)

Clarity & organization in an OLE (Cobb et al., 2018; Peacock & Cowan, 2016)

Role of emotion in the online learning experience (Futch et al., 2016; Lowenthal et al., 2020)

RESEARCH DESIGN

2015 - Shift to two-year B.Ed. program. Included mandatory online 3rd semester.

From 2015-2020 I iteratively developed & taught: Learning in Digital Contexts.

2020 version of the course -- experimental changes in light of the COVID-19 pandemic.

Changes included how & when learning happened to reflect the context in which we were all living, working and learning.

2021 -- formal study of these changes.

RESEARCH QUESTIONS

- What are promising online teaching & learning practices that facilitate student engagement & learning in an online course?
- In what ways might the intersection of a FCM & video-recorded, student-led professional learning sessions lead to student engagement & the development of students' understanding of online pedagogy?
- In what ways can a human-centered approach to teaching, one that prioritizes student-centred learning, empathy, and work flexibility, facilitate student engagement & learning in an online course?

METHODOLOGY

Design-Based Research (McKenny & Reeves, 2019).

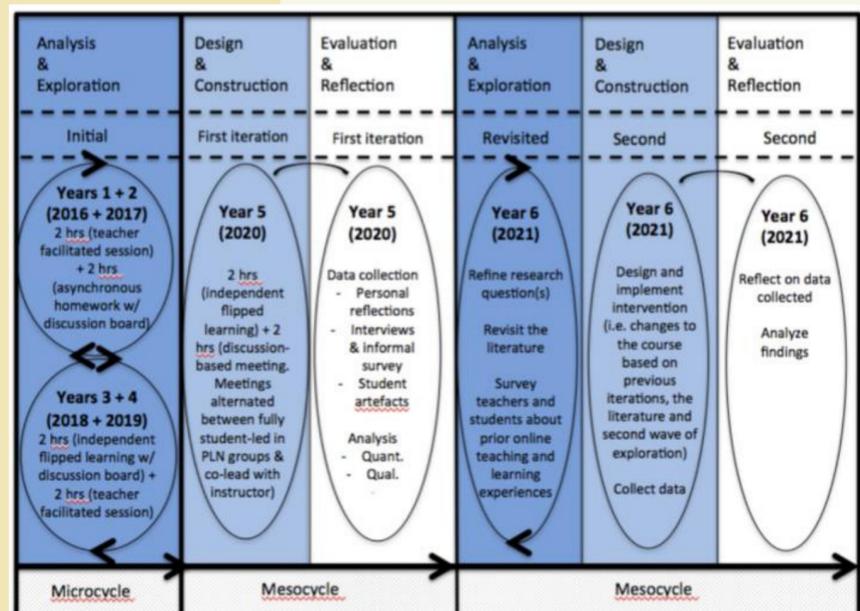
Iterative re-designs of the Learning in Digital Contexts (LiDC) course from 2015-2019. More targeted re-design in 2020 to increase student agency, engagement & learning during COVID-19 using a three-point intervention:

- Use of a FCM; b) video-recorded, student-led bi-weekly meetings;
- weekly work/reflections submitted to the instructor (personalized & detailed feedback always provided).

Participants: 3 students (randomly selected); 1 co-instructor (purposeful selection)

Multiple methods of data collection (open-ended survey, journal/reflections; WhatsApp planning & debrief texts; student artefacts; semi-structured interviews).

Thematic analysis used to analyze data.



KEY FINDINGS



- ★ Teacher feedback is important for student way-finding, motivation & rapport-building
- ★ The inclusion of authentic learning experiences is important to engage students in deeper learning.
- ★ The inclusion of professional learning groups is important for students' social & cognitive presence development.
- ★ The combination of the FCM & student choice is important for students' cognitive presence development.

Considerations included:

- ★ The FCM took time for students to adjust to.
- ★ The course structure required a degree of self-motivation & organization.
- ★ The prep & marking was labour-intensive for the instructors.



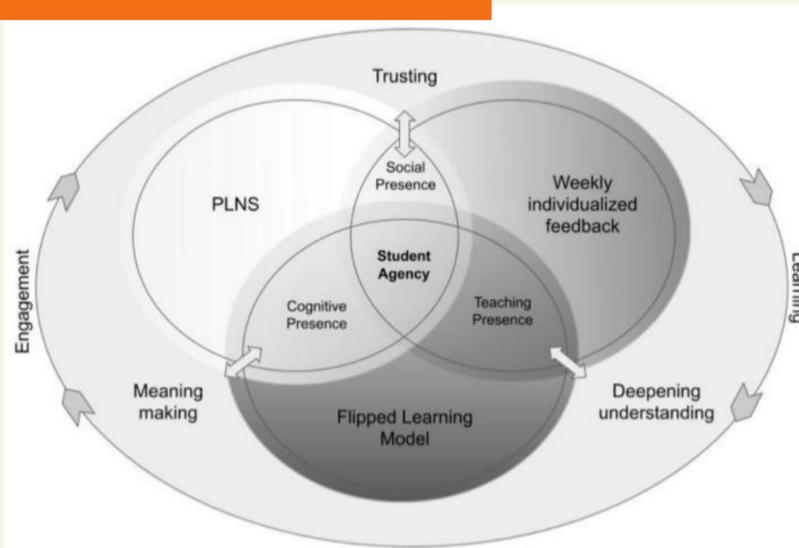
IMPLICATIONS FOR PRACTICE

- ★ The FCM & professional learning communities, together, can support cognitive presence & meaning-making.
- ★ The FCM & weekly individualized feedback can support the development of teaching presence & student understanding.
- ★ Weekly individualized feedback & professional learning communities can support social presence and a trusting learning environment.

PROMISING PRACTICES

- ☑ Ensure students establish & maintain professional learning communities for support & knowledge-building.
- ☑ Ensure students have choice in what, when, & how they learn to help develop student agency.
- ☑ Include opportunities for students to develop their social presence to encourage engagement & knowledge-building.
- ☑ Include opportunities for teacher- & student-facilitation so students can see modelled online practices & so they can also implement these practices.
- ☑ Include regular, positive feedback to guide student learning, to build relationships with students and to motivate them.
- ☑ Include activities that relate to the students' future work as online teachers to promote engagement and learning.
- ☑ Include a variety of online pedagogical strategies to reach a diversity of learners & to support their cognitive engagement.

PROPOSED FRAMEWORK



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