Creating Meaningful Learning Experiences for Pre-Service and In-Service Teachers Facing Interruptions in Field Experience Placements During the COVID-19 Pandemic

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In teacher education, the heart of learning culminates in field-based experiences. When these become interrupted such as during COVID-19, teacher educators can be challenged to create alternate learning opportunities. One professor used written and video-based case studies in lieu of cancelled field placements. Survey responses indicate students believed course adjustments were useful and provided meaningful learning experiences for them: 52% said they benefitted most from the case studies and showed preference for video formats over written cases. Case studies, then, can help effectively create meaningful learning opportunities analogous to field experiences, and promote engagement during remote learning.

INTRODUCTION

In Teacher Education, the heart of learning culminates in field-based experiences which connect theory to practice (Sturmer, Konings, & Seidel, 2015). Consistent with a constructivist framework, field experiences actively engage students in authentic situations (Dewey, 1938) that challenge and expand their existing knowledge (Piaget, 1952) until they can distill these reflections into abstract concepts applicable to future experiences (Kolbe, 1984). Field experiences are powerful because they create genuine connections between ideas and experiences (Darling-Hammond, 2000) which immerse students in complex learning environments where they analyze situations, solve problems, and hone teaching skills. When field experiences become interrupted, as happened during the COVID-19 pandemic, educators can be challenged to find alternatives. One strategy, case studies, builds upon experiential learning theory which harnesses observation and reflection to challenge misconceptions and crystalize learning concepts (Dennick, 2012). Case studies capture the problems and challenges of teaching in specific contexts and require the learner to analyze and reflect to provide a solution (Gunther, Fleige, Upmeier zu Belzen, & Kruger, 2019). Case studies usually supplement, rather than supplant, field experiences. However, when these become interrupted, case studies may create meaningful learning opportunities to mitigate experiences lost.

INNOVATION

COVID-19 created this situation for one professor teaching two sections of an Early Childhood Special Education course which required students--both in-service and pre-service teachers--to work with two children with special needs and attend Early Intervention home visits. This mentoring would have scaffolded learning so students could make critical connections they could not make on their own (Vygotsky, 1978). However, when school closures and early childhood program restrictions cancelled these opportunities, the professor was challenged to find meaningful alternatives. Also, online delivery requires students to demonstrate more responsibility and accountability for their learning (Hoskins,

2011), and even if they were familiar with technology for personal use, they could not apply these for educational purposes (Greene, Yu, & Copeland, 2014).

The lack of field experience created three gap areas: home visits, journal entries, and summary reports. To replace home visits, the instructor searched for home visits students could virtually observe. She used the Results Matter Video Library (https://www.cde.state.co.us/resultsmatter/rmvideoseries_justbeingkids) which has six videos in the "Just Being Kids" series of Early Intervention home visits. The videos are free and publicly accessible, and the YouTube format can be watched on multiple devices that students owned (see Figure 1).

Figure 1. A screenshot of the Results Matter Video Library.

Since some students had attended one or more visits before schools shut down, the instructor adjusted assignment instructions to allow students to combine actual home visit observations with video or use all video observations as needed. She also provided an observation form to scaffold students' analysis and a grading rubric to guide their writing of their paper. These supports made it easier for students to be more independent in their learning online (see Figure 2).

Figure 2. A screenshot of the home visitation report layout.

The second assignment gap area was weekly journal entries where students had to identify teaching objectives for assigned children, plan and implement instruction to meet those objectives, measure children's progress in their learning, and reflect on the teaching experience. To replace the journal entries, the professor wrote short scenarios of fictitious children and asked students to analyze, plan, and reflect as if they were teaching these children. She provided clear directions with questions to guide students in their analysis, and had students use a text entry format for their assignment (see Figure 3). This allowed direct, two-way feedback between the student and the professor, a critical feature for adult learning (Dennick, 2012).

Journal Eight--NEW

Read the following scenario and in 2-3 paragraphs, tell me how you would teach this child:

Autumn is 2 years and 10 months old and has fine and gross motor delays. She is not yet walking. She can get herself into a sitting position if she is placed on her back. She can stand alone for at least 10 seconds. She can sit back down if she has been standing. Her physical therapist feels Autumn is ready to work on pulling herself to stand so this is her new IFSP goal.

This week's objective is to have Autumn pull to stand, with teacher assistance, and remain standing on her own for at least 10 seconds at least two times out of five attempts.

Your job is to plan two different activities that will provide multiple opportunities for Autumn to pull to stand. For each activity, tell how you will:

- Set up the activity and encourage multiple opportunities to pull to stand.
- Prompt Autumn to pull to stand, and what assistance might you provide to help her be successful.
- Assess and document her performance so you will know if she is making progress.

Assuming she can pull to stand successfully with full physical help from you:

- What would be your next steps when you teach her next time?
- How would you adjust the objective?
- How would you adjust your teaching?

Students will get points for the following:

- Description of each activity and how it is set up for multiple opportunities (4 points)
- How you will prompt Autumn in each activity and support her to do the task (4 points)
- How you will document Autumn's progress in each activity (2 points)
- What next steps you have for teaching each activity and how you would adjust the objective and teaching to continue progress (5 points)

Points   15

Submitting   a text entry box

Figure 3. An example of the journal entry scenarios.

The third gap area was the end of semester summary reports where students would have described their children, analyzed data from their teaching, and reflected on the experience. To replace the summary reports, the professor created two-page scenarios of fictitious children with special needs which included descriptions of the children's strengths and needs, documentation of how a fictitious teacher taught the children each session, and weekly data charts on how the children performed over time. She also created a form with questions to guide the data analysis so that students would be able to reflect on both the teacher's implementation and the child's responses over time. The form and grading rubric served to scaffold the students to independently analyze and write up their final papers (see Figure 4).

Figure 4. A screen shot of the summary report case studies.

In summary, the professor replaced field experiences with case studies that mirrored field experiences and provided scaffolding so students could take a higher level of responsibility for their learning in an online environment.

RESULTS

The professor sent an online survey via Qualtrics (see Appendix A) to students as a link in a Canvas announcement just before finals to determine whether course adjustments actively engaged students in the learning process and provided meaningful experiences reflective of experiential learning. The response rate was 83% (35/42).

- 77% stated that the transition to remote learning was smooth, 17% were neutral, and 6% found it difficult.
- 100% believed they were well-informed on how to successfully complete the course, assignments and deadlines were reasonable to complete, and adjustments were sufficient to maximize remote learning.
- 94% said the course had a variety of learning materials to keep them engaged and, of the 25 students who wrote about what benefitted them most, 28% cited video case studies, 24% indicated written case studies, 16% said alternate assignment options, 16% mentioned miscellaneous factors (e.g. instructor flexibility, communication options), and 12% said all of the adjustments.

In summary, most students transitioned well to remote learning. Online learning requires students to integrate self-regulated learning with effective cognitive processing (Greene, Yu, & Copeland, 2014). All students indicated they were well informed on how to finish the course, thought course adjustments worked for them, and believed materials maximized their learning. One student took an incomplete due to COVID-19 factors, and the remaining students completed the assignments and passed the class with a C or better. Therefore, it appears they were able to apply sufficient self-regulation and cognition to accomplish this, and the assignment scaffolds supported this learning.

Also, 52% said they benefitted most from the case studies and found these meaningful. Experiential learning through case studies has been shown to foster critical thinking and self-regulation skills (Kreber, 2001) needed for online environments. Case study analysis supports the social construction of pedagogical knowledge and improves pre-service teachers' informed decision making on educational issues (Floyd & Bodur, 2006). Adult learners are better engaged when it is clear what they are learning will transfer to real life (Hoskins, 2011) and the case studies did appear to meet both pre-service and in-service teacher needs in providing meaningful learning experiences.

IMPLICATIONS

Teacher preparation programs rely on field experiences to help students connect theory to practice; however, challenging situations like COVID-19 may make access impossible. Case studies can effectively create meaningful learning opportunities and help students consider greater details about problems, situations, and events they would encounter in the field (Floyd & Bodur, 2006). In this study, students benefitted from both formats, but preferred video. Video formats have been shown to help pre-service teachers apply conceptual knowledge and see multiple perspectives (Goeze, Zottmann, Vogel, Fischer, Schrader, 2014), understand classroom management skills, (Tal, 2010) evaluate classroom teaching situations, (Siedel, Blomberg, & Renkl, 2013) and reflect on their own practices (Masingila & Doerr, 2002). Video cases are most effective when embedded in instructional contexts with clear goals and learning purpose (Blomberg, Sherin, Renkl, Glogger, & Seidel, 2011), as demonstrated in this study.

The professor accessed videos and created written cases that were not time-consuming to prepare. While case studies should continue to supplement field experiences, instructors may need to utilize these more intentionally if field experiences are interrupted intermittently or completely in situations such as COVID-19. Emerging evidence shows case study simulations can replace at least part of the traditional field experiences and provide meaningful learning (Chu, Sheppard, Guinea, & Imms, 2019; Kennedy, Jewell, & Hickey, 2020). Providing students quality alternate experiences can keep them on track for degree completion while building critical teaching skills.

FUTURE RESEARCH

While case studies can be effective in providing meaningful learning experiences reflective of those in the field, more research is needed to determine the extent to which case study analysis translates to improved implementation in later field experiences. In this study, case studies were of multiple children in different scenarios which provided a larger range of experiences; however, case studies of one or two children who "grow over time" would allow a more in-depth analysis. Research could compare the effectiveness of these case study types to determine their effectiveness under specific conditions. Finally, given that video cases are not always available for key objectives, instructors may want to consider low-cost ways to create simple videos that represent the scenarios they want students to experience and then test these to see if they produce the intended results.

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APPENDIX A

COVID-19 Student Survey (Note: The professor used Qualtrics software because this is what the university used; however, any survey software (e.g. Survey Monkey) could have been used.

Hi Students!

I know that this is a really strange semester with COVID-19. I would really like to hear what is working and not working and how all of you are doing. I have prepared a quick Qualtrics Survey to learn more about how COVID-19 is affecting you related to this class. I also want to know what might help future classes like this in case we are still having to teach remote in fall. Thank you.

Please rate the following 1-6 questions
  Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree

1. I feel I was well informed about what I needed to do to successfully complete the course

2. The course assignments and deadlines were reasonable to complete via remote learning

3. I was able to communicate (zoom, email, phone call, etc.) with my instructor when I needed.

4. I had a variety of learning materials available such as videos, writing journals, online reading, discussion boards etc. to keep me engaged in my learning.

5. I feel the instructor adjusted the course (deadlines, assignments, etc.) to maximize learning remotely.

6. The transition to remote learning was smooth.

What would you like to tell me? Please write your answers below:

1. What learning activity or materials did you benefit the most from during remote learning?

2. What else would you like to tell me to help me understand your experience transitioning to remote learning during COVIDE-19?