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Pre-education reflections of online and face-to-face clinical experiences

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Abstract

Purpose – This research study provides insight into students' perceptions of teaching through virtual and face-to-face clinicals in an introductory education course in a pre-education program at a minority-serving institution.

Design/methodology/approach – This study took place at an urban–suburban-centered community college in the Midwestern United States and was reviewed by the higher education institutional review board (IRB). Data were collected from pre-education majors enrolled in a four-hour Introduction to Education with field experiences.

Findings – The findings indicated that both virtual and face-to-face clinicals were beneficial to the development of pre-service teachers, particularly in an early introduction to education course.

Research limitations/implications – The finding that virtual clinicals are significant to teacher growth is significant to teacher recruitment and preparation.

Practical implications – The flexibility of a virtual clinical provides greater opportunities for low-income and marginalized populations with limited means and access.

Social implications - This finding can lead to strategies to diversify teacher candidates.

Originality/value – This study sought to answer the following question: how do pre-education students reflect to understand the roles and responsibilities of teaching through virtual options vs face-to-face clinicals? The interest of this research is to expand pathways into the teaching profession to nontraditional, ethnically and culturally marginalized groups and historically underrepresented groups.

Keywords Reflective practices, Online and face-to-face clinical, Pre-education Paper type Research paper

Introduction

The purpose of this research was to understand how pre-education students perceive through reflection the roles and responsibilities of teaching through virtual, (i.e. online/digitally captured teaching) and face-to-face clinical experiences. The authors sought to understand student perceptions of the teaching profession through online observations in early teacher education programs. This topic has not been fully explored and is particularly relevant in a post-pandemic environment. Understanding the role of online clinical observations, particularly in early teacher education courses is significant to expanding opportunities



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and access to those entering the teaching profession. This is particularly relevant for marginalized groups who may have extended work and family commitments. Providing online clinical observations may provide flexibility. Recently, in 2020, the Michigan Department of Education emphasized the need for intentionally planned clinical experiences interwoven across the arc of the teacher preparation program. Michigan has been among the many states nationally to mandate supervised clinical practice for teacher preparation programs (National Council for Accreditation of Teacher Education, 2010). As part of its redesigned teacher certification structure, the Michigan Department of Education (MDE) established the requirement of strategically planned phases of clinical experience hours totaling a minimum of 600 h. An essential requirement in our institution's state is to ensure pre-education students are availed 30 clinical hours to explore the teaching profession across PK-12. Through MDE's expectations, teacher education institutions are progressively redesigning their programs to prepare teacher candidates with authentic experiences in diverse placements that enable direct contact with students earlier in candidates' preparation program. Also prior to their culminating student teaching internship, teacher candidates are coached by qualified teacher mentors and university supervisors through 200 apprenticeship hours. These supervised experiences, referred to as flex hours, include clinical practice in the design, implementation and analysis of instructional activities, assessments and data informed differentiation of curriculum activities, including video analysis of digitally captured teaching and learning process (MDE, 2020). Fast forward to the post pandemic teaching and learning experiences mentor teachers have gained, it is reasonable to expect that the virtual modalities of such clinical experiences are no longer a far-fetched innovation. Rather, the imposed virtual teaching experiences that were imposed served as ad hoc pilots we can draw from to develop further and study the potential virtual clinical experience has for immersing the traditional candidate in additionally diverse teaching environments. Conversely, the additional cost-efficient access to such clinical practice may enable nontraditional candidates (i.e. single parents, low socioeconomic status and/or firstgeneration college students) to pursue education for an academic career. Reducing the barriers for these inherently diverse demographics of potential education candidates can directly contribute to increasing the diversity of the teaching workforce which continues to be predominantly middle-class white females (NCES, 2022). The literature continues to assert the potential impact on student achievement when there is closer alignment between the cultural and linguistic backgrounds of students and their teachers (Darling-Hammond, 2010).

Our higher education institution and main school district we serve, Dearborn, is one of the largest Arab American populations in the USA (Where Do Arab American's Live, n.d.). The Dearborn Public School District is the third largest in the state, consisting of 34 schools and 39 K-12 programs. The district serves an area of Dearborn Heights as well as the whole city of Dearborn, Michigan. On its website, the district reports offering free breakfast and lunch to all its students, as over 70% of its student population is identified as low income (NCES, 2022). Indicative of its highly diverse community, the district notes that English learners make up one-half of its enrollment. Ironically, the racial demographics do not reflect this level of diversity as students from the Middle East and North Africa are counted among the White race (Lo Wang, 2022). Educators from out of town touring the high achieving district noted to have a ninety-plus percent white student population may be perplexed when greeted by a student body of majority first, second and third generation immigrants from the Middle East and North Africa (Yemen, Iraq, Jordan, Lebanon, Egypt) as well as small percentage from South Asia (Afghanistan, India, Pakistan) and a number of families from Eastern European countries such as Albania and Croatia.

Historically, Michigan and more specifically Dearborn have been the destination of immigration influxes from the numerous Arabic speaking Middle Eastern and North African (MENA) countries in recent decades, primarily gravitating to communities where they are

more readily embraced. It is estimated that of the 3.7bn Arab Americans in the United States of America, with approximately 277,534 living in Michigan. Interestingly AIS also estimated that Arab Americans make up nearly half of the residents of Dearborn (Where Do Arab Americans) along with an increasing single digit small percentage of Blacks, Hispanic and South Asian student population (NCES, 2022).

Similarly, the higher education institution where this data originates is a high need community college in the Midwest. The student population who are enrolled in pre-education classes fits a minority status population for a variety of reasons, specifically as a high need ethnic minority MENA with 65% Arab American, 10% African American, 2% Hispanic, approximately 88% female and 67% receive financial aid (August 23, 2022, personal communication, Eileen Brennan, Business Intelligence System Analyst Inst Research and Research & Planning, 2021–2022).

Designed with intentionality, exploratory clinical experiences contribute to preparing students for making informed decisions about the grade level and subject area they most identify with. During these clinical practice hours, students are observers with purpose. Clinical assignments are linked to the learning outcomes in teacher preparation standards. These require teachers' responsiveness to diverse PK-12 learners and various factors that impact their learning. Students observing with *purpose* are more likely to take note of the where, when, what, who and possibly whys of what they see and hear. Essentially, students are availed the relevant space for developing needed reflection skills they will later leverage when examining their own teaching practice.

The new Michigan Department of Education (2020) teacher preparation standards include emphasis on the exploratory hours and an expansion of clinical experience hours earlier in their program and particularly in alignment with methods and literacy development education courses. This research serves to help teacher educators understand how those new exploratory hours influence students' perceptions of teaching. This information is important to the broadening and defining of early teacher education clinical observations and can inform higher educational institutions in revising courses and programs to address standards for teacher education. The outcomes of this research could serve to modify reflective assignments or modify, expand or eliminate virtual clinical experiences. Further, this study is relevant to the field of education because there is a need, particularly in a post-COVID-19 higher education environment, to explore students' perceptions of virtual versus face-to-face clinical experiences. The main research question is, how do student perceptions of teaching compare when using virtual and/or field-based clinicals? To answer this question. our theoretical frame incorporated the importance of clinical experiences in shaping a student's understanding of the field of education and integrated reflective practice into the shaping of a student's perception of teaching.

Theoretical framework

This research was founded on the concept that pre-service teachers can reflect on their experiences to determine their understanding of the teaching profession and determine their personal growth to make decisions on whether teaching is right for them. This philosophy is demonstrated in recent developments, particularly in the state of Michigan, where this research takes place, which has recently expanded the number of clinical hours to 600 (MDE, 2020). These hours were expanded to include virtual clinical experiences as part of exploratory hours. These additional hours were meant to introduce the roles and responsibilities of teaching to pre-education students.

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Clinical experiences

Teacher education programs understand the importance of clinical experience in shaping and preparing teachers. As part of National Council for Accreditation of Teacher Education (2010) processes, all accredited teacher education programs are required to incorporate clinical experiences in their programs. Gardiner (2018) presented a scaffolding approach whereby teacher experiences in a higher education environment can build the skills in a clinical placement. Jenset, Hammerness, and Klette (2019) contended that higher education discussions on field placements can connect theory to practice. This implies that simply fulfilling the clinical experience hours may not be enough to fully support teacher candidates' development; there may be a need to not only generically reflect but also to analyze and engage in objective related discussions about the clinical experiences.

However, as online classrooms become more common in K-12 education, teacher preparation programs have sought to better prepare candidates for these contexts and are considering ways to address this additional preparation within their programs (Hall, Widdall, & Lei, 2021). Although online learning offers several benefits, such as the flexibility in attending class from anywhere and at times convenient to the participants, this medium of delivery may not be well suited for all learners (Jaggars, 2011). Research indicated that attrition rates for online learners are higher than rates for students who participated in traditional face-to-face delivery of instruction; and that there is a 10%–20% higher attrition rate for online classes than traditional classroom environments (Aragon & Johnson, 2008). As a result of these higher attrition rates in the online courses, colleges and universities have sought measures to retain their online learners because the loss of students negatively impacted the finances of these institutions (Harris & Martin, 2012).

To understand their retention data, institutions must understand the student population taking online classes. These students tend to be of lower socioeconomic status with 43% having incomes below \$40,000 and 37% of undergraduate students identify with a race other than White (Clinefelter, Aslanian, & Magda, 2019). With more students from culturally diverse backgrounds taking online classes, it is crucial that instructional material and student support are readily available for this population.

The current literature indicates that there are stark differences between the way online students from diverse cultures perceive and learn in the Western classroom spaces (Dunn & Brown, 2021). For example, students from diverse cultures often bring their cultural practices into the online classroom where they openly share knowledge and resources, which are an integral part of their cultural practices and essential to their survival. However, this collectivist type cultural practice is not the norm in the United States of America – an individualist culture – where emphasis is placed on individual learning and personal success. Because this practice is not readily embraced in the online educational system, it can be problematic for international students and other immigrant groups and are potentially contributing factors to the high attrition rates among these groups of students in both on-line and face-to-face classes.

Williams (2021) found that low-income and first-generation students were most adversely impacted by digital challenges, as well as housing, food issues, job or family losses, transportation issues and health worries for self/family. The results of a study conducted by Dunn and Brown (2021) indicated that needs of culturally diverse students were not being adequately met in some institutions of higher education. This unmet need was noted as a contributing factor to the high attrition rates of culturally diverse learners. Moreover, Williams (2021) posited that by genuinely listening and amplifying their voices, we can better serve those students who have been disproportionately impacted by challenges, such as digital access, job stability, personal, familial and emotional struggles.

Finally, Dewey (1933) argued that reflective process involves paying attention to the decisions and reasonings derived from pedagogical practices. He, in essence, argued that

SUP 17,1 experience is not as significant as reflecting on that experience. While, Darling-Hammond, Hammerness, Grossman, Frances, and Shulman (2005) highlighted the importance of structured opportunities to reflect on field placement experiences in order to create quality experiences for teacher candidates. We utilized student reflections in our study as a means of listening and amplifying the voices of our diverse teacher candidates in an effort to create quality experiences and retain this vulnerable population of future teachers.

Methods

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This study took place at an urban-suburban centered community college in the Midwestern United States and was reviewed by the higher education institutional review board (IRB). The IRB approval for this research proposal entitled: Reflections on Early Pre-Education Experiences. The data collected were from pre-education majors enrolled in a four-hour Introduction to Education with field experiences (47 h). During these 47 clinical hours students become active observants under the tutelage of a mentor teacher in their field in a school setting of their choice. Students are required to engage the mentor clinical teacher in discussions on topics, such as classroom management, differentiated learning, community and pedagogical strategies. Toward the middle of their field experience, they are required to dive into activities, such as take attendance, conduct small routine and procedures of instructional activities and co-teach a full 45-min lesson. Overall, these hours allow for sample application of pedagogical practices and teacher professional standards and ethics.

The data source was the final reflective assignment (Appendix) from the Introduction to Education course. This assignment had students reflect on their clinical experiences and how that influenced their understanding of a teachers' role and responsibility. These final assignments were the only data collected from participants for this research. Students were encouraged to complete their clinical experiences face-to-face but were provided an online option without question if they choose. Specifically, they did not have to rationalize why they wanted an online clinical. Coming out of the COVID-19 pandemic, the instructor wanted students to feel comfortable. In the Fall 2021 semester, 33 of the 39 (85%; five did not give permission, one did not complete the assignment) students agreed to participate in this study. From the 33 participants: 22 were completely face-to-face (splitting their time). These reflective assignments had students delve into their clinical experiences.

Participant profile

This data was collected from a community college pre-education program. As a program of 550 pre-education students, 67% (55% Pell, 12% loans) receive financial assistance, 88% are female, 65% are between 18 and 25 years and 32% are between 26 and 31 years (August 23, 2022, personal communication, Eileen Brennan, Business Intelligence System Analyst Inst Research and Research & Planning, 2021–2022). In addition, 10% identify as African American, 2% as Hispanic, 65% are estimated to be Arab-American and 23% are unknown (August 23, 2022, personal communication, Eileen Brennan, Business Intelligence System Analyst Inst Research and Research & Planning, 2021–2022). It is believed that the percent of Arab Americans is considerably higher, but it cannot be confirmed because such is not a listed category for ethnicity/race questions in current forms. To get more precise data, MENA is being considered as an institutional racial/ethnic category. Similarly, the participants in this study reflect the pre-education program profile data. All 33 participants are female. Ethnically, two are African American, two Hispanic, four White and 25 Arab American. The precision of estimating the number of Arab Americans is not exact. This was determined by looking at their profile picture (wearing a Hijab), self-identification and their name). Five participants disclosed that they are married with four or more children.

Around 8 of the 33 participants that requested only online clinicals consisted of the five who stated they were married with children. Two of the remaining three of the eight online only participants were also presumed to be Arab American based on their profile indicators. One identified as African American. The three participants who choose both online and face-to-face were Arab American. Although the participants' financial status is not known, students attend this community college because it is one-quarter the price per credit to the neighboring university (personal communication, Brennan (2021-2022), Business Intelligence System Analyst Inst Research and Research & Planning).

The 33 participants live near three community school districts: Dearborn, Dearborn Heights, and Detroit. The 22 pre-education participants who completed in-person observations used those three public school districts to complete their 47 clinical hours. Transportation is a common concern among the pre-education students; therefore, they are encouraged to select a school that is close to their home. This clinical selection process means that pre-education students select a school based on the proximity to their home. As a result, participants in this study reflect the demographics of the school district. The Community College not only has a close partnership with the Dearborn public schools but also it is classified as a K-14 school district that share a School Board. The school district and community college are intricately intertwined.

Data analysis

Participant responses were thematically organized and analyzed to explore students' perceptions and reflections on clinical experiences. This included the researchers' critically reading the documents multiple times to uncover common themes. A common word search, including classroom management, responsibilities, was used to understand the frequency and context of the words associated with emerging themes. Participants' names were removed from the data.

Results

The findings of this research indicated that all 33 students expressed the benefits of completing in-person or/and virtual observations. After having completed the clinical observations, all 33 participants (100%) expressed through their reflections that they have a better understanding of the roles and responsibilities of a teacher. When students were asked if they feel more enthusiastic about teaching, 100% of the participants expressed that the clinical observations left them more interested in teaching. As a teacher educator this is always good to hear, but the more significant component is that they were able to get a grasp of teaching and decide if this was right for them. Most significantly, 100% of the participants reported that their field experiences contributed to their growth, but they described different learning experiences when comparing virtual to face-to-face clinicals. The main research question delved deeper into the type of clinical observations: specifically, how do students' perceptions of teaching compare when participating in virtual vs field-based clinicals?

From the 33 participants, eight or 24% were purely online, three or 9% completed a combination of online and face-to-face and 22 or 67% completed only in-person observations. The participants were asked, what do you think you learned during the field experiences? Be specific and cite examples. Overwhelmingly the 67% of participants who participated in face-to-face clinical experiences reported the importance of teacher mentorship, student relationship building and the need for flexibility (particularly when implementing a lesson). Around 100% of the 67% mentioned the joy of working with kids. There were comments related to attending events (field trips) and learning through day-to-day moments

In contrast the 24% who participated in online only clinicals discussed classroom management techniques and strategies. The focus of the online participant reflective

responses was on specific classroom strategies. For example, Participant 10 stated, "I used the [online observations which] gave many tips on talking to students which is perfect for managing a classroom, which is probably one of the most important things to do as a teacher." The participant stated further that, "During the [online observations], I learned a lot of ways to not only manage a classroom, but how to talk to students in general. Another Participant 12 stated, that they "feel more enthusiastic" about teaching from these online observations. Participant 12 also found the online observations useful stating, "I learned how to manage a classroom which I never understood before but with these classes, I truly got a peek into what it takes to be a teacher and how they prepare for success.

The virtual only field observations were designed to have participants focus on specific strategies. This contrasted with the students who observed in-person. For example, Participant 24 provided an example of a specific strategy-seating arrangement. Participant 24 stated, "I learned ways to redirect students without disrupting instruction time. One of these ways is through private individualized correction. In this case, the teacher approaches the student when the class is busy, gets on their level, and speaks with them." Participant 24 went on to explain the rationale for doing this stating, "Correcting the student while the class is busy ensures that the teacher is not outing the student in front of the whole class and that no important instruction time is lost. I learned that it's important to get down to a student's level because they feel respected".

A limitation was the small number of participants, particularly with participants who completed both online and in-person (only 3 of the 33 participants). Future studies could delve deeper into the reflections of students who completed an equal amount of virtual and in-person clinical observations to determine how the combination of experiences can be incorporated into early teacher education programs. Another limitation was that students who completed virtual and in-person or virtual only clinicals expressed regret for not being in-person. Similarly, students who completed both online and in-person clinicals wrote more frequently and in greater detail about the in-person interactions with students. Students who completed only in-person observations, 22 of the 33 participants, discussed the following themes, mentoring teachers, student relationship building and the importance of being flexible.

Conclusions

This research pursued the following question, how do pre-education students reflect to understand the roles and responsibilities of teaching through virtual options vs face-to-face clinicals? This is significant to the field of education because both options can provide opportunities to complete required clinical hours and provide early education candidates with valuable field knowledge. Further, the choice of virtual or online clinical experiences, albeit during exploratory or apprenticeship hours, inherently provides flexibility for marginalized and/or nontraditional students for whom the teaching profession has not been an option due to limited time due to family or/and work obligations. Liston and Zeichner (1988) stated, "it is argued that teacher educators need to become much more politically involved in confronting the external conditions that limit the possibilities for reform in teacher education" (p. 1). These words resonate in a post-pandemic educational environment. We believe that teacher educators and Department of Education officers need to delve into the controversies of pedagogical strategies, including online practices. This research is also significant in that access to portions of required clinical practice virtually can contribute to the needed teacher diversity, an increase in diversity that better represents Michigan's students. This is relevant because literature supports that the diversification of teachers leads to an increase in student academic outcomes (Lindsay, 2021).

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This research can serve to expand opportunities for marginalized populations to enter the teaching profession. Providing flexibility on how and when required clinical hours are complete can foster the interconnectedness of the sundry skills to be developed. Specifically, clinical practice activities that education students can engage in online include collaborating with teacher mentor on lesson planning, differentiation of instructional activities and/or planning for assessments. Asynchronous virtual clinical practice is also an option when these independent practice activities could include the pre-service teacher's benchmarked analysis of specific segments of their recorded co-teaching or substitute teaching practice. It is well documented in the literature that there are massive shortages of teachers, especially those from historically underrepresented and marginalized groups, throughout the nation. Having an online intentionally developed clinical experience may open the possibilities for non-traditional students to be exposed to the field of education.

Online and face-to-face clinical experiences

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Appendix

Data collection tool

Final reflection

How does a self-guided reflection influence student perceptions? **Objective**: We learn through our experiences and through our reflections on those experiences. Reflective practice is a commonly accepted practice in education. According to Dewey (1933), reflective practice includes four elements/ attitudes: Open-mindedness – "a willingness to consider different viewpoints and an acceptance of the possibility of error even in the beliefs that are dearest to us" (1933, p. 30); Responsibility – paying attention to the decisions and reasoning's derived from personal actions); Wholeheartedness – a genuine personal analysis of one's own belief and assumptions, the outcomes of one's actions and the understanding that one can learn something new from his or her experiences; and Directness – "a attitude of trust in the validity of one's own experience without spending a lot of time worrying about the judgment of others" (Rodgers, 2002, p. 860). Basically, Dewey argued that experience is not as significant as reflecting on that experience.

Task: Your task is to reflect on the information and field experiences of the semester (EDU 201 & EDU 202). Below are guiding questions. Please write and submit a **2-3 page** summary reflecting on the course content and field experiences.

Please state at the top of your submission if you were in a field placement or were using TLAC.

Due December 13, 2021

- (1) Do you feel more enthusiastic about the teaching field? Why? Why not? Explain
- (2) How did the discussion reflective prompts in EDU 201 and EDU 202 help you develop as a teacher? Be specific
- (3) What do you think you learned during the field experiences? Be specific and cite examples
- (4) Where do you think you need improvement and/or areas to learn more about? Be specific and cite examples
- (5) Feel free to include other ideas that you feel are important to your professional growth

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