Annotated Bibliography


This peer reviewed journal article utilizes the transformative learning theory to critique standards and competency-driven notions of online teaching to provide various perspectives of online professional development for adult learners. Within this article, a review is used to analyze various pieces of literature, including journal articles, and qualitative and quantitative research studies about online teacher roles and competencies. The transformative learning theory supported a framework to analyze the learning process of teachers who taught online. Literature from this article suggests that while online teachers’ roles guide the online training programs, there is a lack of online teacher empowerment that promotes inquiry and critical reflection. Adult learners and teachers must engage in consistent reflection and action to engage and think critically about the course at hand. The article also notes that the roles of online-teachers are vital to student success. The analysis shows that there is diversity in the understanding and meaning of online teacher’s roles verses competencies. The more reflective a teacher is, the more constructive the education will be. A strength of this article was the thoroughness of the literature searched for the study. A weakness of this article is that while many sources confirmed their findings, there was minimal search of the counter argument and no counterclaims stated.

This quantitative research study utilized a nonexperimental design, including a single survey that included questions with Likert scales to measure radiography teacher perceptions of the effectiveness of asynchronous online courses. The original survey that was created and given to participants was created using elements from three other published surveys: the Online Faculty Satisfaction Survey, the Technology Acceptance Survey, and the Factors Affecting Faculty Use of Technology Survey. Participants were given the survey electronically and the data collected revealed that radiography faculty perceptions of the effectiveness of online courses improves with years of experience teaching online courses. It also shows that teacher perceived self-efficacy of competency with technology increases with years of experience. The faculty perceptions of online-course effectiveness are not affected by specific faculty position, age, or experience. Positive perceptions of the effectiveness of online courses increased with the number of years having taught online, the number of online courses taught, and the perceived competence with technology. The study found that faculty who were perceived as the most competent with technology had a strong positive relationship with technology-enhanced learning. A strength of this study was that researchers took a blend of three published and reliable surveys to create their own survey that sought to explore a wider range of topics. A weakness of the study is that the only data collection instrument used was the single survey.

This peer-reviewed research study focuses on effective online professional development programs and what characteristics teachers report are effective means of training. The study utilizes qualitative and quantitative methods through a questionnaire that consists of 21 Likert scale questions and 8 free response questions that explore teachers’ perceptions of the effectiveness of various features of online teacher professional development, specifically content relevancy, online features and delivery quality, online participation and duration, and transformational learning practices. The study found that regardless of online features, participants reported few benefits of online teacher professional development regarding the delivery mode, however, the majority of participants noted it was convenient and fit their schedule better than face to face meetings. Only 25% reported this was an engaging means of professional development and 30% reported it was difficult to stay motivated and engaged during training. Overall, there was a discrepancy between the outcomes that trainers sought and the outcomes that participants felt were gained. A strength of this study was the use of qualitative and quantitative questions for triangulation. The study focused on the Likert scale answers and quantified participant response and filled in the gaps with their textual responses. A weakness of the study was that many teachers were surveyed and the access to training was never monitored. Depending on the school, the presentation of the professional development’s importance or delivery could have varied, thus, impacting participant scores on the survey.

This interpretive hermeneutic research study sought to identify practical knowledge of mathematics teachers and their online professional development. The study was designed to bridge the gap on what mathematics teachers and students are doing with new technologies and how they are adapting to complex circumstances in educational practices. Participants participated in four Elluminate sessions, asynchronous text discussions, exchanged emails, and participated in informal face-to-face and telephone interviews. The nature of the hermeneutic study was to explore teacher’s experiences and note if these experiences were consistent with inquiry approaches to learning to gauge the actual social and cognitive processes in which participants engage with during online professional development. The findings of the study revealed that the nature of the task, in this case mathematics, impacts the quality of the online interaction. Mathematics problems that incorporated easier content were best used for the online collaborative environment. Having content that is more accessible allows participants to assert their identity in the online environment. A strength of the study is that by using a hermeneutic approach, the researchers could modify the instruction presented to participants to see what worked and didn’t work in the online professional development environment. A weakness of the study was the participant sample size. The original sample size was small, and after having participants drop out of the study, it made the sample even smaller.

This research study explores teacher perceptions of the effectiveness of online professional development assisting them in learning how to implement technology into their own classrooms. This action research study utilized qualitative methods to collect data from discussion boards, interviews, and teacher blogs. Data explored teacher perception of the effectiveness of online professional development that they participated in for their specific school site and focused on how the professional development pertains to online engagement. Through thematic coding of teacher responses, findings of the study revealed that teachers identified three themes that have an impact on their online engagement. These themes are: investigation, reflection, and constructive dialogue. If teachers are provided trainings where these three themes are valued, the study found that they will be more engaged with the training and better equipped to return to their classrooms and incorporate knowledge from the training. A strength of this study was that a variety of qualitative data was analyzed, including teacher blogs, interviews, and discussion posts. A weakness of this study was that, until the data analysis section, the actual qualitative method was not mentioned. Readers of the study had to assume what methods were being utilized throughout most of the study.
This qualitative research study explored the various needs of online teachers and examined professional development protocols to identify effective online professional development strategies. The purpose of the study was to understand the extent to which online teachers in the K-12 setting are prepared to teach in an online forum. The study recognized that there is a need to identify effective professional development for online teachers as there is a lack of higher education courses that focus on this domain of teaching. The study utilized a qualitative, open-ended questionnaire sent to teachers that addressed how their understanding of virtual competencies and skill sets informed their professional development needs. Teacher answers were coded thematically. The data revealed that teachers believe that there is a need for continuous professional development and reinforcement catered to online instruction. Furthermore, the study found that teachers perceived professional development should be centered on teacher qualities, technological competence, and interactions with fellow instructors in safe spaces that encourage the sharing of best practices. A strength of this study was how the data was coded thematically. Once an initial theme emerged, researchers cross referenced these themes with other themes that emerged. The coding process was thorough and detailed. A weakness of the study is that only one data collection instrument was used, thus a lack of triangulation.


This research study focuses on online professional development programs and explores the way professional learning takes place and focuses on the impact that e-learning and learning design and technologies has on the professional learning of individuals within the study. This qualitative study utilized a grounded theory approach and sought to explore the professional process through actual professional development of participants. Findings of the study revealed that ensuring that learners are in the center of the learning process and engaged utilizing various interactions rather than a focus on content will have the most benefits. Furthermore, findings suggest that mentors and the content of the program play a supporting role, however, active engagement through collaboration with peers is most beneficial for participants. The study found that this type of learning resembles authentic workplace settings and reveals that e-learning activities can be helpful in designing online professional development. A strength of the study is that the methods of e-learning used were solely online, which allows for a stronger correlation to the online professional development setting. A weakness of the study is that theoretical saturation was not discussed.

This research study utilizes a case study approach to determine what interactive and/or experimental patterns occurred in graduate student threaded discussions within professional development courses. The study explored web-based instructional settings and how they are designed by designers, taught by instructors, and impact students. The study is premised with a literature review that notes the importance of interaction in web-based instruction, online facilitators’ engagement in discussion threads, and the role and importance of group interaction. The methods of the study include collection and analysis of threaded discussion board transcripts, interviews with instructors, and formative and summative course evaluations. Data was coded using themes that emerged within the study. These themes were categorized as five stages: introduction, identification, interaction, involvement, and inquiry. Results of the study revealed that learners collectively progressed through these stages sequentially. Furthermore, it was found that the role of the instructor is essential to student success and engagement. When instructors scaffold and participate in threaded discussions, their students are more willing to engage. The study supports other literature that suggests that asynchronous threaded discussion posts are essential to the online instructional methods that promote critical thinking. The initial coding of this data is a strength of this study, while the inability to generalize their findings could be seen as a weakness of the study.

This quantitative research study explored online teacher trainings and various challenges that online teachers face in terms of online professional development. The use of a 19 question, closed-ended survey allowed participants to share insights on the amount of preservice training they received in online education, the various challenges they face as online teachers, and their perceptions of the types of online professional development they believed would benefit them the most. The study found that online teachers do not receive ample preservice education and training in online education and may need addition training to best support their students. Findings also suggest that more research is needed to determine best instructional practices to improve student engagement, perseverance, and performance. A strength of the study is that the survey given to teachers consisted of elements of various published surveys to ensure reliability and validity of the data collection instrument. A weakness within the study is the use of qualitative descriptors such as emerging themes within a quantitative study. The use of this language may confuse readers. Another weakness of the study is that although the survey was sent out to many teachers, depending on the location, a range of 40% -100% of teachers completed the survey. This could potentially skew data in that specific areas may have a heightened or lessoned number of teachers with certain perceptions. Certain schools could have higher emphasis one way or the other. A more randomized sampling of participants would generate more generalizable results.

This quantitative research study explores teacher perceptions of challenges and participation in online professional development. Participants of the study were sent an electronic survey that explored their perceptions of their engagement in online professional development, challenges of online professional development, and preferences within online professional development. The study found that 85% of participants (virtual teachers in Wisconsin) reported that they have participated in trainings while teaching online. The study found that participants most frequently reported challenges in their online teaching environments related to professional practices such as getting their own students to finish their work, or work collaboratively in a distance learning environment. The study also found that participants preferred unstructured online professional development over structured online professional development. A strength of the study was that they had 91% of participants complete the survey for the study. This is a large percentage of the online teaching population in Wisconsin. Another strength of this study is that the researchers discuss their survey development and sought feedback on them prior to using the tool within the study. A weakness of the study is that it is not generalizable as it focuses specifically on online teachers working for virtual schools in Wisconsin.