TOWARD DEVELOPING BEST PRACTICES

A Study on the Perspectives of K – 8 Online Instructors

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ABSTRACT

Virtual education is expanding to meet the varied needs of families with elementary and secondary students. As virtual enrollment increases, the need for high quality virtual instructors increases. A synthesis of virtual teacher perceptions and effectiveness suggests online teachers rely on a variety of means to build trust and to purposely communicate and connect with students and to manage the online course. Demographic information concerning virtual teachers implies they tend to be highly qualified, with, on average, more years teaching experience than their brick and mortar peers, and oftentimes more advanced degrees. Research seems to indicate a need for increased professional development and teacher training, specific to the virtual environment, for current and future online teachers, including pre-service training at the undergraduate level. As there is relatively little research in this area, with most concentrated at the high school and college levels, literature points toward a need for further research in K – 8 virtual schools, specifically in the areas of effective practices, the effect of prior teacher experience, and appropriate training.
PURPOSE

The purpose of this study is to determine the perspectives held by K – 8 virtual teachers concerning their instructional roles to gain insight into the instructional strategies supporting a teacher’s coordination of content, technology, and pedagogy. A related purpose is to determine the perspectives held by K - 8 virtual teachers concerning impact of prior teaching experience and professional development and training for virtual teachers as related to virtual instruction pedagogy.
RESEARCH QUESTIONS

- What are the pedagogical practices used by K–8 virtual teachers, and why do virtual teachers utilize these practices?
- What training components are essential for virtual educators and what college coursework is appropriate for virtual teacher training?
RESEARCH QUESTIONS

- In what types of school sponsored professional development and training do K – 8 virtual teachers participate and how does this training influence K – 8 virtual teacher pedagogical practices?
- How does prior classroom experience impact transition to successful virtual education?
KEY TERMS

Online Learning

- takes place in conjunction with the Internet.
- includes a variety of technologies to complete
  - Synchronous activities - teacher and students participate concurrently from various locations, such as web conferencing and phone conversations.
  - Asynchronous activities - students are not required to be present simultaneously, have access to lessons and materials, and can complete them following their own timetable to meet school or teacher established deadlines.
- Purpose of online learning - to allow learning of material when student and teacher are separated by time and place.
- Participants - may be students in colleges or universities, high schools, middle school, or elementary schools.
- United States Department of Education (n. d.) - forty-eight states “currently support online learning opportunities” (Virtual or online learning section, para. 1).
KEY TERMS

Professional Development

- used to enhance instruction and to affect change in schools (Rice & Dawley, 2009).
- related to skills and knowledge necessary for teachers to educate students.
- may involve a new program to combat bullying, increase test scores, improve reading comprehension or writing skills, or a whole host of other topics.

Teacher Preparation

- denotes undergraduate and graduate programs and coursework
- designed to train students to teach.
KEY TERMS

Teacher Effectiveness

- The blending of teacher characteristics leading to student achievement.

- Virtual world compared to traditional setting – similar, yet differing, techniques required to make connections and engage students.

- Examples of characteristics:
  - teaching experience,
  - formal and informal preparation,
  - lesson design,
  - communication skills,
  - and course management.
PERCEPTIONS AND PRACTICES OF SUCCESSFUL ONLINE TEACHERS

Archambault’s research (2011) on “technological pedagogical content knowledge (TPACK)” (p. 75)

- asserts there are multiple aspects and roles associated with being a virtual teacher that overlap and intertwine
- similar to the framework developed by Susan Patrick (Wicks, 2010)
- Virtual teachers
  - well-prepared to teach their content areas
  - employ effective teaching methods
  - perceive their greatest challenge - tackling the technology necessary for the virtual environment

Hewett and Powers (2007)

- suggest knowledge of latest technology not as important as knowing how students react and learn in the online setting.
PERCEPTIONS AND PRACTICES OF SUCCESSFUL ONLINE TEACHERS

DiPietro’s research (2010)
- supports TPACK research proposing five beliefs leading to successful online instruction:
  - utilizing clear, timely communication,
  - building a sense of caring community with students,
  - maintaining high expectations with rigorous content,
  - supporting student success through scaffolding,
  - coordinating knowledge of content, pedagogy, and technology.

Schulte’s research (2010)
- supports TPACK - suggests virtual instructors view technology as vehicle for delivering content rather than allowing the content to determine how to teach the course.
- substantiates teacher perceptions - effective, timely communication and course management are essential to success in the virtual classroom.

Ferdig, Cavanaugh, DiPietro, Black, and Dawson (2009)
- the various overlapping roles of the virtual teacher challenge online teachers due to necessity to merge content, pedagogy, and technology.
A “PICTURE” OF THE VIRTUAL TEACHER

Research by Archambault and Crippen (2009)

- virtual teachers compared to their brick and mortar counterparts
  - have more years of teaching experience
  - more advanced degrees

Dawley, Rice, and Hinck (2010)

- report that over half of their participants have between six and fifteen years teaching experience
- more than 60% of participants have a Master’s degree

Rice and Dawley’s research (2009) on virtual teachers

- tend to be highly qualified in their field
- more than 60% have over five years teaching experience
- over 90% have less than five years teaching in the virtual environment.

Archambault (2011)

- Pedagogy and content - areas in which virtual teachers suggest they are most equipped

Technology expertise in virtual schools

- Rice and Dawley’s report (2009) - teachers’ grasp of technology is a weakness
- Dawley, Rice, and Hinck (2010) - over 90% of participants affirmed having technology training as part of their professional development program.
- Archambault’s research (2011) - teachers continue to note technology as a weak area.
PROFESSIONAL DEVELOPMENT AND TEACHER PREPARATION

Smith’s (2009)
- experienced virtual instructors consider important, especially in the area of technology
- need for preparation for administrators in the virtual environment

Dawley, Rice, and Hinck (2010)
- 25% new virtual teachers received no training to prepare for online teaching

Repetto, Cavanaugh, Wayer, and Feng (2010)
- calls for an increase in professional development for supporting special education students.

Archambault, (2011); Archambault, & Crippen (2009); Barbour, Kinsella, Wicks, & Toker, (2009;)
Hewett & Powers (2007); Oliver, Osborne, Patel, & Kleiman (2009); Rice & Dawley (2009); Smith (2009;)
Wicks, (2010)
- need for professional development for current and new virtual instructors,
- preferably before beginning online instruction

Archambault, (2011); Archambault, & Crippen (2009); Barbour, Kinsella, Wicks, & Toker, (2009;)
- need for teacher preparation programs to include integration of more technology
- suggest growth of virtual schools will lead to an increased need for online instructors, possibly newly certified teachers with little or no face to face teaching experience.
EFFECTIVENESS OF VIRTUAL INSTRUCTORS

DiPietro’s research (2010) indicates effective virtual teachers:

- regularly self-reflect to improve instruction
- and incorporate these five beliefs to enhance their efficacy:
  - utilizing clear, timely communication,
  - building a sense of caring community with students,
  - maintaining high expectations with rigorous content, supporting student success through scaffolding,
  - and coordinating knowledge of content, pedagogy, and technology

Development of national standards for online teaching

- “National Standards for Quality Online Teaching” as published by the International Association for K-12 Online Learning (2010).
  - examines teacher perceptions of online teaching standards;
  - indicate a need for further realistic alignment of online teaching standards with true roles of virtual teachers.
RESEARCH DESIGN

- Qualitative research
- Constructivist design

- Seeks to determine the beliefs and perspectives of successful K–8 virtual teachers (Gall, Gall, & Borg, 2010)

- “Effective” teacher criteria based on research conducted by DiPietro (2010) concerning successful secondary virtual teachers
SAMPLING

The sample for this research would be drawn from effective K – 8 teachers in an accredited virtual school.

- **Sample size:**
  - 12 - 15 teachers
  - Approximately one third from grades K - 2
  - Approximately one third from grades 3 – 5
  - Approximately one third from grades 6 - 8

- **“Effective” teacher criteria**
  - State Certification - Highly Qualified, in content area
  - Experience
    - at least three years prior face to face teaching experience
    - at least three years online teaching experience
  - Recommendation of the Head of School (HOS) or other administrator
METHODS OF DATA COLLECTION

Communication with field participants:

- Multiple recorded in-depth interviews with each participant
- Emails
  - Provide ongoing conversations
  - Allow sharing of additional examples from participants
  - Promote member checks to ensure validity of data
METHODS OF DATA COLLECTION

Field notes/memos – collected during interviews to document decision-making process

Transcripts of recorded conversations to ensure accuracy
DATA-ANALYSIS PROCEDURES

Data analysis will involve coding by synthesis of interviewees’ responses into applicable categories.

- Initial coding
  - Memos to record - for possible exploration in future communication (emails or interviews)
  - Questions
  - Possible themes (DiPietro, 2010)
DATA-ANALYSIS PROCEDURES

Focused coding of initial coding
- Organization into categories
- Examples of relationships between categories

Selective coding
- Synthesis of categories from focused coding
- Seeking classification of primary perceptions

Compilation of a list of themes

Comparison to DiPietro’s (2010) research
- Proposal will be submitted for prior approval of institutional review board prior.
- Researcher will contact HOS for permission to conduct research and list of possible participants.
- Teachers agreeing to participate will fill out a release form.
- Researcher will give prior notice for interviews and arrange a mutually acceptable appointment time.
Teacher interviews will be conducted online and recorded via a live Blackboard Collaborate session.

Teachers responses will be verified via member checks.

Interview questions will be provided to teachers prior to second interview.

Teacher responses will be coded and a separate list of identifying information kept to maintain anonymity.
The research will begin at the beginning of the school year with the contact of HOS for permission to conduct research and identification of potential participants. Initial online interviews will be conducted during the first quarter of the school year, with email communication continuing throughout the course of data collection. One on one conversations with participants will be conducted bi-monthly during the first and second quarters of the school year. Initial coding of data and recording of field notes/memos will begin during the first quarter of the school year; coding will continue throughout the study. Near the end of the second quarter of the school year, the researcher will send participants a copy of the second online interview questions, with those interviews being conducted within one to two weeks after the email is sent.
REFERENCES


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