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2015 FOR UM FOR CHRISTIAN TEACHER EDUCATORS

Christian Higher Education: Teaching Teachers Well for a 21st-Century Mission



AVOID THE "TEACHING TO THE TEST" MENTALITY

Jeremy A Ervin, PhD Cedarville University

Teacher candidates must encourage the 21st-century learner to interact with content, technology, and each other in vastly different ways than they did a decade ago. Understanding the mindset of the students is a prerequisite for effective teaching of concepts and training of 21st-century skills necessary for them to be ready in a career and college. This paper discusses how the researcher plans to determine the current status of how Cedarville University's teacher preparation professors implement the paradigm shift from teacher-centered to student-centered instruction with 21st-century skills through the four key mind-sets of today's 21st-century students: digital native, global thinker, informational literacy, and empowerment.

INTRODUCTION

Teaching teachers effectively for a 21st-century mission at Cedarville University is essential for preparing our teacher candidates to integrate their faith, learning, and life as competent, compassionate, professional educators. Twenty-first-century teacher preparation programs must adjust the instructional model paradigm from teacher-centered instruction to student-centered instruction. "Teaching students, not content" should be the motto of all teachers. If we are truly trying to teach the student—the whole student—then content must not be the end goal. My investigation is to determine to what extent is our teacher education program is implementing this paradigm shift in instructional models with the four key mind-sets of today's 21st-century student: digital native, global thinker, informational literacy, and empowerment.

PURPOSE

If teacher education program curriculum looks the same as it did 10, 15, or 20 years ago, there is something wrong. The P–12 student is different; we must train our candidates how to teach these students differently. Neurological research gives us a better understanding of how the brain functions—shifting away from the single path to recall information to a multinetwork pathway connecting multiple lobes of the brain (Amos 2000; Hopfinger 2000). The way to learn looks different now than it did just 15 years ago. Pedagogy has to be different based on this. Teacher-

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centered instruction, which is aligned with the older understanding of brain function, must give way to a betteraligned paradigm of student-centered instruction.

Reinforcing student-centered instruction in our teacher preparation program requires conceptual change since most of our teacher candidates have experienced the teacher-centered instructional model in their own education, field placements, and college content courses (Evertson, Neal, and National 2006; Feden 2012). Seeking this paradigm shift in teacher candidates is a challenge, but it is essential in educating effective teachers (Grossman, Hammerness, and McDonald 2009; Sadler 2012). Engaging teacher candidates in the student-centered instruction model, our curriculum must provide training about today's student and their 21st-century skills (Dwyer et al. 2014). As we are in the process of modifying our curriculum to align with our new Council for the Accreditation of Educator Preparation accreditation standards (Council for the Accreditation of Educator Preparation 2013), we have a prime opportunity to make any changes needed based on this investigation.

METHOD

Throughout the typical constant assessment of our teacher education program, an additional internal evaluation using syllabus audits and alignment with proficiencies of student-centered instruction, 21st-century skills, and the four key mind-sets of the 21st-century student will be implemented during the 2015/16 school year (Ervin 2014/15; Lam and Tsui 2013; Norman and Sherwood 2015). Examples of alignment with the four key mind-sets of the 21st-century student are provided to gain a better understanding of expectations of the investigation.

DIGITAL NATIVE

As digital natives, students desire to communicate and collaborate through technology. So how can we train our candidates to use this mind-set to their advantage to get students to collaborate throughout the learning process? One way is to engage teacher candidates in chats on Twitter. Using the right hashtag and/or handles, all of a sudden the leading researcher or mover-and-shaker in the field is participating in the classroom experience. With proper training, whole classes could take place synchronously on Twitter using our class hashtags. So whatever the course descriptor and number is (e.g., EDSE-4100), use it in all original Tweets and replies. Even assessment of the course outcome will be achieved by a future search of the class hashtag. This example allows the candidates to experience in an education course how to communicate and collaborate through technology.

GLOBAL THINKERS

Global thinking is another mind-set of the 21st-century student. Modeling ways to engage the global thinker requires projects keying in on the big ideas, the essential questions. Projects need to get them to be critical thinkers, problem solvers, because no problem worth solving can be solved through an isolated fact. Authentic, performance-based activities are global in nature—so there are several concepts that must be utilized to frame an effective solution. One way to train our candidates to educate as a global thinker is to use Google Forms. Creating and implementing Google Forms allows for groups to collaborate as a group, but also to bring in experts or local community leaders. For example, several different groups in a class could create a survey though Google Forms to determine the range of intervention practices elementary teachers use based on different geographical regions. Collecting data and making an analysis

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would be one way for candidates to understand multiple concepts related to intervention, diversity, statistics, analysis, and making recommendations for future teaching practices.

INFORMATIONAL LITERACY

21st-century learners need to navigate a lot of available information. So, how are we training our candidates to help their students navigate through the good and the bad in all of this information? What kind of projects can we do to model ways to help them navigate the digital information abyss? One way is to have them create an infographic on a concept. (For an example of an infographic, visit http://elearninginfographics.com/.) During the researching of the concept, candidates will be required to filter out the erroneous information to create the infographic. Since there are a lot of free infographic resources, including four really nice infographics generator websites to create one, it becomes a simple and cheap project to implement into a course. Essentially, an infographic is using graphics to provide information—a sort of digital poster that presents data in a stimulating way to provide understanding of the content of the topic. Again, an artifact is being produced to easily assess understanding.

For instance, a course could have groups create an infographic on 21st-century skills. Sorting through all of the information that is out there on what really are 21st-century skills will provide real experience in informational literacy. The beauty of utilizing Web 2.0 tools like this is that candidates are already using other social media websites (e.g., Instagram), and it's like second nature for them, with no problems in the production of the infographic. Instantly candidates are motivated to spend unusually lengthy periods of time engaged in the learning outcome without any external pressure from the professor.

EMPOWERMENT

Today's students demand individuality. They want to listen to their own music at the time they want to, hence, there is an app out there for that. They seek to tailor everything to their own whim. Let's train our candidates to use this to their advantage. Let's allow students to be empowered and tailor their learning. As student-centered instructors, we seek variation in ways to demonstrate understanding of content, because we want to empower the student to be motivated to be engaged in their education. Students should reflect on their own learning about it and making sense of it. Education is powerful. Unfortunately, students don't want to learn. We must train our candidates to be motivators of learning. Providing differentiation in our teacher preparation courses will model this 21st-century mind-set.

One way to do this is to allow candidates to create voice-over movies. No need for a video camera or for recording the candidate's face. Just use any number of ways: PowerPoint with narrations, Prezi with voice recording, or any number of free Web 2.0 tools to create a screen capture with voice-over recordings. For example, Prezi is an alternative zooming presentation website that provides the ability to create a presentation and record your narration into it free of charge. So understanding the multiple concepts surrounding diversity (e.g., cultural, socioeconomic, gender, geographical regions) will require a lot of class time. But what about having candidates choose a diverse topic and create a video presentation about it? Since the video is stored on the Internet, there is no need for large network space to store the video. Just turn in the link to the Prezi. Probably, there isn't enough time in class for every group to present, so post the link and create an assignment that requires every student to engage in every group's presentation. This is a way to allow candidates to tailor their assignment, bring their own creativity and innovation into it, and empower them to understand concepts that are aligned with course outcomes.

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CONCLUSION

Teacher candidates must encourage the 21st-century student to interact with content, technology, and each other in vastly different ways than they did a decade ago. Understanding the mind-set of the students is a prerequisite for effective teaching of concepts and training of 21st-century skills necessary for them to be ready in a career and college. This paper discusses how the researcher plans to determine the current status of how Cedarville University's teacher preparation professors implement the paradigm shift from teacher-centered to student-centered instruction with 21st-century skills through the four key mind-sets of today's 21st-century students: digital native, global thinker, informational literacy, and empowerment.

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