Structuring the Content, Process, and Product of Educational Foundations

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The educational landscape is changing for teachers and students in the 21st century. For teachers in the PK-12 setting and post-secondary levels, high accountability and diminishing resources are adding to the pressures of producing a college or career ready graduate who "meets or exceeds" the standards. For students, they are surrounded by 24-hour media and quick fixes; therefore, they have come to expect to memorize the information for the test and get immediate knowledge of correct results. There is a clash between these two mindsets. The restructuring must examine the content, process, and product of educational foundations, specifically introduction to teaching courses.

The National Council for Accreditation of Teacher Education (NCATE) also recognizes the need to restructure teacher education based on the findings of their Blue Ribbon Panel. NCATE organized a panel of 29 individuals representing preschool through higher educational levels. This panel recommended revamping teacher education curricula from beginning to end. The focus should shift from an academic content focus to a clinical practice, where the teacher candidates can apply and practice the newly learned content and pedagogy. The Blue Ribbon Panel listed 10 design principles. Of these design principles, the clinical-based preparation of teacher candidates should be focused on student learning and supported by data collected from research and development (Zimpher & Jones, 2010). According to Berry (2010), the current model of teacher preparation is based on the needs of the 20th century; however, preparing teachers for the 21st century classroom will require thinking and taking action by policymakers, practitioners, and the public. The general public and policymakers are unaware of the skills needed to be a good and effective teacher. In reality, the complex skills needed by a teacher to provide all students with the opportunity to learn are overwhelming (Darling-Hammond, 2006).

One of the major issues affecting teacher education is haphazard production because only 70% of teacher education graduates enter the field (Berry, 2010). It is unknown whether the remaining 30% of teacher candidates do not enter the field because of lack of skill, lack of preparation, or lack of market demand.

The purpose of this commentary paper is to provide a thematic, integrated dialogue about restructuring the content, process, and product of an introduction to teaching course for undergraduate students. The commentary will include a discussion of the scope and sequence of the curriculum, including the textbook in an introduction to teaching course aimed at bridging the gap between the different perspectives and expected specific learning outcomes, and teaching practices to be implemented within an introductory of teaching course to establish a solid foundation for future professional coursework.

Content

After using various textbooks and reviewing others, I found that I was supplementing the course content more frequently than utilizing the assigned textbook. When examining student course evaluations, I read comments like "The textbook wasn't very engaging". Other comments included, "There wasn't much need for the book… [The instructor] presented all of the course material…" Such comments sparked the question of how could the content be restructured to capture all of the components that were necessary to build the educational foundations for the 21st century classroom. After reviewing the professional education literature related to this question, a common theme emerges calling for establishing quality teacher education programs which highlight how learning theory and clinical practice are inter-connected and fundamental to support student academic achievement. According to Darling-Hammond (2006), a common factor of exemplary teacher education programs is a strong core curriculum where the content is grounded in applicative practice, child and adolescent

development, assessment, and subject matter pedagogy. Furthermore, explicit strategies are needed to assist teacher candidates with defining their beliefs and assumptions about education process within the classroom.

A new etextbook was written that contained original content, peer-reviewed articles, and teacher-created materials. The etextbook was offered as a free download to all students who took the introduction to teaching course. The students could download it then view it on their desktop, iPad, or other mobile device, or print a hard copy. The majority of the students opted for the electronic version either on their computers or mobile devices.

Within the book, there were three units: Foundations, Learning Theory, and Effective Teaching Tools. The Foundation unit covered the History of American Education, Educational Philosophy, and Law, Ethics, and Dispositions. In the Learning Theory Unit, behaviorism, social learning, cognitive development, and information processing theory are discussed. Within the Effective Teaching Tools, teacher-centered and student-centered instructional strategies are explained including their advantages and disadvantages. In addition, classroom management, technology, classroom assessment, and instructional design are discussed. Each chapter contains application activities for the students to apply the learned theory or concept to the practice within the classroom. There are short videos about theories, actual lesson plans, and virtual classroom tours, and there are interactive practice activities and review games for the students to review the content. At the back of the etextbook, a series of notetaking guides were included for each chapter to guide the students' reading.

The etextbook was piloted with three courses, one graduate and two undergraduate courses. An ongoing discussion board post was maintained for all three courses for the students to offer suggestions for word usage. During Week 11 for the course, all students were invited to

participate in a web-based survey to evaluate the format and content of the etextbook. Of 48

students, 36 students completed the evaluation survey, which is a 75% response rate. The

majority of the respondents felt that the etextbook content allowed them to understand the course

material. On a four-point scale, with 4 being the highest, the mean response was 3.50 with a

standard deviation of 0.65. "It gets right to the meat of the information instead of dancing

around useless facts that I will never apply to my classroom," replied one student. In addition,

the respondents felt that each topic within the etextbook was accompanied by an application or

concrete example. Using the same four-point scale, the mean response was 3.56 with a standard

deviation of 0.65. Another student stated, "I could actually see how this might help me in the

future." When asked if they planned to utilize at least one activity in their current and/or future

classrooms, the mean response was 3.42 with a standard deviation of 0.69.

The respondents stated that this etextbook provided more illustrations and examples

compared to most college textbooks. One student said, "The illustrations and examples are the

strengths of this book. " Another student said the strengths were "the visual aids, outlines, and

videos." This result indicated that one of the goals was achieved since I wanted to create an

etextbook, which showed the application of theory into the classroom setting. According to one

student, "The etextbook is to the point. Most regular textbooks take forever to get to the point

and lose your attention. "Even though many of the respondents indicated that they had not used

an electronic textbook in the past, the respondents felt one of the strengths of this etextbook was

the user-friendly and accessible format; 72% of the respondents viewed the etextbook on a

desktop, laptop, or other mobile device. Only nine students printed the etextbook and viewed it

in hard copy format. Another suggestion was stated by one student, "the cost of etextbooks are

usually less expensive." These respondents offered suggestions for improvement that included

links within the Table of Contents, horizontal formatting versus the vertical formatting, and the inclusion of more lesson plan examples.

Process

Since the purpose of post-secondary education is to acquire an educational experience, conversations about student persistence should not ignore educational practice within the classroom (Tinto, 1997). The classroom serves as a gateway for student integration into the academic and social communities within a college or university. A possible key for unlocking the gate is the *Seven Principles for Good Practice in Undergraduate Education* (Chickering & Gamson, 1987). The *Seven Principles* were developed during a series of conferences sponsored by the American Association for Higher Education (AAHE) and the Johnson Foundation beginning in 1985. At these conferences, a task force was created to identify key characteristics of successful undergraduate education (Gamson, 1991). The *Seven Principles for Good Practice in Undergraduate Education* are: (1) Encourages contact between students and faculty; (2) Develops reciprocity and cooperation among students; (3) Encourages active learning; (4) Gives prompt feedback; (5) Emphasizes time on task; (6) Communicates high expectations; and (7) Respects diverse talents and ways of learning. These good practices are universal for all types of institutions who serve undergraduates and for all types of undergraduate students who attend those institutions.

Student-Faculty Contact. This student-faculty contact can improve educational outcomes, such as student satisfaction, career aspirations, intellectual development, and academic achievement (Sorcinelli, 1991). Umbach and Wawrzynski (2005) found students who had frequent faculty contact reported greater academic gains. Similarly, Grayson (1999) found student-faculty contact was a significant predictor for students' analytic skills, communication

skills, and cumulative GPA with his study of 736 university students. Many pre-service teachers

do not have contact with education faculty until their sophomore or junior years. By offering

freshman learning communities taught by full-time education faculty, the pre-service teachers

come into immediate contact with faculty members instead of the part-time faculty or adjunct

instructor (Tinto, 2006). In addition, the educational foundations class could be partnered with

an English composition class to improve the teacher candidates' written communication.

       During the Fall 2012 Semester, two Freshman Learning Communities were created for

the Diversity Course and for the Introduction to Teaching course. In both Freshman Learning

Communities, the students indicated their first-semester experience was good on end of the

semester evaluation surveys. Nearly 90% of students planned to stay at the university and pursue

the same declared major. Responses from both groups were similar regarding their rationale for

remaining at this university such as location, reasonable costs, faculty and peer relationships, and

specific degree programs. From other data sources, unfortunately, the college will lose one out

of every three students between now and next fall semester. With such a positive first-semester

experience, further research is needed to determine the effect of the second semester on their

intentions to stay.

       Cooperation Among Students. Effective learning is a collaborative and social event.

Cooperative learning, which has been implemented and researched extensively in the K-12

setting, changes the faculty and student roles within the classroom. The instructor becomes a

facilitator that guides the learning process, and students become the teachers that lead the

learning process. Skahill (2002) found that students who reported more friendships within the

institution tended to feel successful at the institution. He concluded development of a

community among students benefited the student learning at an institution and the well-being of

the individual learner. Likewise, Colbeck, Campbell, and Bjorklund (2000) conducted a

qualitative study with freshman students and found cooperative learning groups benefited the

students by providing essential job skills, such as leadership, division of labor, communication,

and problem solving.

Another example of this principle would be the incorporation of a peer review workshop

to improve each teacher candidate's philosophy of education statement. After completing the

rough draft, the students self-selected partners to complete the peer review writing workshop

either virtually or face-to-face. Guiding by prompts, the peers exchange papers, read them, then

evaluate them using the prompts and Likert-type scale ratings. On post-course evaluations, the

students responded that the participants were satisfied with the overall peer review process. The

positive comments about the experience included that the participants were able to find and

correct mistakes before submission and to gain a different perspective, which offered

constructive criticism. An unexpected response was, "It can help prepare you for future grading

practices."

Active Learning. With active learning, the students can move beyond rote memorization

of general knowledge and passive listening during class. Instead, the students talk about the

content, write about it, relate it to prior knowledge, and apply it to their daily lives (Chickering &

Gamson, 1987). Numerous empirical studies have been conducted to determine the effects of

active learning on student satisfaction, integration, performance, and persistence. Murray and

Lang (1997) conducted a study to determine the effect of active learning on exam performance

and student course ratings. They found that students who participated in active learning had

greater academic performance on multiple-choice and essay exams compared to the students who

had lecture style learning.

Active learning can occur inside and outside of the classroom. As a pilot program, a group of nine early childhood majors who were first semester freshman students were paired with an university supervisor similar to a student teaching setting. The university supervisor worked with the students during their field experience to offer critics. This same supervisor will remain with the student as they complete their program of study. Since this experience was the first classroom observation and teaching experience, reading materials and math manipulatives were provided for the students to use as a lesson. These students got the opportunity to develop, implement, and analyze an instructional lesson with ongoing support.

The eight students who participated in the mentoring program along with the two mentors were emailed a link on for a web-based survey. When asked to rate the overall mentor program, one of the mentors responded *Fair*, and the other mentor responded *Good*. For the mentees, the responses ranged from 2 (*Fair*) to 4 (*Excellent*) with a mean of 3.20 with a standard deviation of 0.84. The responses given by the mentors when asked to describe the relationship with the mentees ranged from 2 (*Fair*) to 3 (*Good*), but the responses given by the mentees ranged from 1 (*Poor*) to 4 (*Excellent*) with a mean of 2.80 and a standard deviation of 1.10. The variation may have resulted from the sample size. The mentees responded that their mentor gave them constructive feedback and answered any questions. According to the mentors, the mentees were "eager" to learn and improve. Both mentors primarily discussed lesson planning and implementation with their mentees. These topics were reiterated by the mentees. One mentee stated, "I learned to pay more attention to some of the things that I was doing…", things "that could have been done differently…", and things "that I didn't realize on my own". The mentees liked the additional resource within the classroom to offer "much insight". The students indicated the hands on and interactive experiences were beneficial learning experiences in the

classroom and in the field placements. Moving forward, it is necessary to engage these students in more kinesthetic and applicative activities to motivate their continued success, such as the lesson planning and implementation activity. These active learning opportunities allowed them to experience the daily routine of a 21st century teacher.

   Prompt Feedback. When given appropriate feedback in a timely manner, students can benefit from feedback and gain knowledge of the course content. Immediate, corrective, and supportive feedback is central to the learning process (Sorcinelli, 1991). This feedback provides formative assessments of student performance and offers suggestions for improvement. Formative and summative assessments allow students and instructors to determine what has and has not been learned and/or understood. Assessments should be given by the instructor, then graded and returned in a timely manner with appropriate feedback. Assessments should include formative and summative assessments, and summative assessment methods should include writing, paper-pencil, and performance tasks, which model a continuum of possible assessment within the classroom. Possible formative assessments could include *Tickets out the Door* or another summarizing activity. For summative assessments, traditional exams should be accompanied by mini-projects and reflective assignments.

   Time on Task. Students need assistance with effective time management strategies. Time management includes realistic instructional time during class and appropriate amounts of time allocated for class preparation outside of the classroom. Instructional clarity, organization, and preparation are examples of the time on task principle (Cruce, Wolniak, Seifert, & Pascarella, 2006). Much of the research regarding engaged time has occurred in the K-12 setting (Sorcinelli, 1991). At the post-secondary level, Feldman (1996) found the instructor's preparation, clarity, and organization had a moderate relationship with student achievement.

Cabrera, Burkum, and LaNasa (2005) found the probability of graduating for students who had

low socioeconomic status increased by 15% when taught using effective instructional methods.

In educational foundations, the instructors should chunk large assignments into manageable

pieces. For example, an educational philosophy paper could be broken into four parts: Why you

teach, Whom you teach, How and what you teach, Where you teach. Each of these parts can be

submitted as rough drafts through the semester. Beginning with "Why you teach", the instructor

could offer appropriate feedback and return it to the student. Then, two weeks later, the students

could submit another part. This process allows the pre-service teachers the opportunity to digest

the course content and apply it to their beliefs about education. At the end of the course, the

students will merge all four components into their final paper, which will be reviewed by a peer

in the class. After making suggested revisions, the educational philosophy paper will be

submitted by the students. By providing the scaffold supports, the final product is improved

regarding the ideas, content, and mechanics.

High Expectations. When the instructor sets high, yet achievable, performance goals,

the academic achievement among the students tends to increase (Sorcinelli, 1991). The

expectation for students to perform to their highest potential is viewed as a self-fulfilling

prophecy. In addition to the professionalism of the field experience, a large part of the

introduction to teaching course should be modeling expected behaviors of a classroom teacher.

Such behaviors include using different teaching styles, cooperative learning, active learning, and

differentiation methods within the classroom. It is hoped that these expected behaviors will

transfer to the pre-service teacher's future classroom. Another option is to discuss and evaluate

teacher dispositions within the educational foundation courses. Within the first classroom field

experience, the pre-service teacher, course instructor, and cooperating teacher can complete a

teacher disposition form to evaluate professionalism, work ethic, communication, and emotional intelligence. As society has changed, the dispositions exhibited in the classroom and through other communication outlets have declined. By conveying and evaluating these ideals and expectations at an early stage, the pre-service teachers can be informed and receive remediation if necessary.

       Diversity. Sorcinelli (1991) explains this seventh and final principle serves as the clip that binds all of the *Seven Principles* together. For each student sitting in the classroom, there are equal numbers of diverse talents and learning styles. Some students excel with hands-on activities while other students prefer a history lecture. Faculty who recognize these diverse talents tend to facilitate student growth and development inside the classroom and outside of the classroom. Over the last 40 years, college enrollment has increased. With this increase, more students are attending college with all types of cultural and learning backgrounds. A large number of students do not complete academically challenging work in high school; therefore, they are less likely to persistence in college (Kinzie, Gonyea, Shoup, & Kuh, 2008).

       The use of a "fish bowl" approach for field experiences allows the pre-service teacher to see different classrooms across multiple grade levels instead of the traditional pairing of the pre-service teacher with a cooperating teacher in the field. This approach is particular helpful with students who are interested in K-12 certification, such as Fine Arts Education, Health and Physical Education, and Foreign Language Education. Within the fish bowl approach, student can sample the available educational experience at learning centers, such as space and science centers and environmental education centers. In addition, the students could observe multiple teachers implementing a variety of lesson plans. This approach allows the students see to experience diverse settings and populations as well as observe diverse teaching styles.

Particularly, on the end of the semester evaluation survey in the Introduction to Teaching Course, the students indicated the desire to view multiple classroom settings. When asked to rate the field experience component, the responses ranged from 2 (*Fair*) to 4 (*Excellent*) with a mean of 3.23 and a standard deviation of 0.83. When asked if they would prefer to observe multiple classroom settings instead of one classroom placement, the responses ranged from 1 (*Strongly Disagree*) to 4 (*Strongly Agree*) with a mean of 2.53 and a standard deviation of 0.88. Some of the students commented that the field experience was "amazing", "excited", and "wonderful". Many of the students responded that they liked "getting [the] hands on experience" and "interacting with my students"; however, some students stated, "My cooperating teacher was not very good… She told me … she was ready to retire," and "the teacher assigned was not helpful." By offering more of a "fish bowl" approach during a lengthened class meeting, the students could see multiple teaching philosophies, observe various exemplar teachers, and reduce the additional field experience hours needed outside of the classroom. Furthermore, this approach could provide other sources for lesson plan origination.

Product

The beginning educational experience in an introduction to teaching course will provide the foundation for coherence and integration with the remaining coursework of a teacher education program. The changing dynamics in the classroom at all levels requires teacher education programs to rethink the entire preparation process from beginning to end. The rethinking should move away from academic content knowledge to a clinical based practice, where theory is integrated with content and pedagogy in an applicative environment (Zimpher & Jones, 2010). The hallmark of this clinical based practice is a hands-on approach to applying theory into classroom practice.

By restructuring of the content and process within an introduction to teaching course, the foundation of the teacher candidates' knowledge and skills will be solidified. By solidifying the foundation and incorporating a variety of clinical practices, the final product will be improved. Restructuring the content, process, and product of novice teachers will help them to learn how to teach and how to become a better teacher by addressing the problems of classroom practice and meeting the unpredictable needs of all students (Darling-Hammond, 2006). Thus, the 21st century student in the PK-12 setting will be taught by a better prepared and more equipped 21st century teacher.

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