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Organized Chaos: Modeling Differentiated Instruction for Preservice Teachers

Deanna Iceman Sands and Heidi Bulmahn Barker

Differentiating instruction is a way of thinking about and approaching the planning and implementation of curriculum and instruction with an understanding that learners differ in important ways. The purpose of this article is to describe an activity the authors developed meant to introduce the construct of differentiated instruction to preservice teacher candidates. This article includes a differentiated instruction lesson plan that varies significantly from the approaches typically seen on university campuses. The authors provide contextual information about their teacher education program, the values that serve to guide the program, the course in which this activity took place, and a full description of how they differentiated instruction in order to address the concept of "differentiation" with teacher candidates. The article concludes with implications for future practice.

The biggest mistake of past centuries in teaching has been to treat all children as if they were variants of the same individual, and thus to feel justified in teaching them the same subjects in the same ways. (Howard Gardner in Siegel & Shaughnessy, 1994)

Introduction

Differentiating instruction is a way of thinking about and approaching the planning and implementation of curriculum and instruction with an understanding that learners differ in important ways. Based on the work of Carol Ann Tomlinson (1995, 1999, 2000), differentiating instruction responds to these learner differences: (1) readiness levels, by varying rates of instruction as well as the

complexity of the targeted content; (2) learning profiles, by providing access to and interaction with information in numerous ways and across multiple dimensions; and, (3) interests, by incorporating the learner's affinity, curiosity, and passion for a particular topic or skill. These variables are attended to when we plan and thoughtfully vary the content, process, and/or products associated with a particular unit or lesson of instruction.

Though the term "differentiated instruction" may be relatively new, the foundations from which it evolved are not. Meeting all students where they are and adjusting content, process, and product so that each student can become a member of a learning community that supports his/her individual needs (Tomlinson, 1999) has served as the foundation for many educational initiatives. Progressive education, service learning, experiential learning, project based learning, individualized instruction, mastery learning, inquiry, and technology-based and process-based learning focus on supporting students to work at their own pace, level, and interests (Wolfe, 2001). Thus these educational initiatives focus on individual student learning rather than a pre-set, one size fits all, teacher-directed curriculum (Fischer & Rose, 2001). The approaches are organized and implemented in a manner that incorporates these individual needs, strengths, and interests into the classroom community of learning.

School populations have always been diverse, even when we consider a class full of seemingly homogenous students who "look alike," basically "act alike," or "live alike." Given variance in cognitive, affective, physical, and communicative development, groups of students will always differ (Sands, Kozleski, & French, 2000). In addition, today's classrooms include diversity in socioeconomic background, culture, ethnicity, and language. Consequently, today's teachers must use curriculum and instructional strategies to meet this broader range in learning differences of their students. In sum, professionals are called upon to serve a more diverse student body.

Meeting the complex needs of today's student populations in public schools requires collaboration among school professionals, families, and community members. Recommended practices include collaborative instructional and organization models, integrated curricular strategies, culturally responsive teaching strategies, data-driven instruction, and differentiated instruction (Glickman, 2002;

Ladson-Billings, 1994; Orkwis & McLane, 1998; Schmoker, 2001; Short, Schroeder, Laird, Kauffman, Ferguson, & Crawford, 1996). Unfortunately, many school professionals lack the training necessary to carry out new roles and implement these recommended practices for addressing the needs of all students (Frieberg, 2002; McNaughton, Hall, & Maccini, 2001; Whitaker, 2001). The lack of teacher preparation to address student diversity is due, in part, to the failure of faculty in teacher preparation programs to adequately model and integrate recommended strategies within their own teaching (Elksmin, 2001; Whitaker, 2001).

The purpose of this article is to describe an activity we developed meant to introduce the construct of differentiated instruction to preservice teacher candidates. This article includes a differentiated instruction lesson plan that varies significantly from the approaches typically seen on university campuses. That is, this lesson entails active teacher candidate participation, the use of pre-assessment data to drive the actual planning of the lesson, and the use of teacher candidate evaluation to assess both the effectiveness and modification of future lesson plans. The lesson incorporates varying materials, processes, and products. We provide contextual information about our teacher education program, the values that serve to guide the program, the course in which this activity took place, and a full description of how we differentiated instruction in order to address the concept of 'differentiation' with our teacher candidates. We conclude the article with implications for future practice.

Teacher Preparation at CU Denver

The School of Education at the University of Colorado is a graduate-level program. Within the School of Education, the Division of Initial/Professional Teacher Education houses all programs dealing with initial licensure or added endorsements in general and special education. These programs include elementary, secondary, special education (three different types of endorsements), and dual licensure options in either elementary/special education or secondary/special

education. Once teacher candidates complete their initial licensure or added endorsement programs, they can choose to complete their Master's degree in a variety of educational leadership areas.

The basic teacher preparation programs at CU Denver are all based in partner schools. Teacher candidates simultaneously complete university classes and internships across an entire academic year. One aspect of our program that is particularly germane to the topic of this article is that general and special education teacher candidates take a majority of their licensure courses together. When general and special educators have a common preparation program they develop a common vision, discourse, and framework by which to participate in collaborative decision-making as they support the needs of all children (Fisher, Frey, & Thousand, 2003; Winn & Blanton, 1997). As a result, regardless of whether they are pursuing general education, special education, or dual licensure, all teacher candidates take the same set of core courses. Within each course, instructors are challenged to embed concepts, knowledge, and skills associated with the fields of disability education, English as a second language, and technology. Modeling differentiated instruction to meet the needs of all students to both general and special education teacher candidates communicates the responsibility of every teacher to help all children learn at their individual levels.

The Course

IPTE 5020/5021, Integrated Curriculum Workshops I and II, are two of the core courses taken by all teacher candidates. These workshops are taught in a two-semester sequence. IPTE 5020 is a two-credit course taken during a teacher candidate's first semester. IPTE 5021 is a one-credit follow-up course taken during a teacher candidate's second semester. An essential feature of instruction and curriculum design, implementation, and evaluation is the ability of teachers to draw from students' previous experiences, help students make connections between new information and previous knowledge and skills, as well as to support students' transfer of new information to real-life contexts and environments. The purpose of these two workshops is to guide teacher candidates in achieving these outcomes for *all* students. Thus, teacher candidates explore approaches to and

design of assessment, curriculum, and instruction that support the needs of a diverse group of students, including those with disabilities, those from diverse socioeconomic backgrounds, those who experience English as a second language, and those who come from differing ethnic and sociocultural backgrounds.

The outcomes of this two-course sequence are assessed through the Student Academic Performance Sample (SAPS). In essence, the SAPS is a thorough, standards-based, integrated curriculum unit that teacher candidates design, implement, and evaluate based on student achievement. The SAPS includes the following components: a) a rationale based on the community, school, and classroom contexts; b) identified state and district standards that are then articulated into specific learner outcomes; c) pre- and post-assessment measures as well as methods for collecting ongoing assessment throughout the unit; and d) lesson plans that communicate activities and instructional strategies that reflect the principles of differentiated instruction. Teacher candidates must implement their unit and then provide reflections on the implementation, modified plans, and a thorough analysis and interpretation of student assessment data. During the semester in which this lesson was implemented, we had 77 teacher candidates across our two sections of the course.

Content

Given the integral role of differentiated instruction in meeting the needs of diverse learners, as the instructors of this course we were compelled to model a differentiated lesson during one class session for several reasons. First, we ask teachers across this country to differentiate instruction for their diverse learners (Ladson-Billings, 1994; McNaughton et al., 2001; Tomlinson, 1999, 2000; Waks, 2002; Wiggens & McTighe, 1998). Yet, too often, differentiated instruction is not modeled in higher education classrooms. "Sit and get" models of instruction are not effective for all learners (Jones & Jones, 2001; Vygotsky, 1978), including adult learners. Further, the complexity of differentiating instruction is not well matched to a lecture format of instruction. Modeling and experiential learning, on the other hand, are highly effective instructional strategies for complex skills (Dewey, 1916; Good & Brophy, 1994) like differentiated instruction.

Second, and perhaps more importantly, we were compelled to practice what we preach. Our students, the teacher candidates, bring very diverse background experiences and knowledge bases to our program. Our teacher candidates may come to our program with previous experiences in educational settings. For example, some have been child-care providers, parent volunteers, paraeducators, or licensed in areas such as vocational education, physical education, or other specialized areas. Some teacher candidates have completed or served out other careers (military, medical, dental, legal, business) and are looking to teaching as a second career choice. Still others are in their own classrooms, serving as teachers on emergency or temporary teaching certificates with low levels of mentoring or support. Other teacher candidates are coming straight out of undergraduate programs and seeking a teaching license as their initial career choice. The experience and knowledge that this range of learners carries with regards to children, education, and teaching varies immensely. Therefore, to assume that an instructor in higher education can meet the learning needs of this vast range of teacher candidates through a single approach to content, process, and product is absurd. Yet, prevailing practice is just that.

Our goal was to model the principles and practices we expect of our current and future educators while guiding them through an effective experiential learning activity. The topic of differentiated instruction couldn't have been a more obliging invitation.

The Lesson Plan

The template for this lesson plan involved the following steps: we reviewed the state and respective professional standards required of teacher candidates regarding strategies to support diverse students; we devised a pre-assessment that would provide data regarding each teacher candidate's current level of knowledge and skills about differentiated instruction; we created like-groups to carry out the lesson; we stated objectives for each group that built upon their current knowledge base; we created lesson activities that varied in content

and process; and we developed a feedback tool for evaluating the process and to inform our future efforts. The following sections describe each of these steps.

Pre-Assessment

The pre-assessment was used as a "ticket to leave" activity in a class prior to the one described in this article. The self assessment, illustrated in Figure 1 (p. 33), basically allowed teacher candidates to put an "X" in the box that served as the intersection between their preferred way of gathering/accessing new information and the degree to which they were familiar with various aspects of differentiated instruction—definitions, understanding of the components that could be differentiated, etc. Based on teacher candidates' self-assessments we composed five groups for each class (this would vary according to results of the self-assessment). Group 1 was for teacher candidates who identified themselves as not really understanding the definition of differentiated instruction and preferred to watch videotapes to gather information. There were two subgroups for Group 2. Group 2a was for teacher candidates who could define the construct of differentiated instruction but didn't know how to implement it and preferred reading and talking as a way of interacting with new information. Teacher candidates in Group 2b knew the definition, were not comfortable implementing differentiated instruction, and preferred watching videos to access information. Teacher candidates in Group 3 said that they had implemented a few lessons applying the principles of differentiated instruction but were having problems differentiating across content, product, and process and were having problems in particular with classroom management (due to numbers, we combined teacher candidates from columns 3 and 4 of the self-assessment into this group). Overall, this group preferred watching videos. The final group, Group 4, was comprised of teacher candidates who felt comfortable with differentiated instruction and were continuing to expand their skills but felt as if they could begin to instruct others in the principles and applications of the construct.

Differentiated Instruction – Self Assessment

Preferred learning modalities/varying aspects of familiarity with differentiation	Differentiated Instruction? Let me see. The definition is on the tip of my tongue ...	Differentiated Instruction? Yeah, I can define it and give you the components, but don't ask me to implement it.	Differentiated Instruction? I have implemented a few lessons but struggle with coming up with options across all possible components.	Differentiated Instruction? I can comfortably design instruction but struggle with effective management and my changing role.	Differentiated Instruction? I can comfortably implement it in at least one academic domain and am expanding my skills to other domains.	Differentiated Instruction? No problem, I can teach you all about it.
I learn best when I read and take notes. ...						
I would love to surf the net to find new information. ...						
Videos, videos, videos. I just love watching videos						
Talk, talk, talk, just call me Chatty Cathy!						

Figure 1. Pre-assessment for Lesson Plan.

Planning

Our goal in designing the lesson plan was to move each group developmentally along the continuum of being able to implement differentiated instruction and to provide them access to information in a format that was consistent with their preferred learning modality. Once we had mapped out a variety of activities for each group, we developed a set of instructions for the groups. Those instructions can be reviewed in Figures 2-6 (pp. 35-39). Notice that in several sets of instructions teacher candidates were asked to refer to a set of index cards. Each set was identical and contained four index cards on which an idea was presented that could be extended into a full lesson plan. Sets of cards with the same ideas were used across the various groups. While an instructor could tailor these ideas to any content area, the ideas we used are illustrated in Figure 7 (p. 39). In addition, we had to design a series of guides that specific groups would use to collect notes as they watched specified videos. Interestingly, though different groups watched the same videos, through the use of structured viewing guides the "lens" by which each group viewed the tape could be modified, thereby allowing groups to gain differing information from the same set of tapes (ASCD, 2001). Those guides are available from the authors upon request. Despite the fact that different groups watched the same videotape(s), the planning of the activities was such that no one group needed the same video at the same time. Table 1 (p. 40) illustrates a summary of the skills and processes targeted by group.

The Lesson

As we began our sections of this class, we each started the evening off with the following:

Tonight will be what I call "organized chaos." If someone looked into our classroom they would see lots of different activities going on, but everyone would be engaged and involved in what they were working on. That's what I hope occurs tonight. To me, that is what any classroom should be—engaging, active, and alive. Let's try it out.

Group 1

Group 1 members should watch Videos 1 and 2 from the ASCD set of differentiated instruction materials. While watching these videos each group member should complete individually the Reading Guide 1. The guides are included in the folder of materials for Group 1. After completing the videos and Guide 1, Group 1 students should debrief with one another and come up with a version of the Guide 1 that reflects the group's consensus answers.

Next, Group 1 members should refer to the science lesson plan that is included with their group materials folder. Using both their individual and group notes from the reading guide, the group should brainstorm various ways to differentiate the lesson for students' differing interests, readiness levels (content), and processes. As a summary, the group will report out ideas to the larger class.

NOTE: For any members of Group 1 that would rather gather info through the Internet, these members can use Guide 1 and search for information on the web; then join the larger group for the lesson planning activity.

Figure 2. Instructions for Group 1.

Group 2a

Group 2a members should review the Tomlinson text as well as supplemental materials that are provided in the group's material folder. While reviewing and reading these materials, each group member should individually complete Guide 2, provided in the materials folder. When group members have individually completed their guides, the group should reconvene as a group and share their guide responses.

After the guide is completed, the Group 2a members should assign themselves to groups of 4 people each. Each 4-member group should then pull out the set of colored index cards from the materials folder. Each card lists a concept and associated skill that can serve as a basis of a teaching lesson. Do not read or share the contents of the index cards with the group. Each group member should have a blank piece of paper and a writing tool for use. Individually, each group member (of the 4-person groups) should select one of the index cards from their group's set. Each member should then individually come up with an idea as to how the concept and skills could be taught. These ideas should be written down on the individual's paper. When each member has completed the first card, the index cards should then be passed to the next group member. Again, individual group members should generate ideas as to how to teach that concept/skill. The index cards with the concept/skill written on them will eventually be passed around to each member of the group. When each group member has addressed each index card, the group members reconvene. The 4-member group then shares the various ideas for teaching the concept/skill suggested on each of the original index cards. The assumption here is that by virtue of many students coming up with ideas, the ideas for differentiating this lesson will already be apparent.

Each 4-member group will then choose two of the index cards and associated teaching ideas generated by the group members. For each of the two concepts/skills, the group will design a complete lesson plan. Each lesson plan must address all of the components of the lesson plan shared in class. These blank forms can be found in the group's materials folder (you can just follow the form and write on a different piece of paper if you prefer). Thus, the group will be developing two complete lesson plans. Across these two lesson plans, the group must demonstrate their ability to differentiate for interest, content, and process.

As a summary, each group will present their lesson plans and be able to describe how they arrived at the decisions they made about differentiating the two lesson plans.

Figure 3. Individual instructions for Group 2a.

Group 2b

Group 2b members should watch Video 1 from the ASCD's set of differentiated instruction materials. While reviewing the tape, each group member should individually complete Guide 2, provided in the materials folder. When group members have completed viewing the tape and individually completed their guides, the group should reconvene as a group and share their responses to the guide.

After the guide is completed, the Group 2b members should assign themselves to groups of 4 people each. Each 4-member group should then pull out the set of colored index cards from the materials folder. Each card lists a concept and associated skill that can serve as a basis of a teaching lesson. Do not read or share the contents of the index cards with the group. Each group member should have a blank piece of paper and a writing tool for use. Individually, each group member (of the 4-person groups) should select one of the index cards from their group's set. Each member should then individually come up with an idea as to how the concept and skills could be taught. These ideas should be written down on the individual's paper. When each member has completed the first card, the index cards should then be passed to the next group member. Again, individual group members should generate ideas as to how to teach that concept/skill. The index cards with the concept/skill written on them will eventually be passed around to each member of the group. When each group member has addressed each index card, the group members reconvene. The 4-member group then shares the various ideas for teaching the concept/skill suggested on each of the original index cards. The assumption here is that by virtue of many students coming up with ideas, the ideas for differentiating this lesson will already be apparent.

Each 4-member group will then choose two of the index cards and associated teaching ideas generated by the group members. For each of the two concepts/skills, the group will design a complete lesson plan. Each lesson plan must address all of the components of the lesson plan shared in class. These blank forms can be found in the group's materials folder (you can just follow the form and write on a different piece of paper if you prefer). Thus, the group will be developing two complete lesson plans. Across these two lesson plans, the group must demonstrate their ability to differentiate for interest, content, and process.

As a summary, each 4-member group will present their lesson plans and be able to describe how they arrived at the decisions they made about differentiating the two lesson plans.

Figure 4. Individual instructions for Group 2b.

Group 3

Group 3 members should assign themselves to groups of 4 people each. Each 4-member group should then pull out the set of colored index cards from the group's materials folder. Each card lists a concept and associated skill that can serve as a basis of a teaching lesson. Do not read or share the contents of the index cards with the group. Each group member should have a blank piece of paper and a writing tool for use. Individually, each group member (of the 4-person groups) should select one of the index cards from their group's set. Each member should then individually come up with an idea as to how the concept and skills could be taught. These ideas should be written down on the individual's paper. When each member has completed the first card, the index cards should then be passed to the next group member. Again, individual group members should generate ideas as to how to teach that concept/skill. The index cards with the concept/skill written on them will eventually be passed around to each member of the group. When each group member has addressed each index card, the group members reconvene. The 4-member group then shares the various ideas for teaching the concept/skill suggested on each of the original index cards. The assumption here is that by virtue of many teacher candidates coming up with ideas, the ideas for differentiating this lesson will already be apparent.

Each 4-member group will then choose two of the index cards and associated teaching ideas generated by the group members. For each of the two concepts/skills, the group will design a complete lesson plan. Each lesson plan must address all of the components of the lesson plan shared in class. These blank forms can be found in the group's materials folder (you can just follow the form and write on a different piece of paper if you prefer). Thus, the group will be developing two complete lesson plans. For each lesson plan, the group must demonstrate their ability to differentiate at least two of the three components: interest, content, or process.

After completing the lesson plans, Group 3 should watch Video 2 from the ASCD set of differentiated instruction materials. As you watch the video, each member will complete Guide 3, available in the group's material folder. After the group has completed the video they will debrief their individual guides.

The 4-member groups should now reconvene. Each 4-member group will review the two lesson plans that they completed. Based on those lessons, and using their responses to Guide 3, they must analyze the potential management problems they might encounter in their lessons and revise their lessons in order to address those management issues. As a summary, the group will be prepared to share with the entire class this final activity.

Figure 5. Individual Instructions for Group 3.

Group 4

Group 4 members should find copies of Handout 21 in their group's materials folder. Each member should individually reflect upon the questions in Column 1 of the front side of Handout 21 and then write those reflections in Column 1 one the backside of Handout 21.

Group 4 should watch Video 3 from the ASCD set of differentiated instruction materials. After viewing the tape, group members should individually reflect on the questions in Column 2 on the front side of Handout 21 and then write answers to those reflections in Column 2 on the backside of Handout 21. Group members should then meet and discuss their reflections, both prior to and then after viewing the tape.

Next, Group 4 should develop a Task Guide for other people to use as they attempt to differentiate instruction. Using the lesson plan format that can be found in Group 4's materials folder, for each component the Task Guide will pose the various questions that teachers can ask themselves in the process of designing a differentiated lesson plan. For example, under the component "assessment," Group 4 members should list the kinds of questions a teacher might ask him/herself in order to know whether and how their plans for assessment might be differentiated. As a summary, members of Group 4 should be prepared to describe and explain the Task Guide to the entire class.

Figure 6. Individual Instructions for Group 4.

Index Card Directions

Index Card 1: Introduce the concept of story problems and teach the skill of identifying words that correlate to "addition" within story problems.

Index Card 2: Introduce the concept of "immigration" and teach the skill of reading a map and identifying different countries.

Index Card 3: Introduce the concept of "ecosystems" and teach the skill of identifying the characteristics of an ecosystem and being able to provide an example.

Index Card 4: Introduce the concept of "fluency" in writing and teach the skill of writing a fluent, five-sentence paragraph with three supporting sentences.

Figure 7. Directions for lesson plan designs placed on index cards.

Table 1. Skills and Processes Targeted for Individual Group Activities

Group	Targeted Skills/Processes
1	- Basic definition of differentiated instruction - Components of classroom curriculum and instruction that can be differentiated - The role of the teacher in a differentiated classroom - The role of the students in a differentiated classroom - Modify an existing lesson plan to include components of differentiated curriculum and instruction - Gather/process information through sources of internet, videos, and through group discussion
2	- The role of the teacher in a differentiated classroom - The role of assessment in a differentiated classroom - How to differentiate for student interests, content, and process - Design complete lesson plans that include components of differentiation - Gather/process information through print sources, video, and through group discussion
3	- Design complete lesson plans that include components of differentiation - Analyze potential management issues related to their lesson plans and the role of the teacher and student in addressing those management issues - Gather/process information through video and through group discussion
4	- Refine various teacher roles in a differentiated classroom - Reflect on personal experiences - Create a "task guide" for creating lesson plans that include components of differentiation - Gather/process information through video and through group discussion

Later, as we debriefed with one another, we agreed that both of our respective class sessions appeared to be chaotic. Teacher candidates moved desks to create spaces for conversations. Others worked while lying on the hallway floor with papers of ideas for lesson plans all around them. Three different videos were playing simultaneously at one point. But the underlying organization was evident as we listened to conversations about differentiated instruction woven through the chaos. Unfortunately, our teacher candidates were pressed to complete everything in the allotted time. We knew that another class session was needed to fully address this topic. The response from both sections that night was overwhelming. We had teacher candidates approach us and describe how challenged they were. Some admitted that they may have "overshot" on their self-assessments, but were still able to follow along with their group's activity. Many stopped on their way out the door and said simply, "Thank you—what a great model."

Teacher Candidate Feedback

The focus of this article is to provide colleagues in institutions of higher education with a model of teaching differentiation to their teacher candidates. The final aspect of our description involves reporting the feedback we received from our teacher candidates. While not a formal inquiry, we applied qualitative approaches to understand how teacher candidates reacted to our process of pedagogical and curricular change—by giving a description of those changes as well as our own analysis of their feedback (see Wolcott, 1994; Eisner, 1991). Our intention is that the reader will both understand the teaching process employed as well as student reactions and recommendations for future implementation.

The week following the class on differentiated instruction, we began the class with a short evaluation of the previous class session. Each teacher candidate was asked to write down responses to these three questions: (1) What was your general reaction to the class on differentiated instruction? (2) Was your self-assessment accurate in placing you in the correct group? (3) How would you change the format or content of the class on differentiated instruction? We transcribed responses across both course sections and looked for themes that

emerged from the data. In particular, when analyzing this data we looked for references to both their learning about differentiated instruction as well as the process we incorporated into the class session. The transcripts were analyzed using a line-by-line analysis. Codes were assigned to categories and themes that were consistent were included for reporting. As is typical with qualitative analyses, we were looking for broad categories of responses that could direct future efforts in providing instructional models for preservice teachers (Stake, 1995).

With regard to the first question, teacher candidates' overall reactions to the class were generally positive and fell into three themes:

1) The teacher candidates felt that working at their own levels of knowledge and experience was beneficial:

> *I liked breaking into groups according to our knowledge. Planning a lesson with other people in class brought forth lots of ideas.*

> *This exercise showed me once again how helpful it is to collaborate with others. It really helped to split into small groups of like levels.*

2) The teacher candidates liked working in groups:

> *I really enjoyed the organized chaos because it gave me a chance to discuss ideas with other individuals. There was a variety of activities and instruction to teach the topic. Coming back together as a whole group enabled me to learn what the other groups did and learned.*

3) The teacher candidates appreciated concretely *doing and experiencing* the topic we were covering in class. In other words, they felt that our teaching was authentic in that we were practicing what we were preaching:

> *The members of the class come with different backgrounds and experiences—just like our students. Why shouldn't you practice what you preach and differentiate our class? It is a way to model differentiation for us.*

With regard to the second question, almost all teacher candidates felt that the self-assessment they completed about their level of comfort with differentiation and about the way they would prefer to access information was an accurate indicator. They also felt the groups and tasks we assigned were appropriate and challenging.

> *The self assessment was very accurate in that I was grouped with people who had similar understandings and ideas [of differentiated instruction].*

Some teacher candidates did feel they over-estimated their abilities on the self-assessment:

> *I feel I slightly overshot my self-assessment. I was close, but I was able to quickly adapt to that level thanks to my classmates.*

When asked for suggestions about the content and procedures of the class, teacher candidates identified issues related to noise, time, and sharing of ideas. They felt that there were too many videos going on in a small space, they wanted more time or more guidance in the use of time to complete their learning tasks, and they wanted more time to synthesize their learning and share what their groups had completed at the end of class. A few teacher candidates suggested that we teach the entire semester this way.

> *I think it would have been great to have this at the beginning of the class instead of the end. Why not teach us differenti- ated instruction from the get go?*

The feedback here was again generally positive in nature, encouraging us to repeat the class session:

> *I enjoyed the class—it's worth repeating.*

> *I can't think of anything that needed improvement about the lesson—I really learned a lot.*

> *One of my favorite evenings was the "organized chaos"*
> *class. I felt respected as a learner.*

Instructor Feedback

After this class both instructors met to debrief the experience, review the evaluations, and consider modifications for the course as well as for this particular lesson plan. We both felt a sense of accomplishment and excitement at having succeeded in implementing a lesson plan that met our objectives, met teacher candidates where they were individually in terms of their readiness levels, provided a range of instructional input, and allowed for multiple ways for teacher candidates to demonstrate the outcomes of the class. As we reviewed their comments and considered our own self-evaluations, we considered several next steps.

In the future, for this particular class session or a follow-up session, we want to spend more time allowing the individual groups to debrief the experience, allow teacher candidates to define collectively what differentiation means in teaching and learning, and allow them to generate multiple examples of how this concept could play out in their own classrooms. In addition, we took to heart the comment that was made by teacher candidates over and over again that night, "I wish we could do this for the entire course, each week." As instructors we knew that this should truly be our goal for the future.

Conclusions

As we examine this work and think about how it impacts our ongoing professional development as professors, our conclusions could be categorized into two areas—personal and professional—as well as broader implications for the field. Perhaps the most profound personal conclusions are how both of us feel more honest and valid in our teaching. We've decided that it goes back to a "work ethic" that both of us were exposed to in our upbringing—don't ask others to do what you are not willing to do for yourself. It is one thing for us to talk about teaching through our courses, to actually "do it" and model what you expect others to do in their classrooms is quite another thing.

Modeling differentiated instruction for us validated that we teach in the manner in which we expect of others. Though we had no direct way to "measure" teacher candidates' perceptions other than the short evaluation they completed, their comments led us to conclude that they held a higher level of respect for us as a result of our willingness to assume the risks involved.

Speaking of risks, it was challenging to both of us to let go of the "control" we normally held over the routine of the class structure. We typically had a short "lecture" followed by carefully controlled and similar small group activities and discussions. In this case, the class was like an elaborate ballet—certainly choreographed by us—but once started, out of our control. As is the case in any collaborative effort, the planning was key—it required trust on our part with respect to supporting each other as we admitted personal shortcomings and following through on the individual responsibilities that each one of us assumed in carrying out the planning and resource requirements (Pugach & Johnson, 1995). The time that we had spent in weekly planning meetings throughout the semester was key to building the personal connections needed to support us through this process.

Professionally, as we have stated before, we have a renewed commitment to authentic teaching (Elksmin, 2001; Whitaker, 2001). We know that it is important to our teacher candidates to see us model the learning cycle. They need to see assessment, planning, teaching, and intervention in action. This course session on differentiation came at the end of the semester. We know that not only should we be infusing this topic throughout the course, but we also realize how powerful the ideas in the course could be if the entire course was taught by modeling concepts of differentiation as well as concepts related to other recommended curriculum and instructional principles. This has led us to begin conversations about restructuring the entire course. For example, as we introduce the various steps to designing a standards-based unit of instruction, we will model how our own course design carries out those principles. Through a cognitive coaching model, we will explain explicitly our own thought process (Costa, 2002; Glickman, 2002). In addition, we will build in expanded opportunities for teacher candidates as a group to more immediately practice and reflect upon each stage of curriculum development. Finally, we have committed a major portion of our planning to incorporate the principles of

differentiated instruction into each class session. As we have previously mentioned, our teacher candidates are from diverse experiential, cultural, and ability backgrounds. Choices in process, product, and content across the entire two-course sequence can help respond to their individual and collective needs (Tomlinson, 2000). In the future, conducting research that reveals whether these efforts lead to data indicating teacher candidates' learning and ability to implement the practices targeted would be the logical next step in this line of inquiry.

We hope this article generates multiple implications for the field. First, we anticipate our experience extends and elaborates upon conversation about authentic teaching in higher education (Waks, 2002). There has been discussion of the need to transform traditional, behavioral, lecture models of instruction in higher education (Oakes, Franke, Quartz, & Rogers, 2002). This is truly challenging in that those of us in the field, after all, were hired because of our "expertise." It is only natural to want to "transfer and share" that expertise to others. To accept the challenge, to move beyond traditional methods of instruction, and to incorporate methods of teaching that support alternative approaches to teaching will most likely lead to more responsive and critical teacher candidate thinking.

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