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A Case Analysis of Middle Level Teacher Preparation and Long-term Teacher Dispositions

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Abstract

Underlying all pedagogical decisions are dispositions that animate, motivate, and direct abilities evident in the patterns of one's frequently exhibited behavior (Ritchhart, 2001). Although the research on teacher dispositions remains inconsistent, and the intensity with which dispositions are evaluated seems to be waning, middle level educators recognize the role of teacher dispositions in cultivating developmentally responsive practices and inclusive, safe learning communities. This case analysis examines one middle level teacher preparation program that embraced such practices and the dispositions that undergird them. The program intentionally focused on the cultivation of responsive dispositions, grounded in meeting the needs of a diverse group of young adolescents. If teacher preparation has standards for and works to cultivate specific dispositions, it is important to investigate what happens to these dispositions once novice teachers enter the real world of the classroom. This study examines novice middle level teachers' dispositions over their first five years in the field.

Background

Foundational dispositions undergird all pedagogical decisions a teacher makes. Dispositions animate, motivate, and direct abilities evident in the patterns of one's frequently exhibited behavior (Ritchhart, 2001). The impact of teachers' dispositions on teaching and learning cannot be ignored. At a time when education is increasingly focused on raising test scores, teachers' response to this accountability agenda may have long-term impact on middle level students' acting as recallers of information and facts or as critical consumers and creators of knowledge. In spite of the potential impact teachers' response to testing has on students, the research on underlying teacher dispositions remains inconsistent. Multiple definitions and perspectives associated with teacher dispositions, including tendencies; values; and habits of mind, attitude, and behavior, make it difficult to establish the usefulness of dispositions as a concept and to build a common research base (Ritchhart, 2001). The intensity with which dispositions are evaluated seems to be waning. At a minimum, dispositional

standards have become less of a central focus and, instead, are embedded within standards as evidenced in the draft revision of the Association for Middle Level Education (2011) teacher preparation standards and the state teaching standards of this study (North Carolina Department of Public Instruction, 2011). However, middle level educators recognize the role of dispositions in cultivating developmentally responsive practices and inclusive, harmonious, safe learning communities (Van Hoose, Strahan, & L'Esperance, 2001). Such dispositions are difficult to document and evaluate. The lack of a clear, agreed-upon definition of what we mean by "dispositions" has often led to a narrow focus of recognizable professional behaviors, such as promptness and appropriate dress, found on checklists. Such an approach does not capture the complexity of dispositions. In some cases, they have become verbatim statements of The National Council for Accreditation of Teacher Education (NCATE, now Council for the Accreditation of Educator Preparation [CAEP]) language (Thornton, 2006a). It is time for middle level educators to reexamine educator dispositions to better discern and assess these essential attributes and foster teacher candidates' development of dispositions.

Middle Level Teacher Preparation and Responsive Dispositions

Best practices in middle level education are developmentally responsive to the diverse needs and characteristics of young adolescents. All aspects of young adolescent development—social, emotional, physical, moral, and cognitive—are considered. For teachers to meet these developmental needs, they must employ research-verified practices that challenge, motivate, empower, and nurture young adolescent learners.

The middle school movement is grounded in the notion of the developmentally responsive practitioner. Every decision middle level educators make, from curriculum to management, is impacted by their dispositions. Middle level schools and educators seek to promote harmony among students and teachers, focusing on curriculum, assessment, and school cultures that address individual students' physical, sexual, social, and personal development at this dynamic age (Van Hoose, Strahan, & L'Esperance, 2001). Curriculum needs to be responsive to young adolescents in several ways: relevant, integrated, and centered on students' questions and interests (Beane, 1993; Brazee, 1995; George, Stevenson, Thomason, & Beane, 1992; Lounsbury & Vars, 1978; Vars, 1993). The concept of classroom management centers on empowering young adolescents to be decision makers and members of a democratic learning community who work together to solve problems and promote a safe, equitable, and challenging learning environment for all (Beane, 1990; Beane, 1997; Kohn, 2006). According to the National Middle School Association (NMSA [now Association for Middle Level Education] (AMLE), 2010), there are attributes essential to being an effective educator for young adolescents The first NMSA attribute demands that educators respond to the unique nature of young adolescents according to their developmental needs. This commitment to developmental responsiveness affects all decisions related to organization, policy, curriculum, instruction, and assessment. Teachers possessing the disposition to be responsive may be more likely to consistently employ developmentally responsive practices. This commitment to developmental responsiveness affects all decisions related to organization, policy, curriculum, instruction, and assessment. Teachers possessing the disposition to be responsive may be more likely to consistently employ developmentally responsive practices. Middle level education must also be challenging, empowering, and equitable (NMSA 2010). These three additional attributes are aligned with the grounded theory and resulting construct of responsive dispositions in action, upon which this study is based (Thornton, 2006a, 2006b).

Research into middle level teacher dispositions may help to answer the question: What types of teachers are disposed to enact the NMSA's (2010) 16 characteristics of an effective middle level school? This issue should help guide the practice of middle level administrators and teacher educators, alike, as they seek to nurture other educators most likely to implement the characteristics of effective middle level education. We can examine how these dispositions are evidenced in classroom teachers' practices that support NMSA's delineated characteristics, in an effort to move beyond the self-reported reflections and professional behavior checklists typically used as documentation of dispositions.

Several characteristics of effective middle level education are directly related to the actions and beliefs of teachers. One example is, "Middle level teachers value young adolescents and are prepared to teach them." According to NMSA (2010), middle level teachers' care and preparation are evidenced as they create curriculum and effective learning and assessment strategies that are appropriate to

young adolescents. They engage students in active, purposeful learning and challenging curriculum to meet the diverse needs of young adolescent learners through the use of multiple learning approaches and varied assessments (NMSA, 2010). These specific characteristics of effective middle level schools are directly related to teachers' practices. If a study can document that some teachers are more disposed to consistently think and act in these ways, especially given the challenges facing middle level educators today, this study may offer insight into how preparation programs could intentionally cultivate desired dispositions, which may endure over time.

This longitudinal case analysis examines one middle level teacher preparation program that embraced developmentally responsive practices and the dispositions that underlie them. The program was designed around the NMSA standards for teacher preparation and employed the use of multiple authentic performances and field experiences to provide evidence of meeting these standards within a culminating portfolio. The faculty, professional development school (PDS) master teachers, and undergraduate students in the program jointly set out to find ways to define, document, and evaluate middle level teacher dispositions in a manner that would parallel their documentation of other NMSA standards. This exploration resulted in the development of "dispositions in action" as the framework for the program's assessment of educator dispositions.

Dispositions in Action

Dispositions in action (DIA) (Thornton, 2006a) may be thought of as a link between practice and perception. DIA evolved from grounded theory (Lincoln & Guba, 1985) involving studies of exemplary teachers (Thornton 2006a, 2006b) utilizing discourse analysis (Fairclough, 1989) to evidence teacher dispositions within classroom dialogue and teacher interactions with students. Discourse analysis provides a means to examine the conversations of ordinary lives, settings, and occasions to find how meaning and structure are assembled and achieved (Macbeth, 2003). Discourse analysis can be a method to make explicit the implicit dispositions and related beliefs that educators hold through the evidence found in classroom interactions. Teachers evidenced tendencies to be primarily responsively disposed or technically disposed, as related to various aspects of classroom practice (Thornton, 2006a). Descriptors of how these dispositions are evidenced within classroom interactions were also generated from the data (see Appendix A).

Much like Combs's (1969) seminal work on dispositions, DIA were developed from grounded theory, rather than generated from a list of prescriptive behaviors, and help to describe what teachers actually do in practice. Unlike Combs' (1969) work, which is derived from other helping professions, DIA emerged from the work of classroom teachers and related validation studies completed with groups of exemplary teachers. The concept grew from an iterative design, as it was continually reexamined and redefined by practitioners, teacher educators, preservice teachers, and researchers in the field over a period of three years. Once the tool was developed, a minimum of three master teachers used the tool to evaluate the student teacher. The inter-rater reliability of the resulting tool (see Appendix B) was .81 (Thornton, 2006b). These multiple perspectives and lenses, in essence, member checks, provided face validity (Lincoln & Guba, 1985) and iterative development of the concept via analysis of the language.

Thus, the middle grades program defined itself as intentionally focused on the cultivation of responsive dispositions grounded in actually meeting the needs of a diverse group of students. This focus stands in contrast to too many teacher education programs that encourage counterpart dispositions that focus more on the technical aspects of teaching, rather than on responding to students' idiosyncratic needs first and foremost. Student learning is impacted by the manifestation of the teachers' dispositions in the classroom. Teachers who exhibit more responsive dispositions tend to emphasize student learning that is focused on deep understanding; students are encouraged to ask questions, examine assumptions, and construct new meanings. Teachers who exhibit more technical dispositions are more likely to encourage students to seek correct answers in an efficient, straightforward manner. Evidence of these dispositions may align with major classroom functions including instruction, assessment, and management, as described in the DIA framework chart (see Appendix A). Continual examination and analysis of responsive dispositions is important because responsive dispositions are essential in the education of young adolescents, and middle level teacher preparation programs invest time and energy in cultivating these dispositions.

Examining Change Over Time

Research indicates that teacher experience has a positive effect on student test scores (Clotfelter, Ladd, & Vigdor, 2006; Goldhaber & Anthony, 2007) and that teacher preparation programs make a difference in student learning (Betts, Rueben, & Dannenberg, 2000; Darling-Hammond, 2000; Goe, 2002; Goldhaber & Brewer, 2000; Wenglinsky, 2000); yet this effect is strongest during the first three to five years in the classroom and begins to diminish around the fifth year (Rivkin, Hanushek, & Kain, 2005). The longevity of the impact of teacher preparation experiences may be affected by the culture of schools and the mandates and demands from external sources, such as accountability systems and legislative bodies. This erosion is troubling enough when the use of best practices and teaching methods garnered in preparation may be lost, or at least not utilized, but it may be even more troubling if valued dispositions instilled through a program are lost. If we have standards for and seek to cultivate specific desired dispositions, it is important to investigate what happens to these dispositions once novice teachers enter the real world of the classroom and school. This study examines teacher dispositions after candidates successfully completed a middle level teacher preparation program that sought to cultivate responsive dispositions.

A Case Analysis of Middle Level Educator Dispositions

Cultivating responsive teacher dispositions was central to a middle level teacher preparation program situated within a PDS context. Together the faculty, candidates, and master teachers in the partner schools engaged in participant research examining what dispositions are and actually mean in practice. The construct of responsive dispositions was examined with these PDS participants, and validation studies occurred prior to adopting their use in the field. From these studies, the tools to document and evaluate DIA were developed and then employed as one data source examining the candidates' dispositions in practice. Evidence to document candidate dispositions was gathered throughout the participants' program, serving as baseline data for this study. Candidates exhibited their dispositions within their own writings, coursework, and dialogue in classes, but, most important, during their teaching in field experiences and student teaching. These were documented using the DIA observation form (see Appendix A), which was completed by multiple master teachers on the teams working with each candidate.

The PDS faculty developed the observation form from the DIA framework. The first section of observation focuses on how responsive, empowering, and connected dispositions were evidenced through teacher interaction with students. Within that section, observations centered on six areas of interaction related to instructional strategies, curriculum, student input, collaboration, individual and developmental differences, and classroom management. Descriptors are included for each area, ranging from what one would observe in a more responsive teacher (level three) and in a less responsive teacher (level one). The second section looks for evidence of teachers' dispositions in classroom interactions focused on assessment. Four areas of interaction comprise this section, including expectations for learning, understanding, questioning, and assessing (types/purpose). Finally, the last section focuses on evidence of teacher dispositions within instructional interactions. Six areas of observation appear here, including student-led instruction, differentiation, addressing individual and developmental differences, relevance, multiple paths to learning, and feedback on student learning.

Master teacher teams used these criteria to rate preservice teachers according to the descriptors of evidence provided. University faculty worked with both preservice and master teachers in the development and validation of this tool over a period of three years. Due to the investment in helping candidates cultivate responsive dispositions, concern arose for what might happen to teacher dispositions over time. To address this concern, the following research questions were developed:

- What does the manifestation of teacher dispositions look like in the classroom for teachers prepared in programs focused on responsive pedagogies and responsive dispositions?
- Do new teacher candidates graduating from such programs articulate a difference in their dispositions once they enter the teaching profession?
- Do their dispositions, as evidenced through classroom dialogue and interaction, change over the first five years of teaching, as compared to student teaching experiences?

The construct of DIA is used in this longitudinal case study (Merriam 1998; Stake, 1995) to examine the evolution of teacher candidate dispositions. The study examines whether or not the dispositions developed in preservice preparation remain the same once teachers enter the field. The data were gathered in year one of

the teachers' experiences, to compare to the student teaching data set, and then again in year five, to compare across time.

Context/Participants

Four middle level teachers were selected to participate in the long-term study from a middle level cohort group of 12 teacher candidates receiving licensure that year (see Table 1). Student teaching data were gathered on all 12 members of the cohort. Participants for the follow-up study were then selected using an intentional sample (Patton, 1990) to illustrate the range of dispositions present within the cohort. Since responsive teacher dispositions were emphasized and cultivated within the program, half the members of the cohort consistently exhibited Level 3 responsive dispositions (consistently responsive) during their student teaching experience, and half the group primarily exhibited Level 2 dispositions (moderately responsive). Caitlyn and Sarah and were identified to represent the Level 3 group, and Debbie and Amy the Level 2 group. The sample was one-third of the entire cohort group and of each identified sub-group. All participants were assigned to work in the university's professional development schools during their preservice experiences; these schools included urban, rural, and suburban settings. Their first year and current teaching assignments also represented schools in each of those categories (see Table 1).

Data Collection and Analysis

Data were collected at three checkpoints (student teaching, year one of teaching, and year five) using two primary methods of interviews and teaching observations. Observations included both the use of the DIA observation form and scripting of teacher–student interaction related to the overall DIA framework. The researcher conducted observations with a template for each of the three areas on the DIA observation form, providing spaces to script and record teacher–student discourse under each category for later analysis as responsive or technical. The researcher examined scripted dialogue using discourse analysis (Fairclough, 1989), with a focus on nature of student responses to teacher talk, lending insight into the type of learning that takes place in the classroom. The researcher also analyzed the classroom setting as evidence of technical or responsive dispositions. Examples of such evidence may exist in information written on the board, in classroom rules, and in the nature of student work. The interviews consisted of four open-ended questions, asking teachers to describe what they deemed most important in four primary areas: interaction with students/management, interaction

Table 1
Participants' Teaching Assignments: Grade Level and Subject Area

Teacher	Caitlyn	Sarah	Debbie	Amy
Student Teaching	6th/Language Arts	8th/Science	7th/Math	6th/Language Arts
Year One	7th/Language Arts	6th/Science	7th/Math	7th/Language Arts
Year Five	7th/Language Arts	6th/Science	7th/Math/Science	7th/Language Arts

Table 2
Caitlyn's Dispositions Over Time

Data Set	Student Interactions	Instructional Interactions	Assessment Interactions	Professional Interactions	Avg.
Student Teach Interview	3	3	3	3	3
Student Teach Observation	3	3	3	N/O	3
Year One Interview	3	3	3	3	3
Year One Observation	3	3	3	N/O	3
Year Five Interview	3	3	3	3	3
Year Five Observation	3	3	3	N/O	3

Note. 3 = high responsive disposition 1 = low responsive disposition

with instruction, interaction with assessment of learning, and interaction as a professional. Interview responses were then coded in terms of responsive versus technical teaching disposition indicators. Vignettes (Shoenberg, 2000) were constructed to exemplify the teachers' dispositions in year five, and cross-case analysis (Yin, 1984) was used to identify emergent trends and themes.

Findings

Highly Responsive Dispositions in Action

Caitlyn. Caitlyn's student teaching and first year analysis evidenced responsive dispositions in both the interview and observational data. Her scores regarding interacting with students, assessment, and instruction were all at the high level (3) of responsiveness in multiple observations (see Table 2). Her interview responses echoed these observations. When replying to questions about what is important in the realm of management, she talked about valuing students' opinions, having them involved in their learning and making decisions, and articulated expectations as a two-way path for both students and the teacher. She valued assessment in terms of helping her know "where to go next," and she valued peer and self-assessment and a focus on deep understanding through assessments such as the Structure of the Observed Learning Outcomes taxonomy (Biggs & Collis, 1982). Instruction focused on meeting young adolescents' needs while making certain they are challenged, excited, and having fun as they learn. As a professional, her focus was on working as a team of teachers, supporting one another to meet students' needs. "I have moved from being teacher centered to student centered; I now think of kids as thinkers."

First year observations demonstrated that Caitlyn still evidenced responsive dispositions across all three areas of observation and within her interview responses, including the area of professionalism. She now felt that she had been validated, that all that she learned throughout her preparation was applicable, especially given difficult circumstances. She found herself teaching in a rural school setting, comprised of a majority of Latino students, many of whom spoke English as second language. Issues of poverty, transient student population, and lack of a connection with families were present as she continued to display interactions and replies that were responsively disposed. She posed questions to make students think deeply, designed her language arts lessons based on their questions and experiences, and engaged them in problem solving when behavior issues arose. Her interview responses paralleled those from the previous year, and she articulated a "commitment to connecting with students and helping them become critical thinkers and sound decision makers."

Caitlyn's fifth year interview responses indicated that she continued to be responsively disposed. In terms of management and interacting with students, she spoke of engagement, connection, and mutual respect:

> Well, student engagement is probably the most important aspect of classroom management. If students are engaged in what they are doing, whether it is reading, writing, or projects, there is not going to be a problem with classroom management. I have found that when my students are connected to what they are doing, they work harder and genuinely care about the final product. I have found that respect is the most important thing to gain from students. If they know you respect them as a person, then they will return the same respect to you.

She exhibited a responsive disposition related to assessment but described the challenges she faces in enacting that disposition:

> This is a tough one. I know without a doubt what the most important aspect of student assessment is, but I can't say that it is what I do. Student assessment should be relevant and authentic. However, with state mandated testing and a school system that is test-driven, relevant and authentic testing gets tossed to the wayside. Before I started teaching, I would have answered that the most important aspect would be that an assessment show whether or not a student "gets it." But now, after four years of teaching, I would say that an assessment is there to help students practice for the [end of grade test] EOG. You teach a concept, test, then move on to the next one. I will have to say that I do use authentic assessment on a daily basis. I listen to the students to determine if they are getting it.

Responsive dispositions were evidenced in the fifth year classroom observation, as illustrated in the following vignette:

Caitlyn's language arts classroom is a journey into stories of the past and connections to present issues of equity such as "racism, boycotts, and freedom writers." The focus of the class is posted on the board in terms of studying nonfiction, and the correlated

state language arts standards. After reading several non-fiction books and articles about our nation's struggles with issues of race, social class, and gender, the class explores how these have been present throughout our nation's history, how our government and society has dealt with these concerns, with a focus on rights and law, and connecting these historical and more contemporary events to students' own experiences and understandings. The class has brainstormed a list of famous events that have occurred in our society and their resulting consequences framed by themes of love, hatred, and racism. The teacher leads them through a discussion of what seemed to advance people's causes and what seemed to make it more difficult. The students decide that peaceful resistance seems to have helped the most. And the teacher pushes them to justify their choices and talk about why. Issues of race and gender are openly and calmly discussed, with the students listening and offering their thoughts to the teacher and one another.

Students are seated in groups and the agenda for the double block class is posted as SSR, Writing Workshop, non-fiction discussion and activity. School-wide rules about being prepared, raising hands, and remaining seated are posted on the wall referring to inappropriate behavior and what happens as students accumulate "strikes," but the students and teacher do not even seem to notice or need their presence as basic reminders about other people's perspectives and needs are cultivated through instruction and discussion. In her five years of teaching, she has had to send a student to the office for a referral about four times. Usually, a look is all that is needed. Occasionally, the teacher refocuses the group as they begin to discuss amongst themselves, but they are quick to come back into the group discussion.

The teacher asks about other groups who may have been struggling with attaining rights in our country. The class quickly responds "women." There is discussion about women's roles now and in the past, as the teacher asks students what they know and uses this to guide her further instruction. The students begin to ask questions about all white male jurors and what happened to single mothers in the past who did not have land rights, and make connections to men asking for a girl's hand in marriage. Next a video clip about Susan B. Anthony is pulled up on the computer from the discovery channel website, and students seem very interested in watching. They will be using the ideas in the clip for a team activity exploring women's rights issues. Their homework will be continued work from their writing workshop in the form of a memoir related to their own experiences with the issues, which have framed the class for the past few days.

Highly Responsive Dispositions in Action

Sarah. Sarah's student teaching in a PDS science classroom evidenced responsive dispositions at Level 3 in all areas (see Table 3). Her teaching was responsive to students' needs and inquiry-based, in that she was constantly asking students to think beyond the surface while cultivating their own theories and making their own decisions. She engaged students in problem solving when arguments or issues arose. Sarah's student teaching interview revealed numerous responsive dispositions at the high level. She stated that what was most important in terms of interactions with students was "giving them [opportunities to take] ownership and teaching them

Table 3
Sarah's Dispositions Over Time

Data Set	Student Interactions	Instructional Interactions	Assessment Interactions	Professional Interactions	Avg.
Student Teach Interview	3	3	3	3	3
Student Teach Observation	3	3	3	N/O	3
Year One Interview	3	3	3	3	3
Year One Observation	3	3	3	N/O	3
Year Five Interview	3	3	3	3	3
Year Five Observation	3	3	3	N/O	3

Note. 3 = high responsive disposition 1 = low responsive disposition

to make good decisions for themselves." She talked of being "developmentally responsive to students instructionally and getting them to really think and find answers and even more questions on their own." She felt guiding students to a "deep understanding of concepts and ideas" was important, in terms of assessment. She acted professionally with her assigned team and cooperating teacher but expressed some discomfort with typically having to follow the plans and lead of other teachers, rather than being able to act autonomously.

During her first year, Sarah found herself employed in an International Baccalaureate middle school with a focus on success for all learners and valuing teacher expertise during her first year teaching. She noted that teachers had the freedom to engage students in learning and be creative in meeting these urban students' needs; moreover, it was highly valued and expected. Her responsive disposition toward interactions with students was clearly articulated:

> It is a two-way street with students. You need to have high expectations of them, and they should expect the same of you. You are all in this together, and if students know you care, they will work hard to be successful and really get into learning.

She stated that instruction should be about "investigating, probing, and digging deep." In her classroom, students engaged in ongoing investigations through science labs and designed their own questions for learning. In terms of assessment, she was "all about getting kids to show what they understand and how smart they are." Her classroom observation echoed these responsive answers and evidenced a responsiveness level of three in all areas, with kids actively doing, asking, questioning, and "showing their stuff."

Sarah was still teaching science in the same middle school during her fifth year of teaching. Her year five interview responses continued to reflect a high level of responsive dispositions. Her answers related to interactions with students focused on caring and understanding the cause of any problems students may have so that she could help students work to solve them. In terms of assessment, Sarah stated, "The focus is on developing the depth, the level of their understanding—definitely *not* grades." She continued, "I am a facilitator. I assist my students in learning the information for themselves. To do this, I ask them questions to get them thinking or help to direct their path if they get lost." When talking about professional relationships, her first focus was on students.

> With the students, it means caring as a parent would—helping, listening, and keeping confidences, when appropriate. It also includes taking care of yourself and continuing your own education so that you can provide the best for your students. We are respectful, helpful, and open-minded while, at the same time, still holding each other accountable for always working to the benefit of the students. With administrators and parents, I believe you need to have an open line of communication about anything that affects students. This would include honesty and speaking up, even when it is hard. Additionally, with administration it would involve following rules/guidelines that are in place while, at the same time, working to change rules/guidelines that you do not believe benefit students.

Her Level 3 responsive dispositions were evidenced, as illustrated in the year five observation vignette:

Sarah's science classroom is a place of engaged discovery. The teacher acts as a facilitator, allowing students to decide how and why to set up labs, how and why to choose variables as dependent, independent or controlled. Sarah is continually asking children to explain her pedagogical choices as well as their own choices related to both the content and their learning. Desks are clustered into groups and classical music plays quietly in the background as a reminder of keeping the class discussion at a conversational level. Students are working on a lab they have set up through discussion and decision-making processes that will enable them to consider which natural resources are most valuable and why. They examine samples, negotiate understandings about these resource samples, and work to determine what impacts the value of a substance. They record their group decisions and findings on the SMART Board® for larger group discussion.

The "essential questions" for the day are posted on the board. As students begin to work with the teacher to design their lab, they explain to the teacher how the decisions and processes they will be using in class demonstrate the essential question, giving it meaning and life. There are no rules posted on the wall but, instead, a list of desired learner characteristics and outcomes such as students becoming "thinkers, principled, risk takers, caring, knowledgeable, open-minded, and reflective." If students get off task or need redirection, the teacher refers them to their lab guide (constructed with and by students), which articulates approaches, behaviors, and

attitudes needed to work effectively as inquirers. The classroom hums with busy talk, but when the teacher needs the focus of the whole class, she asks for their eyes and ears or counts down from three to one, which causes them to become quiet and attentive. If students have trouble answering the open-ended questions, she asks them if they would like to choose someone to help them out, and students, in this way, guide each other to understanding through clarification and alternative examples that build on one another's responses. Humor and smiles are present as the teacher crafts the lab with students and asks them for input as to where they left off in the lab preparation from the last class. As students work in groups, the teacher circulates, encouraging them to "make your argument for your conclusions," and to engage in "intense discussions while listening to and respecting other viewpoints."

Students begin to work on their science labs exploring the value of natural resources while talking quietly. Students examine the resource samples, argue their points within their groups, and record their data while some groups of students begin to walk up to the SMART Board to record their choices for class analysis and discussion.

Moderately Responsive Dispositions in Action

Debbie. Debbie's student teaching observations indicate a balance between technical and responsive dispositions (see Table 4). In the area of student interactions, she evidenced dialogue that was primarily Level 2 responsiveness, using some student collaboration and providing some opportunities for student choice and ownership and variation in response to students as individuals. In terms of assessment, the observations, again, revealed Level 2 responsiveness, with questions and expectations focusing on higher-order thinking and students' questions, but not on a regular basis. Instructional interactions also evidenced a level two with dialogue building on student responses and student understanding inconsistently evidenced. Her interview responses were somewhat more responsively disposed. In terms of student interactions and management, Debbie stated that the most important aspect was "building community, making sure that kids are comfortable in the classroom and that they set the rules." Assessment responses focus on multiple representations of learning, varied learning styles, ongoing assessment, and descriptive pre and post performance scores . In terms of instruction, Debbie emphasized, "Standards and structure are needed, but using a pacing guide is a bit much. You still need to have time to get to higher-order thinking." Professional interactions were stated as being about continuous learning, involvement in professional organizations to have a voice, and collaborating to do what is best for students.

Debbie's year one interview paralleled her interview from student teaching. She still expressed the need for students to have ownership in the classroom and to keep students actively engaged in their learning but on track. She focused on real-world applications in the areas of science and math. She focused on using multiple assessments and classroom observations in addition to more traditional assessments. In terms of professional interactions, she was somewhat displeased, stating that she felt like she was not in a healthy work environment and that the principal and her peers did not share her beliefs and values about teaching and learning. She felt very connected to and

Table 4
Debbie's Dispositions Over Time

Data Set	Student Interactions	Instructional Interactions	Assessment Interactions	Professional Interactions	Avg.
Student Teach Interview	3	2	2	3	2.50
Student Teach Observation	2	2	2	N/O	2.00
Year One Interview	3	2	2	2	2.25
Year One Observation	2	2	2	N/O	2.00
Year Five Interview	2	2	2	2	2.00
Year Five Observation	2	2	2	N/O	2.00

Note. 3 = high responsive disposition 1 = low responsive disposition

successful with her rural students but felt that she was going against the grain by using active learning and that she may need to find another place to teach. She was becoming frustrated as a result of not conforming. The classroom observation continued to evidence Level 2 in all areas of interaction.

Debbie had moved to another rural school during her second year of teaching. In her year five interview responses, she talked about how this school had a healthier atmosphere and how the teachers had more freedom to do what was best for kids. In this new setting, she could continue to work toward instruction that was engaging, inquiry-based, and relevant and use multiple forms of assessment:

> Since my students are kind of high risk and have trouble with testing, getting them really involved and letting them show me different ways they are learning is important. It may be games that serve as a more traditional review for tests they have to take or activities and projects to really get them involved.

She talked about now working in a place where, perhaps, there is not strong administrative leadership, but teachers can kind of "do their own thing," as long as student are "doing and getting what they need." Her level two responsive dispositions are evidenced in the fifth year observation vignette:

The focus of Debbie's math and science classroom is 'understanding through doing.' The focus is on helping students make connections to math and science by using their own words, thoughts, and experiences whenever possible and making the needed chores of the classroom engaging through interactive games and assignments. Today they are reviewing for a test by playing "Energy Jeopardy." Students sit at tables and work together to determine answers to the game. A best group totem that is passed from group to group, along with a treat bag, rewards the table group that works most effectively.

After the game, students return to work on their science projects, creating a headline and related story about an energy/environmental issue of their choice. The assignment needs to demonstrate their understanding of the chosen topic and work toward helping to address the situation by informing and persuading others. The students work while talking, as they seek to make their stories both interesting and visually appealing.

When they are finished, they come up to get an article about "brown outs" and are told to use a highlighter to indicate what they deem important within the text—a skill with which they seem both confident and familiar.

Moderately Responsive Dispositions in Action

Amy. Amy's student teaching experience evidenced responsive dispositions at the highest rank, Level 3, during her student teaching, with the exception of a Level 2 in the assessment area (student feedback and responsive curriculum), in which she did manage to give the students some choices (see Table 5). Her interview reflected responsive dispositions in all areas, with the exceptions of student interactions/ management, which was technically disposed, and the area of assessment, which was split between the two dispositions. In regard to student interaction and management, she stated that what was most

Table 5
Amy's Dispositions Over Time

Data Set	Student Interactions	Instructional Interactions	Assessment Interactions	Professional Interactions	Avg.
Student Teach Interview	1	3	2	3	2.25
Student Teach Observation	3	3	2	N/O	2.66
Year One Interview	1	3	1	2	1.75
Year One Observation	1	2	1	N/O	1.33
Year Five Interview	2	2	2	2	2.00
Year Five Observation	1	2	2	N/O	1.66

Note. 3 = high responsive disposition 1 = low responsive disposition

important was "clear teacher expectations, structure, and time to complete what the teacher wants." In terms of assessment, she spoke of a focus on student understanding and multiple ways for students to show what they know and are able to do, but this was buffered by talking about working toward content objectives and the teacher providing clear steps to get there as critical to assessing learning. She stated that instruction should be grounded in student interests, methods that match student needs, and active engagement of students as thinkers, thus representing a responsive disposition. The responsive disposition was also evidenced in her responses about professional interactions, as she talked about teachers needing to be united in working toward change and teaming, providing a way in which this is accomplished.

Amy's year-one interview and observations more closely matched what she stated in her student teaching interview rather than the student teaching observations. In the areas of student interactions/ management and assessment, the themes of needing to have students follow directions and do what the teacher wants to meet objectives, especially in terms of testing and grades, were prevalent in her interview and in the observation. She still utilized instructional approaches and engaged with students in dialogue that prompted ownership, engagement, and questioning; but this was done within a context that focused and relied heavily on rules and procedures to "allow" this type of teaching and interaction to take place:

> I am struggling some with student behavior and getting them to do what they need to do. I don't get a lot of support from my fellow teachers, parents, or the administrators. I know how I want to teach, but sometimes it is really hard to do this with the students having so many issues.

The first year observations of the classroom echoed what she shared. She attempted to use engaging activities and ask for students' questions and thoughts but used a technical disposition when trying to "control" student behaviors with rewards and punishments. There was also a heavy emphasis on getting the *right* answer and completing tasks the *proper* way, which ran counter to her attempts at using student input and inquiry in her instructional approaches. In these two areas—management and assessment—she evidenced Level 1 responsiveness, with instruction evidencing both technical and responsive interactions reflective of Level 2.

During year five, Amy's interview responses indicated both responsive and technical dispositions in all areas discussed, including interactions with students, assessment, and instruction. She believed it was important for students to have a voice in the classroom but embedded this heavily within the teacher's pre-determined rules and procedures. She had very specific classroom procedures to follow and relied heavily on extrinsic rewards and praise to get students to follow directions. In terms of instruction, she wanted to keep students engaged and thinking yet not asking too many questions:

> It is important that students keep engaged in learning so that they can understand and retain it, but they also need to know what is expected of them and get the work done. You can't give them too much freedom, or they may get off track.

Assessment focused heavily on making sure students did well on end of grade and writing tests, but she also talked about the need for students to read authentic texts and have a chance to respond to them. She also spoke of this tension between responsive and technical thinking and action in her professional interactions. Her focus was on compliance, but she expressed a desire to work toward change:

> The principal really likes me, so I get to do some things that are a little different, as long as my test scores are okay and I show that I am doing what I need to do. Then I can try to do more things that are fun and exciting for the student.

The tension between responsive and technical dispositions illustrated in the following vignette was evidenced in the fifth year classroom observation:

Amy's classroom is a smooth running machine. The focus is on a calm and friendly atmosphere governed by clear procedures and processes that help students complete activities and assignments in an efficient and involved manner. Tools to help the classroom run smoothly and to help students make appropriate behavior choices are in place. Agendas and reward cards are signed to help students focus on tasks that need to be completed, and teacher-created classroom rules and related punishments or "consequences" are posted on the wall. Procedures for students to use classroom sets of trade books are also clearly posted, instructing students how to check out books, to make sure they read the ENTIRE book, and then complete the computerized test on the book. Students are seated in a double row "U" shape so that the teacher can see them all and redirect as needed.

The goals for the language arts lesson of the day are posted on the board in the form of an objective along with the day's activities, which include a vocabulary crossword, a scavenger hunt, and a vocabulary writing assignment. As the students enter the class, they are told to tuck in their shirts, zip their jackets, and to get quiet before they come into the classroom. Students, after some quiet talking, are seated. The first part of the class is spent on silent reading time. A timer is set and students begin to read. The teacher circulates around the room to do on-the-spot conferences, in which the students must tell her the antagonist and protagonist in their books and why they choose those people. Conferences last about three minutes and occur in hushed whispers. After about 15 minutes, the timer beeps and students are told to write down the number of pages they read in their logs.

Next, students go over their vocabulary crossword by telling the class the definitions one at a time when they are called upon. Students need to listen, as they may be called on without volunteering, sometimes prior to the question being asked. Reinforcement and feedback is given in the form of "good" and "not quite," as the teacher explains wrong responses. As new vocabulary words are discussed, the teacher asks students for definitions as she offers up her own personal examples, which remain constant from the previous class. A courtroom is evoked to define "object," and a three-legged dog illustrates "atypical," and snakes are creatures to which the teacher has "antipathy." Once this is done, the crosswords are collected so that students get credit for their completion.

Next, the students engage in a vocabulary definition copying game, in which they work with a teacher-chosen partner to walk around the room, looking at words and covered definitions under flaps to find matching words and definitions and copy them down. Directions are continually stressed and repeated to help students stay on task and accomplish their goal. It appears to be a contest to see who can finish first. This goes on for about 35 minutes, with the teacher circulating among groups and giving them answers and hints when they get the words and definitions confused.

Before students leave, the teacher walks around the room signing agendas and reward cards; students are told about their "challenging" homework assignment. They are given a list of 12 vocabulary words in sets of three. They must use each of these three words in one sentence, and it "has to make sense." There is no apparent connection between the words, and meaning can be at a surface level, as per the example the teacher gives. The focus seems to be on completing the task.

Themes

The resulting vignettes illustrate themes that parallel each teacher's level of dispositional responsiveness. Even though each school was involved in high-stakes state-wide testing, and each teacher had to be mindful of content covered and schools' yearly annual progress on standardized goals, how the teachers defined and enacted teaching and learning in their classrooms varied. Those who were more responsively disposed evidenced more use of best practices and developmentally responsive teaching. Their teaching strategies were aimed at engaging young adolescents in active learning and were grounded in the concepts of teaching for understanding (Wiske, 1998), Understanding by Design® (Wiggins & McTighe, 2006) and paralleling practices exemplified in *Practicing What we Preach: Preparing Middle Level Educators* (Totten, Johnson, Morrow, & Sills-Briegel, 1999). Those less responsively disposed attempted to use engaged learning, such as Amy's vocabulary quest and reading conferences, and Debbie's Energy Jeopardy. However, these attempts fell short of cultivating student understanding, ownership, and critical thinking. Responsively disposed teachers focused on real world issues, relevance, and development of student voice, while less responsive teachers emphasized finding correct answers and directing appropriate student behavior.

Overall, the data indicate that the young teachers' dispositions remained fairly consistent over time. This was especially true of the two teachers, Caitlyn and Sarah, who evidenced Level 3 dispositions consistently in student teaching, year one, and year five. Even though they came from two different contexts, rural and urban, and two different content areas (language arts and science), these two teachers remained responsive in their interactions across all areas of the DIA framework. The moderately responsive student teachers, Amy and Debbie, remained near Level 2 responsiveness across the years. Amy was somewhat less consistent, with some variation in her scores, with a dip in responsiveness during her first year teaching then leveling out closer to Level 2 by her fifth year of teaching. In the area of student interaction, she consistently revealed technical dispositions upon entering the field and having responsibility for her own classroom.

Limitations

Although the participants in the study represented one-third of the graduating middle level cohort group from the university, the small sample size has implications for the ability to generalize the findings. The potential benefits of this study do not lie within its ability to represent a large-scale study of teachers across multiple cases; rather, in providing a description of what teachers' classrooms may look like, in terms of educator dispositions' impact on teaching practices and classroom interactions. The study is a revelation of four teachers' stories of how dispositions manifested themselves over the first five years of induction into the profession. Further study with larger samples would increase the likelihood of useful large-scale generalizations. Further, studies that are more inclusive of other content areas, including social studies, foreign language, health, physical education, and the arts may broaden the knowledge base related to teachers' DIA and how they are manifested over time, as would studies with teachers utilizing an integrated approach and with teachers who teach more than one content area.

Implications

The dispositions we choose to include as part of our middle level teacher preparation standards are present because we value them in future teachers and believe they will support the development of the kind of teachers best suited to teach and reach middle level students and further the goals of our profession. Our goal is to graduate new teachers who possess and exhibit these dispositions both by screening them upon entry to the program and by cultivating these desired dispositions through our coursework and field experiences. We want to be certain they are prepared and disposed to help young adolescents succeed when they enter the field as middle level professionals.

This study indicates that it is likely that the dispositions preservice teachers demonstrate at the end of their preparation program remain relatively constant as they enter their beginning years as professional educators. The participants were all held accountable to standardized high-stakes testing via No Child Left Behind and were successful in getting students to achieve satisfactory scores. However, the young teachers' dispositions affected how they reacted to the testing focus and how they ultimately defined teaching and learning in their classrooms in a more or less responsive manner. The teacher participants who were responsively disposed stayed focused on best practices that emphasize teaching for understanding and developing higher-order thinking and decision making in students. Participants who were moderately responsive took a more technical approach to teaching, sometimes centering on student behavior and attaining information and correct answers, all of which are becoming more prevalent in today's accountability-focused schools.

Responsive teachers may feel they are teaching against the grain. In schools where raising student test scores has become the major, and sometimes only, goal, teachers who work against the grain are often not in demand, and, in fact, new teachers willing to comply with an accountability-focused school culture may be the most sought after (Cochran-Smith, 2001). But, if real issues of middle level student achievement are related to dispositional dimensions such as high expectations, commitment, and the disposition to embrace reform, as suggested by Brown, Roney, & Anfara (2003), we must address this concern. This can be accomplished through our teacher education programs; meaningful professional development in the form of mentoring, co-teaching, and learning communities; and development of political action to give informed voice and develop public relations to counter the unchallenged assumptions related to the benefits of current high-stakes testing without a careful examination of its limitations.

If we believe that responsively disposed teachers are more likely to use the developmentally responsive practices of the middle school movement, it is hopeful that well prepared teachers possessing such dispositions are able to maintain them over time. Such teachers promote student achievement on standardized measures while seeking to develop the whole young adolescent as a thinker, problem solver, and decision-maker. Perhaps, if novice teachers are able to maintain and act upon their responsive dispositions over time, they may act as the leaders of the next wave of middle level reform and influence it to take a more student-responsive path.

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Appendix A

Responsive Dispositions	Classroom Function	Technical Dispositions
The disposition to be **Critical** in one's thinking. Evidenced in dialogue that is: probing, focused on quality, centered on criteria, concerned with deep understanding The disposition to be **Challenging** in one's thinking. Evidenced in dialogue that is: centered on high expectations, student competence and success for all students	**Assessment**	The disposition to be **Assuming** in one's thinking. Evidenced in dialogue that is: centered on completion of tasks, focused on correctness, concerned with grades The disposition to be **Accepting** in one's thinking. Evidenced in dialogue that is: indicative of low expectations, focused on effort and compliance
The disposition to be **Facilitative** in one's thinking. Evidenced in dialogue that is: guiding, inquiry oriented, concerned with application and connections to students' lives, and real world examples, in search of multiple answers and the exchange of ideas The disposition to be **Creative** in one's thinking. Evidenced in dialogue that is: about multiple ways of framing learning, examples, and paths to understanding diverse learners, responsive to students' questions, comments	**Instruction**	The disposition to be **Directing** in one's thinking. Evidenced in dialogue that is: about directing actions of students, coverage of facts, telling information, and giving answers The disposition to be **Repetitive** in one's thinking. Evidenced in dialogue that is: lacking in variety in explaining, exemplifying or representing learning, repetitive, the same way for all students
The disposition to be **Empowering** in one's thinking. Evidenced in dialogue that is: concerned with student input related to classroom instructional decisions, centered on fairness and equity The disposition to be in **Connected** one's thinking. Evidenced in dialogue that is: centered on developmental needs and exhibits "withitness" problem solving, conflict resolution, and responsiveness to students as individuals	**Management**	The disposition to be **Controlling** in one's thinking. Evidenced in dialogue that is: concerned with managing student behaviors and actions including movement, talking, and other forms of interaction The disposition to be **Disconnected** in one's thinking. Evidenced in dialogue that is: often limited, general in nature, generic, often remaining the same from class to class and from situation to situation

Appendix B

This tool is premised on the following assertions related to dispositions:

1. A basic dictionary definition of "disposition" is "one's customary frame of mind." For research purposes we define dispositions as "teacher's habits of mind that shape ways that they interact with students and the ways they make decisions in the classroom."
2. As researchers, we can make inferences about teachers' dispositions based on the ways they interact with students and the kinds of dialogue we observe in their classrooms.

Based on everything you know about the preservice teacher who is working with you, please rate him or her on each of the following dimensions:

1. Ways of interacting with students (empowering/connected)

Indicators of dispositions via Dialogue High Level (3)	**Indicators of dispositions via Dialogue Medium Level (2)**	**Indicators of dispositions via Dialogue Low Level (1)**
a. The teacher regularly seeks input from students related to instructional strategies, assessment and the focus of the curriculum in the classroom.	a. The teacher occasionally involves students in instructional decisions by giving them options with assignments or projects.	a. The teacher focuses on covering information and material with very few modifications or adjustments made related to student feedback or input.
b. The teacher elicits student questions and interpretation of curriculum to gain data to inform future plans related to aspects of classroom curriculum.	b. The teacher gives students some choices about what to study and how to study.	b. The teacher rarely seeks feedback from students related to relevancy and understanding of curriculum.
c. Structure and organization in classroom supports dialogue and interaction with individuals and groups of students.	c. Students have some choices regarding classroom procedures.	c. The teacher talks with students and interacts with them in ways that emphasize following directions, completing tasks, recalling information and getting good grades.
d. Student dialogue with each other and teacher is truly collaborative (focuses on quality and mutual support in setting and attaining goals).	d. Classroom conversations indicate a congenial atmosphere (not a collaborative one).	d. Teacher talk rarely veers from focus on "given" content and coverage of this content.
e. The teacher talks with students and interacts with them in ways that show "withitness," keen awareness of individual students, and flexibility in management.	e. The teacher talks with students and interacts with them in ways that show some awareness of individual differences and some variation in management.	e. The teacher talks with students and interacts with them in ways that center on asserting the authority of the teacher.
f. The teacher proactively addresses disruptions and promotes engagement in ways that encourage shared responsibility and a sense of community.	f. The teacher addresses disruptions and promotes engagement in ways that primarily emphasize extrinsic motivation.	f. Teacher addresses disruptions and promotes engagement primarily in autocratic fashion ("because I said so").

Appendix B (continued)

2. Ways of assessing understanding (challenging/critical)

Indicators of dispositions via Dialogue High Level (3)	Indicators of dispositions via Dialogue Medium Level (2)	Indicators of dispositions via Dialogue Low Level (1)
a. The teacher regularly talks with students and interacts with them in ways that communicate high expectations for learning.	a. The teacher indicates that some students are capable of meeting high expectations, while others are not.	a. The teacher talks with students and interacts with them in ways that emphasize effort and compliance.
b. Dialogue and interaction regularly encourage deeper levels of understanding and emphasize progress toward high-quality performances of understanding.	b. Dialogue and interaction occasionally goes beyond the "givens" of the task toward higher levels of understanding.	b. Dialogue and interaction focus on completion of tasks and assignments, with little probing or questioning to move beyond the "givens" of the task.
c. Dialogue and interaction focuses on questioning and probing to reveal the students' depth of understanding to move beyond surface assumptions and statements of "facts," often seeking students' opinions, or justifications and reasoning behind responses.	c. Dialogue and interactions typically center on questions that focus on seeking the correct answer to a question or set of questions, with occasional follow-up questions.	c. Dialogue and interaction typically centers on the teacher providing information, with little focus on questioning students.
d. Assessment of learning occurs regularly within the flow of student-student and student-teacher interactions throughout instruction and is used to set goals for students and to guide further learning.	d. Some projects and learning tasks provide supplemental assessment data.	d. Assessment takes place in isolated events such as tests and quizzes.

Appendix B (continued)

3. Ways of interacting with instruction (facilitative/creative)

Indicators of dispositions via Dialogue High Level (3)	Indicators of dispositions via Dialogue Medium Level (2)	Indicators of dispositions via Dialogue Low Level (1)
a. The teacher frequently responds to student questions, notes their progress, shares their ideas, and builds these responses into instruction.	a. The teacher occasionally responds to student questions, progress, and ideas, and builds their responses into instruction.	a. The teacher emphasizes one approach to learning for all students.
b. Lessons regularly feature the scaffolding of skills and concepts to build on students' current understanding toward deeper levels of understanding.	b. Lessons occasionally vary the explanation of concepts and the performance of skills in response to students.	b. Lessons emphasize the explanation of concepts in a prescribed order and the performance of skills in the same ways.
c. The teacher talks with students and interacts with them in ways that are very responsive to individual differences and developmental needs.	c. The teacher talks with students and interacts with them in ways that show some awareness of individual differences and developmental needs.	c. The teacher talks with students and interacts with them in ways that are rarely responsive and are often the same from class to class and from situation to situation.
d. The teacher regularly relates classroom learning experiences to real-world situations and connects issues to students' lives beyond school.	d. The teacher occasionally relates classroom learning experiences to real-world situations and rarely connects issues to students' lives beyond school.	d. The teacher talks with students and interacts with them in ways that emphasize the coverage of information. Any connections beyond the classroom are incidental.
e. The teacher encourages multiple ways of demonstrating understanding.	e. The teacher offers limited opportunity for student demonstration of understanding during the learning process.	e. The teacher emphasizes single pathways to learning and assesses whether or not students demonstrate prescribed skills and procedures.
f. The teacher regularly provides multiple forms of feedback to students to guide the growth of their understanding.	f. The teacher occasionally provides feedback to students to guide the growth of their understanding.	f. The teacher generally limits feedback to grades on assignments.

Source: Dr. Holly Thornton & Dr. David Strahan. University of North Carolina Greensboro, 2004