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Despite the appealing and intuitive nature of the writings about thoughtfully adaptive teaching, no one has systematically collected empirical evidence to support such claims (Duffy, Miller, Kear, Parsons, Davis, & Williams, 2008). In response to this need, the current study focused on planning as well as on-the-fly adaptations, included a student outcome measure and examined high potential teachers, within a district with less emphasis on accountability outcomes. When compared to previous studies, teachers in this study thoughtfully adapted three to four more times while on-the-fly. Moreover, they adapted during planning but at a far less frequent rate. Minimal evidence was found for the influence of visioning and no evidence was found for the connection between thoughtful adaptations and student agency. This study's findings suggest the need for future research to look at the connections between teachers' adaptations and various student outcome measures.

TWO TEACHERS' THOUGHTFUL ADAPTATIONS DURING PLANNING  
AND INSTRUCTION AND THE RELATIONSHIP TO STUDENT  
AGENCY & TEACHER VISIONING

by

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## TABLE OF CONTENTS

	Page
LIST OF TABLES .....	vi
CHAPTER	
I. INTRODUCTION .....	1
Problem .....	1
Background .....	3
Previous Thoughtfully adaptive teaching Research.....	3
Rationale for High Potential Teachers .....	5
Rationale for Planning .....	5
Rationale for Visioning.....	6
Rationale for Student Agency as a Student Outcome.....	7
Summary .....	8
Definitions.....	8
Assumptions & Limitations .....	11
Ethical Considerations .....	11
Conclusion .....	12
II. THEORETICAL PERSPECTIVE .....	13
Background .....	13
Previous Thoughtfully Adaptive Teaching Research .....	14
Interactive Decision Making.....	16
Hypothesis #1.....	21
Decision Making During Planning .....	21
Hypothesis #2.....	28
Cold and Hot Cognition .....	28
Hot Cognition and Obstacles .....	38
Hypothesis #3.....	44
Agency .....	44
Conclusion .....	54
III. METHODS .....	55
Participants.....	56
Research Site.....	57
Description of Methods.....	58
Case Studies and Relevant Criteria.....	58

	Page
Procedures and Schedule .....	58
Schedule of Observations .....	58
Data Collected.....	59
Pre-Study Interviews.....	59
Pre-Lesson Interviews.....	59
Interviews of Teachers .....	60
Observations .....	61
Student Interviews .....	61
Summary of Data Collected.....	62
Methods of Data Analysis.....	62
Research Questions.....	63
Limitations .....	67
Ethics.....	68
Conclusion .....	68
 IV. RESULTS .....	 70
Case Study 1 .....	70
Ms. Baker’s Adaptations.....	70
Ms. Baker’s Rationales .....	77
Adaptations Related to Vision .....	83
Outcome Data .....	85
Case Study 2 .....	89
Ms. Kaley’s Adaptations.....	89
Ms. Kaley’s Rationales .....	95
Adaptations Related to .....	102
Outcome Data .....	104
Comparison of Case Studies .....	107
Adaptations .....	107
Rationales.....	111
Across Student Interviews .....	113
Summary of Results.....	114
 V. DISCUSSION .....	 116
Implications.....	120
Future Studies .....	123
Conclusion .....	125
 REFERENCES .....	 126

	Page
APPENDIX A. PRE-STUDY INTERVIEW PROTOCOL.....	141
APPENDIX B. TEACHER INTERVIEW PROTOCOL .....	143
APPENDIX C. STUDENT INTERVIEW PROTOCOL .....	144

## LIST OF TABLES

	Page
Table 1. Summary of Participants .....	57
Table 2. Adaptation Codes .....	64
Table 3. Rationales for On-the-Fly Adaptations .....	65
Table 4. Ms. Baker's Adaptations during Planning .....	71
Table 5. Ms. Baker's Adaptations during On-the-Fly .....	74
Table 6. Ms. Baker's Planning Rationales .....	79
Table 7. Ms. Baker's Rationales for On-the-Fly Adaptations.....	80
Table 8. Ms. Kaley's Adaptations during Planning .....	90
Table 9. Ms. Kaley's Adaptations during On-the-Fly Instruction.....	93
Table 10. Ms. Kaley's Planning Rationales .....	96
Table 11. Ms. Kaley's On-the-Fly Rationales.....	99
Table 12. Teacher Comparisons of Planning Adaptations .....	108
Table 13. Teacher Comparison of On-the-Fly Adaptations .....	110
Table 14. Teacher Comparisons of Planning Rationales.....	111
Table 15. Teacher Comparisons of Rationales While On-the-Fly .....	112



## **CHAPTER I**

### **INTRODUCTION**

The purpose of this research study was to explore the types of adaptations teachers made during planning and while on-the-fly during literacy instruction and to see if such adaptations impacted student's sense of agency.

While previous research on thoughtfully adaptive teaching has suggested the importance of teachers being thoughtful when teaching reading, there have been relatively few examples of metacognitive thought in teachers' rationales for their adaptations, and a lack of investigation that such teacher thoughtfulness has an impact on students' literacy. To address these areas, it was necessary to expand thoughtful adaptive teaching studies to include the following dimensions: examining high potential teachers' adaptations during planning and in relation to the kinds of visions they have and students' agentic behavior as a potential student outcome.

#### **Problem**

Previous research on thoughtfully adaptive teaching, conducted in approximately fifty reading classrooms in Guilford County Schools, resulted in relatively few examples of high-level adaptations, few examples of metacognitive thought in teachers' rationales for their adaptations, and has not examined the impact of thoughtfully adaptive teaching on children (Duffy et al., 2008). While these studies have been helpful in conceptualizing thoughtfully adaptive teaching, they have yielded little that would help researchers

understand how teachers adapt or how to teach teachers to adapt while teaching.

Consequently, this study was a replication with variation, with the variations being: (a) intentional selection of high potential teachers instead of using convenient sample and within a district where there was minimal emphasis on testing; (b) closer examination of the relationship between opportunities to adapt, outcomes, and students' performance on such outcomes; and (c) looking at the planning phase as well as on-the-fly phase of instruction.

Previous studies of thoughtfully adaptive teaching found that during on-the-fly instruction teachers made only one considerable adaptation (Duffy et al., 2008).

Consequently, the hypothesis for this study was that teachers, who have clear visions of what they are trying to accomplish through literacy instruction, would evidence more adaptations both during their planning and on-the-fly lessons, and that students of those teachers would, as a result, demonstrate agentic behavior.

The overall research questions and sub-questions for this study include:

1. What are the types and number of adaptations two high potential teachers make
  - a. While planning reading instruction?
  - b. During on-the-fly reading instruction?
2. What are the kinds and types of rationales two high potential teachers provide
  - a. For planning adaptations?
  - b. For on-the-fly adaptations?

3. In what ways are high potential teachers' adaptations while planning and while on-the-fly promoting
  - a. Student's sense of agency?
4. To what extent do students demonstrate
  - a. Student agency?
6. What is the relationship between the kind of planning adaptations and on-the-fly adaptations high potential teachers make in relation to
  - a. Student agency?
  - b. Teacher's vision?

### **Background**

Given that previous research on thoughtfully adaptive teaching has found relatively few examples of high level adaptations it was necessary to include other dimensions. Such dimensions included: examining the kinds of visions two high potential teachers have in relation to adaptations, students' agentic behavior as potential student outcome, and looking beyond on-the-fly adaptations to adaptations teachers made during planning. By examining these dimensions in the current study, more insight was developed about the ways in which teachers engage in thoughtfully adaptive teaching.

### **Previous Thoughtfully Adaptive Teaching Research**

Duffy et al. (2006) conducted a study to examine teacher adaptations during literacy instruction. The authors examined thirteen pre-service teachers and six in-service teachers as they taught literacy lessons and found cases where teachers made adaptations during instruction. This study highlighted the need to examine the kinds of adaptations

teachers made within different contexts. Following this study, Duffy and his colleagues (2008) conducted four case studies involving a total of eight teachers. In the first study within this series of studies, two second grade pre-service teachers were examined during student tutoring sessions. The authors found that the kinds of adaptations teachers made during instruction varied. There was little difference in the kind of adaptations pre-service and in-service teachers made during instruction. The authors argued that these preliminary studies suggested that thoughtfully adaptive teaching and the kinds of tasks teachers designed were related (Parsons, Davis, Scales, Williams, & Kear, 2010). Additionally, these studies provided research tools to examine the level of thoughtfulness in adaptations, rationales, and tasks (Kear, 2009; Parsons, 2008; Scales, 2009).

These studies found that teachers made a minimal amount of adaptations in response to student cues and that the openness of the task was related to the adaptive nature of the teacher. In these collective studies by Duffy and his colleagues (2008), only two percent of the adaptations across studies were considered to be associated with thoughtfully adaptive teaching (Duffy et al., 2008). These studies found that it was difficult to find evidence of thoughtfully adaptive teaching in classrooms. Given the results of these studies, it was necessary to expand thoughtfully adaptive teaching studies to include other dimensions. Consequently, the current study examined these new dimensions—high potential teachers and their visions, the kinds of adaptations during the planning stage and the extent to which adaptations related to student agency. The rationales for these dimensions are included in the following paragraphs.

### **Rationale for High Potential Teachers**

Previous research on thoughtfully adaptive teaching conducted in approximately fifty reading classrooms in a district that emphasized high stakes testing and scripted materials resulted in relatively few examples of thoughtfully adaptive teaching. Additionally, these studies, used a convenient sample, and were conducted with novice teachers who may not have developed the appropriate levels of expertise needed to make thoughtful adaptations. While these on-the-fly studies provided an understanding of thoughtfully adaptive teaching, the teachers evidenced relatively few thoughtful adaptations. This study, in contrast, intentionally selected high potential teachers or those teachers with an advanced degree or National Board certification, outside of a high stakes testing district, in order to examine thoughtfully adaptive teaching.

### **Rationale for Planning**

Research from teacher decision-making studies during planning indicates that teachers plan in response to problems experienced in the past, in response to current practical problems (such as scheduling conflicts, class size), curriculum materials, students' needs or interests, goals and future activities (Clark & Peterson, 1978, 1986; Clark & Elmore, 1981; Hill & Martin, 1971; Joyce & Harootunian, 1964; Sutcliffe & Whitfield, 1976). Given this research it may be that by examining the planning stage in the current study, we may find additional evidence of thoughtful adaptations and understand the thought processes behind these adaptations. Teachers may be making important adaptations during this stage related to adapting the curriculum, adjusting their plans according to students' interests and needs, and modifying their plans based on

successes and failures from previous lessons (Clark & Elmore, 1981; Clark & Peterson, 1986; Hill & Martin, 1971; Joyce & Harootunian, 1964; Shulman, 1987; Shulman & Shulman, 2004). It is for this reason that this study examined the kinds of adaptations teachers made during planning.

### **Rationale for Visioning**

One of the difficulties in locating thoughtfully adaptive teaching in classrooms may be the current political climate in which teachers teach. Although, teachers have long struggled to overcome obstacles while teaching, the current political climate may be making it even more difficult for teachers to make adaptive decisions. Obstacles teachers face (i.e., emphasis on test preparation, the growth of scripted programs and the pressure teachers feel to comply with scientifically based research programs) often appear to leave teachers unable to adapt and modify the curriculum (Valencia, Place, Martin, & Grossman, 2006). As difficult as these obstacles are to overcome, teachers with a clear sense of purpose or vision may be more likely overcome such obstacles by adapting the curriculum and acting upon their vision while teaching (Achinstein & Ogawa, 2006; Duffy, 1997, 2002; Hammerness, 2001, 2006). That is, teachers who have a clear vision may promote adaptive instruction in the classroom even within today's political climate of curricular mandates (Duffy, 1997, 2002, 2005; Duffy & Hoffman, 1999; Duffy et al., 2008).

The call for examining teachers who possess a clear vision in the current study is rooted in the belief that teachers with a clear vision are often independent and modify instruction based on students' needs (Hammerness, 2001, 2006; Turner, 2007). These

teachers are what Duffy (2002) terms ‘effective’ and are often able to “adjust, modify, and invent: they do not emulate” (Duffy, 2002, p. 333). Thus, teachers who possess clear visions may be more likely to negotiate and overcome obstacles (mandated curriculum, scripted programs) because of their vision; making them more likely to engage in thoughtfully adaptive teaching. Consequently, visioning may be helpful in understanding how and why such teachers resist curricular pressures in today’s schools and in turn may be more likely to evidence thoughtfully adaptive teaching.

### **Rationale for Student Agency as a Student Outcome**

Previous research from thoughtfully adaptive teaching studies has not yet examined student outcomes. The concept of agency has been conceptualized by theorists from philosophical, psychological, social-psychological and educational contexts (Bandura, 2001; Basu, Calabrese Barton, Clairmont, & Locke, 2009; Daneilewicz, 2001; Davies, 1990; Holland, Lachicotte, Skinner, & Cain, 1998, Oakeshott & Fuller, 1995). As researchers have found, fostering a sense of agency in students may be an essential component in getting students involved during the learning process (Basu, Calabrese Barton, Clairmont & Locke, 2009; Daneilewicz, 2001; Davies, 1990). Given this important goal, the rationale for studying agency in the current study stems from research which suggests that when students act on their sense of agency they are more likely to engage in learning, take the initiative to be in charge of their learning, develop dispositions as active learners which extends beyond simply learning tasks, and position themselves as active rather than passive learners (Paris & Lung, 2008; Bandura, 2001; Holland et al., 1998). Students’ agentic behavior begins with engaging and meaningful

learning experiences (Basu et al., 2009). Teachers who engage in thoughtfully adaptive teaching may be more likely to create such experiences. Consequently, the current study explored the relationship between thoughtfully adaptive teaching and student agency.

### **Summary**

The current study addressed the kinds of adaptations two high potential teachers made during planning, their visions as they related to adaptations, and the impact of thoughtfully adaptive teaching on students' agentic behavior. These dimensions, not yet examined in previous thoughtfully adaptive teaching studies, are essential in our understanding of future directions for thoughtfully adaptive teaching research. In order to address these current dimensions, the research questions outlined will be answered in the following chapters.

### **Definitions**

In this section I provide definitions of terms used throughout this research. This study was conducted in the context of reading instruction.

*High Potential Teacher:* A high potential teacher is a teacher with National Board certification or an advanced degree.

*Adaptations:* A form of executive control in which teachers modify their professional information and/ or practices during either planning or teaching in order to meet the needs of particular students or particular instructional situations.

*Adaptations during planning:* A teacher report during the pre-lesson interview of a change representing: (a) modification in district or school requirements; (b) a



modification of materials; (c) a change from past experience; (d) a change from instructional strategies; or (e) a modification made in relation to vision.

*Adaptations during a lesson or 'on-the-fly'*: An adaptation during the lesson occurs if the teacher is making a non-routine proactive decision that requires thought and is invented on the spot in order to make instruction suitable for the goal the teacher is pursuing. It must be: (a) non-routine, proactive, thoughtful and invented; (b) include a change in the professional knowledge or the professional practices the teacher is using and; (c) was done to meet the needs of students or instructional situations.

*Vision*: The statement teachers make in a pre-study interview about their vision. Vision may include teachers' beliefs, ideals and goals for instruction or for future development as a teacher.

*Vision-Related Adaptation*: A Vision-Related Adaptation is an adaptation found during instruction or during planning if the teacher (a) stated that the adaptation directly related to her vision, without being prompted or (b) if her statements (as found in their rationales about the adaptations) had the specific themes related to her vision.

*Agency-Related Adaptation*: An Agency-Related Adaptation is an intentional teacher adaptation where the teacher (a) referred to agency without prompting, or (b) their statements had to show one of the following practices: students had opportunities to make choices, make decisions, question, challenge, or critique the lesson from their own perspective.

*Rationale*: The reason teachers provided for the adaptations they made in a post lesson interview.

*Student agency:* Student agency may be defined as individuals who make choices, make decisions, make connections independently, challenge and/or critique. It will be measured by student interviews.

*Evidence of student agency:* Evidence of student agency may be described as students' awareness or actions as demonstrated in students' responses during the interviews. In order to qualify as 'evidence' there must be present in student interviews examples of ways in which students respond in agentic ways (i.e., make choices, make connections independently, challenge, critique). During student interviews, students must respond with an example(s) of when they acted in agentic ways in their classroom, in order to qualify as being agentic. For example, one of the interview questions states:

1. Are there times when you get to create or do something other than what the teacher directs you to do? Tell me about it.

In order for this to qualify as a student acting in agentic ways, the student would need to provide an example of what he/she does outside of the teacher directed activity. Students would need to provide an example in the two interviews (See Student Interview Protocol for additional questions relating to student agency).

*Evidence that adaptations promoted student agency:* In order for an adaptation to qualify as promoting student agency, one of the following criteria must be evidenced in the teachers' rationales.

1. Students acted on opportunities to make choices.
2. Students acted on opportunities to make decisions.
3. Students acted on opportunities to question.

4. Students acted on opportunities to challenge.
5. Students acted on opportunities to critique the lesson from their own perspective.

*Obstacles:* Anything, an individual teacher says, may prevent them from continuing on a certain course of action.

### **Assumptions & Limitations**

I assumed that all of the participants involved in the study responded honestly to the questions and provided typical classroom instruction. Additionally, the limitations of study involved time and the number of participants. Ideally, this study would include more than two teachers and twelve students. Since this study spanned over ten weeks, there was a total of twenty observations, with one observation per week. This was a relatively small amount of observations. I was only able to observe during this time and may have missed significant aspects of lessons. The measures within the study are exploratory and may yield only suggestive findings. Findings cannot be considered generalizable because the design does not meet the criteria for generalizability. That is, additional studies with a larger sample of both teachers and students would aid to increase the study's generalizability.

### **Ethical Considerations**

Selected student participants were not interviewed until permission was gained from the following levels: university, parents, principal, teachers and students. In addition, all participants were given pseudonyms. All participants were not interviewed

until permission was obtained. All participants were made aware through verbal and written communication that they may cancel their participation in the project at any time.

### **Conclusion**

This chapter outlined the problem, the rationales and the research questions for the study. Additionally, the theoretical perspective was discussed as well as important definitions for concepts used during the remaining chapters. In the following chapters, the design of the study, analysis of the data and implications are discussed.

## **CHAPTER II**

### **THEORETICAL PERSPECTIVE**

Given that previous research on thoughtfully adaptive teaching has found relatively few examples of high-level adaptations, this study expanded thoughtfully adaptive teaching studies to include other dimensions. These dimensions included: looking beyond on-the-fly adaptations to adaptations teachers made during planning, examining the kinds of visions high potential teachers had in relation to adaptations and examining students' agentic behavior as a potential student outcome. By examining these dimensions, we may gain more insight into the ways in which teachers engage in thoughtfully adaptive teaching. In the following paragraphs, an overview of thoughtfully adaptive teaching studies is discussed as well as the literature behind these dimensions.

#### **Background**

Thoughtfully adaptive teaching has been based in a long history of teacher decision making. Research from decision making studies has found that during interactive teaching, teachers made minimal thoughtful adaptations. Rather, the kinds of decisions teachers made were limited to decisions made in response to classroom management concerns and student cues. In the following paragraphs, a history of thoughtfully adaptive teaching and interactive decision-making will be discussed in order to highlight this relationship.

### **Previous Thoughtfully Adaptive Teaching Research**

In the early studies of thoughtfully adaptive teaching, Duffy et al. (2006) conducted a study of six in-service and thirteen pre-service teachers to examine thoughtful adaptive teaching during literacy instruction. Thoughtfully adaptive teaching, as Duffy and his colleagues define it, is a form of executive control in which teachers modify professional information and/or practices in order to meet the needs of particular students or particular instructional situations. In these early studies there were limited cases where teachers made thoughtful adaptations during instruction. Adaptations resembled what has been found in teacher decision-making studies: decisions were made based on classroom management concerns or student cues.

Adaptations in these early studies were identified in three categories: to redirect students to a task, to address organizational concerns (timing, lack of necessary materials, etc.) and to assist students in their misunderstandings during a lesson (Duffy et al., 2006). From this work, a coding system was developed to identify themes. These themes related to the kinds of adaptations made and included: modifying the lesson, making changes by which objectives are met, inventing an example, analogy or metaphor, inserting a mini lesson, suggesting a different perspective to students, omitting/inserting activity or assignment and making changes planned in the lesson. Additionally, rationales made by the teacher were also categorized into the following themes: objective not met, challenge or elaborate, teach a specific strategy or skill, help students make connections, uses knowledge of students or classroom dynamics to alter instruction, check student

understanding, anticipation of upcoming difficulty, to manage behavior, to manage time, and to promote student engagement.

The authors found that the kinds of adaptations teachers made during instruction varied. There was little difference in the kind of adaptations pre-service and in-service teachers made during instruction. The authors argued that these preliminary studies suggested that thoughtfully adaptive teaching and the kinds of tasks teachers designed were related (Parsons et al., 2010). These studies provided research tools to examine the level of thoughtfulness in adaptations, rationales, and tasks. Parsons (2008), Kear (2009), and Scales (2009) found that the openness of the task was related to the adaptive nature of the teacher.

These studies on thoughtfully adaptive teaching revealed that teachers made primarily few adaptations in response to student cues. In the collective studies by Duffy and his colleagues (2008), only two percent of the adaptations across studies were considered to be associated with thoughtfully adaptive teaching (Duffy et al., 2008). These studies found that it was difficult to find evidence of thoughtfully adaptive teaching in classrooms. This research was conducted in approximately fifty reading classrooms in Guilford County Schools using a convenient sample to select participants. While these studies provided an understanding of thoughtfully adaptive teaching, the teachers in the study evidenced relatively few examples of high level adaptations.

To fully understand the kinds of adaptations teachers make while on-the-fly, an examination of the historical roots of decision-making is necessary. This history will be

discussed in the following section. The studies on interactive decision-making are organized into the following subheadings: classroom management and student cues.

### **Interactive Decision Making**

Joyce and Harootunian (1964) examined 39 student teachers to see how they used instructional decisions and their reasons for using such decisions while teaching in order to give dimension to effective teaching. The authors examined how teachers used knowledge from a university course while in practice and found that there was a lack of transfer of information from course work to practice during teacher decision-making in the classroom. This study highlighted the difficulty of implementing knowledge from a university course into the classroom and emphasized the need to study teachers' decision making during instruction.

Building from Joyce and Harootunian's (1964) study, Sutcliffe and Whitfield (1976) examined the observable interactive decisions made by teachers in the classroom. Participating teachers viewed videotaped lessons of their instruction and were interviewed about the lessons around three observable stimuli; students' behavior, lesson content, and the environmental stimuli. The authors categorized teachers' decisions into two categories: reflective and immediate and found that teachers made interactive decisions but were unaware of the decision making process as they made these decisions in the classroom.

These studies illustrate the longitudinal effort to understand the ways in which teachers think and make decisions during the interactive phase of instruction. The research indicates that substantive decisions are made during this phase of instruction.



Thus, undergirding the importance of examining the kinds of decisions teachers make during interactive teaching in the current study.

**Classroom management.** Clark and Peterson (1986) in their review of twelve studies from 1975-1983 examined the relationship between classroom practice and teachers' responses about their practice and found that rarely did teachers' decisions deal with the content or subject matter when making interactive decisions. Instead, teachers made interactive decisions based on unexpected interruptions or in response to classroom management concerns. One teacher seemed to capture this when asked if he was thinking of any alternative instructional strategy, "No, none at all. It was all going along. The only time I think of alternative strategies is when something startling happens" (p. 275). In fact, of the twelve reviewed studies, the overwhelming finding was that teachers' interactive decisions were mainly concerned with the flow of the lesson and classroom management concerns.

In addition Shavelson (1983) reviewed studies on teachers' judgements and decision making during instruction. In this review Shavelson summarizes the research on decisions made during instruction and highlights how teachers continue with the routine as planned. However if unacceptable behavior occurs, teachers decide on what action to take. For example Romano (2006) found that teachers made interactive decisions based on "bumpy moments." These moments are "teaching incidents that require the teacher to engage in reflection to make an immediate decision about how to respond to a particular problem in practice" (p. 974).

Other researchers have found similar results when examining the kinds of decisions teachers make during instruction. Cone (1978) in his study of 50 teachers found that teachers based their decisions on the students' behavior. That is when teachers were presented with a description of a student in a classroom scenario, the type of student behavior had a significant impact on the kinds of decisions teachers made. Shavelson and Stern (1981) support this finding that a teacher only made an interactive decision when the student's behavior was out of control. Results from these studies indicate that many decisions made during instruction are in response to classroom management concerns (Calderhead, 1981; Shavelson, 1983).

The research indicates that many decisions during interactive teaching are a result of classroom management concerns. However, perhaps teachers who have a clear vision are better able to negotiate classroom management concerns. The current study explored the kinds of decisions teachers with a clear vision have.

**Student cues.** Clark and Peterson (1986) in their review of studies also found that one of the overwhelming characteristics of these studies was that teachers made decisions during instruction based on students' cues and misunderstandings. Student cues included responding to behavioral issues, students' questions, and selecting students to respond to questions related to instruction. The authors concluded that the reviewed studies demonstrate that the teacher is a "reflective practitioner" but that teachers made decisions in response to classroom management issues or students' misunderstandings frequently and during interactive teaching. Similarly, Bromme (1982) found that after teaching a math lesson, teachers were able to comment on students' misunderstandings and cues

during the lesson, which prompted interactive decisions during the lesson. However, rarely did these teachers use this information to further student learning.

Similarly, other researchers have examined the relationship of decisions made during instruction. For example, Putnam and Duffy (1984) examined the interactive decision-making of an expert reading teacher using Shavelson and Stern's model (1981) of preactive and interactive decision-making during instruction. The model outlined by Shavelson and Stern (1981) assumes that teachers' interactive decisions are carried out as well established routines. That is a teacher has an image of how to carry out the lesson but that if this is interrupted due to student cues then the teacher deviates from the model. Putnam and Duffy (1984) found that student cues prompted the teacher to make decisions to meet the needs of the student.

Similarly, scaffolding was seen as a way for teachers to make interactive decisions based on students' misunderstandings. During instruction, teachers adapt instruction to meet students' learning needs (Duffy et al., 2008). Studies of exemplary teachers found that teachers scaffold the needs of their students by acknowledging and acting upon moments during instruction (Pressley, 2002). Studies found that teachers were adaptive and scaffold instruction during student misunderstandings (Hogan & Pressley, 1997).

Adaptive teachers make decisions, adapt instruction, and assess student strengths and weaknesses during the learning process (Corno, 2008). Maloch (2002) examined the kinds of scaffolds teachers used to support students' discussions during literature groups and found that teachers made decisions to meet students' needs through a variety of

scaffolding instructional techniques: direct and indirect prompting, modeling, highlighting of strategies, and retelling techniques. Lampert (1985) also found that scaffolding was needed while teaching mathematics to fifth graders and that teaching content alone was not enough.

Teachers must balance and consider a variety of classroom variables while making interactive decisions such as how students treat one another, misunderstandings, and assignments while meeting students' learning needs. The current study examined the kinds of decisions teachers made during this phase of instruction.

**Summary.** In sum, the research on interactive decision making suggests that teachers make low level decisions in response to either classroom management issues or students' cues and misunderstandings. These decisions were not situated during 'teachable moments' where teachers find and act upon an authentic opportunity to teach something in the moment. Instead, these decisions were made in response to classroom management concerns or students' cues and misunderstandings. Consequently, given that previous research of thoughtfully adaptive teaching has found relatively few examples of thoughtful adaptations during interactive teaching, the current study examined the planning phase of instruction.

In the following paragraphs, three hypotheses are discussed to give context to the current study: looking beyond on-the-fly adaptations to adaptations teachers make during planning, examining the kinds of visions high potential teachers make in relation to adaptations and examining students' agentic behavior as a potential student outcome.

### **Hypothesis #1**

Given that previous thoughtfully adaptive teaching studies found relatively few adaptations while on-the-fly, it was necessary to examine the kinds of decisions teachers made during planning. Hypothesis #1 suggests that teachers may be making substantive decisions during the planning stage and may evidence more thoughtful adaptations during this stage. The subtopics under this heading include: the influence of tasks during planning and the influence on a variety of outcomes.

#### **Decision Making During Planning**

Studies on teacher decision-making during the planning stage suggest that teacher planning is task focused and multidimensional. It is for this reason that the current study examined the kinds of decisions teachers made during the planning stage. In the following paragraphs, a history of teacher decision-making during planning will be discussed, followed by the influence of tasks during planning and the influence on a variety of outcomes.

**History of decision-making during planning.** Research from teacher decision-making studies during planning indicates that teachers plan in response to problems experienced in the past, in response to current practical problems (such as scheduling conflicts, class size), curriculum materials, students' needs or interests, goals and future activities (Clark & Elmore, 1981; Clark & Peterson, 1978, 1986; Hill & Martin, 1971; Joyce & Harootunian, 1964; Sutcliffe & Whitfield, 1976). Given this it may be that by examining the planning stage, we may find additional evidence of thoughtful adaptations and understand the thought processes behind these adaptations. That is, teachers may be

making important adaptations during this stage especially related to adapting the curriculum, adjusting their plans according to students' interests and needs, and modifying their plans based on successes and failures from previous lessons. Although this presents teachers' thoughts and not their actions, the literature on teacher decision-making during planning indicates that the kinds of decisions teachers make during this stage are substantive (Clark & Peterson, 1986; Clark & Elmore, 1981; Hill & Martin, 1971; Joyce & Harootunian, 1964; Shulman, 1987; Shulman & Shulman, 2004). It is for this reason that the current study examined the kinds of adaptations teachers made during this stage of instruction.

With the onset of the Cognitive Revolution, researchers began examining the kinds of thought process' involved in teaching and the kinds of decisions teachers made (Clark & Peterson, 1986). Prior to the Cognitive Revolution, studies on teachers and instruction focused primarily on a process-product paradigm where researchers examined the ways in which teachers' behavior influenced students' behavior and achievement. As the Cognitive Revolution began, researchers began to examine the relationship between classroom instruction, classroom planning, teachers' thought processes, and teachers' decision-making (Clark & Peterson, 1986).

Teachers' thought processes were categorized into three main dimensions: teacher planning, teachers' interactive thoughts, and teachers' beliefs and theories (Clark & Peterson, 1986). In this context, planning is viewed as the thought processes teachers express before teaching a lesson, thought processes post lesson, and the teachers' interactive thoughts and decisions during the lesson. According to Clark and Peterson

(1978), “the distinction between teachers’ preactive and postactive thoughts does not seem to have been retained by researchers—these two categories have been subsumed under the category of teacher planning” (p. 258).

Thoughtfully adaptive teaching has been based in a long history of teacher decision-making, teacher thinking, and teachers as thoughtful professionals. Teachers’ thought processes (how teachers organize, gather, interpret, evaluate information) leads to the kinds of decisions teachers make (Clark, 1979).

Studies on teacher decision-making during planning indicate that teacher planning is task focused and that the planning process is multidimensional. In other words, planning involves a variety of considerations; modifications based on previous experiences, the curriculum, students’ needs and interests. Teachers also plan according to specific tasks and activities.

**The influence of tasks during planning.** In many studies examining the kinds of decisions teachers make during planning, researchers found a relationship between planning and the kinds of tasks teachers use during instruction. For example, Morine-Dersheimer (1979) observed elementary school teachers and the kinds of decisions and thoughts involved during planning. In this study the author found that during planning, teachers were most concerned with tasks. Similarly, Shavelson, and Stern (1981) found that teachers’ planning was “focused on creating tasks and that once a task is planned it acts as an image, a plan where the task guides the teacher’s behavior during instruction” (p. 464). Peterson, Marx, and Clark (1978) in their study of twelve junior high school teachers found that during planning, teachers focused mainly on strategies, activities and

subject oriented tasks. These studies argue that teachers are concerned with the kinds of tasks related to content during the planning phase. Ultimately, during this phase of instruction, teachers may be considering multiple factors, which may ultimately result in more adaptations than during on-the-fly instruction.

Yinger (1979) found that tasks are carried out according to a three-stage problem solving model and are activity driven. First, teachers conceptualize an activity. Then, teachers assess the activity and how it relates to the instructional goals. Finally, the activity is performed and the teacher actively reflects and evaluates the activity (Yinger, 1979). This suggests that during planning teachers are concerned with tasks and the flow of activities during planning.

Teachers who teach in thoughtfully adaptive ways may also focus on the flow of activities and the kinds of tasks for the lesson during planning. If these activities are rich and based upon students' interests and learning needs, examining such thoughts about tasks and the kinds of activities planned would be worthwhile.

**The influence on a variety of outcomes.** Other studies have found that teachers consider a variety of dimensions when planning. Studies indicate the following dimensions: teachers plan according to tasks and activities: knowledge of self, learners, the curriculum, and modifications based upon past experiences. Doyle (1986) suggests that classroom work is broken down into several academic tasks involving procedures, objectives, content, activities and goals. Teachers make specific decisions in order to accomplish these tasks- activities are seen as components of a specific task. Using what Doyle terms as 'situational awareness' teachers within his study scanned the classroom



for signs of confusion and addressed students' needs while teaching. Doyle (1983) further argues that tasks are an important consideration in the decision making process. He suggests that tasks serve as a way to connect students with specific content. Consequently, teachers must make important decisions during the planning and interactive instruction related to which tasks they choose to use in their lesson.

Other studies of the kinds of decisions made during planning suggest that teachers plan based on past experiences. Clark and Elmore's (1981) study of an experienced second grade teacher and the think alouds she engaged in during her planning of science, math, and writing found that the teacher planned an overall structure for the school year and made modifications based on the previous year's experience and new curriculum materials. Such a study indicates that teachers make modifications during planning based on the success or failure from previously taught lessons and curriculum materials.

Other studies on the kinds of decisions made during planning have found that teachers make modifications during planning based on deficiencies in the curriculum. For example, McCutcheon (1980), in her study of twelve teachers and the kinds of decisions they made during planning, found that since science and social studies were allocated less time by administrators, some teachers were more adaptive during planning, by integrating science and social studies topics into the curriculum during this phase. For example, one teacher developed a unit on Native Americans and another teacher developed a unit on poetry during the planning phase in order to include these underrepresented subject areas. Results from such studies indicate that teachers may be more adaptive during planning because they have to balance integrating subject matter with existing curriculum in order

to meet the needs of their students. McCutcheon (1980) also found that teachers were concerned with practical problems as they related to planning (i.e., class size, scheduling concerns, and available materials) in addition to planning tasks. This highlights how some teachers may need to be more adaptive during planning in order to balance such components.

This adaptive ability coincides with how teachers deviate from objectives while planning. That is, rather than adhering to a specific objective based model, where teachers select an objective as their starting point in a lesson and then plan accordingly, Clark (1978) states that during planning, “Teachers plan around their students and around activities” (p. 11). Thus, during the planning stage, teachers make modifications, making a variety of decisions based on students’ needs, curriculum and materials. This research suggests that teachers may think adaptively during planning basing their decisions on a variety of dimensions.

In their review of literature on teacher decision-making during planning, Shavelson and Stern (1981) support this in their findings. The authors found that of the eighteen reviewed studies, ten of the studies found that teachers during planning were not only task focused but concerned with content, their students and instructional goals (Clark & Yinger, 1979; Joyce, 1978; Mintz, 1979; Morine-Dershimer, 1979; Peterson et al., 1978; Smith & Sendelbach, 1979; Taylor, 1970; Zahorik, 1975). Eleven of the eighteen studies indicated that teachers were most concerned with selecting content for the purpose of building tasks. This may indicate that during the planning stage of teaching, there is a potential for teachers to be more flexible and adaptive. That is,

teachers may be more likely to adapt their lessons during the planning stage based on content, tasks, and their goals for their students. Other researchers have also found that during planning, teachers make decisions and plan tasks centered on subject matter, activity, goals, socio-cultural context, students, materials, and creating learning activities for students (Borko, Cone, Russo, & Shavelson, 1979; Yinger, 1979). Such studies support how teachers, during this phase of instruction may be more likely to adapt and modify the curriculum and in turn may be more likely to be thoughtfully adaptive.

**Summary.** In sum, these studies on teacher decision-making during planning indicate that teacher planning is task focused and multidimensional. Some teachers plan in response to modifications based on previous experiences, students' needs and the curriculum. Given this, it may be that by examining the kinds of decisions teachers make during the planning stage that additional evidence of thoughtful adaptations will occur. That is, teachers may be making adaptations during this stage especially related to adapting the curriculum, adjusting their plans according to students' needs and modifying their plans based on successes and failures from previous lessons. It is for this reason that the current study examined teachers during this phase of instruction. It also appears that during this stage, a teacher's disposition influences the kinds of decisions they make. Consequently, it may be that by examining teachers' dispositions we may begin to see more thoughtful adaptations. In the following paragraph this hypothesis will be discussed.

## **Hypothesis #2**

Previous studies of thoughtfully adaptive teaching have examined “cold” cognitive dimensions of teacher knowledge such as content, pedagogy, and professional knowledge. However, there were relatively few opportunities for teachers to provide rationales based in substantive professional knowledge by viewing it through this lens; which suggests it may be necessary to examine more than these cold cognitive dimensions. Consequently, hypothesis #2 suggests that the affective, motivational and dispositional factors of teachers may be linked to thoughtfully adaptive teaching. In the following paragraphs these dimensions will be explored.

### **Cold and Hot Cognition**

Metacognition has long been understood to inform students’ self-regulation of learning through a process of “thinking about one’s thinking” and the regulation of that thinking (Flavell, 1976, 1979), whereas teacher metacognition may be described as “thinking about one’s thinking” and the regulation of that thinking in pursuit of student learning (Duffy, Miller, Parsons, & Meloth, 2009; Zohar, 2006). In the following paragraphs teacher metacognition has been categorized into cold and hot dimensions.

Cold cognition may be understood in terms of the kind of knowledge teachers possess and use during instruction (content, pedagogy, and professional knowledge). An example of this kind of cognition in action would occur, when during instruction, a teacher becomes aware of an instructional problem, she uses her repertoire of professional knowledge to decide how to teach. Central within the cold cognitive

perspective is the understanding that teachers use and possess this knowledge to adapt their instruction.

Using the cold cognitive lens, past research provides some support for the hypothesis that teachers use professional knowledge, especially knowledge of students, as a basis for adapting. On the whole, however, findings provide only weak support for the “cold” cognition explanation. That is, across study after study, there were relatively few examples of adaptive instructional actions. Consequently, there were relatively few opportunities for teachers to provide rationales based in substantive professional knowledge (Duffy et al., 2008).

Researchers have found that other aspects of metacognition involve not only “thinking about one’s thinking” but also involve “self-awareness, self-determination, self-direction” (Hacker, Dunlosky, & Graesser, 2009) and may also involve affective, motivational and dispositional factors (Garcia & Pintrich, 1994; Markus & Nurius, 1986). These studies have informed our view of future thoughtfully adaptive teaching studies. That is, adaptive teaching may involve not only “cold” cognitive aspects, but may also involve connecting other metacognitive actions, such as teacher’s interests, intentions and aspirations. Hence, these metacognitive actions are driven by cognition plus disposition and may be characterized as “hot” cognition. Whereas, hot cognition may be considered in connection to teachers’ thoughtful decisions which may ultimately be rooted in teachers’ hopes, concerns or other dispositional factors. Moreover, hypothesis #2 suggests that by examining teachers’ dispositions along with knowledge, thereby combining both “cold” and “hot” cognition, there may be more examples of thoughtfully

adaptive teaching. Consequently, the current study explored both cold and hot dimensions.

**Vision as a potential example of hot cognition.** Since previous studies of thoughtfully adaptive teaching have primarily examined cold cognitive dimensions of teacher knowledge such as content, pedagogy, and professional knowledge and have resulted in very few thoughtful adaptations, the current study included not only cold cognitive dimensions but also hot cognitive dimensions. Since a teacher's vision has been characterized as bringing together teachers' passions, their hopes, cares, and dreams with their knowledge about how and what children should be learning, examining teacher's visions may be an essential component of hot cognition. That is, visioning may be related to teachers' thoughtful decisions (Duffy, 2002; Fairbanks et al., 2010). According to Hammerness (2006), teachers must have a vision and "be psychologically strong enough to use professional knowledge in creatively resourceful ways" (p. 332), and must ultimately be able to harness both knowledge and disposition.

Since visioning may be a component of hot cognition, the following paragraphs outline visioning research. The major areas which are discussed in this section include: theories on visioning, research on visioning and why teachers with visions may engage in thoughtfully adaptive teaching. Under theories on visioning, the following subheadings include: moral and intellectual components of visioning literature. Under why teachers with vision may engage in thoughtfully adaptive teaching, the following subheadings include: obstacles teachers face, political efforts to increase scientifically based research, growth of scripted programs, and influence of what this does to teachers.

In sum, the purpose for examining the historical foundations of visioning stems from the argument that since visioning may be a component of hot cognition, it is necessary to examine the literature surrounding this topic.

**Theories on visioning.** Teacher educators have written of the importance of developing a vision to guide classroom instruction and have highlighted the importance of identifying one's purpose as a way to respond to obstacles (Fairbanks et al., 2010). Although not always called 'visioning,' researchers have emphasized the importance of developing this for teaching and have described it in a variety of ways. There are two major themes found in the literature on visioning: a moral and intellectual component. Visioning serves as a moral guide, allowing teachers to see what is possible for their practice, their classroom and their students. The intellectual component emphasizes the sound instructional practices behind a vision. In the following paragraphs, these dimensions will be further explored.

***Moral component.*** Teachers with a clear vision are aware of what Maxine Greene (1991) calls a personal reality. That is, they have a "particular standpoint" and are "conscious, interested and committed" (p. 26). These personal realities help shape a teachers' vision and are developed in part, through experiences, teachers' interests and are often based on moral convictions. Some teachers enter teaching to promote social justice, or pursue teaching because they want to promote an academic subject, while others want to encourage students to pursue different disciplines. Greene states that if teachers lack a vision, they become incapacitated, unable to see others, and be effective as teachers. Teachers must be conscious of their vision and their instructional decisions.

Other researchers emphasize this moral component of teachers' visions. For example, Duffy (2002) states that visioning is "a matter of the heart and the spirit, of personal morality and passion" (p. 332). Teachers use their vision to guide their instruction, often toward their ideal image of what teaching is. Teachers with a vision have a "conscious sense of self, of one's work, and of one's mission . . . a personal stance on teaching that arises from deep within the inner teacher and fuels independent thinking" (p. 334) and strive to provide opportunities for students so students will ultimately be successful.

Hammerness (2006) suggests that developing a vision helps teachers think beyond what is currently occurring and allows them to think of what could be or might be in their classroom, for their students or their school. The vision of what could be allows teachers to "imagine what is possible and (teachers) use this to sustain them through difficult times" (p.78). Teachers strive toward their vision in their classroom, propelling them forward in their day to day interactions.

In her study of 80 teachers and alumni from two teacher education programs, Hammerness (2001) examined the development of four teachers and their visions and found that their visions served as a "measuring stick" indicating how far away they were from their practice and their ideal teacher self. For example Jake, a teacher in Hammerness' study, developed a project for his students based on his vision. In his vision Jake expressed that he wanted to make students more engaged in the curriculum but found the existing curriculum offered little opportunity for student engagement. He modified the curriculum to include the Senior Exhibitions Project, a project where seniors



chose a research topic, wrote a report about it, and presented their information to the community. Such an example underlines how visioning may allow teachers to make adaptations to meet the needs of their students.

Rosaen and Schram (1998) also suggest visioning may be used as a guide. The authors describe teachers' visions as a way to promote "an autonomous self." In their study of two pre-service teachers, the authors focus on promoting a "language of possibility" by encouraging the pre-service teachers to develop a vision. Through visioning the two teachers were able to "act on their emerging philosophies in the midst of powerful challenges" (p. 285), thus emphasizing the moral capacity of a teacher's vision. Visioning was used as a guide in their development as beginning teachers.

Similarly, Shulman and Shulman (2004) describe a teacher's vision as a standard toward which teachers may strive. "Teachers with a vision may be more reflective and purposeful, evaluating their instruction based on the needs of their students" (Shulman & Shulman, 2004, p. 240). Teachers engage in a learning process toward this standard, often reflecting on their practice, evaluating how they impact students and how their practice impacts the school community. In this way, teachers with clear visions have entrepreneurial tendencies, guiding and pushing them to continually focus on who they are and what they want to become.

In his observation of pre-service teachers, Duffy (2002) argues that rather than "passively waiting to be told what to do and what not to do, they (pre-service teachers) used their vision statements as moral compasses to decide how to use pedagogical information" (p. 779). Thus, visions may serve as a moral compass for teachers,

encouraging adaptive teaching that meets the needs of their students. Watanabe and Ramsey (1999) describe teachers who have a clear vision as those that have “personal leadership.” This leadership drives them in their teaching.

Similar to developing personal leadership, Van Manen (1977) emphasizes a “personal orientation” which includes the person’s “outlook, personal standpoint . . . where each orientation has a definite epistemology” (p. 211). Within this orientation Van Manen emphasizes that a teacher must develop clear beliefs before acting upon them. Similar to Greene’s personal realities, Van Manen stresses that teachers develop personal orientations to guide their actions. These orientations are based on what teachers believe to be real.

In sum, these theories highlight the moral dimension of visioning literature. Although visioning may be called different names (personal reality, personal orientation, standard, or measuring stick) these theories suggest that teachers with visions have a clear sense of purpose and use their vision to guide their instruction. Teachers with a vision are able to ‘imagine what is possible’ and adapt and modify the curriculum which may ultimately help them to teach adaptively. Consequently, the current study explored how this dimension impacted the kinds of decisions teachers made during planning and instruction.

***Intellectual component.*** Researchers have argued teachers with visions must also have a strong intellectual component in addition to a moral one (Darling-Hammond & Baratz-Snowden, 2005; Duffy, 2002; Shulman & Shulman, 2004). “As teachers encounter more and more professional information, we emphasize again and again that

the best instructional decisions are based in values as well as in research findings” (Duffy, 2002, p. 336). Visions must be rooted in instructional decisions.

Emphasizing what pre-service teachers need in teacher education programs, Feiman-Nemser (2001) stresses the importance of developing a vision in new teachers, rooted in beliefs, curriculum, instruction and assessment. Similar to Duffy’s (2002) description of how effective teachers develop dispositions to be independent and adapt as needed, depending on the needs of the learners, Feiman-Nemser (2001) emphasizes the need for teachers to become ‘reform minded’ and skilled while working toward the needs of their students. That is, teachers must evaluate situations and choose to adapt and modify their instruction based on what they know to be sound instructional practice. A vision without such an intellectual basis would not be beneficial (Shulman & Shulman, 2004).

Similarly, Anders, and Richardson (1991) in their study of eleven in-service teachers during staff development workshops found that teachers’ visions or beliefs about literacy were shaped by the knowledge gained from such workshops. Such knowledge was used to shape their vision for teaching literacy. Shulman and Shulman (2004) describe a teacher who had a strong moral vision but was unable to enact such a vision because she lacked the necessary skills to design curriculum materials to meet her vision. “She lacked the practical skills of instructional planning and design—even in her own content area—that she needed to design the curriculum materials and activities needed to fulfill her vision” (p. 258).

The research underscores the importance of examining teachers who have a clear vision based in knowledge about good practice. Such examples caution that although the moral component of a vision is necessary, the intellectual component is equally important. The current study explored teachers' visions and the relationship of this dimension to adaptations made during their planning and instruction.

**Research on visioning.** Researchers have described visioning in a variety of ways and have provided a conceptual understanding of visioning within the field. However, researchers describe visioning without conducting methodological studies (Duffy, 2002; Greene, 1991; Van Manen, 1977). There are few empirical studies which document teachers who use and act upon their vision. In the following paragraphs these empirical studies will be discussed.

In Hammerness' (2001) work on visioning, four teachers were selected out of 80 teachers based on the criteria that these four had the "the most clearly articulated and vivid vision statements" (p. 90). Although, four is a relatively small sample, these teachers demonstrate how teachers use their visions in their classroom to help modify and adapt their instruction. "Vision brings together teachers' passions, their hopes, cares, and dreams with their knowledge about how and what children should be learning" (p. 24). Similarly, in Rosaen and Schram's (1998) study of pre-service teachers and their emerging visions, two of the seven student interns were highlighted with their understandings on visioning. Although the sample of teachers is relatively small, in each of these studies, visioning is used by teachers to guide their instruction. Specifically, in Hammerness' study, each of the four teachers adapted the curriculum to meet the needs

of their students. In Rosaen and Schram's study, the two teachers developed their vision and practice based on their discussions with colleagues.

Other empirical studies on visioning have included a larger sample of teachers. For example, Rohr (2005) in her study of 60 pre-service teachers over the semester of an introductory education course found that the pre-service teachers developed their vision over the time in the course. According to results from the study, Rohr found that "relatively few students entered the introductory course with visions but that over time the number of students expressing visions increased and students changed their focus of their vision" (p. 79). This study examined the extent to which visioning was used to guide teachers' adaptations.

In addition, Turner (2007), in her study of 20 pre-service teachers, found that teachers progressed in their thinking about vision. By the end of the study, the teachers' vision statements contained complex and developed understandings of culturally responsive teaching.

These empirical studies and theories on visioning support the belief that teachers with visions strive toward a goal, reflect on their practice, and evaluate their instruction based on their students' needs and the skills they want their students to have. Their vision serves as a standard toward which they continually strive. Consequently, teachers with a vision may be more likely to engage in thoughtfully adaptive teaching.

**Summary.** The research on visioning emphasizes that without a vision teachers are without a focus, often unable to negotiate what it is they actually want as professionals (Hammerness, 2001). Teachers with this focus, then, may be more likely to

engage in thoughtfully adaptive teaching despite facing obstacles. That is, within today's political climate, with an even greater emphasis for teachers to follow mandated curriculum programs, prescribed lesson plans, pacing guides, and to teach based on assessments (Cochran-Smith & Lytle, 2006), teachers with a vision may be more likely to negotiate and overcome these obstacles and stay focused and teach based on students' needs (Miller, Heafner, & Massey, 2009; Pressley, Wharton-McDonald, Hampston, & Echevarria, 1998; Smith, 1991; Watanabe, 2008). Consequently, teachers who possess a vision may be likely to be more committed and likely to overcome obstacles (Valencia et al., 2006) and teach in thoughtfully adaptive ways. In the following section, these obstacles will be outlined to give context to the climate within which teachers teach.

### **Hot Cognition and Obstacles**

One of the difficulties in locating thoughtfully adaptive teaching in classrooms may be the current political climate in which teachers teach. By examining the hot cognitive dimensions such as the affective and the emotional responses of teacher's we may be more likely to find examples of thoughtfully adaptive teaching. Researchers have defined such responses as teacher's visions (Duffy, 2002; Hammerness, 2001). In the following paragraphs, these hot cognitive realms will be examined within the current political climate.

Although teachers have long struggled to overcome obstacles while teaching, the current political climate may be making it even more difficult for teachers to made adaptive decisions. Obstacles teachers face (i.e., emphasis on test preparation, the growth of scripted programs and the pressure teachers feel to comply with scientifically based

research programs) often appears to leave teachers unable to adapt and modify the curriculum (Valencia et al., 2006). As difficult as these obstacles are to overcome, teachers with a clear sense of purpose or vision may be more likely overcome such obstacles by adapting the curriculum and acting upon their vision while teaching (Achinstein & Ogawa, 2008; Duffy, 2002, Hammerness, 2001, 2006).

These studies indicate that having a vision may promote adaptive instruction in the classroom even within today's political climate of curricular mandates, which drives many teachers to teach from scripted programs and to technical compliance (Duffy, 2002; Duffy & Hoffman, 1999; Duffy et al., 2008). In this section, I will support this by discussing the obstacles teachers face, a description of political efforts to increase scientifically based research within the field, the growth of scripts in classrooms, and influence of what this does to teachers.

**Political efforts to increase scientifically based research.** Teachers face an enormous amount of obstacles while teaching in today's schools. The obstacles; emphasis on test preparation, the growth of scripted programs, and the pressure teachers feel to comply with unsound scientifically based research programs often appears to leave teachers unable to adapt and modify the curriculum. However, as the research and theories on visioning suggests, teachers with visions have a clear sense of purpose, guiding their instruction, which allows them to invent, adapt and modify the curriculum (Duffy, 2002). Consequently, having a vision may promote adaptive instruction in the classroom even within today's political climate of curricular mandates, which drives

many teachers to teach from scripted programs and to technical compliance (Duffy & Hoffman, 1999; Duffy et al., 2008).

Current educational policies have increased the amount of obstacles teachers face in their classrooms. From the 1990's into the 21<sup>st</sup> Century, research on preparing young children for school and ensuring that they acquire the necessary literacy skills to succeed has gained even more attention (McCombs, Daniels, & Perry, 2008).

One of the biggest obstacles which started to emerge for teachers during this time was the emphasis within schools on test preparation. In 1997 test sales from test publishers went from 260 million annually to approximately 700 million annually (Supovitz, 2009). Standardized test results provide indicators of a school's performance. If a school scored high on the standardized assessments the school was labeled as an exemplary school and teachers would receive monetary bonuses. However, low performing schools would receive a range of interventions, technical assistance and even reconstitution (Fuhrman & Elmore, 2004). The test preparation climate in many schools serves as an obstacle for teachers to modify curriculum.

With the NCLB legislation enacted in 2001, schools across the United States have become increasingly more accountable for promoting instruction that builds literacy and mathematics abilities of students (Taylor, Pearson, Peterson, & Rodriguez, 2003). Federal agencies have designated funds to those schools using a "scientifically based research" perspective that promotes phonics literacy instruction (Gamse, Jacob, & Horst, 2008). Through Reading First, school districts receive support to apply scientifically based reading research programs to ensure that all children learn to read well by the end of third



grade. Many educators and schools districts have come to believe that literacy taught in this way is “the silver bullet” to improving not only test scores but instruction for students (Flores-Duenas, 2005). Duffy, Roehler, and Putnam (1987) found that accountability issues hindered teachers from making decisions because of their focus on accountability measures. In this study teachers found it easier to teach from mandated materials than adapting and making independent decisions.

In many districts teachers have been forced to use scripted programs which have been promoted as successful examples of ‘scientifically based research’ in their classrooms. In fact some school administrators assert that scripted programs have increased favorable results and improved test scores (Milosovic, 2007). This emphasis on scripted programs serving as the approved curriculum in many districts serves as a major obstacle for teachers. These studies indicate the various obstacles teachers experience daily in their classrooms.

**Growth of scripted programs.** Consequently, many school districts have promoted curriculum mandates for teachers to teach from scripted programs. Researchers have argued that the promoted literacy programs, which are primarily scripted, not only fail to promote “best practices” in literacy instruction but also fail to meet the needs of many students (Reading First Impact Studies, U.S. Department of Education). Results from a national study conducted by the U.S. Department of Education, National Center for Education Statistics (NCES) of students tracked from kindergarten through fifth grade found that even with the federally approved literacy instruction programs, the achievement gap in reading grew wider from the start of kindergarten in fall 1998 to the

end of 3rd grade in spring 2002 for children whose families were living in poverty and from homes where English was not the primary language.

Results from such studies indicate that our low SES children and children where English is not the dominant language have not seen any significant gains in reading achievement in recent years (NCES, 2002). However, schools continue to promote scripted programs and strongly encourage teachers to use these targeted programs (Garan, 2004). This becomes an obstacle for teachers as many of the programs do not fit all learners, yet teachers feel pressured to use these programs in their classrooms.

**Influence of what this does to teachers.** In addition to failing many students, teachers experience difficulties when trying to adapt the curriculum within schools where scripted programs are promoted. Teachers working in the current NCLB environment may be pressured from colleagues and administration when trying to modify the curriculum in such a climate (Valencia et al., 2006; Watanabe, 2008). However, teachers who possess a clear vision may be more likely to successfully navigate these obstacles. Teachers with National Board certification may be termed as “expert” or “high potential” teachers. Moreover, these teachers may be more likely to have a strong vision, and may be more willing to adapt and modify their instruction. Berliner (1987) positions that expertise is developed over hundreds and thousands of hours and as a result expert teachers are more opportunistic and flexible in their teaching than are novices. According to Nias (1989), these teachers are “emotionally committed” to the various aspects of their job where such a commitment is not a choice or “indulgence; it is a professional necessity. Without feeling, without the freedom to ‘face themselves’, to be whole persons

in the classroom, they implode, explode—or walk away” (p. 10). Their vision may guide their decisions. Consequently, visioning may be a way to examine teachers’ dispositions and the ways in which this aspect of cognition is enacted upon during instruction.

This research suggests that teachers face an enormous amount of obstacles while teaching in today’s schools. The obstacles; emphasis on test preparation, the growth of scripted programs, and the pressure teachers feel to comply with unsound scientifically based research programs often appears to leave teachers unable to adapt and modify the curriculum. However, as the literature on visioning suggests, teachers with clear visions have a sense of purpose, guiding their instruction, which may allow them to invent, adapt and modify the curriculum (Duffy, 2002). Teachers with visions, then, may be better able to overcome obstacles and teach in thoughtfully adaptive ways. “When you have this clear vision, your sense of the obstacles becomes diminished” (Hammerness, 2006, p. 83) and your purpose for teaching guides you and may encourage you to teach adaptively, in ways that will meet the needs of all students.

**Summary.** Previous studies of thoughtfully adaptive teaching have examined “cold” cognitive dimensions of teacher knowledge such as content, pedagogy, and professional knowledge. Hypothesis 2 suggests that the affective, motivational and dispositional factors of teachers (visions) may allow for more thoughtfully adaptive teaching.

### **Hypothesis #3**

Intuitively the idea that thoughtfully adaptive teachers impact students’ achievement seems logical. Researchers agree that effective teachers are knowledgeable

professionals who must be flexible, responsive, and adaptive (Anders & Pearson, 1984; Hoffman & Pearson, 2000; IRA, 2003; Snow et al., 2005). However, there is a lack of empirical evidence which establishes a relationship between thoughtfully adaptive teaching and any kind of student outcome. This study served to examine the relationship between thoughtfully adaptive teaching and student outcomes. Hypothesis # 3 suggests that teachers with a vision may be more likely to engage in thoughtfully adaptive teaching and that the students in these classes will be able to demonstrate a sense of agency toward their learning. In the following paragraphs a rationale for agency as a potential student outcome is examined.

### **Agency**

Previous research from thoughtfully adaptive teaching studies has not yet examined student outcomes. One potential student outcome may include examining the ways in which students act and participate in the learning process. Such a dimension has been labeled by researchers as ‘agency’ and has been conceptualized by theorists from philosophical, psychological, social-psychological and educational contexts (Bandura, 2001; Basu et al., 2009; Daneilewicz, 2001; Davies, 1990; Holland et al., 1998; Oakeshott & Fuller, 1995).

As researchers have found, fostering a sense of agency in students may be an essential component in getting students vested and interested in the learning process (Basu et al., 2009; Daneilewicz, 2001; Davies, 1990). Thus, the rationale for studying agency in the current study is that when students act on their sense of agency they are more likely to engage in learning, take the initiative to be in charge of their learning,

develop dispositions as active learners which extends beyond simply learning tasks, and position themselves as active rather than passive learners (Bandura, 2001; Holland et al., 1998; Paris & Lung, 2008). Students' agentic behavior begins with engaging and meaningful learning experiences (Basu et al., 2009). Teachers who engage in thoughtfully adaptive teaching may be more likely to create such experiences. Thus, this important student outcome was examined in the current study. In the next section I will provide research on agency. The literature on agency is categorized into three subheadings: dispositional, motivational, and positional. In the following paragraphs these dimensions will be discussed.

**Research on agency.** Agency has been conceptualized by many theorists from philosophical, psychological, social-psychological, and educational contexts (Basu et al., 2009; Brown, 2009; Daneilewicz, 2005; Bandura, 2001; Holland et al., 1998; Oakeshott & Fuller, 1995). Three dimensions appear consistent across these domains: the dispositional aspect of agency, the motivational aspect of agency, and the positional nature of agency. Although some of the studies included in this review discuss agency as it applies to teachers' agency, the underlying dimensions of what constitutes 'agency' may be understood in ways that also apply to student agency.

***Dispositional.*** Previous research has viewed agency from a dispositional stance in the following dimensions: entrepreneurial, generative thinking, and active. Viewed from these dimensions, agency can be thought of as a dispositional quality in which an individual embodies and acts upon.

Those who act with agency are often thought to be entrepreneurial, often taking the initiative to act. Philosopher Michael Oakeshott (2001) suggests that agency is “the starting place of doing” and that someone with agency is “one who is recognized as having an understanding of himself in terms of his wants and his powers and creates opportunities” (p. 35).

This entrepreneurial quality was found among sixteen teachers in Paris and Lung’s (2008) study of teachers. The authors found that the teachers in the study took the initiative to change the school practices based on their knowledge and their willingness to act. These teachers had “the ability to see possibilities, as well as a willingness to take initiative, and to do so mindfully and intentionally” (p. 255). These teachers demonstrated a sense of agency by initiating change in the classroom even in the face of district mandates.

Similarly, Danielewicz (2001) found that those who enact a sense of agency demonstrate entrepreneurial qualities in her study of six students and their development through a teacher education program. “Agency is the power or freedom or will to act, to make decisions, to exert pressure to participate” (p. 163). By rewriting curriculum, challenging mandates and acting upon their beliefs, the teachers demonstrated a sense of agency in their response to obstacles.

Another dispositional quality associated with agency is generative thinking. Giddens (1979) theorizes this concept of agency by saying that agency is the “ability to reinterpret” and produce thinking other than what was or is. “Teachers when enacting agency act in new, creative ways and are improvisational” (Sexton, 2008, p. 75). This

suggests that when teachers enact a sense of agency they demonstrate generative thinking.

An integral component of agency is an individual's ability to respond and act upon one's beliefs. The opposite of such action is passivity. Thus, another dispositional quality found in those who act with a sense of agency is the ability to be active rather than passive. Roth (2008) theorizes a dialectical relationship between agency and passivity. That is, individuals, acting with agency must be active and not passive during the learning process. Roth (2008) argues that by acting intentionally and purposefully, individuals are enacting a sense of agency. That is, according to Roth (2008), in order to be agentic, individuals must not only have a willingness to act, but be purposeful in their actions.

In sum, the literature on agency suggests that agency may be viewed through a dispositional lens (i.e., entrepreneurial, generative thinking, active). These dispositional qualities are characteristic of those who enact a sense of agency. Classrooms which foster these dispositional qualities may promote a sense of agency in students. As Danielewicz (2001) found, fostering a sense of agency in her students (teachers in a teacher education program) was essential in getting students vested and interested in the learning process. Thus, promoting a sense agency may allow for students to make meaning of what they are learning, to create alternative possibilities and to become engaged in the learning process.

***Motivational.*** Agency as seen through a motivational lens may be viewed in the following ways: self efficacy and self regulation. In the following paragraphs, each of these motivational dimensions will be discussed.

Viewed from the social cognitive theories of Bandura (1989, 1991), agency may be viewed associated with an individual's strive for control of their learning activities, in a way that empowers them as learners. Perceived self-efficacy or the anticipation that one can meet and succeed current challenges is critical to an agentic stance (Paris & Lung, 2008). Central to an individual's agency are the beliefs about their ability to act and exercise control in their environment (Bandura, 1989). "Among the mechanisms of human agency, none is more focal or pervading than people's perceived self-efficacy" (Bandura, Barbaranelli, Caprara, & Pastorelli, 2001, p. 187). That is, unless an individual believes he or she can successfully accomplish the desired result and prevent negative outcomes for their actions, they have little desire to act. Thus, self efficacy beliefs influence, in part whether or not an individual enacts agency in a given situation. Self efficacy beliefs determine how much effort an individual will demonstrate when faced with obstacles (Schunk, 1990). "The stronger the belief in their capabilities, the greater and more persistent are their efforts" (Bandura, 1989, p. 2). When an individual has strong, perceived self-efficacy beliefs, they are more likely to act in more agentic ways. This agency requires that an individual has strong self-efficacy beliefs and remains motivated in the face of challenges (Bandura, 2001).

Perceived self-efficacy beliefs influence how individuals regulate their learning. That is, if an individual feels as though they cannot successfully accomplish a task their



tendency is to avoid such a task. “The likelihood that people will act on the outcomes they expect to produce depends on their beliefs about whether or not they can produce those performances” (Bandura, 2001, p. 10). Thus, self regulation is tied to self monitoring.

As individuals self monitor their performance, they make judgments about their performance which ultimately affects their self efficacy and their participation in future tasks (Miller & Meece, 1999). Self regulation and self- efficacy are tied to whether or not a person persists and ultimately enacts a sense of agency. “Self-Regulation refers to the self-directive process through which learners transform their mental abilities into task related skills” (Zimmerman, 2001). Self regulation is the continual process by which individuals monitor their progress toward a goal, check their outcomes, and redirect unsuccessful outcomes (Berk, 2003; Zimmerman, 2001).

Learners use this self evaluation process to manage and organize their thoughts and convert them into skills for learning. “This process allows for students the opportunity to view learning as an activity that they do for themselves in a proactive manner, rather than viewing learning as a covert event that happens to them as a result of instruction” (Zimmerman, 2001). Self regulation is important in relation to agency because in order to enact a sense of agency, students need to be proactive in the learning process rather than being passive.

In sum, these theories suggest the motivational dimension of agency. People act on one’s self efficacy which produces experiences of further efficacy. Self regulation theory would suggest that if an individual has a strong self concept then they are more

likely to persist and engage in an activity. Self efficacy theory would suggest that if a person has high perceived self efficacy beliefs then they are more likely to encounter challenging tasks as obstacles to overcome. This is in contrast to those who have low perceived self efficacy beliefs. Such individuals view such a task as threatening and with avoidance. In this way, agency may be viewed from a motivational lens: in that, the greater an individual's beliefs of their ability then the more likely an individual will persist and ultimately enact a sense of agency. The implication for this in response to student agency is that by examining a student's self efficacy beliefs and self regulation tendencies one may understand their ability to enact a sense of agency.

*Positional.* Theorists have described agency through a positional lens. That is, people mediate their position through their participation (or nonparticipation) in social practices. Much of the research on agency in this dimension builds from Vygotsky's (1978) sociocultural theory. Briefly, Vygotsky (1978) suggests that one learns through social interactions with others and that learning and developing are "dynamic processes, social, cultural, and historical by nature, and in a dialectical relationship with each other" (p. 27). Building from Vygotsky's (1978) foundational work, Wenger (1998) further described the social interactions with others through their participation within a community of practice.

To understand agency within this context, it is necessary to examine an individual's participation and ultimately their positioning within this community or the ways in which they engage in tasks, use resources and negotiate within the community. Individuals may be accepted within this community and positioned as a 'legitimate'

member or as a 'peripheral' member, one who is outside of the group (Lave & Wenger, 1991).

Similarly, Holland et al. (1998) support this by stating "our agency is developed through participation in activities; socially produced, culturally constructed activities" with others as we can become members within the community (p. 41). Inden (1990) also supports this stating that human agency is "the realized capacity of people to act upon their world . . . to act purposefully and reflectively, to remake the world (or community) in which they live" (p. 23).

In this way, individuals act with agency as they respond to their position as either a member or a nonmember in a group. Calabrese Barton and Ortiz (2008) in their study of six girls in a science physics class found that the girls became positioned as 'someone who knew science' and were positioned as science experts in their classroom. The way that the girls positioned themselves as a knowing authority in science can be viewed as an expression of agency. For example one of the girls collected bugs and created a garden with the bugs. By collecting bugs and creating a garden, she was perceived by other members in the class as someone who liked and did science things. In other words acting with a sense of agency (by collecting bugs) allowed for her to be positioned as someone who was good at science. She became a 'legitimate' member rather than a 'peripheral' member within the community. The student was acting with a sense of agency by forging out and creating this opportunity for herself. In a sense she was acting in an entrepreneurial way while creating positive self efficacy beliefs about her ability as a science learner.

Similarly, other researchers emphasize the ways in which students develop a sense of agency and are able to change their position within a community of practice. For example Rodriguez, Zozakiewicz, and Yerrick (2008) in their two year intervention study of eight teachers, their practices, and their students; found that while operating within a community of practice, the students were able to transform some of the classroom norms by acting agentially. In this case the students did not collect bugs, but used discourse as a way to enact their sense of agency. During their study, Rodriguez et al. (2008) found that the students were not able to use the computers. The authors held focus groups with the students. After discussing it, the students, asked their teachers how and when they could use the equipment. They discussed their ideas about how to incorporate technology more into the curriculum, thereby acting on a sense of agency. The students worked to change their position of being passive toward becoming agentic and working to transform the community in which they participated.

Adopting a certain kind of discourse as means to enact agency has been found in other studies, particularly in studies involving science and math. Researchers refer to this as adopting a ‘critical science discourse’ or ‘mathematical discourse’ and found that when students adopt such discourses they act upon their sense of agency and are able to transform who they are and how they are positioned within their ‘community of practice.’ “Both the teacher and the students use the discourses available to them in situated and contingent ways to negotiate their respective roles (position) in the class” (Sharma, 2008, p. 812).

Brown (2009) in his study of an elementary teacher and his students examined the different social positions that students constructed as they moved towards or away from the 'legitimate forms of membership' within the community of practice. By examining the ways the students talked about the classroom community through journal reflections, Brown found those students who were initially on the peripheral became more legitimate members by using certain discourse and by enacting a sense of agency. This was seen as students took up a position of knowing how to do math and by using certain types of mathematical discourse in their discussions with other students. In other words, students enacted a sense of agency by negotiating their position during classroom practices. Through their agentic behavior, they were able to transform who they were and how they were viewed.

Similarly, Tobin (2009) in his study of four focus student during a science dissection lab found that Pam, Katrina, Darnell, and Kareen enacted their sense of agency through the use of discourse and resources. Each of the students used 'science discourse' toward becoming a more legitimate participant. That is, the students talked liked scientists, using science words to become involved in the learning activity. Students also used resources, such as the teacher, peers and the internet to develop their position. By using such resources and adopting this discourse, the students demonstrated a sense of agency during the frog dissection.

These studies support the positional nature of agency. Of particular importance within this view is that individuals are social beings, influenced and shaped by others and by their own actions within their 'community of practice.' That is often their ability to act

agentially depends on their ability to negotiate their position within this community, through actions, discourse and other means. Examining the ways in which students react and use resources and the discourse during classroom practices helps to underline the ways in which students act agentially.

In conclusion the rationale for studying agency in the current study is that when students act on their sense of agency they are more likely to engage in learning, take the initiative to be in charge of their learning, develop dispositions as active learners and position themselves as active rather than passive learners. Students' agentic behavior begins with engaging and meaningful learning experiences. Teachers who engage in thoughtfully adaptive practices teaching are more than likely to create such experiences. Consequently, the current study examined this important student outcome.

### **Conclusion**

In sum, the current study examined beyond 'on-the-fly' adaptations to adaptations teachers made during planning, the kinds of visions high potential teachers had in relation to adaptations and students' agentic behavior as a student outcome. By examining these three hypotheses, more insight was developed about the ways in which teachers engage in thoughtfully adaptive teaching. In chapter three, the design of the study will be explored.

### CHAPTER III

#### METHODS

During my study I conducted two case studies of a fourth and fifth grade teacher during the planning and interactive phase of their literacy instruction in order to explore the relationship between their vision, adaptations and the impact of these adaptations on students' sense of agency. The research questions for the study were:

1. What are the types and number of adaptations two high potential teachers make
  - a. While planning reading instruction?
  - b. During on-the-fly reading lessons?
2. What are the kinds and types of rationales two high potential teachers provide
  - a. For planning adaptations?
  - b. For on-the-fly adaptations?
3. In what ways are high potential teachers' adaptations while planning and while on-the-fly promoting
  - a. Student's sense of agency?
4. To what extent do students demonstrate
  - a. A sense of agency?
5. What is the relationship between the kind of planning adaptations and on-the-fly adaptations high potential teachers make in relation to

- a. Student agency?
- b. Teacher's vision?

The two case studies took place over the course of fourteen weeks. Each teacher was observed one time per week for a total of 10 observations. Prior to any observations, a pre-study interview was conducted in order to develop a profile of each teacher (vision, perceived obstacles, teaching context, instructional materials). Six students from each class were interviewed at the beginning and at the end of the study in order to obtain information on their sense of agency. Prior to each observation, I conducted an on-line pre-lesson interview to examine the kinds of adaptations teachers made during the planning stage. Each observation took approximately thirty to forty-five minutes. I took field notes of each in-class observation, making note of any adaptations. After each observation I met with the teacher to discuss the adaptations. I asked each teacher if the adaptation I saw was actually an adaptation. If the teacher stated it was an adaptation, then, they explained their reasoning for conducting the adaptation. At the end of the study, the same six students from each class were interviewed to obtain their thoughts about their sense of agency.

### **Participants**

This sample of participants was a purposive sample (Maxwell, 2004). The two teachers selected for this study were chosen because they held an advanced degree or National Board certification. I worked with these two teachers in previous years when I served as a first grade teacher at the school and knew of their collaborative efforts with other teachers.



One teacher is Caucasian and has taught for 11 years. She was voted “Teacher of the Year” for the elementary school, earned National Board certification, and a Masters Degree in Education. The other teacher recently received an advanced degree in Reading and Technology and at the time of the study was working on her National Board certification. Both teachers agreed to weekly observations, pre-lesson interviews centered on their literacy instruction, and post-lesson interviews. During the observations, I stayed for two hours, once a week to provide a time for observations and post-lesson interviews.

**Table 1**

*Summary of Participants*

	<b>Years Teaching</b>	<b>Years at Goody Elementary</b>	<b>Race/ Gender</b>	<b>Nationals Boards</b>	<b>Masters Degree</b>
Teacher #1	6	6	W/F	No	Yes
Teacher #2	10	10	W/F	Yes	Yes

**Research Site**

The setting for this study was Goody Elementary (pseudonym), a K-5 public elementary school, located in the Southeastern region of the United States, where I was a first grade teacher, having worked at the school for eight years. Seventy-six percent of the students are European American, ten percent are African American, eight percent identified as Hispanic, and six percent identified as Other. Of the total population of students, thirty percent identified as economically disadvantaged.

## **Description of Methods**

### **Case Studies and Relevant Criteria**

As with case studies, the task of this research study was to understand take an in depth examination of the participants in order to produce evidence that leads to an understanding of the research questions (Stake, 1995). In this study, I use the data to examine the kinds of adaptations teachers make. The study contains two case studies conducted in the Spring of 2010 with a fourth and fifth grade teacher.

### **Procedures and Schedule**

The research was conducted over 14 weeks during the Spring semester of 2010, starting the week of February 15 through the week of April 26. I observed and interviewed in both classrooms one day a week for approximately two hours per visit. Visits were conducted between 8:30 a.m. and 1:00 p.m. There were 10 observations for each teacher for a total of 20 observations in all.

### **Schedule of Observations**

Week 1 – Monday, February 15

Week 2 – Monday, February 22

Week 3 – Monday, March 1

Week 4 – Monday, March 8 and Wednesday, March 10

Week 5 – Monday, March 15

Week 6 – Monday, March 22

Week 7 – Monday, March 24

Week 8 – Monday, April 8

Week 9 – Monday, April 12 and Wednesday April 14

Week 10 – Friday, April 23 and Monday April 26

### **Data Collected**

Throughout the 14 weeks, four types of data were collected. Prior to any observations, a pre-study interview was conducted (See Appendix A). First, pre-lesson interviews were conducted prior to each of the 10 observations. Second, observations of reading lessons were conducted once a week. Third, post-lesson interviews were conducted after each lesson where teachers provided rationales about the adaptations made during the lesson. Finally, student interviews were obtained at the beginning and at the end of the study.

#### **Pre-Study Interviews**

Prior to observations, the two high potential teachers were interviewed about their instructional practices, the climate of which they taught and their vision. This pre-study interview allowed for an understanding of the context of which the selected teachers taught (See Appendix A).

#### **Pre-Lesson Interviews**

Pre-lesson interviews, observations, post-lesson interviews and student interviews were the primary methods of data collection in this study. Pre-lesson interviews were conducted once a week prior to each observation. Adaptations during planning were identified as a teacher report during the pre-lesson interview of a change representing (a) modification in district or school requirements, (b) a modification of materials, (c) a change from past experience, or (d) a change in instructional strategies.

## Interviews of Teachers

Prior to each observation, teacher interviews were conducted with each teacher. These interviews were conducted in order to gather information about the kinds of adaptations teachers made. The interview protocol for teachers consisted of six questions (see Appendix B). The first question asked: **“What are you planning to teach today?”** This question established the subject matter and the goal the teacher set forth in deciding the lesson. The second question asked: **“What is it you want students to be able to do and know?”** This question provided information about the knowledge teachers wanted students to obtain from each lesson. The third question asked: **“What instructional strategy are you using?”** This question provided a context to examine if an adaptation was part of the routine or if it was something which was not planned. The fourth question asked: **“Why is it important to do today’s lesson?”** This question helped determine if the lesson was related to the teacher’s vision or the overall purpose for each lesson. The fifth question asked: **“Is what you’re doing today in any way a change?”** This question helped to determine if the teacher was making any modifications during the planning of each lesson. Additional probes for this specific question included: **“Is it a change in terms of a modification of district or school requirements? If yes, why? Is it a change in terms of a modification in what the materials suggested to do? If yes, why? Is it a change in terms of how you have done this kind of lesson in the past? If yes, why? Is it a change in terms of your instructional strategies? If yes, why?”** Finally, the sixth question asked, **“Anything else?”** This question provided teachers with an opportunity to state any additional information about each lesson.

## **Observations**

Observations of lessons were conducted once a week to record teacher adaptations during the lessons. Adaptations were noted if teachers modified their practices while teaching in order to meet the needs of particular students or particular instructional situations. During the observation, I recorded adaptations which I believed were thoughtfully adaptive in nature. That is, I noted adaptations where the teacher was making a non-routine proactive decision that required thought and was invented on the spot in order to make instruction suitable for the goal the teacher was pursuing. Since I conducted a pre-lesson interview, I was aware of the instructional goals for each lesson. Specifically, each adaptation was noted that appeared to be (a) non-routine, proactive, thoughtful and invented, (b) involving a change in the professional knowledge or the professional practices the teacher is using, and (c) was done to anticipate the needs of students or instructional situations.

## **Student Interviews**

The twelve students were interviewed at the beginning and at the end of the study. These interviews were conducted to gather information about students' sense of agency. Student agency was operationalized as individuals who make choices, make decisions, challenge and/or critique. Thus, the interview protocol centered on these concepts and was comprised of two questions (see Appendix C). The first question asked: "Are there times when you get to create or do something other than what the teacher directs you to do?" This question established whether or not the classroom environment allowed for students to be able to generate their own projects. The second question asked: "Can you

tell me about a time when you got to choose what you wanted to learn about in class?” This question established whether or not students had the ability to choose a topic of interest in their class. The third question asked, “Can you tell me about a time when you learned about something you were interested in during reading instruction?” This question established whether or not students were interested in the subject matter; if students responded with not being interested, this could potentially provide for an avenue for students to (question, challenge, and/or critique).

### **Summary of Data Collected**

The sources of data provided various evidences about the kinds of adaptations teachers make and whether or not these adaptations related to students’ sense of agency. Pre-lesson interviews, observations, post-lesson interviews and student interviews were collected to reveal the kinds of adaptations teachers make while teaching during planning and while on-the-fly and whether or not these adaptations impacted students’ sense of agency.

### **Methods of Data Analysis**

To analyze the data collected in teacher observations and interviews, I categorized the relationships between the adaptations and the rationales (Spradley, 1980). I used codes for on-the-fly adaptations and rationales which Duffy and his colleagues developed (Duffy et al., 2008). On-the-fly adaptations were categorized into seven categories. Rationales were coded into ten categories. Adaptations during the planning stage were coded into four categories: a change representing (a) modification in district or school

requirements, (b) a modification of materials, (c) a change from past experience, or (d) a change in instructional strategies.

### **Research Questions**

The central question for this study was: What are the types and number of adaptations two high potential teachers make while (a) planning, and (b) on-the-fly? In order to answer this question, I first categorized the adaptations from the pre-lesson interview and the post-lesson interview. Then, these were compiled into a chart for each lesson.

**Data analysis adaptations during planning.** Interviews with teachers were conducted using an on-line chat service which provided a transcription for each interview. For each pre-lesson interview, questions were asked about the upcoming lesson (see Pre-Lesson Interview), I asked if changes were made during the planning stage based on the following criteria: (a) modification in district or school requirements, (b) a modification of materials, (c) a change from past experience, or (d) a change in instructional strategies. Using the transcriptions, I noted whether or not the teacher stated if any change was made using the above criteria. Then, I compiled a chart of the stated changes.

**Data analysis of on-the-fly adaptations.** Interviews with teachers were conducted, tape recorded, and transcribed. For each observation, I observed adaptations and asked, "I saw you do this during the lesson and thought this was an adaptation. Was that an adaptation?" These interviews were transcribed and analyzed. Three team members were present for the coding of these adaptations. The description of the adaptation the

teacher made was discussed with the team members using the following adaptation codes (see Table 2).

**Table 2**

*Adaptation Codes*

<b>Code</b>	<b>Adaptation</b>
1	Modifies the lesson objective
2	Changes by which objectives are met (e.g., materials, strategy, activity, assignment, procedures, or routines)
3	Invents examples, analogy, or metaphor
4	Inserts a mini lesson
5	Suggests a different perspective to students
6	Omits/inserts activity or assignment
7	Changes planned order of instruction

First, using the codes for rationales developed by Duffy and his colleagues (2008), the research team identified the kinds of on-the-fly adaptations observed during the lessons. These codes will help explain the reasons teachers state for the ‘on-the-fly’ adaptations.

The second sub-question was: What are the kinds and types of rationales two high potential teachers provide for (a) planning adaptations, and for (b) on-the-fly adaptations?



For planning adaptations, during the pre-lesson interview, if a teacher stated that a change was made, they were probed and asked why they made this change. Such responses constituted the rationales behind such decisions and were coded using the rationales for on-the-fly adaptations.

For on-the-fly adaptations, during the post-lesson interview, teachers provided statements about the adaptations made during the lesson. After confirming that the change was an adaptation, teachers were asked, “Why did you make that adaptation?” during the post-lesson interview. These responses were recorded and transcribed. The rationales were categorized based on the codes developed by Duffy and his colleagues (2006) (see Table 3). Three members of the research team were present to establish the codes for the rationales teachers provided. This analysis took place after the study was completed. The following codes were used for coding the rationales.

**Table 3**

***Rationales for On-the-Fly Adaptations***

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<b>Code</b>	<b>Rationale</b>
A	Objective not met
B	Challenge/Elaborate
C	To teach a specific strategy or skill
D	To help students make connections
E	Uses knowledge of student(s) or classroom dynamics
G	Changes planned order of instruction
H	Anticipation of upcoming difficulty
I	To manage behavior
J	To manage time
K	To promote student engagement

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The third sub-question was: In what ways are high potential teachers' adaptations while planning and on-the-fly promoting student's agency?

**Data analysis adaptations and rationales.** In order for an adaptation to be categorized as promoting student agency, either in the planning stage or on-the-fly, one of the following criteria was evidenced about the adaptations in the teacher's rationales:

1. Teacher wanted to provide opportunities to make choices.
2. Teacher wanted to provide opportunities to question.
3. Teacher wanted to provide opportunities to decide.
4. Teacher wanted to provide opportunities to challenge.
5. Teacher wanted to provide opportunities to critique the lesson from their own perspective.

A chart was compiled of planning adaptations which had one of the above criteria. Additionally, a chart of on-the-fly adaptations which had one of the above criteria was created in order to answer this research question.

The fourth sub-question was: To what extent do students demonstrate a sense of agency? In order to answer this question, the Student Interview Protocol was used to examine to what extent students say they demonstrate agentic behavior. Specifically, the following questions were analyzed to examine students' agentic behavior: "How often do you get to decide what to learn about in reading?"; "During reading did you have a chance to do something you wanted to learn about?"; and "Can you tell about a time when you have to decide on learning about something?" For the two student interviews, students must respond with an example(s) of when they acted in agentic ways (decided

on doing something other than what was being required of them, made choices which were outside of the teacher directed activity, challenged the learning context) in their classroom, in order to qualify as being agentic.

The fifth sub-question was: What is the relationship between the kind of planning adaptations and on-the-fly adaptations high potential teachers make in relation to student agency?

Relationships between the types of adaptations and student agency were examined using the results from the research question: In what ways are high potential teachers' adaptations while planning and while on-the-fly promoting student's agency. If the data showed that the teachers' adaptations did not promote student agency then there would be no relationship between the types of adaptations and student agency. However, if the results from this research question indicate that there were adaptations related to student agency, then there may be the potential for students to demonstrate agentic behavior.

The fifth sub-question was: What is the relationship between the kind of planning adaptations and on-the-fly adaptations high potential teachers make in relation to teacher's vision? In order for an adaptation to be considered related to their vision, the teacher's rationale must be tied to themes derived from teachers' visions during the pre-study interview.

### **Limitations**

One of the limitations of this study is the relatively small sample size of participants. Ideally, this study would include more than three teachers and eighteen students. Since this study spans over ten weeks, there is a total of ten observations, with

one observation per week. This relatively small amount of observations may also be a limitation. In addition, the measures within the study are exploratory and may yield only suggestive findings. Findings cannot be considered generalizable because the design does not meet the criteria for generalizability. That is, additional studies with a larger sample of both teachers and students would aid to increase the study's generalizability.

### **Ethics**

Selected student participants will not be interviewed until permission is gained from the following levels: university, parents, principal, teachers, and students. In addition, all participants will be given pseudonyms. All participants will not be interviewed until permission is obtained. All participants will be made aware through verbal and written communication that they may cancel their participation in the project at any time.

### **Conclusion**

Previous research on thoughtfully adaptive teaching, conducted in approximately fifty reading classrooms has found very few examples of high-level adaptations, few examples of metacognitive thought in teachers' rationales for their adaptations, and has not examined the impact of thoughtfully adaptive teaching on children. Given this, the current study examined new dimensions. These dimensions included: examining thoughtfully adaptive teaching in relation to the kinds of visions high potential teachers have, students' agentic behavior, as well as looking beyond 'on-the-fly' adaptations to adaptations teachers made during planning. Using a mixed methods design, two case studies were examined. Data collection methods included qualitative data (student,

teacher interviews, and observations) and quantitative data (frequency of adaptations) of high potential classroom teachers to understand these dimensions of thoughtfully adaptive teaching.

## CHAPTER IV

### RESULTS

#### Case Study 1

In this chapter, the two high potential teachers of this study will be presented in terms of the research questions. Then, a comparison between the two will be discussed.

On average, Ms. Baker adapted 1.4 times per planning session. About 86% of her rationales during planning related to her efforts to use her knowledge of students or the classroom to alter her instruction and to help students make connections. Across her 72 adaptations while on-the-fly she primarily focused on helping students to make connections. When reading her examples within these adaptations, note her strong knowledge of her students and her metacognitive reflections while teaching- both of which allowed for her to differentiate her instruction.

#### **Ms. Baker's Adaptations**

**During planning.** Ms. Baker adapted 14 times across the 10 pre-lesson interviews representing an average of 1.4 times per planning session. As displayed on Table 4, there were three patterns to note. First, she planned her lessons by using primarily her knowledge from past experiences ( $n=5$ ; 36%), to select instructional strategies ( $n=6$ ; 43%). These two adaptations counted for 79% of her total. Second, she placed far less emphasis during planning on making adaptations based on her district's ( $n=1$ ; 7%) and school's curriculum requirements ( $n=1$ ; 7%), or materials ( $n=1$ ; 7%).

Third, she placed no emphasis on planning adaptations based to promote student choice, decision making, student questioning, challenging the curriculum, or opportunities to critique the learning from their own perspective (See Table 4).

**Table 4**

***Ms. Baker's Adaptations during Planning***

<b>Pre-Lesson Interviews</b>	<b>L1</b>	<b>L2</b>	<b>L3</b>	<b>L4</b>	<b>L5</b>	<b>L6</b>	<b>L7</b>	<b>L8</b>	<b>L9</b>	<b>L10</b>	<b>Total</b>	<b>%</b>
a) modification in district requirements	1										1	7%
b) modification of school requirements					1						1	7%
c) modification of materials			1								1	7%
<b>d) a change from past experiences</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>				<b>1</b>			<b>5</b>	<b>36%</b>
<b>e) change in instructional strategies</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>			<b>1</b>			<b>6</b>	<b>43%</b>
Modification made to promote student choice												0
Modification made to promote opportunities for students to decide											0	0
Modification made to promote student questioning												0
Modification made to promote students with opportunities to challenge												0
Modification made to afford students with opportunities to critique from their own perspective												0
<b>Total</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>100%</b>

Her most common planning modification was to “change instructional strategies.”

An example was when she described her strategy for teaching the story *Wolfstalker* by

Gloria Skurzynski. She originally planned to teach the skill of comparing and contrasting but after meeting with the students she discovered they did not understand character development. She then made a change during planning to teach analyzing the text to understand character development. When asked about why she made this change, she responded:

The idea for contrasting/comparing and analyzing the red wolf with the grey wolf came out of a comment made in the student's work. I thought it would be a good time to take it a step further for reinforcement and practice with this skill of analyzing information presented to understand why the characters were the way they were.

Her second most common adaptation was to modify her plans based on her understanding from "past experiences." An example was when she described adopting a new text after working with the Literacy Coach. She referenced the text *Mosaic of Thought* by Elin Oliver Keene as a guide in helping her to develop reading groups based on needed skills for her students.

She said:

I think it's (*Mosaic of Thought*) is probably one of the few things that I've read about recently about teaching reading that I can say this is real life and practical. This is good and it helped me assess my students based on what they know so I can make them into groups for instruction.

An example of an adaptation of she described modifying district requirements occurred when she decided to teach a lesson comparing and contrasting before the requested time in the pacing guide. She said:



I think I am more thoughtful about teaching reading in the context of what I think the students are needing and ready for at the time, instead of teaching reading skill by skill like how the district wants us to. I wait for a prime opportunity to reinforce a skill . . . such as this one.

The next modification within this category included an adaptation of school requirements. An example of this occurred when she described adopting a literacy program other than the one the county suggested. When asked why she made this adaptation she responded:

The county advocates Fountas and Pinell, which has good ideas but us 5th grade teachers did our own investigating and found a different program that we like better, feel more comfortable teaching, and it addressed reading strategies in a more concise, practical way.

Her next adaptation was a modification of materials. She described modifying parts of the *Mosaic of Thought* text based on the needs of her students. She said:

I'm incorporating using a 'tool kit' with the students—I'm taking the ideas of *Mosaic of Thought* a step further and it's really good reading strategy. It's called a tool kit. I'm using that as a way for students to collect all the tools and strategies they need for reading.

Overall, Ms. Baker made changes to her instructional strategies using primarily her knowledge from past experiences to select instructional strategies to help her students. She placed far less emphasis during planning on making adaptations based on her district's or her school's curriculum requirements and materials. No emphasis was placed on planning adaptations based on promoting student choice, decision making,

student questioning, challenging the curriculum, or opportunities to critique the learning from their own perspective.

**While On-the-Fly.** Ms. Baker adapted 72 times across the 10 observations for an average of 7.2 per lesson. Table 5 shows how her adaptations fell within two patterns based on her frequency of use. She was concerned mainly with adapting her instruction by inventing examples, analogies or metaphors and by changing the means by which objectives were met in order to promote student understanding. These two adaptations counted for 75 % of her total adaptations during on-the-fly instruction.

**Table 5**

*Ms. Baker's Adaptations during On-the-Fly*

Pre-Lesson Interviews	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Total	%
<b>Modifies lesson objective</b>	1		1		1	1	3				7	10%
<b>Changes means by which objectives are met (e.g., materials, strategy, activity, assignment, procedures or routines)</b>	1	1	2	2	2	2	5	2	5	3	25	34%
<b>Invents examples, analogy, or metaphor</b>	2	3	5	3	3	5	3	3		3	30	41%
Inserts mini-lesson											0	0
<b>Suggests different perspective to students</b>				1		1	3		1		6	9%
Omits/inserts planned activity or assignment	2	1									3	5%
Changes planned order of instruction			1								1	1%
<b>Total</b>	6	5	9	6	6	9	14	5	6	6	72	100%

Her second most frequent pattern included “modifies the lesson objective” ( $n=7$ ; 10%), and “suggests different perspective to students” ( $n=6$ ; 9%). These adaptations resulted in 19% of her total. Her least frequent pattern of adaptations amounted to 6% of her total: changing the planned order of instruction ( $n=1$ ; 1%), and omitting/inserting planned activities or assignments ( $n=3$ ; 5%). No emphasis was placed on inserting mini-lessons.

Within the first category, her most common adaptation was to “invent examples, analogies or metaphors.” An example occurred when she described the wolf in the story of *The Three Little Pigs* by James Marshall by introducing another example of this character from *The True Story of the Three Little Pigs* by Jon Scieszka. She highlighted the character’s different traits in the two stories. She said:

We got into *The True Story of the Three Little Pigs* where the wolf has his side of the story. And so we had gotten into the wolf was always kind of a bad guy. Because he eats Little Red Riding Hood, that’s what the kids know about wolves. We talked about misconceptions.

Her second most common adaptation during instruction was “changes by which objectives are met.” For example, Ms. Baker was teaching a lesson about investigating facts during the pre-writing stage. As the class read a nonfiction article on bugs, one student read the word protein. She began a discussion about the meaning of protein and said to the class, “Let’s make a chart and note facts that we think are important about bugs and let’s think about what’s the opposite of fats and sugars. Let’s note what protein is on our chart.” During this on-the-fly adaptation, Ms. Baker modified her instructional strategies in order to meet the needs of her students.

Within her second pattern, she modified a lesson objective during a discussion on summarizing. During instruction, students struggled to capture the main idea of the chapter within the text, *Wolfstalker*. She had students write about the chapter rather than reading it aloud to find the main idea. When asked why she adapted in this way, she responded, “I wanted them to instead of reading and finding out what was going on- to write- two or three words that would really capture their ideas about the story-because they seemed to be struggling.” During instruction, she focused on incorporating different instructional strategies such as differentiation and extending focus lessons in order to meet the needs of her students.

Another example within this category included an adaptation where she suggested a different perspective to her students. During a lesson on finding the main idea, Ms. Baker related the experience of reading Dr. Seuss as a first grader and as a fifth grader. She asked the students, “Do you remember reading Dr. Seuss when you were in first grade? We read it again this year—we pick things differently and we get different things out of it because you make different connections—you get more out of it now because you have more life experiences.” When asked as to why she made this adaptation she said:

I was trying to get to see another view—to relate it so that if they can personalize this then they would be able to see what was going on and become better readers.

Within her third category, she incorporated asking the students comprehension questions during a comparing and contrasting lesson on the different National Parks.

When asked why she made this adaptation she said:

That was an enrichment opportunity for the kids. I wanted to take them a little bit past beyond just understanding some of the differences between the wolves and the bears.

The last example within this category included changing the planned order of instruction.

Ms. Baker incorporated a writing activity for students after a read aloud on beetles. When asked why she made this modification she said:

It was a sheet I wanted them to complete to see what they thought—and I wanted them to do it at some point and since we had time then I had them to it then instead of waiting to do it later.

Overall, in three out of every four modifications, Ms. Baker mainly adapted her instruction by inventing examples, analogies or metaphors and by changing the means by which objectives were met in order to promote student understanding. None of her remaining adaptations accounted for more than ten percent of her total changes.

### **Ms. Baker's Rationales**

**During planning.** Ms. Baker primarily used four different rationales for her adaptations during planning (see Table 6). About 86% of her rationales related to her efforts to use her knowledge of students or the classroom to alter her instruction ( $n=7$ ; 50%) and to help students make connections ( $n=5$ ; 36%). The remaining two categories: “to teach a specific skill or strategy ( $n=1$ ; 7%) and “to promote student engagement” ( $n=1$ ; 7%) counted for her remaining total.

For example, related to the first rationale of “uses knowledge of student(s) or classroom to alter her instruction,” she said:

There are students of different levels, and then there are the same materials, but because of the level of the students I have to approach the concept of summarizing differently depending on the needs of the specific group of students.

Ms. Baker used her knowledge of students to apply specific instructional strategies during planning to make connections across subject areas. For example, as related to the second rationale, “to make connections,” she described incorporating a comparing and contrasting component to the lesson in order to help students make a connection across different content areas. She said:

This was a good time to further their understanding of compare and contrast as a reading skill because we are doing something similar in math and I wanted them to see that it all ties in with content across the subject areas.

An example of her rationale of “to teach a specific skill or strategy” during planning occurred when she described incorporating different strategies to help students develop better summarizing skills in order to be a more active reader. She said:

I now need to show them what to do with those skills now, i.e. synthesize them with the information in the text, in order to be a more comprehensive, active reader.

Related to her rationale of “to promote student engagement” during planning, she described modifying her instruction to include a non-fiction text on wolves. When asked why she decided to use this text she said:

For a couple of reasons; either I felt like I wasn't reaching the kids-weren't showing as much improvement as I would like to see. Naturally your first reaction is you think is it them or is it me? So I thought maybe something I'm doing if I'm

not reaching them so maybe there's a different way. You always have to be open to trying different ways.

With these four rationales, Ms. Baker used her knowledge of students to differentiate her instruction. In these four examples, the variance in her students' abilities caused her to make the appropriate changes to meet their needs. She rarely stated the other rationales (see Table 6).

**Table 6**

*Ms. Baker's Planning Rationales*

<b>Rationales</b>	<b>L1</b>	<b>L2</b>	<b>L3</b>	<b>L4</b>	<b>L5</b>	<b>L6</b>	<b>L7</b>	<b>L8</b>	<b>L9</b>	<b>L10</b>	<b>Total</b>	<b>%</b>
A - Objective not met											0	0
B – Challenge /Elaborate											0	0
<b>C - To teach a specific strategy or skill</b>	<b>1</b>										<b>1</b>	<b>7%</b>
<b>D - To help students make connections</b>	<b>1</b>	<b>1</b>		<b>2</b>	<b>1</b>						<b>5</b>	<b>36%</b>
<b>E - Uses knowledge of student(s) or classroom dynamics to alter instruction</b>	<b>1</b>	<b>1</b>	<b>3</b>		<b>1</b>			<b>1</b>			<b>7</b>	<b>50%</b>
G - Checking student understanding											0	0
H - Anticipation of upcoming difficulty											0	0
I – To manage behavior											0	0
J - To manage time											0	0
K - To promote student engagement								1			1	7%
Total	3	2	3	2	2	0	0	2	0	0	14	100%

**While On-the-Fly.** Ms. Baker’s rationales for her on-the-fly adaptations primarily focused on “helping students to make connections.” This rationale counted for 26 of her 72 adaptations or 36% of her total (see Table 7).

**Table 7**

*Ms. Baker’s Rationales for On-The-Fly Adaptations*

Rationales	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Total	%
A - Objective not met	1		2								3	4%
<b>B – Challenge /Elaborate</b>	<b>4</b>						<b>1</b>		<b>1</b>		<b>6</b>	<b>8%</b>
<b>C - To teach a specific strategy or skill</b>		<b>1</b>		<b>2</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>14</b>	<b>19%</b>
<b>D - To help students make connections</b>	<b>1</b>	<b>3</b>	<b>5</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>26</b>	<b>36%</b>
<b>E - Uses knowledge of student(s) or classroom dynamics to alter instruction</b>		<b>1</b>	<b>1</b>	<b>2</b>		<b>2</b>	<b>2</b>			<b>2</b>	<b>10</b>	<b>14%</b>
<b>G - Checking student understanding</b>			<b>1</b>		<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>8</b>	<b>11%</b>
H - Anticipation of upcoming difficulty										1	1	2%
I – To manage behavior							1				1	2%
J - To manage time							1				1	2%
K - To promote student engagement								1			1	2%
Total	6	5	9	6	6	9	14	5	6	6	72	100%

The next most frequent category of rationales included: “to teach a specific skill or strategy” ( $n=14$ ; 19%), “uses knowledge of students or classroom dynamics to alter



instruction” ( $n=10$ ; 14%), “checking student understanding” ( $n=8$ ; 11%) and “challenge or elaborate” ( $n=6$ ; 8%). These rationales accounted for 52% of her total. The final grouping of adaptations included “objective not met” ( $n=3$ ; 4%), “anticipation of difficulty” ( $n=1$ ; 2%), “to manage behavior,” ( $n=1$ ; 2%), “to manage time” ( $n=1$ ; 2%) and “to promote student engagement” ( $n=1$ ; 2%) resulted in the remaining 10% of her total.

Related to her most frequent rationale of modifying her instruction to help students make connections, during the post-lesson interview, Ms. Baker discussed how she helped students to summarize using the movie *Avatar* as a way for students to make connections with the task. She said:

If you went and saw *Avatar* this weekend and somebody asked you about what it was about, how would you figure out what it was about? How would you tell them enough but without going off on some tangent about something in the movie: you just want to tell them the main idea, the character, the setting, and just what happened? Just feed them enough information.

As stated earlier, the second category of her most common rationales included four other codes starting with teaching “specific skill or strategy.” An example of this occurred when Ms. Baker discussed the importance of comparing and contrasting in preparation for the students’ presentations on National Parks. During a discussion of how to compare the different National Parks, a student questioned which park had bears. She stated, “Think about the different parks we’ve been learning about. Would the Dry Tortugas (a National Park off the Florida Keys) have bears or would a park like Yellowstone?” She responded to the adaptation in the following way:

I want them to be able to use actual parks to talk about when they compare and contrast and to talk about them as they are working on them. It's also a vocabulary thing. I try to use bigger words with them and sometimes I find out that they're not sure of what they're saying so I try to get them to really think about it.

Ms. Baker's next most common rationale in this category was "uses knowledge of students or classroom dynamics to alter instruction. An example of this occurred when she described using the knowledge of her students (rising fifth graders) as she related steps in making foods for beetles. She said:

I try to pull them in at the beginning instead of me telling them. I want to know what their thought process is and it's always conflict trying to get them to think strategically. Life just doesn't happen. It's the steps that you go through. And this was helping them to get into the writing and reading and seeing that there are steps to follow.

Ms. Baker's next most common rationale in this category was "checking for student understanding." An example of this occurred during a lesson on steps in a process. As one student read the text to figure out which part of the text came next in the sequence, Ms. Baker stopped and said, "What do you notice about the words at the beginning of the sentence (referring to the words, then, next, finally)." When asked why she made this adaptation, her rationale was:

I just wanted to see what they already knew to connect those sequence words because I know they've heard them in their past.

The last rationale in this category was to "challenge or elaborate." An example of this occurred during a discussion on students' background knowledge about wolves.

After reading a text on wolves, Ms. Baker asked the students to look at their graphic organizer to see if they had to correct misconceptions about wolves. When asked as to why she made this adaptation, she said:

It's kind of like the core but that is just to get them started thinking and get their brain activated and going. But I want them to be able to go beyond that and apply it to other situations and other things that they read or hear about.

Related to her remaining adaptations within her last category, there was one example related to an objective—objective not met, an example of this type of rationale occurred when she described incorporating the parts of speech during a summarization lesson. This adaptation resulted after a student suggested looking at the parts of speech to figure out who the author of the story was. When asked about this adaptation, Ms. Baker replied:

That just popped in. I remember thinking—thank you for doing that (bringing up the parts of speech) because that's important. I left that out of the discussion and then included that because that was important.

Overall, Ms. Baker made about one-third of adaptations helping students to make connections. Additionally, she then focused on using her knowledge of her students to teach specific skills or strategies, to challenge and to check for understanding. Less emphasis was based on the remaining five rationales.

### **Adaptations Related to Vision**

As stated in the methodology section, adaptations both during planning and on-the-fly related to Ms. Baker's vision were coded in the following two ways. If she stated

that the adaptation directly related to her vision, without being prompted, this was coded as such. The second way, the pre-study interview, specific themes (develop independent skills in reading, develop disposition as a reader, make general connections across the curriculum and outside the classroom) were developed to represent her vision and used to analyze each adaptation.

None of her statements spontaneously mentioned vision in her adaptations during planning. Of the 14 adaptations during planning however, five adaptations or 36% related to the phrases concerning her vision and they were related to making general connections across the curriculum. An example of this kind of adaptation occurred when she described her teaching of the visualizing skill in order for her students to make connections in and outside of the text. Ms. Baker wanted to make learning more “real world” for her students by providing them with opportunities to develop strategies and plans for solving problems. When asked why she did this she responded:

This was a good time to have them make a connection with what we are learning and what is going on with them using visualizing, steps and actions and seeing how it is all linked and connected to their world.

Overall Ms. Baker’s adaptations during planning that related to her vision centered on providing opportunities for students to make general connections with life in and out of school. The other categories of her vision were not present in her reasons for adapting during planning.

Of Ms. Baker’s on-the-fly adaptations, there was one code of her vision which she predominantly used: to promote general connections ( $n=13$ ; 65%). An example of an on-

the-fly adaptation which promoted this aspect of her vision occurred when Ms. Baker described incorporating extinction into her discussion on bears. She stated:

That was off the top of my head. I hadn't planned to do that but sometimes that kind of stuff just comes out of the discussion with the kids. I'm trying to get them to think beyond the text. What if it wasn't just the wolf that was becoming extinct or eradicated from the park? What is it was something else and why is that such a big deal to take such a small thing like that out?

Overall, during her planning and while-on-the fly instruction, Ms. Baker used her vision to guide her instruction. Of the 14 adaptations during planning, 5 adaptations or 36% related to the phrases concerning her vision and they were related to making general connections. During her on-the-fly instruction she used her vision one-third of the time.

### **Outcome Data**

**Student agency related adaptations during planning.** As stated in the methodology section, in order for an adaptation to qualify as promoting student agency during planning, teachers (a) had to refer to agency without prompting or (b) their statements had to show one of the following practices: students had opportunities to make choices, make decisions, question, challenge, or critique the lesson from their own perspective.

Of the 14 adaptations during planning, Ms. Baker did not spontaneously mention agency and none of her adaptations used phrases related to agency. Of the 72 adaptations while on-the-fly, Ms. Baker did not mention agency spontaneously and only one adaptation related to it. The objective of the lesson was to prepare her students for the End of Grade test. In the middle of the lesson, she stopped and asked the class, "Do you,

as the reader, have any questions about the story; where do you think the story will end?”

When asked in the post lesson interview as to why she made this adaptation she gave the following response. She said:

I felt like I was losing them. They weren't focused. And then I thought let's throw this out what questions do you as a reader actually have? I wanted to allow them the opportunity to ask questions.

**Student agency related adaptations during on-the-fly.** Overall, during on-the-fly instruction, Ms. Baker made only one modification ( $n=1$ ; 5%) to promote student's sense of agency. She did not refer to agency without prompting during the post-lesson interviews. Only one of her statements demonstrated an opportunity for students to question.

**Ms. Baker's students' sense of agency.** As stated in the methodology section, evidence of student agency was described as students' awareness or actions as demonstrated in students' responses during the interviews. In order to qualify as 'evidence' there had to be present in any of the student interviews an example of a student responding in agentic ways (i.e., made choices, questioned, decided, challenged, critiqued). In the student interviews, students needed to respond with an example(s) of when they acted in agentic ways in their classroom, in order to qualify.

Across 12 interviews with students in Ms. Baker's class, there was one example of a student stating that he had an opportunity to choose within the learning opportunity. Gus, (pseudonym) said that although he did not get to choose the research topic (National

Parks) that the class was studying, within that project, he got to *choose* the actual park within which he could study. Gus said:

You don't get to pick the topic but she (Ms. Baker) will have an idea and then you can pick different things, like in our National Park Project. We got to pick the National Park we wanted to study.

However, students described topics they would have liked to study if given the opportunity to choose. For example, Tom said, "I'm interested in sports and stuff . . . if we had an assignment that we got to choose the topic, I would choose sports." When asked if this occurred, Tom said, "No not really, not ever."

When asked if there were opportunities to decide about the learning during reading instruction, all twelve students reported wanting to decide but followed the curriculum set forth by Ms. Baker. Her students responded in the following ways:

Gus said:

We never get to decide. Ms. Baker basically takes the lesson really seriously and never lets us decide.

Haley said:

To decide? If we got to take a vote on what we want to do? We don't really do that. No, she (Ms. Baker) just kind of picks the books and the topic.

When asked why this occurred, Haley responded in the following way:

We would probably learn about something we already learned about . . . I think she likes us to move forward instead of backwards.

Tom said:

Not really—we never get to decide because she still has to teach and get the lesson taught.

Sue said:

No we don't get to decide because if we did we'd probably be confused about we are supposed to learn.

Students did not provide statements on opportunities to critique the learning from their own perspective. Overwhelmingly students reported reading instruction was teacher-directed. For example, Tyree said:

We're studying about National Parks because my teacher took a trip to a National Park (Yellowstone) and so we're learning about it- so when she came back she taught us about it.

Chris said:

Because she's (Ms. Baker) saying you need to do this thing and you absolutely don't like that, but if you got to pick your own thing you could actually see what you want to learn about.

Students revealed that they rarely had opportunities to challenge or question what was being taught. For example, Gus said:

If you're not interested in something that Ms. Baker assigns you—it's like it doesn't really do you much good.



Overall, of the possible sixty ways in which agency could be counted or mentioned (five criteria across 12 interviews), Ms. Baker's students reported only one opportunity to act in agentic ways in her classroom (and this occurred within a teacher directed activity).

**Relationship between agency and vision.** Due the infrequent use of agency statements in her planning and on-the-fly adaptations, it was impossible to find meaningful connections between vision and agency.

### **Case Study 2**

Ms. Kaley adapted 16 times across the 10 pre-lesson interviews representing an average of 1.6 times per planning session. About nine out of every ten of Ms. Kaley's pre-lesson rationales fell within three types- to teach a specific skill or strategy, to help students make connections or uses knowledge of students or classroom dynamics to alter instruction. During on-the-fly instruction, Ms. Kaley adapted 67 times across the 10 observations for an average of 6.7 times per lesson. Her on-the-fly rationales were spread across the categories, however she had a majority within the following categories: to help students make connections, to teach specific skills, and used knowledge of her students to alter instruction. When reading her examples within these adaptations, her strong knowledge of her students and her metacognitive reflections while teaching was noted.

#### **Ms. Kaley's Adaptations**

**During planning.** Ms. Kaley adapted 16 times across the 10 pre-lesson interviews representing an average of 1.6 times per planning session. She made adaptations in only five of the 11 categories. As displayed on Table 8, there are two

themes to note. First, she planned her lessons mostly by modifying materials ( $n=6$ ; 38%). Second, she had four categories with either four adaptations (district requirements,  $n=4$ ; 25%), 3 adaptations (past experiences,  $n=3$ ; 18%), 2 adaptations (instructional strategies,  $n=2$ ; 13%) or 1 adaptation (student choice,  $n=1$ ; 6%).

**Table 8**

*Ms. Kaley's Adaptations during Planning*

Pre-Lesson Interviews	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Total	%
a) modification in district requirements	1	1	1		1						4	25%
b) modification of school requirements											0	0
c) modification of materials		1			1		1	1	1	1	6	38%
d) a change from past experiences				1	1			1			3	18%
e) change in instructional strategies				1	1						2	13%
Modification made to promote student choice					1						1	6%
Modification made to promote opportunities for students to decide											0	0
Modification made to promote student questioning											0	0
Modification made to promote students with opportunities to challenge											0	0
Modification made to afford students with opportunities to critique/perspective											0	0
Total	1	2	1	2	5	0	1	2	1	1	16	100%

In five of the 11 categories, there were no adaptations where she adapted to make opportunities for students to decide, question, challenge, and critique the learning from students' own perspective or according to school requirements.

An example of making “modification of materials” occurred when she described modifying the vocabulary word lesson plan in the book, *Step Up to Reading* by Carson Dellosa. The objective for the lesson was for students to decode an unknown vocabulary word in a passage. She modified the materials in order to prepare students for the End of Grade tests. She said:

I have created my own lesson plan using some of the passages from this book because it is aligned with the Standard Course of Study and has skills based on what my kids need to know for the End of Grade tests.

Within “modification of district requirements,” Ms. Kaley described adapting a text that the county provided to meet the needs of her students during reading instruction. She said:

The district really pushed the Fountas and Pinnell Guiding Readers and Writers approach. I adapted it because it is a little less of a mini-lesson and more of a directed skill lesson done with a whole class rather than a small group.

Related to her next category, “change from the past,” she described adopting a text that she had not used in the past based on the current needs of her students. She said:

I'm borrowing a book. It's a high-interest, low-readability book on wild animals. I figured it would be interesting to them—it's a series of books that are offered by this publisher designed to engage struggling readers.

After this adaptation, an example “change in instructional strategies” occurred when Ms. Kaley described incorporating the Smartboard to have students use information to include in their summaries on a nonfiction text. She said:

I used the scholastic materials instead of using guided reading groups. I selected a nonfiction text to use for the summary. I plan to use the Smartboard for the class discussion part which is not in the materials.

Related to providing opportunities for student choice, she described incorporating independent reading into the lesson so that her students would have more independence and choice. She said:

Last week they had to do a lot of independent reading and we did all of the vocabulary work as a class. This (independent reading) will give them a little more power and independence where they have to figure out the vocabulary without me or a classmate telling them. And they will have to discover a way to present that information to others.

Overall, Ms. Kaley planned her lessons by modifying materials (district and instructional) and from past experience and by providing opportunities for choice. She placed far less emphasis during planning on making adaptations based on the school’s curriculum or providing opportunities for decision making, questioning, challenging or critiquing the lesson from students’ own perspective.

**While On-the-Fly.** Ms. Kaley adapted 67 times across the 10 observations for an average of 6.7 per lesson. Table 9 shows how her adaptations fell within two patterns based on her frequency of use. First, she was concerned mainly with adapting her instruction by changing the means by which objectives were met in order to promote

student understanding and by inventing examples, analogies or metaphors. These two adaptations counted for 95% of her total adaptations during on-the-fly instruction.

**Table 9**

***Ms. Kaley's Adaptations during On-the-Fly Instruction***

<b>Pre-Lesson Interviews</b>	<b>L1</b>	<b>L2</b>	<b>L3</b>	<b>L4</b>	<b>L5</b>	<b>L6</b>	<b>L7</b>	<b>L8</b>	<b>L9</b>	<b>L10</b>	<b>Total</b>	<b>%</b>
Modifies lesson objective					1						1	2%
Changes means by which objectives are met (e.g., materials, strategy, activity, assignment, procedures or routines)		3	2	2	4	4	5	3	3	7	33	49%
Invents examples, analogy, or metaphor	2	3	5	2	5	4	5	3	2		31	46%
Inserts mini-lesson											0	0
Suggests different perspective to students											0	0
Omits/inserts								1	1		2	3%
Changes/order of instruction											0	0%
<b>Total</b>	<b>2</b>	<b>6</b>	<b>7</b>	<b>4</b>	<b>9</b>	<b>8</b>	<b>10</b>	<b>7</b>	<b>6</b>	<b>7</b>	<b>67</b>	<b>100%</b>

Moreover, at least one of these two adaptations occurred in every lesson with both occurring in 8 of her 10 lessons. When reading her examples within these two adaptations, note her strong knowledge of her students and her metacognitive reflections while teaching. Her second most frequent pattern of adaptations included “omits and inserts planned activity” ( $n=2$ ; 3%) and “modifies the lesson objective” ( $n=1$ ; 2%). No

emphasis was placed on inserting mini-lessons, suggesting a different perspective to students or changing the planned order of instruction.

Related to Ms. Kaley's most common adaptation "changing by which objectives are met," she incorporated a discussion about roots of words, modeling how to use sticky notes to write down unknown words to her students. She takes different strategies like this and incorporates them into her adaptations while on-the-fly in order to promote student understanding. When asked about this adaptation she said:

I was just trying to get them to understand. They weren't verbalizing what they were looking at. They just kept saying what the word meant so I was trying to get them to tell me the strategy so that they could use that in other situations.

Her second most common adaptation during instruction was to "invent examples, analogies or metaphors." During a lesson on idioms, her students had to match the correct idiom with a phrase. As students read aloud, "easy as pie," one student asked, "When would you use this kind of writing?" Ms. Kaley discussed an example of an author that the class recently read. She said, "There's an author that we have read which writes in this way . . . you know the author of the Amelia Bedelia books." She explained why she had made such an adaptation in the following way: She said:

I used that example from Amelia Bedelia because I thought they would think about that and what it actually meant. It was one of those think on my feet things so I was like Amelia Bedelia is something they know about so I just brought it up in the middle of the lesson to help them make the connection.

Within her next most frequent adaptation, "inserting an activity," she incorporated an activity on details during a lesson on the main ideas of passages. As students were

reading a passage, Ms. Kaley read one of the sentences aloud and said, “Okay if you think this is the main idea, put a 1 up with your hand and if you think it is a detail, put a 2 up with your hand.” When asked why she made this adaptation, she said,

I had not thought about adding in that but wanted them to come up with how they should be thinking about the details to go with the main idea and I thought that would be a good check to see if they were really understanding how the detail supports the main idea.

Within “modifying the lesson objective,” during an on-the-fly lesson, she adapted the original objective of summarizing to decoding words. She modeled to students how to use the prefix and suffixes of words to understand their meaning. When asked about why she modified in this way, she responded: “I did that when I noticed that they didn’t know the vocabulary word relevant and irrelevant. I talked about the prefix ir and what relevant meant.”

Overall, Ms. Kaley frequently adapted by changing the means by which objectives were met and inventing examples, analogies and metaphors to meet the needs of her students. These two adaptations counted for 95% of her total adaptations during instruction. She placed far less emphasis on the other categories. She adapts her instruction based on the needs of her students.

### **Ms. Kaley’s Rationales**

**During planning.** About nine out of every ten of Ms. Kaley’s pre-lesson rationales fell within three types- to teach a specific skill or strategy ( $n=7$ ; 44%), to help students make connections ( $n=5$ ; 31%) or uses knowledge of students or classroom dynamics to alter instruction ( $n=4$ ; 18%). Her remaining rationales fell within two

modifications to “manage time” ( $n=1$ ; 6%), and to “promote student engagement” ( $n=1$ ; 6%). She made no adaptations based on the categories of objective not met, to challenge or elaborate, checking student understanding, anticipation of upcoming difficulty, and to manage behavior (see Table 10).

**Table 10**

*Ms. Kaley’s Planning Rationales*

<b>Rationales</b>	<b>L1</b>	<b>L2</b>	<b>L3</b>	<b>L4</b>	<b>L5</b>	<b>L6</b>	<b>L7</b>	<b>L8</b>	<b>L9</b>	<b>L10</b>	<b>Total</b>	<b>%</b>
A – Objective not met											0	0%
B – Challenge /Elaborate											0	0%
C – To teach a specific strategy or skill	1	1	1	1	2			1			7	44%
D – To help students make connections				1	1		1		1	1	5	31%
E – Uses knowledge of student(s) or classroom dynamics to alter instruction					2						2	13%
G – Checking student understanding											0	0%
H – Anticipation of upcoming difficulty											0	0%
I – To manage behavior											0	0%
J – To manage time								1			1	6%
K – To promote student engagement		1									1	6%
<b>Total</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>16</b>	<b>100%</b>



An example of her most common rationale, “to teach a specific skill or strategy,” occurred when she described planning an extension to her work with poetry. She said:

I chose to give my students 6 short poems with inferencing questions and they will work in groups to practice reading the poems aloud with fluency and discuss questions about how they got meaning from the text.

Her second most common rationale, “to make connections,” occurred when she described incorporating a graphic organizer into the lesson on finding relevant and irrelevant information in a passage. She said:

I want them to be able to make connections between what we are learning and their life outside of school. It may be a stretch with this lesson but I’m hoping that given the chance of having them use their own information for the graphic organizer will begin to help them use the skill of finding relevant and irrelevant information in a context outside of just a reading passage.

An example of her third most common rationale during planning, “uses knowledge of students to alter instruction” occurred when after reviewing student work she realized that she needed to reteach the skill of inferencing. The following was her response as to why she decided to focus on this specific skill. She said:

I gave my students some independent work from these lessons on Friday and after checking their work I realized I needed to address some the misunderstandings which is why I created this lesson.

An example of an adaptation made to “manage time,” occurred when she described extending a lesson by adding a graphic organizer. She said:

The graphic organizer changes I made mostly for time constraint. I also don't want students to lose the importance of the lesson by taking a lot of time and effort to copy information—it takes away from the whole point of what I'm teaching.

Related to her adaptation of promoting “student engagement” she described adding a graphic organizer that students would be able to personalize. When asked why she made this adaptation during planning, she said:

I guess so because it will hopefully allow me to emphasize the main point of the lesson rather than getting lost in the logistics of the getting the work completed. This goes back to being able to see the big picture rather than just doing an activity for the sake of doing it.

Overall, about nine out of every ten pre-lesson rationales Ms. Kaley provided fell within three types—to teach a specific skill or strategy, to help students make connections or modifying instruction based on knowledge of her students. She made no adaptations based on the categories of objective not met, to challenge or elaborate, check for student understanding, anticipation of upcoming difficulty, and to manage behavior.

**While On-the-Fly.** Ms. Kaley's on-the-fly rationales fell within two categories based on her frequency of use. First, she relied on rationales made in order to “help students make connections” ( $n=29$ ; 43%), “to teach a specific skill” ( $n=14$ ; 22%) or “knowledge of students to alter instruction” ( $n=7$ ; 11%). Her next most frequent category of rationales included “promoting engagement” ( $n=4$ ; 6%), “student understanding” ( $n=3$ ; 4%), “upcoming difficulty” ( $n=3$ ; 4%), “managing behavior” ( $n=3$ ; 4%), or “to challenge or elaborate” ( $n=1$ ; 2%). She had no rationales in the category of “objective not met” (see Table 11).

**Table 11***Ms. Kaley's On-the-Fly Rationales*

<b>Rationales</b>	<b>L1</b>	<b>L2</b>	<b>L3</b>	<b>L4</b>	<b>L5</b>	<b>L6</b>	<b>L7</b>	<b>L8</b>	<b>L9</b>	<b>L10</b>	<b>Total</b>	<b>%</b>
A – Objective not met												
B – Challenge /Elaborate										1	1	2%
C – To teach a specific strategy or skill		1	3	1	4	1		1	2	1	14	22%
D – To help students make connections	2	2	2	3	2	4	8	3	3		29	43%
E – Uses knowledge of student(s) or classroom dynamics to alter instruction		1			1		1	2	1	1	7	11%
G – Checking student understanding		1	1				1				3	4%
H – Anticipation of upcoming difficulty						2				1	3	4%
I – To manage behavior					1					1	3	4%
J – To manage time		1								2	3	4%
K – To promote student engagement			1		1	1		1			4	6%
Total	2	6	7	4	9	8	10	7	6	7	67	100%

An example of her most common rationale, to help students ‘make connections’ occurred when she began a dialogue with her students about the word “worship” during a read aloud. She posed the question about the word worship within the context of the reading. When asked as to why she made this adaptation, Ms. Kaley said,

They just use token words like that a lot but they don’t actually know what they mean. I was trying to get them to realize that they have to use different strategies

to understand what the words mean like for word parts. It's not always going to be just I read it and use the context clues if I don't know what it (the word) means.

Related to her second most common rationale to teach a 'specific skill or strategy' she described asking students for other examples of idioms. One of the students said, "I know how about having a mummy in a fairytale." Ms. Kaley began a discussion with the students, asking them to think about what they already knew and apply it to new situations. She said:

I was just trying to get them to realize that when he said mummies could have been in a fairytale—I was trying to get them to think- you don't normally see mummies in fairytales. I wanted them to use their background knowledge and try to explain why there would have been a better answer than that one.

Ms. Kaley used her knowledge of her students to alter instruction. An example of this rationale occurred when she described, during a lesson on finding the main idea in passage, why she stopped and decoded words with her students. She said:

I think they can find the main idea in something really simple. But when it gets more complex and they have more factors like vocabulary to deal with they get lost, so I decided to stop so they would be able to get it.

The remaining categories of rationales included 26% of her total with the most frequent adaptation of "promoting student engagement." An example of this occurred during small group discussions on summarizing; Ms. Kaley stepped in, rearranged the groups and the posters so that her students would be able to access the posters more easily. When asked about this adaptation, she said:

Yeah because I put the posters up and then I noticed that some of them were looking away from the poster so I moved that so they would follow that direction. I wanted to make sure that they were engaged in what we were doing.

An example of “checking student understanding” occurred during a lesson on idioms. She asked the students to retell the purpose of the activity (explaining the meaning of idioms). When asked as to why she made this adaptation she responded:

They thought the purpose of the lesson was to know idioms inside and out but I was trying to get to talk to them and get them to realize that it was to understand how to use them not know them.

Related to “anticipation of upcoming difficulty,” she described pulling out words during a read aloud and posting them on the board so that her students would be able to understand the main idea of the passage. She said:

I looked at the passage and I realized that they’re not going to be able to pick out the main idea unless they really understand the words. So I tried to pick out on the board words I thought were central to passage that they might not know.

An example of “to manage behavior” occurred during a small group lesson on summarizing. Students were supposed to write down important facts of the article on a sticky note. Ms. Kaley adapted by asking her students questions about the article. She said:

I noticed that some of them were getting off task and it was taking them a long time to put their sticky note sup so I started to have a conversation about the main idea of the article.

An example of “to challenge or elaborate” occurred during a lesson on inferencing. Ms. Kaley wanted her students to be able to use what they learned about inferences to make inferences about certain situations presented in a game. During the game, she stopped and began a discussion on how the examples related to their own experiences. When asked as to why she began this discussion, she said: “I was just trying to go over several different options that could have happened. I was trying to get them to think more.”

Ms. Kaley described such adaptations in order to not only engage students but to get them to go beyond their initial understandings. Across her adaptations during planning, she works to engage students, in order to promote a deeper understanding. She made more adaptations while on-the-fly based on the ways in which students understand the lesson as it unfolds.

Overall, about three out of every four of Ms. Kaley’s on-the-fly rationales included modifications to help students “make connections,” to teach “specific skills or strategies,” and “knowledge of students to alter instruction.” Her next most frequent category of rationales included “promoting engagement,” “student understanding,” “upcoming difficulty,” “managing behavior,” and “to challenge or elaborate ( $n=1$ ; 2%). She had no rationales in the category of “objective not met.”

### **Adaptations Related to Vision**

As stated in the methodology section, adaptations both during planning and on-the-fly related to Ms. Kaley’s vision were coded in the following two ways. One, if she stated that the adaptation directly related to her vision, without being prompted, this was

coded as such. The second way, if her statements (as found in their rationales about the adaptations) had the specific themes related to her vision (develop independent skills in reading, develop disposition as a reader, make connections across the curriculum and outside the classroom) then these were coded.

None of her statements spontaneously mentioned vision in her adaptations during planning. Of the 16 adaptations during on-the-fly instruction, five adaptations or 31% related to the phrases concerning her vision and were related to making connections. An example of this occurred when she described incorporating a writing component in order for her students to make connections with the reading lesson and their life outside of school. She said: “I’m hoping that by adding their own personal information into a graphic organizer into this lesson that they will be able to connect their life in the reading passage.”

Overall Ms. Kaley’s adaptations during planning that related to her vision centered on providing opportunities for students to make general connections with life in and out of school. The other categories of her vision were not present in her reasons for adapting during planning.

Of Ms. Kaley’s on-the-fly adaptations, there was one code of her vision which she predominantly used: to make general connections across the curriculum ( $n=29$ ; 43%). An example of an on-the-fly adaptation which promoted her vision (connectedness) occurred when she described why she began a dialogue with her students about the word “worship” during a read aloud. She posed the question about the word worship within the context of the reading. When asked as to why she made this adaptation, Ms. Kaley said,

They just use token words like that a lot but they don't actually know what they mean. I was trying to get them to realize that they have to use different strategies to understand what the words mean like for word parts. It's not always going to be just I read it and use the context clues if I don't know what it (the word) means.

Overall, Ms. Kaley used her vision to guide her planning minimally. During her on-the-fly instruction she used her vision more frequently.

### **Outcome Data**

**Student agency related adaptations during planning.** As stated in the methodology section, in order for an adaptation to qualify as promoting student agency during planning, teachers (a) had to refer to agency without prompting or (b) their statements (as found in their rationales about the adaptations) had to show one of the following practices: students had opportunities to make choices, make decisions, question, challenge or critique the lesson from their own perspective.

Of the 16 adaptations during planning, Ms. Kaley did not spontaneously mention agency and only one of her adaptations used phrases related to agency. The one example occurred when she made a modification during planning to allow for student choice ( $n=1$ ; 6%). This example occurred when she described incorporating independent reading into the lesson so that her students would have more independence and choice. She said:

Last week they had to do a lot of independent reading and we did all of the vocabulary work as a class. This (independent reading in this lesson) will give them a little more power and independence where they have to figure out the vocabulary without me or a classmate telling them. And they will have to discover a way to present that information to others



Overall, during planning, Ms. Kaley planned only one modification (related to choice) to promote student's sense of agency. She did not refer to agency without prompting during the pre-lesson interview.

**Student agency related adaptations while on-the-fly instruction.** Of the 67 adaptations while on-the-fly, Ms. Kaley did not mention agency spontaneously and no adaptations related to it.

**Ms. Kaley's students' sense of agency.** As stated in the methodology section, evidence of student agency was described as students' awareness or actions as demonstrated in students' responses during the interviews. In order to qualify as 'evidence' there had to be present in any of the student interviews an example of a student responding in agentic ways (i.e., made choices, questioned, decided, challenged, critiqued). In the student interviews, students needed to respond with an example(s) of when they acted in agentic ways in their classroom, in order to qualify.

Across the 12 interviews there were no examples of opportunities where students provided examples of being able to decide, choose, question, challenge or critique the learning from their own perspective.

For example, when asked whether or not students had the opportunity to decide, students overwhelmingly stated no.

Madie said, "No we don't get to decide very often- We don't get to decide. Ms. Kaley decides on what we do." When asked why Ms. Kaley decided she said, "She has something special planned in reading-like she's going to tell us something really cool in an article."

Another student, Taylor, said that he got to decide on what he wanted to write during an integrated social studies and writing project on The Lost Colony. However, he did not mention any activities during the observed reading instruction time where he got to decide. When asked if he got to decide on the learning during reading instruction, he said, “No—except for silent reading (not during the observed reading instruction time)”. He said, “Ms. Kaley gives us stuff that we need to learn.”

Jonah said, “No, not really.” While both Ashley and Kevin responded, “No we don’t get to (decide).”

Students reported no examples of being able to question, challenge, decide, or critique the learning from their own perspective. Interestingly, when students were asked about times when they learned something they were interested in, one student responded that the class got to choose what they wanted to do for instruction because Ms. Kaley was absent and a substitute teacher was teaching that day.

Jonah said:

I remember one time when we had a substitute and they asked- do you want to just read . . . a book to read together or do you want to just read independently and it just wasn’t me—the whole class picked the choice of reading independently.

Overall, of the possible sixty ways in which agency could be counted or mentioned (five criteria across 12 interviews), Ms. Kaley’s students reported no opportunities to act in agentic ways in her classroom.

**Relationship between agency and vision.** Due to the infrequent use of agency statements in her planning and on-the-fly adaptations, it was impossible to find meaningful connections between agency and vision.

### Comparison of Case Studies

#### Adaptations

**During planning.** Across the 20 observations of the two teachers there were 30 adaptations during planning. Ms. Baker adapted 1.4 times during planning and Ms. Kaley adapted 1.6 times per planning. Across these adaptations, there were similarities and differences to note between the two teachers.

For example, Ms. Baker and Ms. Kaley had strong knowledge of their students and provided metacognitive reflections regarding their adaptations. There were variations in the ways in which the two teachers adapted during planning. That is, Ms. Baker planned her lessons by using primarily her knowledge from past experiences ( $n=5$ ; 36%), to select instructional strategies ( $n=6$ ; 43%). These two adaptations counted for 79% of her total. She placed far less emphasis during planning on making adaptations based on her district's ( $n=1$ ; 7%) and school's curriculum requirements ( $n=1$ ; 7%), or materials ( $n=1$ ; 7%). In contrast, Ms. Kaley planned her lessons mostly by modifying materials ( $n=6$ ; 38%). Additionally, she had four categories with either 4 adaptations (district requirements ( $n=4$ ; 25%), 3 adaptations (past experiences ( $n=3$ ; 18%), 2 adaptations (instructional strategies ( $n=2$ ; 13%) or 1 adaptation (student choice,  $n=1$ ; 6%) (see Table 12).

**Table 12***Teacher Comparisons of Planning Adaptations*

<b>Pre-Lesson Interviews</b>	<b>Ms. Baker</b>	<b>Ms. Kaley</b>
a) modification in district requirements	1	4
b) modification of school requirements	1	0
c) modification of materials	1	6
d) a change from past experiences	<b>5</b>	3
e) change in instructional strategies	<b>6</b>	2
Modification made to promote student choice		1
Modification made to promote opportunities for students to decide	0	0
Modification made to promote student questioning		0
Modification made to promote students with opportunities to challenge		0
Modification made to afford students with opportunities to critique from their own perspective		0
<b>Total</b>	<b>14</b>	<b>16</b>

Of her 14 adaptations during planning, Ms. Baker had 5 adaptations or 36% related to the phrases concerning her vision (making general connections across the curriculum). Similarly, of Ms. Kaley's 16 adaptations during, 5 adaptations or 31% related to the phrases concerning her vision and were related to making connections. Additionally, both teachers had a low frequency of agency related adaptations during planning. For example, Ms. Baker had no adaptations related to agency and Ms. Kaley had only one.

Although the two teachers adapted in a variety of ways, some categories were used more than others. The two most common adaptations used between the two teachers during planning were: change from “past experiences” ( $n=8$ ) and “instructional strategies” ( $n=8$ ). During planning, the two teachers made few adaptations related to agency. However, adaptations during planning which reflected Ms. Baker and Ms. Kaley’s vision counted for one third of each of their total.

**While On-the-Fly.** Ms. Baker and Ms. Kaley, during on-the-fly instruction, focused on helping students make connections and taught skills in order to promote student understanding. Across the 20 observations, the most common adaptation used between the two teachers was “invents examples, analogies or metaphors” with 61 adaptations in this category. The second most common category between the two included “changing the means by which objectives were met” with a total of 58 adaptations in this category (see Table 13).

Interestingly, both teachers had the same area of their vision (making general connections across the curricula) represented in their vision related adaptations. The number of vision-related adaptations varied significantly across the two teachers. For example of Ms. Baker’s on-the-fly adaptations, she had 13 adaptations. Ms. Kaley’s had 29 vision related adaptations. However, the two teachers resembled each other in their frequency of agency-related adaptations: Ms. Baker had only one agency related adaptation and Ms. Kaley had none.

Overall, during on-the-fly adaptations, both teachers focused on helping students make connections and taught skills in order to promote student understanding. The

number of vision-related adaptations varied significantly across the two teachers. Ms. Kaley had approximately double the amount of vision-related adaptations than Ms. Baker. Both teachers expressed making general connections as the focus of their vision-related adaptations. The two teachers had a low frequency of agency related adaptations.

**Table 13**

*Teacher Comparison of On-the-Fly Adaptations*

<b>Pre-Lesson Interviews</b>	<b>Ms. Baker</b>	<b>Ms. Kaley</b>
Modifies lesson objective	0	1
Changes means by which objectives are met (e.g., materials, strategy, activity, assignment, procedures or routines)	25	33
Invents examples, analogy, or metaphor	30	31
Inserts mini-lesson	0	0
Suggests different perspective to students	6	0
Omits/inserts planned activity or assignment	3	2
Changes planned order of instruction	1	0
Total	72	67

**Rationales**

**During planning.** Across the 20 observations there were 30 adaptations identified during planning. For these adaptations there were also an average of 30 rationales provided. Both teachers used their knowledge of students and their classroom in order to teach strategies or skills and promote making connections (see Table 14). Specifically,

about 86% of Ms. Baker’s rationales related to her efforts to use her knowledge of students or the classroom to alter her instruction ( $n=7$ ; 50 %) and to help students make connections ( $n=5$ ; 36%). The remaining two categories: “to teach a specific skill or strategy ( $n=1$ ; 7%) and “to promote student engagement” ( $n=1$ ; 7%) counted for her remaining total. Similarly, about nine out of every ten of Ms. Kaley’s pre-lesson rationales fell within three types- to teach a specific skill or strategy ( $n=7$ ; 44%), to help students make connections ( $n=5$ ; 31%) or uses knowledge of students or classroom dynamics to alter instruction ( $n=4$ ; 18%).

**Table 14**

*Teacher Comparisons of Planning Rationales*

<b>Rationales</b>	<b>Ms. Baker</b>	<b>Ms. Kaley</b>
A – Objective not met	0	0
B – Challenge /Elaborate	0	0
C – To teach a specific strategy or skill	1	7
D – To help students make connections	5	5
E – Uses knowledge of student(s) or classroom dynamics to alter instruction	7	2
G – Checking student understanding	0	0
H – Anticipation of upcoming difficulty	0	0
I – To manage behavior	0	0
J – To manage time	0	1
K – To promote student engagement	1	1
Total	14	16

Overall, both teachers adapted during planning by using their knowledge of their students to alter their instruction. They relied heavily on adapting their instruction in order to teach strategies or skills and to provide opportunities for students to make connections.

**While On-the-Fly.** Ms. Baker and Ms. Kaley mainly adapted in order to help their students make connections in and across the curriculum and to teach specific strategies or skills (see Table 15).

**Table 15**

*Teacher Comparisons of Rationales While On-the-Fly*

<b>Rationales While On-the-Fly</b>	<b>Ms. Baker</b>	<b>Ms. Kaley</b>
A – Objective not met	3	
B – Challenge/Elaborate	6	1
C – To teach a specific strategy or skill	14	14
D – To help students make connections	26	29
E – Uses knowledge of student(s) or classroom dynamics to alter instruction	10	7
G – Checking student understanding	8	3
H – Anticipation of upcoming difficulty	1	3
I – To manage behavior	1	3
J – To manage time	1	3
K – To promote student engagement	1	4
Total	72	67



Although both teachers mainly stated this in their rationales, they varied in other rationales. For example, Ms. Baker's next most frequent categories of rationales included: "uses knowledge of students or classroom dynamics to alter instruction" ( $n=10$ ; 14%), "checking student understanding" ( $n=8$ ; 11%) and "challenge or elaborate" ( $n=6$ ; 8%). Such results suggest that she mainly focused on using her knowledge of her students to teach specific skills or strategies, to challenge and to check for understanding.

Ms. Kaley also placed great importance on adapting in order to help her students make connections and to teach specific strategies or skills. Similar to Ms. Baker, her next most frequent category included: "knowledge of students to alter instruction" ( $n=7$ ; 11%), follow by "promoting engagement," "student understanding," "upcoming difficulty," "managing behavior," and "to challenge or elaborate."

Overall, both teachers provided metacognitive reflections in their rationales. Specifically, both teachers mainly described adapting in order to help students make connections. Additionally, they focused on using their knowledge of their students to teach specific skills or strategies, to challenge and to check for understanding. Less emphasis was based on the remaining rationales.

### **Across Student Interviews**

Students in both classes revealed that they did not have opportunities to decide, challenge, critique, question or choose the learning from their own perspective. There was one exception: a student in Ms. Baker's class said he could choose within the teacher directed topic. However, of the possible one hundred and twenty ways in which agency could be counted or mentioned (five criteria across twenty four interviews), Ms. Baker

and Ms. Kaley's students did not provide examples of opportunities to act in agentic ways.

### **Summary of Results**

The central research question of the study was: what are the types and number of adaptations two high potential teachers make while (a) planning and (b) on-the-fly?

Results from this study indicate that the high potential teachers during planning, mainly adapted based on "past experiences" and "instructional strategies." Overall, their rationales indicate that they mainly adapted during planning by using their knowledge of their students to alter their instruction. Additionally, they relied heavily on adapting their instruction in order to teach strategies or skills and to provide opportunities for students to make connections.

While on-the-fly, Ms. Baker and Ms. Kaley, focused on helping students make connections and taught skills in order to promote student understanding. Across the 20 observations, the most common adaptation used during on-the-fly instruction was "invents examples, analogies or metaphors." The second most common category while on-the-fly included "changing the means by which objectives were met."

Results indicate that the high potential teachers within this study made only one agency related adaptation. Of her 14 adaptations during planning, Ms. Baker had 5 adaptations or 36% related to the phrases concerning her vision and they were related to making connections. Similarly, of Ms. Kaley's 16 adaptations during, 5 adaptations or 31% related to the phrases concerning her vision and were related to making connections. The number of vision-related adaptations while on-the-fly varied significantly across the

two teachers. For example of Ms. Baker's on-the-fly adaptations, she had 13 adaptations. Ms. Kaley's had 29 vision related adaptations. Interestingly, both teachers had the same area of their vision represented in their adaptations (making general connections).

Of great significance is the impact of teacher's adaptations on their students. Results from this study indicate that in both classes, students did not have opportunities to decide, challenge, critique, question or choose the learning from their own perspective. There was one exception: a student in Ms. Baker's class said he could choose within the teacher directed topic. In other words, of the possible one hundred and twenty ways in which agency could be counted or mentioned (five criteria across 24 interviews), there was only one example of a student reporting an opportunity to act in agentic ways.

## **CHAPTER V**

### **DISCUSSION**

My research questions for the study examined the types and number of adaptations and rationales two high potential teachers made during planning reading instruction and on-the-fly and the ways in which adaptations promoted student agency and related to the teacher's visions. In the following paragraphs, the implications for policy, practice and future thoughtfully adaptive teaching studies will be discussed.

While previous research has suggested the importance of teachers being thoughtfully adaptive, there has been no empirical evidence to support this claim. That is, despite the appealing and intuitive nature of the writings about thoughtfully adaptive teaching, no one has systematically collected empirical evidence to support such claims. In response to this need, the thoughtfully adaptive teaching research project at UNCG, under the direction of Dr. Gerald Duffy, conducted over 150 observations in 24 classrooms. Overall, their research project found few instances of teachers altering their instruction in thoughtfully adaptive ways. Instead, teachers seemed more concerned with following their lesson plans than with adapting during instruction to attend to students' needs and interests.

Possible reasons for the lack of evidence include: these studies were conducted with novice teachers who may not have developed the appropriate levels of expertise to adapt thoughtfully and they were conducted in high stakes testing districts where teachers

may have not had adequate opportunities to adapt because they were pressured by administrators to follow scripted materials. The current study differed from previous thoughtfully adaptive teaching efforts by including expert teachers, moving to a district with less emphasis on accountability outcomes, focusing on planning as well as on-the-fly adaptations, and by including a student outcome measure.

Compared with previous thoughtfully adaptive teaching studies, this study found a higher number of adaptations with most occurring during on-the-fly rather than during the planning phase of the lesson. The two high potential teachers of this study demonstrated three to four times more adaptations during instruction than was found in previous studies. This finding suggests that perhaps the climate of where teachers teach or their levels of expertise as defined by advanced certification may be factors rather than years of experience in predicting the number of their on-the-fly adaptations.

In comparison to the actual teaching, research suggests teachers may be more likely to make more adaptations during planning based on student's interests and specific tasks because they have more time to reflect on their goals (Clark & Elmore, 1981; Clark & Peterson, 1978, 1986; Hill & Martin, 1971; Joyce & Harootunian, 1964; Sutcliffe & Whitfield, 1976). In contrast to this assumption, the teachers in this study made more adaptations during instruction than during planning. The underlying goal of both of their adaptations during planning and instruction, however, served the same purpose—teachers acted metacognitively to improve their students' learning. This finding underscores the need for research to look at both types of adaptations in their quest to understand the purposes underlying why teachers in one situation and not the other.

During on-the-fly instruction, teachers adapted strategies, skills and content in order to help their students to understand the curriculum. The goal of ‘fostering an understanding’ permeates all of their adaptations. Their most frequent adaptations made in order to help students to foster an understanding were to “invent an example or metaphor” or to “change the means by which they met their lesson’s objectives.” Whereas previous thoughtfully adaptive teaching studies also found these adaptations to be the most commonly used, this study found a higher frequency of these modifications. When examining the nature of their adaptations within these two categories, I noticed a variety of different purposes for making each type of adaptation.

Teachers often used a metaphor or an example to expand students’ understanding; at other times, teachers adapted to clear up a misunderstanding or to reinforce a basic skill. For example, Ms. Kaley described incorporating the use of a graphic organizer in order for students to determine relevant information from the text and their own life. When asked why she made this modification, she said, “I want them to understand this skill in a context other than just a reading passage.” Similarly, another adaptation, coded as ‘invents an example or metaphor,’ occurred when she included a discussion on the underlying meaning of words during a lesson on idioms. When asked why she adapted in this way, she said, “I picked up on what students were saying and wanted to go through different examples . . . so they would understand.” She used adaptations within this category for different purposes.

Teachers also used adaptations within the other common adaptation category for different purposes. For example, Ms. Baker changed the means by which she approached

her objective by using different comprehension strategies. When asked why she made this adaptation, she said, “I want them (my students) to be able to go beyond that and apply it to other situations—other things that they read or hear about.” She modified the lesson so in order for her students to make connections beyond the curriculum. However, within the same category, she helped students to make connections by using context clues. When asked why she made this adaptation, she responded, “That just popped up . . . and I am glad it did because using that skill will help in understanding words.” Even though both adaptations were within the same category, they served markedly different purposes and demonstrate the different ways by which teachers help their students to make connections to the curriculum.

In this study, both teachers expressed ‘making general connections among the curricula’ as a core aspect of their vision. Because visioning brings together “hot” cognitive dimensions-teacher’s ‘passions, hopes, cares, and dreams with their knowledge about how and what children should be learning,’ visioning has been linked to adaptive teaching (Duffy, 2002; Hammerness, 2001, 2006). Such a finding seems consistent with what is known about visioning-teachers with visions are ‘effective’ and often able to “adjust, modify, and invent: they do not emulate” (Duffy, 2002, p. 333). The findings from this study provide moderate support for these claims and underscore the complexity associated with efforts to understand why teachers adapt as they do. I use the term ‘moderate’ because both teachers used general descriptions when describing their visions.

As researchers have found, fostering a sense of agency in students may promote students’ interest in learning (Basu et al., 2009; Daneilewicz, 2001; Davies, 1990). In this

study, however, there is little evidence to support a relationship between thoughtfully adaptive teaching and student agency. A possible reason for this may be the way in which I defined agency. That is, I suggested agency may exist as a student-generated alternative curriculum, rather than the ‘promoted’ curriculum of which the teachers in this study currently taught. Perhaps examining agency within teacher directed activities within the traditional would allow for a more meaningful relationship between thoughtful adaptations and agency.

In summary, this study found more adaptations than in earlier studies. It appears as if the selection of high potential teachers from within a district with less emphasis on high stakes testing is linked to the number of thoughtfully adaptations during instruction. As compared to earlier studies, the on-the-fly adaptation categories-invent example or metaphor, changes by which objectives were met were also the most common types. This study’s teachers’ most common rationales while on-the-fly included changing the means by which objectives were met in order to help students make connections. Teachers’ most common adaptations during planning were: change from “past experiences” and “instructional strategies.” Their rationales during this phase of instruction were primarily based on metacognitive responses; their knowledge of their students and practices to make connections in and outside of the curriculum. The findings suggest a moderate and general link to visioning and no link to student agency.

### **Implications**

Research suggests that those teachers who adapt their instruction are “exemplary and highly effective” (Allington & Johnston, 2002). Undoubtedly, schools want their



teachers to be exemplary; thereby promoting thoughtfully adaptive instruction is essential. Previous thoughtfully adaptive teaching studies which were conducted in classrooms where teachers were required to follow scripted reading programs, resulted in relatively few examples of teachers teaching in thoughtfully adaptive ways. In comparison, this study was conducted within a district which placed minimal emphasis on testing and more thoughtful adaptations were discovered. In order to confirm the importance of these teachers' adaptations, they need to be related to students' academic performances.

Whether adaptations are a significant phenomenon will be determined by their association with students' outcome measures. For example, perhaps certain adaptations are more related to students' achievement than are others. Or perhaps it is not the type or number of adaptations, but the thoughtfulness of the teacher's rationale. If thoughtfully adaptive teaching is linked to other student outcomes, it becomes necessary then to determine whether the quality of teachers' adaptations, the extent to which they are metacognitive, is connected to these outcomes as well. While teachers' rationales for their adaptations were not rated according to their thoughtfulness (as was done in previous TAT studies), teachers' comments reinforce the need for researchers to continue with efforts in this area. Some of the teachers of this study were deeply metacognitive in their rationales about their adaptations. Quite often, teachers' rationales for their adaptations demonstrated their concern to differentiate to meet students' different needs and interests. Several other comments showed similar levels of thoughtfulness.

Researchers need to develop a way to evaluate the sophistication of this phenomenon if we are to understand both the quantity and quality of teachers' adaptations.

Given the finding that 'making connections among the curricula' was a finding within this study, perhaps examining the benefits of thoughtfully adaptive teaching beyond test scores may also be necessary. Research on belonging suggests that affording students with opportunities to make connections in and outside of school significantly increases the likelihood of students becoming vested and interested in the learning process (Brophy, 2009; Faircloth, 2009; Hamm & Faircloth, 2005). Because teachers in this study wanted to promote understanding by relating learning opportunities across and outside of the curriculum for their students, it would seem logical to incorporate belonging measures in future studies.

Similarly, although agency was not found in this study, perhaps it is necessary to examine this within the promoted school curriculum. That is, if teachers are 'making connections' successfully in their classroom, then intuitively, students should be taking more control of their learning. Perhaps if I had examined agency within the teacher directed activities, I may have found more examples of students participating agentially within their classroom and a deeper understanding of 'making connections' could be attained.

In sum, intuitively, the idea of thoughtfully adaptive teaching should promote student learning. Since testing is part the school culture, examining thoughtfully adaptive teaching and its relationship to other outcomes such as test scores may be essential. Given that the teachers within this study emphasized 'making connections' in their

rationales, thoughtfully adaptive teaching may be connected to broader outcomes such as (belonging and agency).

### **Future Studies**

High potential teachers, who teach in school districts where there is less emphasis on testing, appear to make more adaptations than those in districts where scripted materials are mandated. When school districts place minimal emphasis on testing and promote unscripted curricula, teachers appear to make more thoughtful adaptations based on students' instructional needs. In light of this, future thoughtfully adaptive teaching studies should examine the relationship between novice teachers and districts that place a minimal emphasis on testing.

Teachers, who teach with a vision in mind, work toward their 'ideal image' of their classroom; adapting materials and their instruction based on the needs of their students. This study found a moderate connection to thoughtfully adaptive teaching and visioning. Such a finding, however, was indirect because teachers did not spontaneously state that any of their adaptations were directly related to their vision. Moreover, their visions were quite general and lacked the specificity needed to link them to a particular adaptation or outcome. As implied by Hammerness (2001), perhaps teachers' who have clear visions are able to better articulate their reasons for adapting-which may indicate that by articulating one's vision, they may be more likely reflect metacognitively about their adaptations. More support is needed in future studies to examine the potential relationship between thoughtfully adaptive teaching and visioning. If it is determined that visioning can be defined more specifically and is related to thoughtfully adaptive

teaching, then schools should promote teacher visioning through professional workshops and other educational opportunities.

Teachers provided metacognitive responses during planning and instruction about using their knowledge of students and their classroom in order to teach strategies and to make connections for their students. The underlying goal of their adaptations served the same purpose—teachers acted metacognitively to improve their students' learning. These findings support the claim that teachers are reflective, flexible professionals, adjusting their practice to meet the needs of diverse learners (Williams & Baumann, 2008). It follows then, that continuing to examine the reasons why teachers make adaptations during different phases of instruction would further enhance practices which would help to develop teachers' ability to teach in thoughtfully adaptive ways.

Future studies should continue to examine districts with minimal emphasis on testing. Intervention studies should be conducted in order to develop other metacognitive dimensions (aspirations, hopes) and how this may relate to thoughtfully adaptive teaching. Additionally, it may be necessary to develop a way in which to examine these dimensions. By examining adaptations and how they relate to teacher's metacognitive thought processes, future insight may be attained particularly in order to understand the relationship between student outcomes and thoughtful adaptations.

Finally, future studies should examine the relationship between the kinds of tasks teachers plan and how these relate to thoughtfully adaptive teaching. It may be necessary to conduct an intervention study with teachers to develop specific tasks related to

learning centered opportunities. Additional insight about the ways in which teachers adapt may be obtained by conducting an intervention study.

### **Conclusion**

While previous research has suggested the importance of teachers being thoughtfully adaptive, there has been no empirical evidence to support this claim. The current study differed from previous thoughtfully adaptive teaching efforts by including expert teachers, moving to a district with less emphasis on accountability outcomes, focusing on planning as well as on-the-fly adaptations, and including a student outcome measure. When compared to previous studies, teachers in this study thoughtfully adapted three to four more times while on-the-fly. Moreover, they adapted during planning but at a far less frequent rate. Minimal evidence was found for the influence of visioning and no evidence was found for the connection between thoughtful adaptations and student agency. This study's findings suggest the need for future research to look at the connections between teachers' adaptations and various student outcome measures.

## REFERENCES

- Achinstein, B., & Ogawa, R. T. (2006). (In)fidelity: What the resistance of new teachers reveals about professional principles and prescriptive educational policies. *Harvard Educational Review, 76*(1), 30–63.
- Allington, R. L. & Johnston, P. (2002). *Reading to learn: Lessons from exemplary fourth-grade classrooms*. New York: Guilford Press.
- Anders, P. L., & Pearson, P. D. (1984). Instructional research on literacy and reading: Parameters, perspectives, and predictions. In R. J. Tierney, P. L. Anders, & J. N. Mitchell (Eds.), *Understanding readers' understanding: Theory and practice* (pp. 307-321). Hillsdale, NJ: Erlbaum.
- Anders, P. L., & Richardson, V. (1991). Research directions: Staff development that empowers teachers' reflection and enhances instruction. *Language Arts, 68*(4), 316-321.
- Bandura, A. (1989). Perceived self-efficacy in the exercise of personal agency. *The Psychologist: Bulletin of the British Psychological Society, 2*, 411-424.
- Bandura, A. (1991). Self-regulation of motivation through anticipatory and self-regulatory mechanisms. In R. A. Dienstbier (Ed.), *Perspectives on motivation: Nebraska symposium on motivation* (Vol. 38, pp. 69-164). Lincoln: University of Nebraska Press.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52*, 1-26.
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (2001). Self-efficacy beliefs as shapers of children's aspirations and career trajectories. *Child Development, 72*(1), 187-206.
- Basu, S., Calabrese Barton, A., Clairmont, N., & Locke, D. (2009). Developing a framework for critical science agency through case study in a conceptual physics context. *Cultural Studies of Science Education, 4*, 345-371.
- Berk, L. E. (2003). *Child development*. Boston, MA: Allyn and Bacon.
- Berliner, D. (1987). *Educator's handbook: A research perspective*. New York: Longman.

- Bogner, K., Raphael, L., & Pressley, M. (2002). How grade 1 teachers motivate literate activity by their students. *Scientific Studies of Reading, 6*(2), 135-165.
- Borko, H., Cone, R., Russo, N. A., & Shavelson, R. J. (1979). Teachers' decision making. In P. L. Peterson & H. J. Walberg (Eds.), *Research on teaching* (pp. 136-160). Berkeley, CA: McCutchan.
- Bromme, R. (1982). *How to analyze routines in teachers' thinking processes during lesson planning*. Paper presented at the annual meeting of the American Educational Research Association, New York.
- Brophy, J. (1999). Research on Motivation in education: past, present and future. In T. C. Urdan (Ed.), *The Role of Context: Advances in achievement and motivation* (pp. 1-44). Stamford: JAI.
- Brophy, J. (2008). Developing students' appreciation for what is taught in school. *Educational Psychologist, 43*(3), 132-141.
- Brophy, J. (in press). *Motivating students to learn* (3rd ed.). New York: Taylor & Francis.
- Brown, R. (2009). Teaching for social justice: Exploring the development of students agency through participation in the literacy practices of a mathematics classroom. *Journal of Math Teacher Education, 12*, 171-185.
- Calabrese Barton, A., & Ortiz, L. (2008). Co-opting science: Transforming engagement in science. In A. J. Rodriguez (Ed.), *The multiple faces of agency: Innovative strategies for effecting change in urban schools*. (pp. 193-214). Rotterdam, Netherlands: Sense Publishers.
- Calderhead, J. (1981). A psychological approach to research on teachers' classroom decision making. *British Educational Research Journal, 7*(1), 51-57.
- Clark, C. M., & Elmore, J. L. (1981). *Transforming curriculum in mathematics, science, and writing: A case study of teacher yearly planning*. East Lansing, Michigan State University, Institute for Research on Teaching.
- Clark, C. M., & Petersen, P. C. (1978). Teachers' reports of their cognitive processes during teaching. *American Educational Research Journal, 15*(4), 555-565.
- Clark, C. M., & Peterson, P. C. (1986). Teachers thought process. In M. C. Whitrock (Eds.), *Handbook of research on teaching* (3rd ed.). New York: MacMillian.

- Clark, C., & Yinger, R. (1979). *Three studies of teacher planning*. (Research series no. 55). East Lansing, MI: Michigan State University, Institute for Research on Teaching.
- Cochran-Smith, M., & Lytle, S. L. (2006). Troubling images of teaching in No Child Left Behind, *Harvard Educational Review*, 76(4), 668–697.
- Cone, R. (1978, March). *Teachers' decisions in managing student behavior: A laboratory simulation of interactive decision-making by teachers*. Paper presented at the annual meeting of the American Educational Research Association, Toronto, Ontario.
- Corno, L. (2008). On teaching adaptively. *Educational Psychologist*, 43(3), 161-173.
- Danielewicz, J. (2001). *Teaching selves: Identity, pedagogy and teacher education*. New York: State University of New York Press.
- Darling-Hammond, L., & Baratz-Snowden, J. (Eds.). (2005). *A good teacher in every classroom*. San Francisco: Jossey-Bass.
- Davies, B. (1990). Agency as a form of discursive practice. A classroom scene observed. *British Journal of Sociology of Education*, 11(3), 341-361.
- Deci, E. L., & Ryan, R. E. (1994). Promoting self-determined education. *Scandinavian Journal of Educational Research*, 38(1), 3-14.
- Donley, J. (1991). The relationship between reader-response pedagogy and adolescent development. *Contemporary Issues in Reading*, 6(2), 87-93.
- Doyle, W. (1983). Academic work. *Review of Educational Research*, 53(2), 159-199.
- Doyle, W. (1986). Classroom organization and management. In M. C. Wittrock (Ed.), *Handbook of research and teaching*, 392-431. New York: MacMillan Publishing.
- Duffy, G. G. (1997). Powerful models or powerful teachers? An argument for teacher-as-entrepreneur. In S. Stahl & D. Hayes (Eds.), *Instructional models in reading* (pp. 351-367). Mahwah, NJ: Lawrence Erlbaum.
- Duffy, G. G. (2002). Visioning and the development of outstanding teachers. *Reading Research and Instruction*, 41, 331-344.
- Duffy, G. G. (2005). Metacognition and the development of reading teachers. In C. Block, S. Israel, K. Kinnucan-Welsch, & K. Bauserman (Eds.), *Metacognition and literacy learning* (pp. 299-314). Mahwah, NJ: Lawrence Erlbaum.



- Duffy, G. G., & Hoffman, J. V. (1999). In pursuit of an illusion: The flawed search for a perfect method. *Reading Teacher*, 53(1), 10-17.
- Duffy, G. G., Miller, S. D., Kear, K. A., Parsons, S. A., Davis, S. G., & Williams, J. B. (2008). Teachers' instructional adaptations during literacy instruction. In Y. Kim, V. J. Risko, D. L. Compton, D. K. Dickinson, M. K., Hundley, R. T. Jimenez, K. M. Leander, & D. W. Rowe (Eds.), *57<sup>th</sup> Yearbook of the National Reading Conference* (pp. 160-171). Oak Creek, WI: National Reading Conference.
- Duffy, G. G., Miller, S. D., Parsons, S. A., & Meloth, M. (2009). Teachers as metacognitive professionals. In D. J. Hacker, J. Dunlosky, & A. C. Graesser (Eds.), *Handbook of metacognition in education* (pp. 240-256). Mahwah, NJ: Lawrence Erlbaum.
- Duffy, G. G., Roehler, L. R., & Putnam, J. (1987). Putting the teacher in control: Basal reading textbooks and instructional decision making. *The Elementary School Journal*, 87(3), 357-366.
- Duffy, G., Webb, S., Kear, K., Leiphart, R., Parsons, S., & Miller, S. (2006, December). *Does thoughtfully adaptive teaching exist? First steps in a longitudinal study of literacy teaching and literacy education*. A paper presented at the National Reading Conference, Los Angeles.
- Flores Duenas, L. (2005). Lessons from la maestro Miriam: Developing literate identities through early critical literacy teaching. *Journal of Latinos and Education*, 4(4), 237-251.
- Fuhrman, S. H., & Elmore, R. F., (1994). Education professionals and curriculum governance. In R. F. Elmore & S. H. Fuhrman (Eds.), *The governance of curriculum: 1994 yearbook of the Association for Supervision and Curriculum Development* (pp. 210-215). Alexandria, VA: Association for Supervision and Curriculum Development.
- Gamse, B. C., Jacob, R., & Horst, M. (2008). Reading first impact study final report: Executive summary. NCEE 2009-4039. *National Center for Education Evaluation and Regional Assistance*, 1-20.
- Garcia, T., & Pintrich, P. R. (1994). Regulating motivation and cognition in the classroom: The role of self-schemas and self-regulatory strategies. In D. H. Schunk & B. J. Zimmerman (Eds.), *Self-regulation of learning and performance: Issues and educational applications* (pp. 127-153). Hillsdale, NJ: Lawrence Erlbaum.

- Greene, M. (1991). Teaching: The question of personal reality. In A. Lieberman & L. Miller (Eds.), *Staff development for education in the 90's: New demands, new realities, new perspectives* (pp. 3-14). New York: Teachers College Press.
- Fairbanks, C. M., Duffy, G. G., Faircloth, B. S., He, Y., Levin, B., Rohr, J., & Stein, C. (2010). Beyond knowledge: Exploring why some teachers are more thoughtfully adaptive than others. *Journal of Teacher Education, 61*(2), 161-171.
- Faircloth, B. S. (2009). Making the most of adolescence: Harnessing the search for identity to understand classroom belonging. *Journal of Adolescent Research, 24*, 321-348.
- Feiman-Nemser, S. (2001). From preparation to practice: Designing a curriculum to strengthen and sustain teaching. *Teacher's College Record, 103*, 1013-1055.
- Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *American Psychologist, 34*, 906-911.
- Flavell, J. H. (1987). Speculations about the nature and development of metacognition. In F. E. Weinert & R. H. Kluwe (Eds.), *Metacognition, motivation, and understanding*. Hillsdale, NJ: Lawrence Erlbaum.
- Flum, H., & Kaplan, A. (2006). Exploratory orientation as an educational goal. *Educational Psychologist, 41*(2), 99-110.
- Garan, E. M. (2004). *In defense of our children: When politics, profits, and education collide*. Portsmouth, NH: Heinemann.
- Giddens, A. (1979). *Central problems in social theory*. Berkeley, CA: University of California Press.
- Greene, M. (1988). *The dialectic of freedom*. New York: Teachers College Columbia University.
- Hacker D. J., Dunlosky J., & Graesser, A. C. (Eds.). (2009). *Handbook of metacognition in education*. Mahwah, NJ: Erlbaum
- Hamm, J. V., & Faircloth, B. S. (2005). The role of friendship in adolescents' sense of school belonging. *New Directions for Child & Adolescent Development, 107*, 61-78.
- Hammerness, K. M. (2001). Teachers' visions: The role of personal ideals in school reform. *Journal of Educational Change, 2*, 143-163.

- Hammerness, K. M. (2006). *Seeing through teachers' eyes: Professional ideals and classroom practices*. New York: Teachers College Press.
- Hill, J., & Martin, W. R. (1971). Training for educational decision making. *Journal of Teacher Education*, 22(4), 443-447.
- Hoffman, J. V. & Pearson, P. D. (2000). Reading teacher education in the next millennium: What your grandmother's teacher didn't know that your granddaughter's teacher should. *Reading Research Quarterly*, 35, 28-44.
- Hogan, K., & Pressley, M. (Eds.). (1997). *Scaffolding student learning: Instructional approaches and issues*. Cambridge, MA: Brookline Books.
- Holland, D., Lachiotte, W., Skinner, D., & Cain, C. (1998). *Identity and agency in cultural worlds*. Cambridge, MA: Harvard University Press.
- Inden, R. (1990). *Imagining India*. Oxford: Blackwell.
- International Reading Association. (2003). *Prepared to make a difference: Research evidence on how some of America's best college programs prepare teachers of reading*. Newark, DE: International Reading Association.
- Joyce, B. (1978). Toward a theory of information processing in teaching. *Educational Research Quarterly*, 3, 66-67.
- Joyce, B. R., & Harootunian, B. (1964). Teaching as problem solving. *Journal of Teacher Education*, 15(4), 420-427.
- Kear, K. A. (2009). *Beginning teachers' rationales for adaptive decisions about text use*. Unpublished doctoral dissertation, The University of North Carolina at Greensboro.
- Lampert, M. (1985). Mathematics learning in context: The voyage of the Mimi. *Journal of Mathematical Behavior*, 4, 157-167.
- Lave, J., & Wenger, E. (1991) *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.
- Lin, X., Schwartz, D. L., & Hatano, G. (2005). Toward teacher's adaptive metacognition. *Educational Psychologist*, 40(4), 245-255.
- Maloch, B. (2002). Scaffolding student talk: One teacher's role in literature discussion groups. *Reading Research Quarterly*, 37(1), 94-112.

- Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, *41*(9), 954-969.
- Maxwell, A. J. (2004). *Qualitative research design: An interactive approach*. Thousand Oaks, CA: Sage Publications.
- McCombs, B. L., Daniels, D. H., & Perry, K. E. (2008). Children's and teachers' perceptions of learner-centered practices, and student motivation: Implications for early schooling. *The Elementary School Journal*, *109*(1), 16-35.
- McCutcheon, G. (1980). How do elementary school teacher's plan? The nature of planning and influences on it. *The Elementary School Journal*, *81*(1), 4-23.
- Miller, S. D., Heafner, T., & Massey, D. (2009). High-school teachers' attempts to promote self-regulated learning: "I may learn from you, yet how do I do it?" *The Urban Review*, *41*(2), 121-140.
- Miller, S. D., & Meece, J. L. (1999). Third graders' motivational preferences for reading and writing tasks. *Elementary School Journal*, *100*, 19-35.
- Miller, S. D., Parsons, S. A., Duffy, G. G., Webb, S., Leiphart, R. Q., & Kear, K. (2006, December). *Teacher education effectiveness and the development of thoughtfully adaptive teachers of literacy*. Symposium conducted at the annual meeting of the National Reading Conference, Los Angeles, California.
- Milosovic, S. (2007). Building a case against scripted reading programs: A look at NCLB Reading First Initiative's impact on curriculum choice. *Education Digest*, 27-30.
- Mintz, S. L. (1979). *Teacher planning: A simulation study*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, California.
- Morine-Dersheimer, G. (1979). Teachers' conceptions of pupils—an outgrowth of instructional context: The South Bay Study, Part 3. Michigan State University, Institute for Research on Teaching. *Research Monograph*, 59.
- National Center for Education Statistics (NCES). (1998). *Projection of education statistics to 2008*. Washington, DC: National Center for Education Statistics.
- Nias, J. (1989). *Primary teachers talking: A study of teaching as work*. London: Routledge.
- Oakeshott, M., & Fuller, T. (2001). *The voice of liberal learning*. Indianapolis, IN: Liberty Fund.

- Oakeshott, M., & Fuller, T. (1989). *The voice of liberal learning: Michael Oakeshott on education*. New Haven, CT: Yale University Press.
- Oldfather, P., & Dahl, K. (1994). Toward a social constructivist reconceptualization of intrinsic motivation for literacy learning. *Journal of Reading Behavior*, 26(2), 139-158.
- Paris, C., & Lung, P. (2008). Agency and child-centered practices in novice teachers: Autonomy, efficacy, intentionality, and reflectivity. *Journal of Early Childhood Teacher Education*, 29(3), 253-268.
- Parsons, S. A. (2008). *Case studies of four teachers: The openness of the tasks they implement, the adaptations they make, and the rationales they offer for adapting*. Ph.D. dissertation, The University of North Carolina at Greensboro, North Carolina.
- Parsons, S. A., Davis, S. G., Scales, R. Q., Williams, J. B., & Kear, K. (2010). How and why teachers adapt their literacy instruction. In S. Szabo, M. B. Sampson, M. Foote, & F. Falk-Ross (Eds.), *Mentoring literacy professionals: Continuing the spirit of CRA/ALER after 50 years* (Vol. 31, pp. 221-236). Commerce, TX: Association of Literacy Educators and Researchers.
- Peterson, P. L., Marx, R. W., & Clark, C. M. (1978). Teacher planning, teacher behavior, and student achievement. *American Educational Research Journal*, 15, 417-432.
- Pressley, M. (2006). *Reading instruction that works: The case for balanced teaching* (3rd ed.). New York: Guilford Press.
- Pressley, M., Wharton-McDonald, R., Hampston, J., & Echevarria, M. (1998). The nature of literacy instruction in ten grade—4/5 classrooms in upstate New York. *Scientific Studies of Reading*, 2, 159-194.
- Putnam, J., & Duffy, G. (1984). *A descriptive study of the pre-active and interactive decision making of an expert classroom teacher*. Research series No. 148. East Lansing, MI: Michigan State University, Institute for Research in Teaching.
- Rodriguez, A. J., Zozakiewicz, C., & Yerrick, R. (2008). Students acting as change agents in culturally diverse schools. In A. J. Rodriguez (Ed.), *The multiple faces of agency: Innovative strategies for effecting change in urban school contexts* (pp. 47-77). Rotterdam, Netherlands: SENSE Publishing.
- Rohr, J. P. (2005). *The examination of prospective teachers' initial and developing vision*. Unpublished doctoral dissertation. University of North Carolina at Greensboro.

- Romano, M. E. (2006). "Bumpy moments" in teaching: Reflections from practicing teachers. *Teaching and Teacher Education*, 22, 973-985.
- Rosaen, C. L., & Schram, P. (1998). Becoming a member of the teaching profession: Learning a language of possibility. *Teaching and Teacher Education*, 14(3), 283-303.
- Roth, M. (2008). Agency and passivity. In A. J. Rodriguez (Ed.), *Multiple faces of agency: Innovative strategies for effecting change in urban school contexts* (pp. 136-161). Los Angeles, CA: Sense Publishers.
- Scales, R. (2009). *Teaching adaptations as they are related to academic task and student engagement*. Doctoral Dissertation, The University of North Carolina at Greensboro.
- Schunk, D. H. (1990). Goal setting and self-efficacy during self-regulated learning. *Educational Psychologist*, 25, 71-86.
- Sexton, D. M. (2008). Student teacher negotiating identity, role, and agency. In T. Nelson, G. J. Brunetti, & B. Levin (Eds.), *Teacher identity as a useful frame for study and practice of teacher education* (pp. 73-88). San Francisco, CA: Caddo Gap.
- Sharma, A. (2008). Making (electrical) connections: Exploring student agency in a school in India. *Science Education*, 92(2), 297-319.
- Shavelson, R. J. (1983). Review of research on teachers' pedagogical judgments, plans, and decisions. *The Elementary School Journal*, 83, 392-413.
- Shavelson, R. J., & Stern, P. (1981). Research on teachers' pedagogical thoughts, judgments, decisions and behavior. *Review of Educational Research*, 51(4), 455-498.
- Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1), 1-22.
- Shulman, L. S. & Shulman, J. (2004). How and what teachers learn: A shifting perspective. *Journal of Curriculum Studies*, 36, 257-271.
- Supovitz, J. A. (2009). Can high stakes testing leverage educational improvement? Prospects from the last decade of testing and accountability. *Journal of Educational Change*, 10(2), 211-227.

- Sutcliffe, J., & Whitfield, R. (1976). Decision making in the classroom: An initial report. *Research Intelligence*, 2(1), 14-19.
- Taylor, P. H. (1970). *How teachers plan their courses*. Slough, England: National Foundation for Educational Research in England and Wales.
- Taylor, B. M., Pearson, P. D., Peterson, D. S., & Rodriguez, M. C. (2003). Reading growth in high poverty classrooms: The influence of teacher practices that encourage cognitive engagement in literacy learning. *The Elementary School Journal*, 104(1), 3-28.
- Tobin, K. (2009). Research priorities for transforming urban science education. In W. M. Roth & K. Tobin (Ed.), *The world of science education: Handbook of research in North America* (Vol. 1, pp. 451-472). Rotterdam: Sense Publishers.
- Turner, J. D. (2007). Beyond cultural awareness: prospective teachers' visions of culturally responsive literacy teaching. *Action in Teacher Education*, 29(3), 12-24.
- Valencia, S., Place, N. A., Martin, S. D., & Grossman, P. L. (2006). Curriculum materials for elementary reading: shackles and scaffolds for four beginning teachers. *Elementary School Journal*, 107(1), 93-121.
- Van Manen, M. (1977). Linking ways of knowing with ways of being practical. *Curriculum Inquiry*, 6(3), 205-228.
- Van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. Albany, NY: State University of New York.
- Vygotsky, L. S. (1978) *Mind in Society*. Cambridge, MA: Harvard University Press.
- Watanabe, M. (2008). Tracking in the era of high stakes state accountability reform: Case studies of classroom instruction in North Carolina. *Teachers College Record*, 110(3), 489-534.
- Watanabe, G., & Ramsey, S. (1999). *The practice of personal leadership in the SIIC intern program*. Unpublished paper. Spokane, WA: Whitworth College.
- Wenger, E. (1998). *Communities of practice*. Cambridge: Cambridge University Press.
- Williams, T. L., & Baumann, J. F. (2008). Contemporary research on effective elementary literacy teachers. In Y. Kim, V. J. Risko, D. L. Compton, D. K. Dickinson, M. K. Hundley, R. T. Jimenez, K. M. Leander, & D. W. Rowe (Eds.), *57<sup>th</sup> Yearbook of the National Reading Conference* (pp. 357-372). Oak Creek, WI: National Reading Conference.

- Yinger, R. J. (1979). Routines in teacher planning. *Theory into Practice, 18*(3), 163-169.
- Yinger, R. J. (1980). A study of teacher planning. *Elementary School Journal, 80*, 107-127.
- Zimmerman, B. J. (1989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology, 81*(3), 329-339.
- Zimmerman, B. J. (2001). Theories of self-regulated learning and academic achievement: An overview and analysis. In B. J. Zimmerman, & D. H. Schunk (Ed.), *Self-regulated learning and academic achievement: Theoretical perspectives* (pp. 1-65). Mahwah, NJ: Lawrence Erlbaum.
- Zohar, A. (2006). The nature and development of teachers' metastrategic knowledge in the context of teaching higher order thinking. *Journal of the Learning Sciences, 15*(3), 331-337.
- Zahorik, J. (1975). A. Teachers' planning models. *Educational Leadership, 33*, 134-139.



## Appendix A

### Pre-Study Interview Protocol

**Introduction:** Thoughtfully adaptive teaching is the way teachers change their teaching to meet students' needs. We are doing a study to try and learn about how to help students learn more.

**Instructional practices:**

How do you normally teach (reading, reading comprehension, science and literacy)?

What kinds of materials do you use to teach these subjects?

What kinds of methods do you use to teach the subject?

**Visioning:**

1. Why did you become a teacher? What is it that you really want to accomplish?
2. What are the big goals you are trying to accomplish as a teacher?
3. What do you want your students to learn?
4. What do you want them to become?

Is this your vision? Can you tell me about your vision? *Do you share your vision with your kids? If so, how?*

5. How do you attempt to enact your vision? Give me an example.
6. Can you give me an example of a lesson you taught in the past that was designed to enact your vision? What methods did you use to accomplish this?
7. What do you look for in students which indicate they are “getting” your vision?

8. Is there ever a time when you intentionally decide NOT to enact your vision?

When? Why?

**Obstacles:** What would be helpful for us to understand about your teaching context?

- a. Can you tell me about your class?
- b. What part of your vision are you able/unable to enact at this time?
- c. Are there obstacles in your school environment that make it difficult for you to teach the way you'd prefer to teach? What are they? What is the way you want to teach?
- d. How do you deal with such obstacles?
- e. Does your school have rules you must follow when teaching reading?  
Examples? What do you do?
- f. Are you able to do what you want to do in your classroom/ school?

## **Appendix B**

### **Pre Planning Interview Protocol**

To help me understand what I will be observing in your lesson tomorrow, I need to ask a few questions about what you will be teaching.

1. What are you planning to teach today?
  - a. What is it you want students to be able to do and know?
  - b. What instructional strategy are you using?
  - c. Why is it important to do today's lesson?
2. Is what you're doing today in any way a change . . .
  - a. in terms of a modification of district or school requirements?
  - b. in terms of a modification in what the materials suggested to do?
  - c. in terms of how you have done this kind of lesson in the past?
  - d. in terms of your instructional strategies?
3. If so, why did you make this change?

## **Appendix C**

### **Student Interview Protocol**

1. What have you been learning in reading? When would you use that?
2. How important is it to learn this (on a 1-10 scale). Why is it important?
3. How well do you think you are doing during reading?
4. What do you think your teacher thinks is the most important thing to learn in reading?
5. How often do you get to decide what to learn about in reading?
6. During reading, did you have a chance to do something you wanted to learn about?
7. Who are the good readers in your class? Why? What kind of reader are you? Why?
8. Can you tell me about a time while in class you got to learn about things that you were interested in?