Mindfulness in Education: Case Studies of Mindful Teachers

and Their Teaching Practices

Christine E. Sherretz University of Louisville

Introduction

For generations, educational philosophers, parents, business people, and practitioners have argued that public schools promote mindless standardization that stifles creativity, curiosity, and enthusiasm for learning. Dewey (1933) argued that schools try to instill uniformity and therefore rule out wonder. As a result, schools are not energetic and vital. Along that same line, Whitehead (1929) stated that schools were dominated by routine and teaching of "...inert ideas that are merely received into the mind without being utilized, or tested, or thrown into fresh combinations" (p. 1). This view prevailed later in the century as Silberman (1970) wrote that "...what is mostly wrong with schools and colleges is mindlessness" (p. 36) and Gardner (1983) argued that most schools never go beyond rote memorization and the superficial learning of facts. More recently, Eisner (2005) argued that too much time is spent on test preparation instead of focusing on meaningful activities that can be intrinsically motivating to students.

The opposite of mindlessness is mindfulness. Mindfulness is a more expansive view of intelligence. Ritchhart (2002) and Schlinger (2003) have stated that since the 20th century, intelligence has been conceptualized from a psychometric perspective that stresses the presence of specific abilities, skills, and processing capabilities. Intelligence is measured with predicted outcomes that separate those with more ability from those with less ability. Langer (1992) stated that mindfulness should not be confused

with the psychometric views of intelligence that are linear and move from problems to solutions and from questions to answers.

The capacity to resolve problems as measured in terms of cognitive speed has served as the standard definition of intelligence (Eysenck, 1987; Jensen, 1982; Spearman, 1927; Sternberg, 1980). Brown and Langer (1990) stated that mindfulness is purposefully not linear; it asserts that problems and resolutions should be viewed from several vantage points with several possible outcomes. Langer (1989) stated that mindfulness is a process in which an individual views one situation from several perspectives. Instead of moving in a linear fashion from question to answer, the mindful individual seeks out other vantage points to view the problem. This in turn may raise additional questions and scenarios.

Brown and Langer (1990) described four main distinctions between intelligence and mindfulness. First, intelligence requires the individual to correspond reality to one optimal fit between the individual and the environment, whereas mindful individuals identify several possible perspectives from which any situation can be viewed. Second, intelligence is a linear process that moves from problem to resolution as quickly as possible in order to achieve a specific desired outcome. In comparison, mindfulness is a process in which the individual steps back from the perceived problem and perceived solutions in order to view the situation in a new and novel way. Therefore, meaning is given to the outcomes through the process. Third, intelligence is developed from an expert's perspective that focuses on stable categories of information, whereas mindfulness is developed from more of an actor's perspective. The mindful individual will experience and view perspectives and information as shifting and unstable while they seek personal and professional control. Lastly, intelligence depends on the ability to remember facts and cognitive skills, whereas mindfulness depends on the fluidity of knowledge and cognitive skills.

Over the past two decades, experimental studies provided the foundation for the theory of mindfulness (Langer, 1989). According to these studies, giving people more choices, offering different perspectives, and giving alternative forms of instruction can promote mindfulness. Liberman and Langer (1995) found that individuals had greater recall of details in a story after reading a text from different perspectives. Nursing home patients experienced increased physical and mental engagement when given choices (Langer & Rodin, 1976), and children were more open and less prejudiced after exploring different possibilities for handicapped individuals (Langer, Bashner, & Chanowitz, 1985).

In another study, Liberman and Langer (1997) found that presenting information from multiple perspectives produced better writing performance by students. For example, when introducing a history lesson, one could say, "Here are three reasons for the Civil War from the perspective of a Northern landowner" versus "Here are the three reasons for the Civil War." In the study, students learned information presented from different perspectives better, even though they had to learn more information.

Clearly, prior research provides evidence that mindful teaching practices can have a pronounced positive effect on student learning. Less available, however, are detailed and descriptive accounts of mindful teaching in practice. The research provides examples of teacher identified mindful techniques. Readers are challenged to reflect upon the teaching strategies and consider mindfulness as useful teaching dispositions that should be fostered. This research provides such descriptions as shown by three elementary teachers identified as mindful and then challenges the reader to consider if mindfulness is a teaching disposition that should be fostered in teachers and students.

Method

Purpose of Study

As noted previously, a good deal of research supports the idea that, in a variety of circumstances, adults tend to interact mindlessly with the environment unless they are provoked into mindfulness (Langer, Blank, & Chanowitz, 1978; Langer & Imber, 1979). This study further delineates the construct of mindfulness as it applies to mindfulness in teaching by addressing the questions: What does it mean to be a mindful teacher? What does mindful teaching look like in practice?

Materials and Procedure

The three participants for this study taught at Eastside Intermediate School. Eastside Intermediate School is located in a city in upstate New York. Eastside houses approximately 1,009 students in grades four through six with 10 regular education teachers for each grade level. Approximately 56% of the students at Eastside qualify for free or reduced lunches, significantly above the state average of 27%. Also, 18% of the students at Eastside have Individual Evaluation Plans (IEPs), also above the state average of 15%. In the year before this study, only 58% of the students passed the state English and Language Arts tests compared to the state average of 70%. In the area of math, 80% of the students passed the state math test compared to the state average of 85%. Eastside was labeled as a "needs improvement" school and charged with implementing many curricular and instructional changes because of the No Child Left Behind mandate. I contacted local school administrators, teachers, and curriculum supervisors and asked for potential candidates. Specifically, I asked them to recommend teachers who were novel in their teaching and presented content from various perspectives. Once I had a pool of potential and willing candidates, I administered the *Langer Mindfulness Scale* (Langer, 2004) to the potential candidates in order to confirm their mindfulness as measured by the scale. The LMS is a 21-question survey based on a 7-point Likert scale. For the purposes of this study, and to be considered as a participant, teachers were considered mindful if they scored at least one standard deviation above the college sample mean, that is, at least a 121 on the LMS. The three participants scored the following: (a) Wilma 127; (b) Paula 129; and (c) Annette 137. These scores confirmed all three teachers as mindful as measured by the LMS. All three participants taught sixth grade at Eastside elementary. Wilma has taught for 10 years, Paula for seven, and Annette for 16 years.

Data were collected by taking observation field notes, interviewing the participants using conferences and interviews, and analyzing classroom documents and artifacts. Observational notes were taken over a threemonth period. The field notes consisted of detailed, concrete descriptions of what had been observed. They were written in a notebook with two columns. The left column was used to record observations by making notes, drawing maps, etc., and the right column was used to write my preliminary impressions of the observations.

Conferences and interviews were also used to collect data. Conferences were more informal than interviews and were used to give participants the opportunity to talk about the observations in which they engaged. Depending on the availability of the participants, conferences were held with each teacher after the observations. The purpose of these conferences was to ask clarifying questions regarding what happened during the observations. One structured interview with each participant was also used to collect data. There was also a content analysis of classroom handouts, assignments, homework, letters, etc. that supplemented the observations and interviews. The review of documents took place the same time as the observations.

Data were analyzed in a systematic process rooted in grounded theory. I first used open coding in which initial categories of information related to mindfulness were categorized (Creswell, 1998). After open coding, axial coding was used. Strauss and Corbin (1990) stated that the focus of axial coding involves analyzing a phenomenon in terms of its properties, explaining strategies in which the phenomenon is carried out, and describing the consequences of those strategies. This procedure was followed throughout the analysis stage.

Results

The purpose of the research was to investigate the teaching practices of mindful teachers. An analysis of data revealed four major themes that all three mindful teachers shared. They shared a process orientation rather than a response orientation, they gave students choices, the three teachers required an elaboration of thinking, and all three mindful teachers had a positive classroom atmosphere.

Process Orientation

Langer (1997) described mindful teachers as individuals who emphasize process over a response orientation. Langer (1997) contended that when students have the freedom to define the process and explore possibilities, they rid themselves of an outcome goal orientation and thus are not limited to one particular answer. This research corroborated that view.

During observations, all three teachers demonstrated their desire to see kids actively engaged in the learning process for the sake of learning and not for the sake of obtaining a particular correct answer. The teachers stressed the fun of learning and the importance of making connections with other subject areas and life in general. The two major categories of behavior that demonstrated a process orientation were (a) the emphasis on multiple answers as well as multiple paths to determine answer and (b) an emphasis on the fun of learning.

Multiple Paths to an Answer

All three teachers observed the theme of a process orientation, as opposed to a response orientation that focuses on obtaining the correct answer, on numerous occasions. All three mindful teachers consistently demonstrated this ability to look at a problem from many different perspectives. They also challenged their students to find more than one way to solve a problem even when their textbooks or standard curriculum might only show one particular linear route.

In one particular lesson taught by Annette, the students had to determine various nonstandard shapes. Annette told the students the answers to the problems and then had the students figure out various ways to solve the problems. Telling the students the answers encouraged an emphasis on the process, not on the response. Various students then came to the overhead and demonstrated different ways to solve the same problem. Annette commented, "Remember there are different paths to work out a problem."

Paula demonstrated this process orientation too. During one observation, the students were given the following problem: Seven friends

have 182 video games. What is the average number of games owned by each person? Paula first asked the students to set up the problem. One student asked Paula if she had correctly set up the problem. Paula responded, "Yes, that is one way, but you don't have to do it that way."

An Emphasis on the Fun of Learning

The process of learning was presented in a fun and engaging format. For example, Paula used games in mathematics to teach students the importance of mathematical processing and to add an element of fun to mathematics. Paula commented that using games was a conscious decision on her part because they help develop understanding of mathematical concepts. During one observation, the students played a game called the Polygon Capture Game. The students were given two sets of cards. One set had a description of an angle on it and the other card had particular shape drawn on it. For example, one card had written on it, "At least one angle is a right angle." The students had to find the shape that fit the criteria on the card. There was no particular answer key to this game, because there could have been many different answers depending on the descriptions. So instead of using an answer key, the students were told to talk about the answers to determine if the answer was correct. The students engaged in discussions and questioning during which they had to explain why their answer was correct and why the opponent's answer was not correct. The students had not merely memorized definitions for the various shapes but they were also able to explain their thinking. The game format added a fun component that intrinsically motivated the students.

Additionally, it was observed that during much of the reading instruction there were no formal teaching activities. Instead, the students engaged in book shares in which they talked with their classmates about what they read. This was the case in all three classrooms. Reading was viewed as a fun event, because there was no worksheet assigned to the task. Reading was the reward. This particular example also demonstrates how the teachers made the learning activities applicable to real life. Most adults in real life do not use comprehension worksheets. Instead, discussions, debates, and conversations are shared among individuals who have read the same book.

Giving Choices

Sixth Grade Students Explore Poetry

The theme of giving students choices was a consistent characteristic of the three mindful teachers in the study. The data suggest that giving choices increased student engagement. This finding is consistent with Langer (1997), who argued that when individuals are given choices and information is not the same the individual is forced to be observant. Langer described this as soft vigilance, in which the individual is open to more information and is more engaged. During the observations, student engagement seemed to increase when involved in a task in which they had choices.

Wilma gave her students a choice of possible books they could read for literacy groups. She placed students in groups based on their reading level. Each group went to the library and picked about four or five titles they thought might be interesting. Wilma then displayed all the books for each group and gave them the chance to decide what book the group would like to read. Each group then met with Wilma to discuss the book and review various reading skills that were pertinent to the fifth grade curriculum. After each meeting, Wilma asked the students to decide how they would respond to the book by giving them a list of possible response options. Each student was able to choose his or her response task instead of having it assigned by Wilma.

An analysis of classroom documents revealed that Annette gave options when developing assignments. For example, Annette developed a unit using the Titanic as the theme. There were over 50 projects that students could choose from to earn points for a grade. The projects were divided in a way to accommodate various learning styles and interests. Some examples included: (a) make a time-line of the important events of the voyage, (b) draw a map of the voyage, (c) pretend you are sailing on the Titanic and write an eyewitness account, (d) write a diary as if you were on board, (e) analyze the Titanic tragedy in light of the Greek myths we have studied and, (f) what could have been done to prevent the tragedy?

Besides having choices regarding instructional tasks, the students were also given choices to determine if they would work in pairs, partners, or groups. This occurred during almost every observation and seemed to be a natural and common option for students. Students were generally given options as to where they would work too. It was very common to see some students at desks, others on the floor, some at small tables, and even others outside the classroom.

During an interview with Paula, I asked her if giving choices was purposefully orchestrated or if it just flowed because of her personality. She commented:

I think it is a bit of each. Part of it is, you know, knowing the kids and knowing what they need. There are some kids in here who are pretty uncomfortable working with partners. What's my goal? I want them to accomplish X, Y, or Z, and if I put them in a situation where they're

going to shut down because they don't like the grouping, I'm going to get nothing, so yes, it's conscious.

Giving students choices was a major theme that all three mindful teachers shared. Each teacher gave choices that ranged from choosing books to read for literacy circles to choosing if they worked individually or with another person. The theme of giving choices was evident in the fact that the teachers let the students choose aspects of classroom assignments and gave choices regarding whom the student could work with and where the student could complete the work.

Elaboration of Thinking through Questioning and Modeling Metacognitive Strategies

Sixth Grade Students Explore How Decimals Are Used

Each mindful teacher encouraged and led by example the practice of elaborating her thinking. Effective questioning and modeling thinking aloud in turn encouraged students' elaboration of thinking. Wilma, Paula, and Annette requested additional details, asked for clarification of ideas, offered contrasting views, and connected new material with past learning. Elaboration of thinking was achieved when the teacher acted as a coach and provided prompts for thinking instead of telling the students the answer. During an interview with Annette, she explained that she does use questioning to get her students to articulate their thinking and elaborate on their ideas. She explained,

I say something like, can you examine this from a different angle? Can you see how this applies to something else? Does this remind you of anything else in your experience? Can you think of anything that this is related to?

She explained that phrases that teachers use that do not clearly articulate thinking frustrate her. For example,

I'll tell you my pet peeve phrase that I hate teachers to say—common sense. That is my least favorite phrase in the entire world, because I don't know what that means. What is common sense? Is it the same thing as common thinking?

Elaboration through Effective Questioning

During one lesson, Wilma worked with a student in order to get him to expand his ideas on his weekly literacy letter. The particular student was writing about the same topic every week in this literacy letter. Wilma used questioning to help the student expand his ideas. In this observed conversation, the student told Wilma that he picked the book because he liked the illustrations. Wilma then stated: Topic 14 on your literacy response sheet is about how illustrations add to the story. Would that be a possible topic you would be interested in? Have you read other books about Egyptians? You could also compare this book with another book you have read on the topic. What do you think? There are so many things you could write about in your next letter. I would be happy to work with you to get started. I just want you to think about other responses to the book. Think of other ways you can respond to the text.

The student later decided that he wanted to write about the illustrations and how they added to the story. Wilma periodically went over to the student while he was working and asked him questions and encouraged him during his writing. Wilma used this technique of questioning frequently during literacy groups. When Wilma asked a question and the students did not respond she asked more questions to elicit a response.

In another lesson, Annette read the students an article about delayed gratification in students. In this article, an experiment was conducted in which teens were told that they could have \$1 immediately or they could have \$2 next week. Most of the students in the article took the \$1. A discussion then began over the idea of delayed gratification. Annette asked the students to think about the characteristics a person would need to have delayed gratification. At first, the students had a hard time answering the question so Annette asked, "What is that quality called?" The students then began to use adjectives to describe individuals who might wait for gratification. The most common word used was self-discipline. Annette then stated, "I have a provocative question. Do you think there is a difference between girls and boys and the level of self-discipline?" This question sparked a long debate. Annette continued to ask questions to elicit more ideas, "What would you be willing to wait for? Do you think delayed gratification would help you succeed in school? How?"

To conclude the discussion, Annette asked the students to make a T chart that listed things in which they believed they were disciplined, and on the other side they listed things in which their parents or teachers want them to be disciplined. Annette then asked the students to think of times that it might be a bad thing to have delayed gratification. She responded, "What do you think? I know that there are many times that I am very impulsive and don't want to wait on things. Maybe that isn't always bad?"

Articulation of Thinking

Annette also tried to explain how she thought about different perspectives when trying to get students to articulate their thinking. During one particular lesson, the students had to imagine that they were in space and were instructed to complete a simulation activity in which they had to rank the most important ten items that were needed for the mission. To get them thinking about the problem, Annette commented,

Try to get yourself in the frame of these people. You are living or dying together. You must work as a group. I know I can't simulate that feeling, but I want you to try to think as if you were those people.

Later in the lesson, the students had to share their answers by justifying the ranking order. Annette asked the students to show examples of good thinking and then to pick the best examples of thinking from other groups. She also required the students to provide evidence of their thinking by giving details.

Effective questioning and articulating thinking encouraged elaboration of thinking. All three teachers modeled how they thought through a process to encourage students to think, but also allowed room for the students to express their process of thinking through a problem. There was a conscious effort to let the students know that their way of thinking was not the only way. In many examples, then, the elaboration of thinking and the process orientation seemed to happen concurrently.

Classroom Environment

In all three classrooms, it was evident that a sense of community had been established. The students looked happy to be in class and seemed very connected with each teacher. During my observations, it was very common to hear students make comments related to how much fun they were having and how they liked their class and classmates. Additionally, all three teachers had positive attitudes about their students. On my first observation, Paula made the following comment, "I really have a wonderful class this year." Likewise, Wilma stated, "This is the nicest group of kids I have ever worked with." Annette also related her positive attitude regarding her class. "They're a very compassionate class and they're interested in so many different things, and they're active and they have visions already that are far beyond a sixth grade classroom."

The three teachers also frequently praised the students and made encouraging comments that demonstrated their belief in the students' abilities. For example, during one observation Paula commented:

There are high school students who can't figure this out as fast as you can. Ask your mom what $\frac{1}{4} + \frac{2}{8}$ is and look at her. She will think you have two heads.

The similar positive classroom atmospheres seemed to be a result of three major sub themes that included the following: (a) emphasis on establishing relationships, (b) incorporation of fun, and (c) ability to pay attention to multiple tasks at one time.

Established Relationships

Many times, I noticed that these teachers did not speak at their students but *to their students*. This seemed to set the tone for positive student-teacher relationships, relationships the teachers seemed to hold paramount. Paula commented on this:

If I don't get to know these kids as people, then I don't know how they function with each other and their environment, and I'm going to get nothing out of them, ever. I spend a lot of time at the beginning of the year trying to get to know them personally, who they are and how they work, and I still don't feel like I get to know them enough. You know, it's not until the end of the year and you're sending them—oh gee, well, give me another year with that kid and I could really make some progress, because I really know him now.

Likewise, Wilma seemed to deal with classroom management issues by talking with students about problems. She commented, "I am always available to talk in the morning and if they have a problem they know they can talk to me."

All three teachers commented during interviews that relationship building was paramount in their classrooms. Relationships seemed to be the cement that held everything together. It was evident that the students had strong relationships with each other too. Frequently, students helped other students, assisted each other in academic tasks, and spoke to each other in a respectful manner. They also looked out for each other by getting books for absent students, clarifying directions, and praising each other's work.

Incorporated Fun

All of the teachers thought that teaching was fun and commented that they purposefully tried to add fun elements to the day. Adding fun was another way the teachers built relationships, and it seemed to contribute to the positive classroom atmosphere. Paula commented:

It's got to be fun. Kids have to be engaged, and I think the fun comes from the engaging piece. If the kids are not invested in what's going on you can talk until you are blue in the face and it doesn't make a bit of difference. And I think the engaging and the fun goes together.

Wilma explained that she purposefully has a goal of making students happy. Wilma added,

That is one of my goals. I wouldn't want my ten-year-old to be miser-

able nine months out of the year. That is totally unacceptable. They are only ten once. They can laugh and have fun.

Annette also commented, "Fun is extremely important in teaching."

Attention to Multiple Tasks

A third factor that seemed to foster a positive classroom environment involved the teachers' ability to attend to multiple tasks. During observations, it was common to witness two or three different activities happening at one time. For example, during reading groups, Wilma was able to notice students who were off task and then redirect them appropriately. During group presentations, Annette was able to direct the presentations while directing one student to go to a time out area for disruptive behavior. Looking at the student, pointing to the time out area, and raising five fingers to indicate a five-minute time out accomplished this. During math games, Paula was able to cut out extra manipulatives, give directions to the math game, and direct students to work areas.

These examples demonstrate the teachers' abilities to multitask and attend to both the academic task at hand and management issues. The behavior issues were generally taken care of by constantly moving around the room and interacting with the students. The ability to attend and notice numerous different activities in the classroom made me consider whether teachers really do have eyes in the back of their heads. This ability to multitask meant that the classrooms were relaxed and free of major discipline incidents. Problems were generally taken care of discretely, rather than in front of the whole classroom.

Discussion

Langer (1997) described mindful teachers as individuals who emphasize process over a response orientation. This research corroborated that view. Langer (1997) contended that when students have the freedom to define the process and explore possibilities, they rid themselves of an outcome goal orientation and thus are not limited to one particular answer. Because the students do not have a particular "correct" answer or format, they have the freedom to explore alternatives that otherwise may not have been considered. The individual does not have to concentrate on "Can I do it?" but "How do I do it?" As a result, student productivity and creativity can be increased.

This fact was observed when Annette's class was writing poems about peace. I never heard a student question his or her ability to write the poem. Instead, the conversations that I heard were in regard to *how* they could write the poem. As a result, the students wrote a wide variety of poems, and every student completed the assignment. In Wilma's class, the students did not question whether they could read a book, but instead had conversations about what and how much they should read. Likewise, in Paula's class, when students played math games, they did not question whether they could determine the answer. Instead, the students spent time thinking about the various ways the problems could be solved.

It was also noted that all the teachers commented that learning was not always a linear process, which is consistent with mindfulness theories. Brown and Langer (1990) contended that mindful individuals generally do not move directly from problem to resolution but remain open to new ways of viewing the problem. This flexibility allows the individual to view the information from several different perspectives instead of from one constructed category.

The idea of incorporating fun has been promoted by other educational theorists. Glasser (1993) proposed that fun is one of our basic psychological needs. When students do not have this need fulfilled in school, they may become bored and try to seek fun in another way. Rea (1999) argued that teachers should provide opportunities for students to experience fun through games and playful challenges. These experiences are guided by the teacher and structured, so the students can grasp concepts and gain valuable skills. It could be argued that this fun component helped students academically and also contributed to the positive classroom environment.

The theme of giving students choices was a consistent characteristic of the three mindful teachers in the study. It appeared that the idea of giving choices increased student engagement. During the observations, student engagement seemed to increase when students were provided choices. This was most noticed in Paula's math class. Paula consistently used games in which the students had to continually examine information from different perspectives. During the games, the students had to change perspectives based on their opponent's move. In comparison, if Paula had given her class a worksheet on the math facts, the information would be stagnant, and the students could have a tunnel-vision view of the information.

The third major theme that emerged was that each participant elaborated their thinking practices. Effective questioning and modeling thinking aloud encouraged elaboration of thinking. The participants requested additional details, asked for clarification of ideas, offered contrasting views, and connected new material with past learning. Elaboration of thinking was achieved when the teacher acted as a coach and provided prompts for thinking instead of telling the students the answer. The idea of elaboration of thinking meshes with Vygotsky's view of thinking and learning. Crain (1992) explained that Vygotsky believed that knowledge is social and is constructed through interaction that includes exchanges in information, discovering weak points in reasoning, and adjusting understanding on the basis of new information and new understandings. This view encourages dialogue between teacher and student. This dialogue provides guidance and support, because the adults model their thinking. The main point is that children do benefit from knowledge and dialogue with teachers.

This theme of elaboration of thinking aligns with the process orientation of each classroom. The teachers were not content with the answer, but wanted the students to understand the answer and go beyond merely regurgitating facts. Langer (1993) explains that mindful teachers are not concerned with going directly from a question to an answer. Instead, mindful teachers seek alternative viewpoints. When discussing problems, an answer from one perspective may raise questions from another. This is a type of elaboration, because the learner is going beyond reciting one particular answer. The emphasis on elaboration of one's thinking is also proposed by educational theorists who adhere to a dispositional view of intelligence.

Lastly, elaborating thinking by encouraging conversations and thinking aloud aligns with a postmodern view of curriculum that views curriculum as a conversation. Doll (2002) explains that conversation in which we speak and listen to each other promotes understanding. Doll challenges teachers to "...encourage students to have conversations with language arts, mathematics, science and social science texts and the contents therein" (p. 50). It is through these conversations that curriculum can become rich and deeper in understanding.

The last theme that emerged was that all classrooms had a similar positive classroom environment. Relationships with students seemed to be the root of the positive classroom environment. All three educators purposefully attended to the relational aspects of teaching. This does not mean that they were not concerned with the more concrete aspects of teaching like teaching strategies or classroom management, but it does mean that these dimensions were considered from the context of relationships.

I contend that giving choices, encouraging a process orientation, and elaborating of thinking all intersect and help to create the positive classroom environment. When the teachers were involved in teaching activities that promoted the abovementioned themes, they had to interact with the students. I consistently observed the teachers walking around, monitoring progress, and talking with the students. This type of interaction led to better teacher-student relationships. The teachers knew the students and were mindful of what they needed academically. Relationships were purposefully fostered but were also indirectly fostered as a result of the mindful teaching practices.

Conclusion

To my dismay, many times I hear students, including my own children, describe school as mundane, repetitive, and plain boring. Sometimes, when I am in a boring situation, my mind tends to wander. Because I am not attending to the situation, I make mistakes or forget things. This frequently happens to me when I am driving. Because I have traveled the same way over and over again, I tend to go on automatic pilot. I become mindless. Consider this same mindset in education. Imagine for a moment that you are a teacher who has been teaching the same subject, grade, or class year after year with little change. You use the same teaching techniques, employ the same assessment strategies, use the same materials, and treat all your students the same year after year. You operate on automatic pilot in a mindless manner.

The opposite of mindlessness is being mindful. Vines (1997) examines the word mindfulness from the original Greek. He defines mindfulness as, "to remember, to be mindful of, in the sense of caring for" (p. 753). The meaning for mindfulness is found only in the present tense, not in the past. This translation of the word from the Greek to English seems to fit the general characteristics of the teaching practices I observed during the course of this research. The three teachers in the case studies were not on automatic pilot but were active and situated in the present. They thought about the needs of their students in an active sense. They did not just know their students in the sense that we know our social security number, but they were mindful of their students in the sense that they cared for them

We now need to thoughtfully consider if mindfulness is a disposition that should be fostered in teachers and students. What would our classrooms be like from a mindful perspective? First, mindful teachers promote thinking dispositions that can be applied to different contexts instead of teaching skills that are only applicable to a particular test. The thinking dispositions are generative. Currently, many teachers emphasize the answer, not the process (Klein, Hamilton, McCaffrey, & Stecher, 1998; Koretz & Barron, 1998)—thus the knowledge is not generative. Additionally, students are rarely given choices in how they can answer the questions, and elaboration is not necessary. Mindful teachers emphasize a process orientation and the idea of choice (Langer, 1997). This does not mean, however, that mindful teachers cannot successfully navigate in the world of standardized tests. I hear many colleagues complain that they cannot teach mindfully because of curriculum and school policies. They state that there is too much material to cover, so they are unable to probe deeply into any area. However, the three teachers in this research were able to teach mindfully and still adhere to the district's curriculum guidelines. There are barriers to mindful teachers, but there are many different ways to respond to those barriers. It is also important to recognize that many of these barriers may be self-imposed.

A second major implication is the need to align mindful teaching practices with current theories of instruction that have constructivist underpinnings. Constructivism originates in the work of Vygotsky. According to Vygotsky, knowledge is acquired through social interaction with knowledgeable peers (Bigelow & Zhou, 2001). The teacher acts as a bridge to help the student learn the cognitive skills necessary in education. In this research, the three participants allowed students to engage in discussions, group work, and games. Additionally, the teachers monitored student work by interacting with students while they were working. Mindful teaching practices and constructivism share common themes. Mindfulness theory should be introduced to future teachers and supported in teacher training programs by linking it with other educational theories, Further, besides just teaching the theory, university professors must examine their own teaching practices to ascertain if they are encouraging mindfulness or if they are promoting mindlessness by teaching information from one perspective only.

Lastly, encouraging mindfulness means that faculty and staff in higher education must create opportunities for students to develop relationships and connections with each other and their students. The research showed the teachers all established positive relationships with students. There was a sense of a community of caring between teachers and students and between the students themselves. Teachers in higher education should help to create relationships by giving students opportunities for connecting in conversation and dialogue. Specifically, organizing groups of students in cohorts throughout their educational program may help to provide the opportunities for these relationships. Specific professors could be assigned to specific cohorts in hopes of establishing and promoting relationships.

This research examined how mindfulness is lived out in the teaching practices of three mindful teachers. The four major themes that emerged included the following: (a) emphasized a process orientation rather than a response orientation, (b) gave students choices, (c) required students to elaborate thinking, and (d) created a positive classroom atmosphere. I have learned that the real educational potential in mindfulness is in addressing the ability to transfer skills and knowledge to new contexts, the development of understanding, student motivation and engagement, the ability to think creatively, and the development of self-directed learners. We cannot afford to act in a mindless manner any more.

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