

Middle Level Teachers Quarantine, Teach, and Increase Self-Efficacy Beliefs: Using Theory to Build Practice During COVID-19

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Abstract

During COVID-19, almost all schools have been transformed into something unlike what they were before. Teaching that was done in person is now done virtually, with little to no preparation. Middle level teachers may have been confident in how to teach their content in the classroom; however, this confidence may differ when teaching virtually. Using the four sources of self-efficacy theory, I analyze the importance of self-efficacy and how teachers can use the COVID-19 pandemic to build their self-efficacy beliefs while teaching during this unique time.

Introduction

Alexander Graham Bell was quoted as saying, “Before anything else, preparation is the key to success.” This has remained my favorite quote from my time as a middle school teacher up through my role as a professor. I live by the notion that preparation and planning is the key to success. However, COVID-19 is teaching me that this idea is somewhat flawed in that sometimes there is no time to plan, prepare, or practice. In risk management terms, COVID-19 might be thought of as an “unknown unknown.” In other words, this is a risk that one could not have seen coming; therefore, one could not have prepared. Before COVID-19 changed life as people knew it, planning at any level was one of the main activities that would keep many individuals together, organized, and forward thinking. Today, nearly everyone is adapting to a new and different life that is unfolding and was unforeseen. Some call our lives during COVID-19 a “new normal.” However, it does not feel normal to many, especially those who count on rigorous and disciplined daily schedules, like our teachers and students. While the impact from COVID-19 is seen across all professions and communities, teachers and students are experiencing some unique circumstances from this change that may disrupt their daily schedules but can give an opportunity to adapt, overcome, and prepare for the future.

During COVID-19, almost all schools have transformed into something unlike what they were. Before, the classroom was a physical room with desks, chairs, books, students, and teachers. Today, it is an online Zoom meeting or independent reading. Before, lessons included students talking face-to-face, presenting a report

in front of the class, or turning to a neighbor to discuss a science theory. Today, there is no neighbor to turn to and reports and group work are done on a screen. Before, teachers walked through classrooms and observed who had grasped a mathematical concept or who was on task. Today, it is difficult to know what is happening with individual students during class time. Before, a seasoned teacher felt confident in their ability to teach. Now, this confidence may in question. These are all points of concern, but the latter is of greatest concern due to the impact one teacher has on dozens of students. Using self-efficacy theory, I will analyze how teachers can use these times during COVID-19 to their advantage to reconfigure their teaching and student learning.

Essential Characteristics: Curriculum, Instruction, and Assessment

This We Believe: Keys to Educating Young Adolescents (National Middle School Association [NMSA], 2010) states that five of the 16 *Essential Characteristics* for teaching young adolescents relate to *Curriculum, Instruction, and Assessment*. It is essential for a middle level teacher to: *Value Young Adolescents*, engage in *Active Learning Curriculum*, create *Challenging Curriculum*, use *Multiple Learning Approaches*, and employ *Varied Assessments*. While these five essentials may seem independent of one another, they have something in common. Each requires a good amount of planning.

While middle level educators look to *This We Believe* to guide how to best teach their students, there is not a guide for how to teach during a worldwide pandemic. Technology is now at the forefront of living, teaching and learning, as social distancing keeps people from one another.

Without preparation individuals are experiencing Conceptual Change, which occurs when one restructures one's existing knowledge on a certain topic, in every aspect of one's life (Vosniadou, 2007). Therefore, middle level teachers should refer to use existing guides, such as *This We Believe*. However, while teachers use existing guides, changing their concepts on teaching and learning with little to no warning is very difficult.

Past research has shown that misconceptions that are deeply embedded are hard to change. For example, the notion that a teacher will have time to plan and prepare for a lesson is a concept that is embedded in a teacher's training and best practices. However, during COVID-19 teachers did not have time to plan to move to an online format. This lack of time to plan lessons may seem overwhelming due to the difficulty one may experience in changing one's schema (Piaget, 1970), which makes such conceptual change especially challenging for middle grades teachers.

As stated in the tenets of *This We Believe*, middle school teachers have trained and planned to create the best teaching and learning experience for the young adolescent. Past research has shown that such specialized training of middle school teachers proved to help teachers become more prepared to teach regarding better instructional practices (Flowers & Mertens, 2003; Mertens et al., 2002). However, during the pandemic, specialized training or professional development has not been readily available.

Each day state representatives react to new information to manage the crisis, save lives, and reopen economies. Thus, keeping schools closed and students out of harm's way to 'slow the spread' has put teachers in an environment for which they did not train or plan to teach young adolescents. While research shows that learners' knowledge, interest, and beliefs are woven together with conceptual change (Murphy & Alexander, 2000), one may question what this lack of preparation will do to teachers' beliefs. In a recent study, Baez-Hernandez and Andres (2019) found that professional development improved teachers' level of efficacy and instructional performance. Therefore, enhancing and transforming teachers' self-efficacy beliefs may help to guide teachers through this difficult time.

Link to Theory

Self-Efficacy Beliefs

There is a large body of research based on Albert Bandura's (1977, 1994) social cognitive theory, and specifically his notion of self-efficacy beliefs. One's self-efficacy belief is the notion that one has about their own ability in performing a task. An individual's self-efficacy beliefs direct how that individual thinks, acts, and feels. These beliefs differ based on the specific task (Haverback & Mee, 2015; Pajares, 1996). For instance, a teacher may have high self-efficacy beliefs regarding teaching 7th grade literature in a classroom; however, that same teacher may have low self-efficacy beliefs when teaching the same material in a virtual classroom. It is important to note that self-efficacy beliefs stem from four sources: mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states (Bandura, 1994).

Mastery Experiences

Mastery experiences are the most influential and are created when one actually does the task. For example, when a teacher plans and teaches a lesson on the Han Dynasty to seventh graders, this is a mastery experience. Depending on how well the task is completed, one's efficacy will grow or lessen. Therefore, if the teacher completes the Han Dynasty lesson successfully, his or her teaching self-efficacy will grow in the domain of history. This means that he or she will feel more efficacious when teaching such content in the future. However, if he or she is unsuccessful, self-efficacy beliefs may lower and this will negatively impact self-efficacy beliefs.

Vicarious Experiences

Vicarious experiences occur when an individual observes another performing a task. If the performer is successful, the observer will increase in their self-efficacy beliefs. For instance, a teacher who observes a master teacher teach a lesson on the Han Dynasty to seventh graders constitutes a vicarious experience. If the master teacher is successful in this lesson, the observer's self-efficacy will grow. However, if the master teacher is deemed by the observer as not being successful in his or her execution of the lesson, the observer's self-efficacy beliefs will decrease.

Verbal Persuasion

Verbal persuasion impacts efficacy when a credible other convinces the one of his or her capabilities. In this case, if a mentor teacher were to tell a preservice teacher that he or she is skilled in teaching history, the preservice teacher's self-efficacy beliefs will grow. Conversely, if the mentor teacher were to tell a preservice teacher that he or she does not have the skills needed to teach history, the preservice teacher's self-efficacy beliefs would decrease.

Physiological and Affective States

Physiological and affective states impact one's self-efficacy beliefs by how one feels while in a situation regarding the task. On one hand, if a teacher has positive feelings towards a pedagogical domain (confident, knowledgeable, prepared), these feelings may positively impact his or her self-efficacy. On the other hand, if a teacher feels negatively towards a pedagogical domain (not prepared, nervous, unknowledgeable), these feelings can negatively impact his or her self-efficacy beliefs.

Teacher and Preservice Teacher Self-Efficacy Beliefs

In the time of COVID-19, teachers' self-efficacy beliefs may vary regarding their beliefs in their ability to teach virtually. Due to the findings from past research, these beliefs are an issue worth considering. Researchers have found that having a teacher with healthy self-efficacy beliefs is important for students in that classroom and that such healthy self-efficacy beliefs prove to be advantageous to learning (Bandura, 1993). In fact, teaching self-efficacy beliefs can determine and predict a teachers' accomplishments (Cho & Shim, 2013; Gotch & French, 2013). Past research has shown that higher teacher self-efficacy is: related to greater end-of-the-year student goals and innovative techniques; correlated with positive teacher practices and policies used in the classroom; related to personal teaching achievement goals; connected with time in a PDS, and aligned with greater time in the classroom and parental communication with regard to test scores (Bebas, 2016; Cho & Shim, 2013; Fives et al., 2007; Gibson & Dembo, 1984; Gotch & French, 2013; Skaalvik & Skaalvik, 2007; Wolters & Daugherty, 2007).

Theoretical Questions

While past research has shown higher self-efficacy beliefs are beneficial to many aspects of teaching, it is of import that during the COVID-19 pandemic, teachers' efficacy beliefs are high. Thus, I propose that teachers can build their self-efficacy beliefs by strategically using the four sources of self-efficacy. The questions guiding this paper are: 1. How can middle grades teachers increase their self-efficacy beliefs to respond to the pandemic-related challenge of teaching virtually with little preparation? 2. How can middle grades educators use their teaching and learning to increase their self-efficacy during COVID-19?

Self-Efficacy Beliefs

Past research has found that high self-efficacy beliefs are important for teachers. The more time one teaches, the more their teaching self-efficacy beliefs will grow. However, self-efficacy is a multifaceted concept (Usher & Pajares, 2008). To measure this construct, Tschannen-Moran and Woolfolk Hoy (2001) created the Teacher Sense of Efficacy Scale (TSES). The TSES examines teachers' self-efficacy beliefs in these three areas: Student Engagement, Instructional Practices, and Classroom Management. Interestingly, all three of these areas may look very different when teaching virtually than they do in person. One example is student engagement. While in a classroom a teacher will engage students through a variety of techniques that may not be available virtually. This change may make a teachers' self-efficacy to differ in the virtual setting.

Self-efficacy beliefs differ based on domain (Haverback & Mee, 2015) and grow through organized experiences (Bebas, 2016). Therefore, the COVID-19 pandemic has created a situation in which usually efficacious teachers may not feel efficacious now. For example, a seasoned seventh grade English teacher may have high teacher self-efficacy when teaching a lesson on poetry. In this case, he has taught it before and been very successful. The students were engaged, grasped the content, and classroom management was at its peak. This would lead to the teacher having high self-efficacy.

However, now that the same lesson needs to be taught virtually, his efficacy beliefs may have changed. Perhaps he is uncomfortable using

technology, or the students are not quite as engaged as they would be in class or just 'on mute' which limits immediate feedback for the teacher. These experiences could lead to the same teacher having a drop in his self-efficacy beliefs. When this is added to the other pressures that come with living through COVID-19, this may severely impact the learning experiences of the students.

Building Self-Efficacy Beliefs During COVID-19

Due to the almost instantaneous onset of COVID-19, teachers had to shift to virtual teaching, yet they were not allotted training or experiences in their new platform. Given the importance of self-efficacy beliefs in teaching and learning, middle grades teachers can increase their self-efficacy beliefs while teaching virtually. This can be done through using their own teaching and learning in conjunction with the four tenets of self-efficacy theory.

(1) Mastery Experiences

Mastery experiences are hands-on experiences that teachers have when they teach. In the previously used example, a literature teacher has a mastery experience when he teaches a poetry lesson to middle school students. This mastery experience is very specific and varies by domain (Haverback & Mee, 2015). Such mastery experiences are the most influential and are created when one does the task. Today, teachers are automatically building their mastery experiences while teaching online. It is important for teachers to explore the pedagogy of teaching virtually. While teachers use domain specific pedagogical strategies in the classic classroom, teaching in virtual spaces may feel different. By having mastery experiences teaching within the virtual world, teachers will find their path. Remember, what works in the classroom may not work online, and that is acceptable. Even though the students are the same, their behavior or engagement may differ in a virtual classroom. Teachers should reconsider their classroom management plan, motivational strategies and teaching pedagogies. Lectures, group work, and presentations will require different mastery experiences than they do in person. However, over time, these mastery experiences will increase one's self-efficacy beliefs on this new platform.

(2) Vicarious Experiences

Vicarious experiences occur when the individual observes another performing the task. If the performer is successful, the observer may grow in their self-efficacy beliefs. But, if they are not successful, self-efficacy may decrease. Today's virtual classroom is the perfect opportunity to allow teachers and preservice teachers to observe others teaching virtually, as field experiences and observations have been deemed as essential to learning how to teach. Middle level teachers should use COVID-19 as an opportunity to have virtual field experience observations. By watching other teachers successfully use virtual tools to teach, the observer can not only learn the tools, but also feel more confident. Teachers should look to videos of exemplar online teaching lessons and partner up with master teachers who have had online teaching experiences. Moreover, teachers can form groups or pairs in which they can observe each other and grow their self-efficacy beliefs.

(3) Verbal persuasion

Verbal persuasion impacts efficacy when a credible other convinces another of his or her capabilities. During COVID-19, if teachers are not already, they should find a partner with whom they can plan, or perhaps work with a group to continue with Common Planning Time. During these meetings, working to support one another, the teachers will be able to share knowledge, practice and prepare lessons, discuss how to meet student needs, and most importantly, give positive verbal responses to one another.

(4) Physiological and Affective States

Finally, teachers' physiological and affective states impact one's self-efficacy beliefs. By remembering that middle school teachers are content and pedagogical experts in teaching the young adolescent, a teacher should feel confident, knowledgeable, and prepared. Even more so in these uncertain times, teachers have a duty to come into each interaction with his or her students as prepared as possible. Therefore, becoming knowledgeable about the virtual environment one's class is using, if one is not already, or demonstrating confidence when one may not be so is a step that teachers must take in order maintain continuity in the virtual environment. By doing so, the teacher can

continue to promote the same atmosphere that he or she had in the physical classroom to ensure that the virtual setting has as good of a physiological and affective state for the teacher and the students.

Conclusion

Teaching middle school is a demanding teaching experience during non-pandemic times, and middle school teachers have always had a great deal asked of them. They must value young adolescents, engage in active learning curriculum, create challenging curriculum, use multiple learning approaches, and employ varied assessments. That goes for the classroom historically, today online, and in the future when we return to the classroom. When one combines the great effort and preparation teachers employ to include these essential characteristics with the sudden onset of COVID-19, it is especially vital that teachers feel efficacious in what they are teaching.

To do this, middle grades teachers can increase their self-efficacy beliefs to respond to the pandemic-related challenge of teaching virtually by considering mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states while teaching in virtual platforms. By using the hands-on experiences of virtual teaching and training, middle grades educators will be able to increase their self-efficacy during COVID-19. While we may not know what the future will bring, teachers can leverage the four sources to help prepare themselves and others for the next time something like this occurs. Looking back, we can say COVID-19 was a risk we did not see coming; therefore we did not prepare for it. However, we will not need to say that the next time. By using the four sources of efficacy beliefs, teachers will be able to continue to teach their content virtually with the same confidence they had in the classroom, we will collaborate and learn from one another to improve and capture lessons learned, and next time we will all be better prepared.

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