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10-1-2015

Grit, Biography, and Dedicated Teachers Who Struggled Academically as Students

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Grit, Biography, and Dedicated Teachers Who Struggled Academically as Students

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ABSTRACT: Dedicated teachers who had and overcame academic challenges in their youth offer valuable insights into how to support students who struggle. This article presents a qualitative study of 46 teachers from across the United Stated who faced academic challenges as elementary, middle, and/or secondary students. Their memories of academic struggles lead them to use teaching practices that are grounded in the professional disposition that all children can learn. The findings suggest a positive interrelationship between a biography (Knowles, 1992) that includes academic struggles, the theoretical constructs of grit (Duckworth, Peterson, Matthews, & Kelly, 2007) and self-efficacy (Bandura, 1977), and current educational practices and provide implications for theory, teacher education, and induction.

When I began teaching sixth grade, I was initially overwhelmed by the challenge of meeting the needs of my students who struggled. As I attempted to understand their confusions and challenges better and learned how to respond effectively, I was mentored by veteran colleagues who were successful, dedicated teachers. One colleague was particularly helpful: Michael (pseudonyms are used throughout this article). One day, Michael told me he did not really learn to read until sixth grade. How, I wondered, could a successful veteran reading teacher with a master's degree in literacy not have been able to read until he was 12? As my respect for Michael's skills as a teacher deepened, I wondered if having and overcoming academic challenges helped Michael succeed when teaching students who struggled.

My wondering tapped into a significant issue: responding effectively and persevering when students struggle with academics and/or are disengaged in school are essential teacher characteristics. As Darling-Hammond (2005) explained, teacher education is at the heart of helping educators learn to "teach powerfully—that is, to teach in ways that *all* children can learn" (p. 1, emphasis in the original). Darling-Hammond (2005) further underscored the need for enhancing teaching and teacher educators endeavor to respond, it follows that dedicated and successful teachers like Michael who overcame academic challenges in youth might have valuable insights. For such teachers, the belief that all children can learn is more than a professional disposition (National

Teacher Education and Practice, Vol. 28, No. 4 / Fall 2015

Council for Accreditation of Teacher Education [NCATE], 2008): it is reality grounded in what Knowles (1992) called biography.

Therefore, 15 years after meeting Michael, I undertook an investigation of the nature of academic struggles that 46 dedicated teachers from across the United States faced as K–12 students. I sought to identify how those struggles influence their current educational practices and ascertain how their experiences might inform teacher education. Two theoretical perspectives informed this study: (1) teacher biography and (2) behaviors and characteristics associated with effective teaching.

Theoretical Perspectives

Teacher Biography

Knowles (1992) called teachers' earlier school experiences "biography" and explained that their background can lead teachers "to engage in inappropriate classroom behaviors or actions" (p. 143). Biography can mislead beginning teachers to assume that because they like children, have been to school, and have spent hours under the tutelage of both good and bad teachers, they are ready to teach (Edens, 2000). When candidates think "that they know more about teaching than they actually do, [it can] make it harder for them to form new ideas and new habits of thought and action" (Feiman-Nemser, 2001, p. 1016). Biography can also have a negative impact on the way preservice and in-service teachers approach the teaching of specific content areas, such as mathematics (Lutovac & Kaasila, 2011) or writing (Street & Stang, 2009).

Knowles (1992) called for teacher preparation programs to help candidates address their biographies lest they "become teachers who teach in the manner in which they were taught and who will be limited in the ways in which they can professionally develop" (p. 147). Carefully designed teacher education experiences can help candidates consider and potentially move past their biographies. For example, Lutovac and Kaasila (2011) found it effective to address elementary candidates' biographies with mathematics by having students write about their own experience and compare them with others. As many of their students had apprehensions about teaching mathematics, learning that they were not alone in having undergone challenges with the subject seemed to be an empowering experience that helped positively transform their thinking.

Addressing biography can be helpful holistically as a way of shaping candidates' ways of viewing teaching dilemmas. Skerrett (2010) indicated that preservice experiences that help candidates examine how their biography might interact with school contexts can help novices develop "the stance of a critically reflective educator who has the ability to examine pedagogical dilemmas in an effort to effect change" (p. 89). Examining well-written narratives of teachers' lives can facilitate candidates' development of professional identity through self-exploration and help them develop "the rudiments of a schema for framing then attacking problems" (Bullough, 2008, p. 13). If narratives about teachers who faced and overcame academic challenges were used, Bullough's (2008) suggestions might help teachers develop the professional disposition that all children can learn (NCATE, 2008). This disposition is one characteristic of high-quality teachers, which leads to the next issue that framed the present study.

Teacher Behaviors and Characteristics

Despite the difficulty with defining and assessing teacher quality (Berliner, 2005), there are characteristics and behaviors associated with effective teaching. Such characteristics include a commitment to ongoing learning as a way to improve instruction (Stotko, Ingram, & Beaty-O'Ferrall, 2007). Effective teachers set high expectations and help students meet them (Peterson, Bennet, & Sherman, 1991). The latter requires knowledge of how to motivate students (Darling-Hammond, 2010). Effective teachers in urban schools not only have a strong academic program of instruction but also are flexible and able to interrupt instruction to respond to student problems. Such responsiveness to students' needs is related to another behavior common among effective teachers: creating an environment where students feel belonging (Peterson et al., 1991).

Persistence and a refusal to give up on students are characteristics associated with effective teachers (Stotko et al., 2007). Self-efficacy (Bandura, 1977) is a closely related characteristic that is also correlated with effective teaching (Gibson & Dembo, 1984; Tschannen-Moran & Woolfolk Hoy, 2001; Yost, 2006). Defined as "the conviction that one can successfully execute the behavior required to produce outcomes" (Bandura, 1977, p. 193), self-efficacy influences people's expectations of success, how much effort they expend, and the extent to which they persist in activities. Grit, defined as "passion and perseverance towards long-term goals" (Duckworth et al., 2007, p. 1087), may be a positive predictor of teacher effectiveness (Duckworth, Quinn, & Seligman, 2009). It is conceivable that a relationship exists between self-efficacy and grit, as "the propensity to pursue long-term goals with perseverance and passion may be determined in part by beliefs about one's capabilities" (Duckworth et al., 2007, p. 1100). Grit, like self-efficacy, is a construct developed by psychology researchers.

Duckworth et al. (2007) found that, compared to people with less grit, highgrit individuals are able to sustain their interest, effort levels, and passion in working toward achieving goals even if they encounter obstacles, delays, and setbacks. They persevere even if the process takes years. Duckworth et al. (2007) indicated "the achievement of difficult goals entails not only talent but also the sustained and focused application of talent over time" (p. 1087). Duckworth and Quinn (2009) and Duckworth et al. (2007) have conducted multiple studies with thousands of participants to define and develop ways to measure this construct.

Duckworth et al. (2009) examined whether the positive characteristic of grit was a predictor of teacher effectiveness as measured by their students' academic gains at the end of the school year. Their sample of 390 first-year public school teachers all worked in schools in low-income communities. The participants completed the short-grit scale (Duckworth & Quinn, 2009) prior to beginning the school year. Using students' academic gains as a measure of teacher effectiveness, Duckworth et al. (2009) found that grit was a significant predictor. Although the researchers cautioned that their findings may not be generalizable to all populations of teachers, they also called for further inquiry into how to help teachers increase their grit given that this quality has the potential to have a positive impact on student achievement.

Need for the Present Study

Educational researchers have identified teacher biography as a potentially negative influence on practice (Feiman-Nemser, 2001; Knowles, 1992; Lutovac & Kaasila, 2011; Street & Stang, 2009). However, no one appears to have looked at how negative experiences in teachers' biography can contribute to the development of characteristics associated with effective teaching. Grit is a characteristic that appears to be a positive predictor of success. In its limited application to teaching, teacher grit was found to be a predictor of students' academic gains (Duckworth et al., 2009). The combination of beliefs and biography influences teaching behaviors (Pajares, 1992), and a high sense of self-efficacy beliefs is associated with effective teaching (Gibson & Dembo, 1984; Tschannen-Moran & Woolfolk Hoy, 2001; Yost, 2006). Therefore, in order to explore the potential relationship between biography and teacher characteristics in general and grit and self-efficacy in particular, I investigated the question: How does a biography of struggling academically as students influence teachers' current educational practices?

Methods

Participants

I used criterion sampling (Miles & Huberman, 1994) to find dedicated teachers who self-identified themselves as having struggled with academics as K–12 students. I defined a dedicated teacher as one who is devoted to student learning and success. I intentionally did not define what it meant to struggle with academics and limit the participant pool to those whose experiences met the definition. Thus, the participants' academic struggles differed and were the result of diverse causes that ranged from learning disabilities to tumultuous homes to social ostracization.

In order to obtain a nationally representative sample of dedicated K–12 teachers who also met guidelines for highly qualified teachers, I placed a call for participants in the National Board for Professional Teaching Standards (NBPTS) newsletter, which goes out to all National Board–certified teachers and candidates. National Board certification is an advanced credential obtained after successful completion of a "voluntary assessment program designed to recognize effective and accomplished teachers who meet high standards based on what teachers should know and be able to do" (NBPTS, 2010, para. 2). It takes 1 to 3 years to complete, and the success rate is only 50%. I recruited this population of teachers because their willingness to undertake the rigorous National Board certification process is an indication of being a dedicated teacher. It was also a pragmatic decision that allowed me to recruit dedicated teachers at a variety of grade levels and disciplines from across the United States.

A total of 46 teachers participated. Thirty-nine held National Board certification; seven were candidates. The teachers were from 26 states and every region of the United States. Collectively, the participants were a well-educated and experienced group of teachers. Table 1 provides a summary.

Some participants described contextual background factors that influenced their experiences as K–12 students. Eleven teachers indicated that they grew up in low-income or poverty-level homes. One teacher grew up in a home where the language spoken differed from that used in school. Three participants indicated an African American or Caribbean heritage. Five teachers' families moved frequently. Three participants grew up in inner cities, while five grew up in rural communities or small towns. The teachers who discussed context described how these factors contributed to their academic struggles.

Data Collection

With the exception of two participants who requested to provide written responses to the interview questions due to their busy schedules, I conducted interviews over the phone and recorded them. The interviews ranged between 30 minutes and 1 hour in length. I conducted the interviews using a semistructured protocol. In addition to inquiring about the participants' teaching background, I asked two primary interview questions: (1) You were

Table 1.	Participants'	Years of	Teaching	Experience
and Edu	cation Level			

Years of Experience	Number	Education Level	Number
40 or more	1	Pursuing doctorate	4
30–39	5	Master's degree	38
20–29	11	Pursuing master's	5
10–19	21	-	
5–9	8		

recruited to participate in this study because you identified yourself as someone who struggled with academics at some point in your K–12 education. Please tell me as much about your struggles as you are comfortable sharing. (2) How does your previous experience as a student who struggled influence your teaching?

Most of the teachers naturally explained how or if they overcame their struggle. For those who did not, I asked, "How were you able to overcome this struggle, or did it persist later in life?" I intentionally asked broad, general questions as Creswell (2007) recommended. I avoided asking questions that addressed emerging themes that I suspected might contribute to a composite description of being a teacher who struggled as a K–12 student. By adhering to this protocol, the data reflect the nature of the teachers' experiences as they remembered and described them regardless of whether the participant was the first or last person interviewed.

Data Analysis

I analyzed the data using a multistep process. After transcribing the interviews, a graduate research assistant and I read each interview transcript and prepared a one-page contact summary sheet describing the ideas and issues that were discussed in the interview (Miles & Huberman, 1994). We met four times to discuss potential trends about how the participants' experiences as struggling students influenced their practice as teachers, leading to an earlier publication about defining effective teaching behaviors (Fry & DeWit, 2010–2011). This process of developing summary sheets also facilitated identifying the nature of the academic struggles participants faced; in total, the struggles fit into seven categories.

Next, I reread each transcript, "highlighted significant quotes that provided an understanding of how participants experienced the phenomenon" (Creswell, 2007, p. 61) of struggling as students, and developed grounded codes to describe these significant ideas in the data (Gibbs & Taylor, 2005). The codes and, later, themes emerged from the participants' experiences rather than through a priori expectations. I stopped after coding every five transcriptions to review the codes and identify recurring ones. Data displays (Miles & Huberman, 1994) helped me keep track of recurring codes or codes that seemed significant. Specifically, I used a spreadsheet to describe each code and list each participant who experienced it. The display of regularly recurring significant codes helped me identify trends in the data.

After completing the coding, I reviewed the first data display and merged similar codes. I also reviewed each transcript again to determine if any teacher participant provided evidence of a common trend that I overlooked during the initial coding. In total, I identified six themes about how past experiences inform current education practice. For the final step in analysis, I turned to the theoretical literature about grit (Duckworth & Quinn, 2009; Duckworth et al., 2007, 2009) and self-efficacy (Bandura, 1977; Tschannen-Moran & Woolfolk Hoy, 2001; Yost, 2006). I used the definitions of these constructs and indicators from their respective measurement scales to review each teacher's interview transcript in its entirety to identify whether the teacher made statements associated with teacher self-efficacy or grit. I then reread all of the transcripts with indicators of self-efficacy or grit to determine common trends or themes among these teachers.

Credibility: Member Checking

To promote credible results, I invited participants to member check (Lincoln & Guba, 1985) by reviewing the findings and offering feedback as to whether their experiences were accurately analyzed and portrayed. Once I identified the main trends, the participants were invited to review a list of all of the trends, offer clarifying comments, and indicate which trends described their experience. Fourteen responded, and all identified the same trends as relevant to their experience that I had, suggesting that I did not misinterpret their experiences. I also invited the 21 participants whose experiences were included in an earlier draft of the findings to participate in a second round of member checking. Seven responded to this call, and their feedback confirmed that their experiences were represented accurately. Finally, rather than a cursory description of all 46 teachers, I profile three participants in depth in the "Findings" section in order to provide rich description of their experiences. For these three participants, I used an additional form of member checking: 20-minute follow-up interviews to clarify and confirm details about their lived experiences.

Limitations

This study design is not without limitations. Each teacher's memories of academic struggles are clouded by time. For those participants with 20 to 40 years of teaching experience, many of the events they recalled occurred 30 to 50 years earlier. The lack of opportunity for follow-up interviews with most participants meant that I did not check for greater prevalence of the major themes. Another limitation is the questions that went unasked. For example, although I did not ask participants to indicate the size of the community in which they grew up, eight participants explained the ways in which attending school in an inner city, rural area, or small town impacted their academic struggles. In retrospect, obtaining these demographic data from all participants might have provided a meaningful way to further analyze participants' experiences.

Findings

The 46 participants experienced a variety of academic struggles when they were elementary, middle, and/or secondary students. Table 2 provides a summary. Since many reported facing more than one kind of academic struggle, the numbers do not total 46. Twenty-six participants also described one or two additional factors that they believe had contributed to their academic struggles: negative experiences with individual teachers and/or unsupportive instructional practices (n = 17) and challenging situations at home (n = 12).

Past academic struggles influence the participants' current practice as teachers in myriad ways. Table 3 lists the six most common themes that describe how past experiences as students inform current educational practice and the number of participants who engage in each practice. Some of the participants may employ these same practices but either did not attribute the impetus to past academic struggles or did not describe the practice in the interview.

All but one interview transcript had evidence of either teacher self-efficacy (n = 45) or grit (n = 26). Twenty-five transcripts had evidence of both. This finding does not necessarily indicate that 20 participants lacked grit or that one participant lacked self-efficacy. It means that their responses to the interview questions did not include statements that reflect those qualities. All 45 teachers who provided evidence of self-efficacy in their interviews expressed the conviction, either directly or tacitly, that they successfully teach in ways that help all children learn. The teachers who provided evidence of grit did so by explaining how they did one or more of the following: achieved a goal despite academic barriers, accomplished a goal despite a lack of positive feedback, and/or strived to achieve in school despite a tumultuous situation at home.

Figure 1 provides a visual representation of the relationships between academic struggles, the constructs of self-efficacy and grit, and current educational practices. Organizing the findings based on the most common themes was an inadequate way to explain the relationship between these factors; therefore, in order to elucidate the relationships, I profile three teachers: Elaina, Maisie, and Angelle. Collectively, these three experienced the most

Table 2.	Academic Struggles	Faced by	Participating Teache	rs
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Struggle	Frequency
Math	22
Reading	13
School in general (e.g., "Everything was difficult.")	12
No connection or bond with school (leading to issues such as truancy, which affected academic performance)	6
Attention deficit disorder (ADD)/attention-deficit/hyperactivity disorder or ADD-like behavior without a formal diagnosis	4
Test anxiety	2

Educational Practice	Frequency
Became the teacher they wish they had as a child.	20
Committed to ongoing professional learning.	19
Creates caring relationships with students.	17
Gives students a vision or encouragement.	10
Shares history of academic struggles with students.	9
Holds high expectations for students who struggle.	9

 Table 3. How Past Academic Struggles Inform Current

 Educational Practices

common themes from the data. At the same time, their family backgrounds and academic struggles showcase the varied experiences that the participants had in their youth.

Elaina

Elaina is a math specialist in a small urban school district. Prior to this position, she had 20 years of elementary teaching experience. As a child, school was difficult; she struggled with reading, writing, and math. Elaina believes that her home situation contributed. Her family moved frequently, which led her to new schools and "new curriculums and teachers" every year or two. Her family was also low income. She believes she would have qualified for free and reduced lunch, but her hardworking, thrifty, and proud parents would never have signed Elaina up for it.

Elaina's academic struggles were significant. She did not read a book independently until she was in seventh grade and reflected that "math didn't make sense to me until I was an adult." She described herself as resilient and tenacious, characteristics that her father modeled by going to work every day despite significant health problems. She explained, "I thought if he could do it, then I can go to class. So I always stuck with it, even if I was the lowest one in the group. I'd always be the first one there." Elaina continued to say, "Isn't that strange? I don't know why I didn't give up." Her wondering about perseverance in school in the stark absence of success, while acknowledging her father's influence, is noteworthy. Her words remind us that the origin of

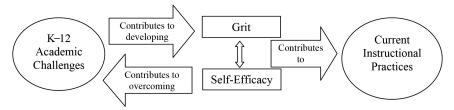


Figure 1. Academic struggles, self-efficacy, grit, and current educational practices.

grit is not yet clear (Duckworth et al., 2007) and suggests that a person's development of grit may occur through multifaceted and complex experiences.

Elaina was one of 17 participants who stressed the importance of creating a caring, emotional relationship with their students. She explained, "I believe all learning has an emotional base. And so we have to tap into the heart of the child before they will learn." For Elaina, creating caring relationships is related to her academic struggles because she remembers the positive influence of the "teachers who saw something in me, and that made me want to work even harder to understand what they were trying to teach."

High school was a turning point for Elaina, and although school was still hard, she began to do better. She entered college on probation because her high school grades were too low for full admission. She explained, "Once I got to my major in college, I really never struggled again." When asked if her struggles influence her practice as a teacher, Elaina provided explicit evidence of self-efficacy, explaining, "The impact it made on me is I have this Polly Anna attitude that all kids can learn. I firmly believe that every child who has ever been in my classroom can and has the right to learn." Elaina's conviction is grounded in personal experience. Despite not understanding math until adulthood, she is a talented math teacher who was honored with the Presidential Award for Excellence in Teaching Mathematics. She is now the elementary math curriculum specialist for her district and "empowers teachers to teach math with better practices." Elaina also is an adjunct faculty member for a local university where she teaches courses for a math endorsement. These are impressive accomplishments for any educator, but given Elaina's history of academic struggles, they seem more so. Her biography influences her professional disposition that all children can learn, and she knows never to give up on a child.

Maisie

Maisie has been an elementary teacher for over 40 years. Like Elaina, she has had a successful career; most recently, she was honored as the teacher of the year in one of the largest school districts in the United States. Like Elaina, her biography influences her practices as a teacher. Maisie was one of seven children; she grew up in "a poverty family in a poverty area. We had so little because there were so many of us and an unsteady paycheck." Maisie also described her family as "very dysfunctional. My brothers were in trouble with the law. My mother hadn't finished school. My father was an alcoholic and wasn't responsible. I think it affected my ability to learn." Maisie also blamed herself when her father's "alcoholism got out of control. I thought there was something wrong with me, that I hadn't been a good enough daughter."

Somehow, despite living "in chaos," having little confidence in herself, and lacking basic academic skills, Maisie demonstrated grit by trying her hardest

in school despite a tumultuous situation at home. She credits her mother as being a role model; despite not graduating from high school, her mother was intelligent and "read all the time." Maisie's persistence in the absence of success suggests that the origin of her grit is ineffable.

Today, Maisie teaches in an inner-city school in a high-poverty community with a large population of families who are new to America. She was adamant that it is vital to help families and lamented how some teachers label children from poor communities as "stupid, unprepared, or unsupported by their parents. I think 'You don't know what they might be up against either." She continued to explain, "My mother tried her hardest. She's a fabulous woman. She couldn't overcome all of it. She had to go to work when we needed her most. There was no choice. Somebody had to bring home a paycheck." Although Maisie did not explicitly state "all kids can learn," that belief was tacit as she described how her experiences in youth led her to create caring relationships with students and families. Maisie takes families on cultural field trips, funded by grants, such as when she took "300 students and parents to their first theater experience, The Lion King." Years later, former students still remember the play and meeting the orchestra. By providing her inner-city students and their families with rich cultural experiences and sending home regular newsletters about community resources, events, and free days in local museums, Maisie gives her students a vision, encouragement, and opportunities.

Maisie describes herself as an "advocate for children and families in crisis." That advocacy results in multifaceted support. Maisie designed a class "for parents to learn how to effectively help their kids acquire site language, especially when they're Spanish speakers." Maisie has even taken parents to Alcoholic Anonymous meetings. Maisie's advocacy for youth and families is built on her conviction that all children can learn and an ongoing, reflective connection to her personal struggles as a student. Her background "influences my need to really have my kids feel loved and know that I believe in them. That's paramount in my thinking because I know how lack of self-confidence can impede learning."

Despite early academic struggles, Maisie "loves the learning process" and is committed to ongoing professional learning. Every other summer, she has attended National Endowment for the Humanities institutes for teachers, taking her to places like Chicago to study poetry and Springfield, Illinois, to learn about President Lincoln. She explained, "It's just fabulous to be able to do those things and challenge yourself. And if you're a passionate learner, that rubs off. Kids get it." This successful teacher who was once a struggling student is influenced by her biography in positive ways. She knows all children can learn, reaches out to children and families in poverty, and endeavors to provide her students with enriching cultural opportunities.

Angelle

Angelle is a special education teacher with 12 years of experience working in an inner-city school. Angelle was recently honored with a prestigious districtlevel teacher-of-the-year award. She is African American and grew up in a poor inner-city area where she had limited exposure to other ethnic groups. She remembers her teachers as caring, but the instructional approaches they used were not interactive or designed to support children from a community where after-school hours were more likely to be spent riding bikes outside or watching adults play card games than reviewing flash cards with parents. She reflected on her struggle to learn the multiplication tables without support for drills at home, reflecting, "We didn't do drills at school either. We were just expected to learn them. You know when a kid is expected to do things on their own like that, 9 times out of 10 they just won't get it." Angelle was retained in third grade, but retention did not help her conquer her nemesis. Math remained a struggle through college. Reading was also a challenge, and she does not "remember having books at home."

Despite growing up in an impoverished home, Angelle's grandmother exposed her to the world beyond her neighborhood. She reflected, "With her I experienced other things like restaurants. She nurtured other aspirations in me." Those aspirations led her to seek something more than her neighborhood high school. Even though it meant getting bused, Angelle was adamant that "the best thing that ever happened to me was I went to a different high school than the one that was in my neighborhood." Although school remained challenging, she persevered and had her goal set on a college education.

She remembers, "I went 65 miles away to college, and it seemed like such a wonderful life." It seemed like a million miles from the inner-city neighborhood where she grew up, and her college experiences further broadened her horizons. Meeting people from different backgrounds helped, as did

learning and growing up on my own and maturing. I came to understand that life was much more than just the neighborhood. When I got out of high school and saw that everyone wasn't like me, that every house was not like mine, I wanted a piece of that life.

Convinced that education would help her achieve that wonderful life, Angelle demonstrated grit in working toward her degree. She needed it, too. Her lack of foundational math skills in her youth had a long-term impact: Angelle took college remedial math four times before she passed it.

Angelle was the only teacher in this study who entered the profession through an alternative route. She recalls, "There was a critical shortage of teachers in our area, especially in special education." She was offered the job without certification or student teaching experience. When she began her career as a special educator, having "never even observed a teacher, I just went on my instinct for what to do." Those instincts served her well. She uses her own history of academic struggles and inner-city school experience to guide her teaching. She shares her struggles as part of her efforts to inspire her students to persevere when they struggle and realize that although "it's going to be hard, if you put your attitude in a position where you want to learn these things and do well, then there's nothing you can't do." She even brings her remedial math book to school and shows "them the things I had to learn in college. I correlate that to what they're learning right now. I tell them you don't want to be a student entering college taking remedial math; you want to be able to test out of this."

Angelle makes real-world connections to content whenever possible, and caring relationships with students are also essential. She was also adamant that students can succeed if teachers meet them where they are, set high goals, and help children meet them. She explained,

Just because you are a struggling reader in first and second grade, it doesn't mean that at the end you'll end up being a drug dealer. You'll catch up. Somehow the mental ability, the want to be something in life, and prayers and dedicated teachers all fit together, and it creates a child who will be successful. But they need a teacher who is going to start engaging them and actually teach them, not scoot them along with everyone else. Take time out one-on-one on your lunch period or after school.

Angelle's words underscore her belief that all students can learn. Like Maisie and Elaina, she engages in effective teaching behaviors that help translate her conviction into unwavering support for students. Biography, grit, and selfefficacy may be part of what helps these National Board–certified teachers succeed.

Discussion

Although their personal experiences vary, Angelle, Maisie, Elaina, and the other 43 teachers in this study are all influenced by their memories of academic struggles in their youth. As Elaina said, "I cannot separate who I was 30 years ago from who I am today. It's a whole package." The lasting impact of these memories is more than personal: the students who are entrusted in their care are taught by teachers who truly believe that *all* children can learn.

The participants' biographical experiences contribute to their effective teaching. A commitment to ongoing professional learning, creating caring relationships with students, giving students a vision or encouragement, holding high expectations for students who struggle, and persistence are consistent with existing research about characteristics and behaviors associated with effective teaching (Peterson et al., 1991; Stotko et al., 2007). The themes of becoming the teacher they wish they had as a child and sharing their personal history of academic struggles with students appear to offer new insights into how biography can inform teacher characteristics and behaviors. Unlike teachers with biographies that might predispose them to engage in

negative teaching behaviors (Knowles, 1992; Lutovac & Kaasila, 2011), the participants credited their negative experiences in school as helping them be effective as teachers.

Most of the teachers also provided evidence of self-efficacy (n = 45), grit (n = 26), or both (n = 25). The 20 participants who provided evidence of teacher self-efficacy only may also be gritty but did not offer specific indications of both qualities in their interviews. Figure 1 suggested a positive interrelation-ship between having academic struggles and developing self-efficacy and grit. These qualities, in turn, helped participants overcome their academic struggles, and their subsequent success may have further strengthened those qualities. To further explain these findings, I offer the following theoretical proposition that extends Bandura's (1977) indication that self-efficacy can be enhanced through positive interventions (Duckworth & Quinn, 2009; Duckworth et al., 2007, 2009): teacher effectiveness, as evidenced by student success, can lead to enhanced teacher self-efficacy and grit, which in turn may increase teacher effectiveness. Figure 2 provides a representation of this theoretical proposition.

This theoretical proposition implies that self-efficacy is separate from but related to grit; grittier teachers are more likely to persist in achieving the goal of helping all students learn, even when working with children who struggle or are disengaged in school. My findings suggest that overcoming their own challenges helped at least 25 of the teachers in this study develop grit. Grit in turn fosters teaching effectiveness, which, when the teachers reflect on their behaviors that promote student success, enhances their self-efficacy as teachers.

This is a preliminary theoretical proposition grounded in the data from the current study; I by no means suggest that it is generalizable to other teachers. Nevertheless, this proposition merits further study as a way both to test and refine the theory and to examine interventions that can help teachers enhance their grit. I now discuss the implications of this theoretical proposition and the findings of this study for theory and teacher education.

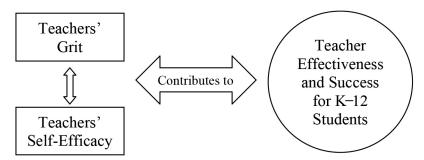


Figure 2. Enhancing teacher grit and self-efficacy through teaching success.

Implications for Theory

Angelle, Maisie, and Elaina's stories offer insights into how the construct of grit (Duckworth et al., 2009) can help struggling students persevere in the absence of success. Duckworth (2009) explained that grit allows people to "be in a very uncomfortable place for some part of your day, working extremely hard, and then to get up and do it all over again. And again and again" (minutes 16:25–16:40). Although Duckworth uses *place* figuratively, for Angelle, Maisie, and Elaina, school was literally an uncomfortable, sometimes even miserable, place. Math remained a struggle for Angelle and Elaina into adulthood. Yet all of them persisted.

Duckworth et al. (2007) defined grit as "passion and perseverance towards long-term goals" (p. 1087); it is a personal quality that was identified based on studies of successful individuals. Grit has been studied and measured among individuals in pursuit of positive goals, such as competing in the National Spelling Bee or making it through the challenging summer training at the U.S. Military Academy at West Point. While it is clear that Angelle, Elaina, and Maisie demonstrated the perseverance component of grit when overcoming academic challenges, it is not clear that they demonstrated passion. Nor is it reasonable to expect them to be passionate about learning when, as Maisie bluntly put it, her "basic skills sucked."

What is compelling here is that Angelle, Elaina, and Maisie seemed to have reached higher levels of grit in adulthood as teachers who are passionate about and persistent in helping all children learn. This finding offers a new insight since the origin of grit is unclear and existing research focuses on grit as a positive predictor of success, not on its development (Duckworth & Quinn, 2009; Duckworth et al., 2007, 2009). I propose that these three teachers demonstrated partial grit in youth; perhaps it developed as a result of the influence of positive adult role models who either demonstrated or encouraged persistence or helped them develop aspirations for success. Angelle articulated this belief during her follow-up interview, explaining, "If you have a mentor, if you have somebody that says 'You can do it-this is obtainable,' then it actually is." After school became a place of success, Angelle, Maisie, and Elaina became higher in grit, and that makes them both passionate and persistent about helping all children learn. Their grit may have contributed to their willingness to pursue National Board certification. Certainly, the decision to undertake a lengthy and demanding certification process with a success rate of only 50% calls for persistence. It also requires confidence in one's teaching skills; thus, self-efficacy played a role as well.

Previous research has suggested that self-efficacy is a variable that influences teachers' persistence and instructional behavior, student achievement, and teachers' beliefs that they can help the most unmotivated student learn (Tschannen-Moran & Woolfolk Hoy, 2001). Bandura (1977) proposed that self-efficacy can be enhanced through success and reflection. It follows that teachers who see their students succeed will increase in self-efficacy and be more persistent when helping future students. Grit may also be a positive predictor of teacher effectiveness; however, "less is known about increasing grit, but mean-level increases in grit across the lifespan suggest that it may be improved by intervention" (Duckworth et al., 2009, p. 546).

Given that a positive interrelationship seems to exist between self-efficacy and grit, future studies should investigate whether grit can be improved in a similar way as self-efficacy. Self-efficacy can be enhanced by providing strategies and skills to ensure incremental success (Bandura, 1977). Might teachers be able to use children's enthusiasm for a topic as a way for them to find success and thus enhance children's grit and self-efficacy? This possibility seems worth exploring, particularly with students who struggle in school, so that educators can help them persevere. As Duckworth (2009) explained, "Whatever that is [that makes people persevere], let's figure that out. And whatever it is, through the art that is teaching and education, let's bring it to children" (minutes 18:25–18:38). As a corollary, I add this: let's also bring it to teachers.

Implications for Teacher Education

Building on Bandura's (1977) understanding of how self-efficacy develops, an important question emerges: Can teacher educators help candidates develop self-efficacy and grit by providing them with experiences in which they apply tools and strategies for enhancing the learning of students who struggle? The possibility merits further investigation because of the potential to help future teachers develop not only the disposition that all children can learn but also a skill set to help actualize that belief when they teach students.

Helping teachers develop the willingness and ability to persevere on the journey to help all children learn is essential. As Angelle's, Maisie's, and Elaina's long histories of struggles make clear, some children take years to become successful learners. Angelle hoped that this study would

give teachers another perspective. A lot of teachers come from homes were the parents have it together. And a lot of times we forget. Even I forget, and I quickly bring my mind back to where I came from and what I went through. And I hope and I pray that it [this study] opens the hearts and minds of a lot of teachers.

Angelle described how stereotypes of children in the inner city seem to cloud some teachers' expectations, particularly those "who have always heard about what it's like teaching 'these kinds of kids." Her suggestion that stories of perseverance might help teacher candidates expand their perspective is consistent with Bullough's (2008) suggestion that candidates can develop "the rudiments of a schema for framing then attacking problems" (p. 13) by comparing their own experiences with narratives of teachers' lives. Bullough further explained that stories of extraordinary teachers "may demand to be told for moral purposes, and they inspire action, sometimes outrage" (p. 13).

Bullough wrote specifically about teachers' professional lives. Using narratives of biographies of teachers who faced academic struggles and are now exemplary educators might be transformative in helping preservice teachers confront their own biographies.

The teachers in this study provide a noteworthy contrast to teachers in the literature about the dangers of biography (Feiman-Nemser, 2001; Knowles, 1992; Lutovac & Kaasila, 2011). The participants had negative experiences in school, and those memories led to their commitment to professional learning and efforts to be different from teachers they had. Their negative student experiences have a positive impact on their practice. As Alma, a 30-year veteran elementary teacher, explained after reading a draft of the findings, "Most developed ways to teach themselves, and because of that they know that students can learn, especially when teachers are willing to take professional development courses to learn multiple ways to teach." Future research is needed to explore why some teachers are able to translate the negative experiences in their biography into positive teaching practices while others are not. Such information might help teacher educators effectively address biography in preservice preparation.

In conclusion, Grace, who teaches English at an alternative high school, provided a powerful thought about how she learns from listening to her at-risk students: "When [students] tell their personal stories, it always amazes and humbles and inspires me." The teachers whose stories are a part of this study are also amazing and inspiring. Their stories have potential pedagogical utility in teacher preparation and induction. The resilience and perseverance that allowed these teachers to overcome challenges is as inspiring as the resultant self-efficacy and grit that helps them to be dedicated and effective teachers. The findings suggest the rich opportunity for future study about how grit is developed and how grit can influence teaching and learning. Their stories and accomplishments also remind us that all children *can* learn. As Angelle said, "We have to invest in the children we have before us because they're our future."

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