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BECOMING A HIGHLY EFFECTIVE ELEMENTARY TEACHER AND HOW TO SUPPORT TEACHERS' DEVELOPMENT

Article by Tim Pressley, Riley Isom, Chalon Johnson, Amy Barnes, and Laura McAuliffe

Abstract

As teachers enter the field of teaching, teachers look to continue to develop in order to become highly effective teachers as they are often less effective than teachers with at least some experience (Boyd et al., 2008; Ladd & Sorenson, 2017). This development may occur through the support of mentors, administration, professional development (PD), as well as through trial and error, with the most development occurring during the first several years of teaching (Koedel & Betts, 2007; Rice, 2003). However, not all teachers develop into effective teachers. Some aspects that may affect a teacher's effectiveness are the classroom environment, instruction, and pedagogy, which then may affect student engagement and achievement based on if they are effective or ineffective (Stronge, 2018). Though having a positive impact on student engagement in the classroom is essential, others have gone further to state effective teachers do much more (Roehrig et al., 2012). More recently, along with observations of teachers, the use of value-added scores linked student achievement to teacher effectiveness (Goe, 2007). However, this approach to evaluating teachers is controversial, especially among teachers (Papay, 2011; Pressley et al., 2018; Rothstein, 2009).

Because of the difference between highly effective teachers and others, it is important to understand how highly effective teachers have had success within the classroom. The purpose of this study was to provide insight into the development of a highly effective teacher. The researchers looked to answer the following research questions: 1) What behaviors are new and developing teachers doing that make them less effective teachers? 2) How can schools support new and developing teachers to develop into highly effective teachers? and 3) How do new, developing, and highly effective teachers approach professional development to improve teaching?

Teacher Induction

With teachers making the largest gains in effectiveness in the first few years of teaching, schools and districts need to provide appropriate support to new teachers

(Koedel & Betts, 2011). Beginning a teaching career with a strong foundation of support may lead to continued growth throughout a teacher's career and a supportive environment may encourage teachers to stay in teaching, especially in low-income schools (Johnson et al., 2012; Podolsky et al., 2019). A supportive environment is especially important for new teachers; this includes support when needed in the classroom as well as developing relationships with other teachers, supportive administrators, resources to support improvement, and detailed feedback from observations (Johnson & Birkeland, 2003; Kraft & Papay, 2014). Previously researchers found the positive connections a teacher makes with those around them, such as principals, other teachers, and coaches had a strong impact on the new teacher's willingness to remain a teacher (Aspfors & Fransson, 2015; Bickmore & Bickmore, 2010; Cherubini, 2009; Curry et al., 2016). A supportive environment for new teachers tends to consist of collaborative structures, individualized teaching plans for new teachers, and an overall welcoming environment (Cherubini, 2009; Johnson & Birkeland, 2003). This type of environment benefits new teachers because it creates a more comfortable and personalized work setting, which then in return makes the new teachers feel more included in the teaching society (Aspfors & Fransson, 2015; Bickmore & Bickmore, 2010; Cherubini, 2009; Curry et al., 2016).

Mentor teachers also play a critical role in supporting new teachers (Feiman-Nemser, 2001a; Feiman-Nemser, 2001b; Feiman-Nemser, 2003; Howe, 2006). Mentor programs are influential on new teachers because they allow new teachers to work with more experienced teachers who have had success in the classroom and are already a part of the school environment. This helps new teachers learn and gather useful techniques, skills, and knowledge they may not already know (Feiman-Nemser, 2001a; Feiman-Nemser, 2001b; Feiman-Nemser, 2003; Howe, 2006). Beyond receiving advice from a mentor, it is also important for mentees to mentor themselves during the mentoring process. New teachers should analyze information given to them by a mentor as well as reflect on their practice and their surrounding school environment (Aspfors & Fransson, 2015). This is a good way for these new teachers to develop their self-reflection skills, which may lead to a more positive working environment overall (Feiman-Nemser, 2001a; Feiman-Nemser, 2001b; Feiman-Nemser, 2003; Howe, 2006).

Characteristics of Highly Effective Teachers

When it comes to the difference in effective and ineffective classrooms, teacher experience is associated with teacher effectiveness. In a meta-analysis on effective teaching, Podolsky et al. (2019) found a positive association between experience and teacher effectiveness through a majority of previous literature. Another way school districts and researchers have defined effective teachers is by identifying those that have a positive impact on student engagement within the classroom, especially at the elementary and middle school levels (Dolezal et al., 2003; Pressley et al., 2020; Raphael et al., 2008; Stronge, 2018). Though having a positive impact on student engagement in the classroom is important, others have gone further to state effective teachers do so much more. Similarly, highly effective teachers hold high expectations for their students on all work, including state assessments (Pressley et al., 2007). This

same study found highly effective teachers use data to drive their instruction with individual students and provide proper remediation for students to have success on state assessments. Highly effective teachers also have an effect beyond their classroom with a positive impact on a school's overall achievement (Jackson & Bruegmann, 2009).

Beyond an increase in student achievement, other characteristics of effective teachers include a teacher who is highly skilled in classroom culture, and motivation (Gaskins, 2005; Pressley et al., 2020; Roehrig et al., 2012). Roehrig et al. (2012) specifically discussed highly effective teachers as developing self-regulated students and support of deep processing through classroom management, classroom atmosphere, and classroom instruction. Lastly, the highly effective teacher is highly skilled in pedagogy, which includes the use of research-based instruction, metacognition, and continued PD (Gaskins, 2005; Roehrig et al., 2012).

Professional Development and Teacher Effectiveness

Professional development (PD) attendance is a staple for teachers each year. Attending PD sessions allows teachers to continue developing their skills and to learn new skills to improve their pedagogy, with more effective teachers seeking out PD opportunities more frequently than less effective teachers (Pressley et al., 2007). Pressley et al. (2007) found teachers at a highly successful school brought new skills learned at PD sessions into their classrooms regularly. These teachers sought out PD sessions and shared their PD learning's with all teachers within the building, which led their school to have high reading and writing achievement on state end of year assessments (Pressley et al., 2007). Other studies found PD sessions may have positive effects on teachers' behaviors, instruction, teacher efficacy (Desimone et al., 2002; Hilden & Pressley, 2007; Yoo, 2016).

PD plays a critical role in teacher development according to Guskey's (2002) teacher change model, which suggests PD is the first step in changing teacher behaviors, which will eventually impact student outcomes and teacher beliefs. The PD teachers attend must be effective PD for teachers to make changes in their teaching. Effective PD should focus on how students learn, include teachers within the same grade-level and school, and engage teachers in the learning process, with teachers analyzing examples of student work and presenting to peers (Desimone, 2011; Jeanpierre et al., 2005). PD should also focus on one topic across the school year, rather than multiple areas (Desimone, 2011). More recently, Gore et al. (2017) found positive effects on overall teacher quality for all teaching experience when providing PD in the Quality Teaching framework, which pushes teachers to collaborate and reflect on their teaching.

Beyond the content of the PD, Joyce and Showers (2002) found teacher attitudes to play a critical role in teachers PD learning. Teachers also need opportunity to practice skills learned at PD, for example, Parise and Spillane (2010) found teachers' self-reported positive changes in math and language arts instruction associated with PD and on-job learning. While Desimone et al. (2013) found teachers, who attend PD for

instructional strategies in math used strategies in the classroom more likely to lead to student growth, such as focusing instruction on more advanced cognitive thinking. With regard to student achievement, PD is associated with higher student achievement (Darling-Hammond, 2000; McCutchen et al., 2002). Specifically, McCutchen et al. (2002) found teachers who attended PD for reading instruction improved student achievement compared to the teachers who did not attend the PD. In addition, Hilden and Pressley (2007) found students whose teachers attended PD focused on increasing student reading comprehension showed increases in reading comprehension and self-regulation strategies. Thus, attendance at PD sessions has led to positive effects on teacher effectiveness and student achievement.

When focusing on new teachers and PD, schools should use PD to allow new teachers to share classroom experiences and need align their PD content with new teachers' needs (Burkman, 2012; Wong, 2004). However, schools need to be aware of the amount of PD provided to new teachers as to not overwhelm them (Hahs-Vaughn & Scherff, 2008). Beyond PD, instructional coaches also play a role in developing teachers, especially early in a teacher's career (Reddy et al., 2016; Spelman et al., 2016). Additionally,, Joyce and Showers (2002) state peer coaching is a key element of teachers transferring knowledge from PD to the classroom as well as supporting school wide implementation. Instructional coaches can work one-on-one with teachers on specific areas of weakness, developing effective lessons, and assessing students (Vogt & Rogalla, 2009; West & Staub, 2003). Along with providing guidance on instruction and areas of improvement, coaches also can model instruction and provide formative feedback on observations of teachers (Desimone & Pak, 2017). Similar to PD attendance, previous studies have found positive impacts on student achievement (Campbell & Malkus, 2011; Cornett & Knight, 2009).

Methods

The current study used a concurrent nested mixed-methods approach (Creswell et al., 2003) that included a focus on the qualitative data and supporting quantitative data regarding teachers' teaching and development practices (Morse, 1991). The goal of the current study was to examine the experiences and perceptions of teachers who were new (less than one year of teaching experience), teachers with an evaluation level of developing (or less than effective), and teachers and instructional coaches rated as highly effective. Data collection occurred during the 2017-2018 school year and included a survey and interview.

Participants

To be eligible to participate, teachers had to teach at an elementary school or work as an instructional coach at an elementary school. The researchers recruited participants using purposeful, convenience, and snowball sampling using an initial survey. After the collecting the survey data, the researchers grouped any teacher who shared their email indicating interest in participating in an interview in a level based on their answers to the survey (new, developing, and highly effective). To select interview participants, the

researchers used random selection from each level. The study included new, developing, and highly effective teachers in order to explore teacher development. The sample included new teachers because they are still growing as teachers. The researchers also believe it was important to include developing teachers because these teachers have had at least a year in the classroom to grow but are still developing their instruction and pedagogy according to administrators. There is also limited research on experienced, developing teachers. The current study looked to include highly effective teachers' perspectives on their development and the differences in behaviors between groups.

The sample for this study included a total of 11 elementary school teachers and 4 instructional coaches ($N=15$; See Table 1 for demographics). The different groups of teachers included new teachers ($N= 4$; 1 year or less of teaching experience), developing ($N= 2$; more than 1 year of experience and the latest evaluation score of developing or needs improvement), and highly effective ($N= 5$; based on palmer at al., 2005 guidelines). Palmer et al. (2005) suggested, based on their review of characteristics of highly effective teachers, that researchers focus on teaching experience, social nomination-recognition (e.g., teacher of the year), teaching performance, and professional and group membership when identifying highly effective teachers for a study. Highly effective teachers may provide insight on teacher development because of their teaching experience and previous record of highly effective teaching through teaching observations by school administrators. The highly effective teachers may also provide insight for other levels of teaching due to their extensive knowledge of classroom pedagogy developed throughout their career. The highly effective group also included instructional coaches ($N= 4$) because coaches are often promoted to their positions by building administrators for previous success in the classroom and included characteristics suggested by Palmer et al. (2005). Additionally, instructional coaches often work with new and developing teachers through formative observations, model teaching, and providing resources.

Only three developing teachers completed the initial survey, limiting the number of teachers available at the developing level. The limited number may also be due to the limited number of teachers labeled below proficient or effective by administrators (Weisberg et al., 2009). However, because of the limited number of teachers falling into this category it was important to include developing teachers in this study. The two developing teachers in this study had received evaluations at the developing level, which placed the teachers on action plans for the data collection year. The action plan required meeting with administrators and instructional coaches with the risk of their contract not being renewed if the teacher did not improve. Post-data collection, the two developing teachers, left the field of education to pursue other careers, but the teachers did not share if this decision was their own or one made by the district. All other case study teachers remained in teaching; however, two new teachers shared they planned to reassess career options after the following year.

The sample included elementary teachers from Virginia, with most participants teaching in either urban or suburban schools. The teachers did not come from the same district,

but rather from 4 districts across Virginia, which included 9 teachers from urban districts, and 2 teachers from suburban districts. The current sample included 9 teachers currently teaching at a Title I school that included an average student population of 52% economically disadvantaged, 54% African American, 24% White, and 19% Hispanic. The three instructional coaches worked at Title I schools and had previous experience teaching at Title I schools within the same district (Coaches 1 and 2). The coaches' sample included two coaches who currently worked at urban schools, one at a suburban school (Coach 3), and one at a rural school (Coach 4). Demographically, the current sample of teachers and coaches aligned with Taie and Goldring (2017) national sample, with 80% identifying as white, 13% Hispanic, and 7% African American.

Interviews

The Primary investigator (PI), who has previous qualitative research and interview experience, conducted semi-structured telephone interviews that averaged 45-60 minutes. Interviews were audio-recorded and transcribed verbatim. Interviews focused on teachers' perspectives on their development, description of the classroom environment, approaches to instruction, and motivation to teach. For example, "Describe the support you receive from administrators, coaches, other teachers to grow as a teacher." "How have you grown as a teacher?" The highly effective teachers and coaches also answered questions focused on the development of new teachers. For example, "How can new teachers develop their skills within the classroom?" (See Appendix A for the full set of interview questions).

Survey

The survey items used for this study came from a more extensive survey given to teachers. The current study focused on the questions specifically about the professional development attendance and teacher development. These questions included, "How many professional development sessions do you attend a year?" and "how often do you read research articles?" (See Appendix B for the full survey). The inclusion of these questions provided more insight into teacher behaviors and development. These data points also strengthened the construct validity of the qualitative data.

Data Analysis

A qualitative analysis accepts that researchers come with previous background knowledge and experiences that can influence their views during the data collection and analysis (Strauss & Corbin, 1998). In order to limit any previous experiences or views, all conclusions had to have multiple pieces of data to support. With each conclusion, the researchers also had come to a unanimous agreement regarding the findings. Lastly, to mitigate any personal biases all researchers used a reflective journal as a reminder of any personal biases, which included: a) the PI had experience as a former elementary teacher, b) the PI had continuous contact with current teachers about educational issues, and c) the co-researchers were observing elementary school classrooms at the

time of the analysis. The researchers specifically kept journals during the data analysis process, which allowed the researchers to note specific transcript quotes and survey data points in memos which supported emerging codes and themes. The journals ensured that data supported all codes and themes rather than previous personal experiences (Strauss & Corbin, 1998).

The researchers initially hand-coded transcripts using open coding (Strauss & Corbin, 1998). All researchers had previous qualitative analyses experience and reviewed all transcripts separately. The researchers then met to discuss codes found across transcripts. Any discrepancies between codes were reanalyzed as a group to determine an agreed upon code. After coding the teachers' interviews individually, the researchers grouped the teachers by the three levels (new, developing, and highly effective teachers) and developed themes across each level. The PI took the lead on developing themes and shared these themes with the other researchers. In order to consider a theme for the results, the theme required multiple quotes and/or survey data across the teacher level. The PI distributed the themes to the other researchers and discussed edits to the results until no new major conclusions emerged, and multiple data sources supported each theme across a teacher level. If any researcher felt there was no support for a theme across the teacher level then the researchers did not include theme in the results. After the research team finished the results section, the researchers reread original coding notes to determine any contradictions. After completing a read through of the results, the researchers confirmed alignment with the results and data (Strauss & Corbin, 1998).

Finally, the results incorporated statistics from the survey to support interview findings for research question 3 (Creswell, 2003). To support the qualitative data, a one-way ANOVA was run to compare new, developing, and highly effective teachers' professional development attendance as well as how often teachers' read research. Within the current results, the ANOVA results looked to enrich the qualitative data regarding teacher growth behavior (Creswell et al., 2003; Morse, 1991).

Results

After completing the analysis, the results suggested three major themes with differences in how teachers at each level approached teaching and development. The results provide support for each research question.

Research Question 1: What behaviors are new and developing teachers doing that make them less effective teachers?

When looking at the development of a teacher, it is important to understand the behaviors teachers perform prohibiting them from being effective from the beginning and throughout their career. Though new and developing teachers are still learning the craft of teaching, highly effective teachers shared common behaviors new and developing teachers do prohibiting them from being more effective. One of the major themes was new and developing teachers have a hard time developing the proper

relationships with their students. For instance, some teachers try to be friends with students rather than the teacher in order to get students to like them. When observing newer teachers in her building Teacher 8 (highly effective) shared,

They (new & developing teachers) want the kids to love them, and that's good, they should want them to love them, but you're not supposed to be their friend, and so I think trying to figure out the difference between being their friend and being their teacher takes time.

Similarly, several coaches observed new and developing teachers struggle with relationship building. For example, Coach 2 shared, "I think first and foremost, it's relationship building. You have to show them you care and that you are trying to learn about them before you can expect anything from them." Coach 1 also saw this theme when working with struggling teachers, as she explained, "the first mistake I see them making is not building relationships with their students. I think that is number one and keeping it a priority in the classroom." All four coaches shared they emphasized relationship building from day one when mentoring teachers in their schools and districts.

Tying into relationship building, new and developing teachers often struggle to implement an effective classroom management system. This may be due to not establishing or reinforcing rules and routines enough at the beginning of the school year. As shared by Teacher 10 (highly effective),

I think they don't establish that classroom community and that sense of routine and structure within a classroom from the beginning. If you don't set the tone for your classroom and your expectations, the kids will take advantage of that and then you spend more time on classroom management than actual instruction.

Similarly, Teacher 11 (highly effective) felt new and developing teachers need to understand the concept of establishing an effective classroom management system is not immediate and is a process. "They (new & developing teachers) need time to develop those skills (classroom management). It is not something you can do overnight; it is something that needs to be developed."

One characteristic the highly effective teachers shared regarding new and developing teachers' classroom management is it is often extrinsically motivated with behavior charts and technology applications. These applications allow students to earn points and share behaviors with parents, but require teachers to be on an electronic device to award points. This can often lead to teachers not being aware of the behaviors in the classroom as seen by Coach 2. While doing an observation, Coach 2 shared some advice she gave to a struggling first-year teacher using an application for behavior. "I told her (new teacher) instead of looking down at your phone and pressing things, shouldn't we look up and see what's going on out there? Because when your awarding points on your phone, you're missing things."

The use of extrinsic rewards is common among teachers, and even some of the highly effective teachers in the current study shared they used extrinsic motivation within their classrooms in the past. For example, Teacher 7 (highly effective) shared she used to rely on extrinsic motivation until shifting to a more intrinsic motivational classroom management system later in her teaching career.

I relied a lot on extrinsic rewards because it was a lot of what I saw when I was a preservice teacher. A lot of behavior management that we studied talked about things like token economies and a lot of schools have some sort of reward for students or a way to track behavior.

When asked why she moved away from extrinsic rewards, Teacher 7 (highly effective) shared, "I noticed very early on that students would only behave or perform if they were going to get some sort of reinforcement. It just became an issue of stepping back and not liking the direction things were taking." Teacher 7 went on to share that other teachers in her school have approached her about implementing her classroom management but often struggle to let go of a behavior chart.

Though the highly effective teachers felt new and developing teachers shared common behaviors prohibiting them from being highly effective, the highly effective teachers felt these behaviors were fixable if the new and developing teachers worked to improve. All highly effective teachers felt improvement could result from using the supports in the school and through attending PD sessions.

Research Question 2: How can schools support new and developing teachers to develop into highly effective teachers?

As new teachers enter the classroom, schools and districts must provide support to scaffold their development. The results of the current study found new teachers often receive support from instructional coaches or mentor teachers in the school. All the coaches shared their goal was to allow the new teachers to guide the mentorship process by having the new teachers communicate their struggles and needs. The coaches' support the growth of the new teachers by providing feedback on lessons taught and lesson plans. The instructional coaches also discussed co-teaching or modeling teaching to help the new teachers see highly effective teaching in action. Coach 1 stated, "I provide both formal and informal feedback on their lessons. I model lessons for them and then watch them complete those same lessons and provide them feedback on those lessons." Similarly, Coach 2 shared how she models and co-teaches with new teachers to help them get comfortable implementing skills the new teacher wants to incorporate in their classroom. "I'll model for a week or two depending on how comfortable the teacher is with the skills. Then I usually co-teach for a week, then finally the teacher does it on their own with me observing to gain feedback." Coach 2 felt this set-up was successful because it gave new teachers plenty of opportunities to watch and develop through scaffolding. All the coaches discussed their role in the school is to support and help the teachers develop into highly effective teachers.

All four new teachers shared the support received during the first year had helped them become a better teacher. For example, Teacher 3 (new) shared, "I have worked closely with the math coach in my school to work on my instruction. She has allowed me to observe her teach a lesson and team teach together, which has really helped." Teacher 2 (new) also shared that she felt supported in her school. "My administrator is great. She has observed me a couple of times already and given me great feedback as well as shared other resources with me." While Teacher 4 (new) utilized a first-year coach, "The first-year coach has been a lifesaver. She has helped me improve my reading instruction throughout the year with modeling and providing feedback."

Support after the first year

Beyond the first year of teaching, teachers shared that they must seek out support from others in the building or district. The skill of seeking out support was a characteristic of the highly effective teachers in the current study; however, the developing teachers did not look for support with their teaching. Due to district requirements of developing teachers, frequent observations were required. However, neither developing teacher believed this feedback was helpful to their development. When asked specifically about the feedback received, Teacher 6 (developing) shared, "I get a sheet in my box with boxes checked off for what got observed and every now and then they add a sentence of feedback, but nothing detailed." Teacher 5 (developing) shared a similar experience. "I get observed at least once a month because of my last evaluation, sometimes a couple of times (observed). The feedback usually includes actions observed checked off and maybe a sentence or two of praise or a suggestion, but I don't get much guidance." When asked if they ever sought out more feedback, neither developing teacher had at the time of the interview. The developing teachers lack of initiative for feedback may be a reason for their developing label rather than an evaluation of effective or highly effective.

Highly effective teachers and support

When discussing their development as teachers, the highly effective teachers focused on the feedback and support they received within the school. While developing as new teachers, the current highly effective teachers shared that feedback often came with observations. However, due to previous success in the classroom, observations happen less often. Even though the observations of highly effective teachers do not occur as often, they still sought out feedback when possible. The highly effective teachers shared their successes and drive to improve was due to the support they received from others in the school, especially as new teachers. Teacher 9 shared how her first principal played an important role in her development as a teacher.

She was a very hands-on principal; she was in your classroom at least once or twice a week, looking at your lesson plans, and seeing how your delivery of instruction was. She would leave sticky notes on your desk that said this is great or pop in and provide a little bit of help if you needed it. She would also send us research articles, pushed a lot of data decision-making. She was the one who taught me how to look at student scores

and develop the different tiers of instruction for kids. The foundations she gave me the first couple of years are still things I use today.

Similarly, Teacher 8 (highly effective) shared how she still has her current principal provide feedback, so she can continue to improve as a teacher. "I get immediate feedback on observations and then we debrief. My principal will tell me what she noticed and pose questions about different aspects she saw. This has pushed me further about my thinking about my kids and what I am doing with them." Teacher 8 (highly effective) went on to share this feedback from her principal is making her an even better teacher.

Research Question 3: How do new, developing, and highly effective teachers approach professional development to improve teaching?

When focusing on the number of PD sessions attended each year, there was a significant difference between the highly effective teachers ($M=9.56$, $SD=.957$), the developing teachers ($M= 5.00$, $SD=0.00$), and the new teachers ($M= 6.25$, $SD=2.35$) $F(2,14)=6.64$, $p=.011$ (See Tables 2 & 3). Going beyond the number of PD sessions attended, there was also a difference in the mindset each group of teachers when attending PD sessions.

The highly effective teachers shared a love of learning through PD training and through reading research articles. For instance, teachers from the highly effective category often shared they enjoyed and gained a large amount of knowledge through PD attendance. Teacher 7 (highly effective) shared,

I come from the mindset that, if there is something out there that is new and that can help my kids learn better or come at something from a different aspect, then I really want to be educated and trained in that. So then, I can use that as a tool to help support my instruction and development as a teacher.

The idea of applying information from PD was common amongst the highly effective teachers. As shared by Teacher 8 (highly effective),

I love to take things back from PD sessions, to the classroom and apply them. Being able to try things out in the classroom and discuss with other teachers in attendance is my favorite way because others might have tried to apply it differently than me.

Similarly, Coach 3 saw the advantages of attending PD, "I'm always learning new things. I think it's [attending PD] is an important part. It is where I learned the most about the craft of teaching."

Other highly effective teachers discussed not only attending PD but also sharing about their PD experiences helped expose them to current research. As Teacher 10 (highly effective) shared, "I think PD is good because it keeps you up to date on the latest research and practices that are most effective." She went on to share about a PD

session she attended and brought back to her school and district. “I was able to attend a national conference and come back and present not only to my school but also to my district. I think it’s great because you get to help other teachers, which also helps you grow.” PD and conferences were not the only ways the highly effective teachers grew. Coach 1 shared she used research articles to help her grow. “I try to read at least one research article every couple of weeks to stay up to date with what is going on in education.” All the highly effective teachers and coaches shared that they often read ($M=4.00$, $SD=.707$; 1= Never to 5 = Very often; See Table 2) research articles and all four coaches discussed sharing research articles to promote growth with the teachers they work with throughout the year.

New and Developing Teachers Professional Development

When it came to new and developing teachers, the views of PD differed from the highly effective teachers. New and developing teachers shared that the PD put on by the district was not relevant or useful to their teaching. As Teacher 5 (developing) explained, “I often go to PD provided by the district and I don’t think it is relevant to my class in particular, then I don’t think it is helpful to what I do.” Similarly, Teacher 6 (developing) shared she only attends required PD sessions and often does not implement anything from the PD attended. “I go to the ones that are required, but they (PD sessions) rarely relate to my classroom or my students.” Teacher 4 (new) echoed this view, which felt the general sessions offered by the district were not useful; however, this was not always the case. “I think the most helpful PD sessions are when the district is introducing something new about the curriculum or a new, specific skill, but the general ones I’ve attended are not as helpful.” The new teachers did see the value of PD when given autonomy in the PD sessions did attend. In particular, Teacher 3 (new) shared being able to attend several PD sessions to improve her reading groups. “I previously struggled with my reading groups, so having specific PD for small group instruction has really upped my reading group capabilities because now I feel more equipped to teach reading to kids who struggle with reading.”

As for how often the new and developing teachers read research articles, new teachers ($M=2.75$, $SD=.50$) and developing teachers ($M= 2.50$, $SD=.71$; See Tables 2 & 3) shared they rarely read research articles. When asked in the interviews, new and developing teachers stated they did not have time or see research as applicable to their classrooms because of other demands from the district or their administration. The difference in research read between the three levels was at significant level $F(2, 14)=7.410$, $p=.008$ (1= Never to 5 = Very often; See Tables 2 & 3).

Discussion

The results of this study give insight into the behaviors of three different levels of teachers, including professional development and the support given to each level. The study also provided perspectives of highly effective teachers on behaviors made by new and developing teachers, which may inhibit their effectiveness. The current study provided teachers an opportunity to discuss their development and to provide insight

into the views of development for new, developing, and highly effective teachers. The results also indicate schools and districts need to continue support teachers beyond the first year. As indicated by the highly effective teachers, behaviors developed early in their career and knowledge gained through feedback and PD may influence a teacher's effectiveness level (See Figure 1).

Teacher induction has been a major focus of research and schools over the last couple of decades (Feiman-Nemser, 2003; Howe, 2006; Koedel & Betts, 2011). The results of this study found schools are providing extensive support to new teachers within the first year; however, the support given to new teachers declines in the second year. The lack of support given to teachers beyond the first year may influence a teacher's effectiveness and motivation to stay in the classroom. A difference between the highly effective teachers and the developing teachers in the current study was the motivation to seek out support. The highly effective teachers in the current study had an intrinsic motivation to improve as teachers. The highly effective teachers demonstrated this motivation by seeking out support and formative feedback on their instruction through observations, PD, and research. One possible reason for this motivation was due to administrative and coach support early in the highly effective teacher career, which can also help with teacher attrition (Johnson & Birkeland, 2003; Torres, 2016). With both developing teachers leaving the field of education post-data collection, districts need to evaluate the support given to struggling teachers beyond the first year of teaching. This might include providing appropriate mentors who can connect with the developing teachers and providing a supportive school environment developed by administrators and highly effective teachers (Johnson & Birkeland, 2003; Joyce & Showers, 2002). Providing a more supportive school community may keep developing teachers in the classroom (Aspfors & Fransson, 2015; Curry et al., 2016; Feiman-Nemser, 2003).

When it comes to PD, previous studies found a connection between PD and highly effective teachers (Darling-Hammond, 2000; Desimone et al., 2002; Hilden & Pressley, 2007). Though districts require all levels of teachers to attend PD sessions, there was a difference in the mindset of attending PD, suggesting a teacher's motivation may influence their application of the information received in PD (Desimone, 2011; Pressley et al., 2007). Similar to previous studies, the highly effective teachers in this study felt PD and research were important aspects of improving teaching. Contrastingly the developing teachers did not look to utilize opportunities to learn, whether through PD, research, or from others in the building as they did not feel it applied to their classroom.

Implications

The current findings suggest schools and districts need to find supportive and individualized methods to work with developing teachers beyond the first year. This may include providing specific feedback on observations, sharing relevant research, or sending developing teachers to applicable PD sessions for their classrooms. Administrators can also look to provide a more hands-on approach or have instructional coaches within the school to work with teachers early in their career and with developing teachers to help the teachers grow and see success in the classroom. If

able, this formative support can come from a highly effective teacher within the building who may be more relatable to a teacher (Johnson & Birkeland, 2003; Joyce & Showers, 2002). The mentor or administrator should also include formative feedback and a focus on areas a teacher can improve rather than generic feedback for all teachers. Lastly, for all teachers, administrators within the schools and districts should look for insight from teachers on relevant PD topics.

The new teachers felt PD helped them improve their teaching if the PD was applicable. However, it is important to consider the new teachers may have jaded views of PD due to the required new teacher PD trainings at the beginning of the school year. These required PD trainings are not always classroom centered, but rather focus on district policies. Schools and districts should look to engage new teachers during the first year with PD sessions that connect with classroom instruction, and focus on a specific skill throughout the year to encourage teacher learning from PD (Desimone, 2011). To provide relevant PD sessions, schools can survey new teachers on PD topics that are relevant to their grade level or classrooms. Based on the current study, a skill districts should focus on during the first year is to help new teachers incorporate classroom management beyond extrinsic motivation and relationship building as part of new teacher training and the induction programs. This should include classroom support that focuses on areas of need based on observations with a specific focus on classroom management and relationship building. Mentors and administrators should also share observation feedback often and applicable research articles with new teachers to support teaching and continuous growth.

The current results are also relevant to teacher prep programs to guide preservice teachers on ineffective behaviors new teachers are performing in the classroom. Teacher prep programs may be able to provide more instruction during internships or courses to help preservice teachers avoid common behaviors discussed in the current results. Teacher prep programs can also support preservice teacher development by placing preservice teachers with highly effective cooperating teachers during their internship and providing supportive supervisors. Placing a preservice teacher with a highly effective cooperating teacher may allow the student to observe an effective model of teaching and classroom management, as well as gain a positive insight of teaching as a career. This practice also has led to higher observation and VAM scores for first-year teachers (Ronfeldt et al., 2018). Lastly, teacher prep programs can push preservice teachers to seek out relevant research to support teaching as a way to encourage continuous learning throughout their teaching career.

Limitations & Future Studies

In order to strengthen the results, the current study used several methods to check the validity and reliability of the results. One limitation of construct validity (Yin, 2013) was that the researchers did not observe the teachers' in their classrooms, thus the researchers could not confirm teachers' behaviors described in the interviews and survey. Future studies should look to add in other data pieces in order to gain a more detailed picture of the development of teachers at each level of teaching. Moreover,

because this study is qualitative in nature, readers should not generalize the findings for all teachers (Creswell et al., 2003). Readers should interpret the quantitative findings with caution due to the small group sizes of the new and developing teachers. Future research should look to expand on the current findings through a larger sample size and more extensive quantitative data. This may include working with a specific school district or elementary schools to recruit a larger sample. Moving forward, more research needs to focus on teachers who have struggled beyond the first-year of teaching and have received a label of ineffective or developing. Though there are a limited number of teachers out there, which fall into this category (Weisberg et al., 2009) it is important for researchers and educators to understand the needs and perspectives of developing teachers if districts hope to help improve teacher instruction. Future research should look to include more extensive research on the development of highly effective teachers. Specifically gaining a larger sample of highly effective teachers and their perspectives on the actions taken to improve their teaching throughout their career.

Additionally, future studies should focus on other variables, which may influence a teacher's development. Some of these other variables may include the school demographics (i.e., school location, Title I label, racial match/mismatch, or school socioeconomic status), school environment (i.e., the support given within the school), teacher motivation, or district supports (i.e., PD opportunities). Researchers should also consider looking into the support or programs provided to teachers beyond the first year of teaching.

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Appendix A

Semi-Structured Interview Questions

Questions on Teacher Knowledge

How have you grown as a teacher/coach?

Describe the support you receive from administrators, coaches, etc. to grow as a teacher. What type of feedback does/did your admin give you regarding teaching?

How often do you attend professional development throughout the year?

How important do you feel professional development is for you as a teacher?

Describe your classroom management plan.

Describe how you prepare for teaching the content to your students.

Do you feel you push students to take risks within your classroom? If yes/no, how so? why not?

How do you work with students to monitor their own learning in your classroom?

How do you promote reflection of learning in your classroom?

Questions on Classroom Culture

What type of activities do you do to engage students?

How important is it for you to develop relationships with your students?

Explain how you develop relationships with your students?

How do you provide feedback to students in your classroom?

How often do you provide feedback to your students on their academic work?

How do you bring in student choice into your classroom?

How do you push students to develop and seek answers to their own questions?

Questions on Instruction

Describe the type of instruction you implement in your classroom.

Describe your instructional technique of working with a wide range of student abilities.

Describe some ways you present new content or strategies to students.

How often do you pull small groups or work with students one on one? Describe how you work in small groups or one on one.

How often do you collaborate with other teachers? How important/not important is collaboration to you?

How do you use student data to influence your instruction?

Questions on Motivation

How do you motivate students in your classroom to promote appropriate behavior?

Do you set goals with your students? If yes, how often do you discuss these goals with them?

How do you motivate students to promote student academic success? Has this approach been effective?

What is your motivation to be a teacher?

What is the most challenging aspect of being a teacher?

What aspect of teaching have you had to work the most on since becoming a teacher?

What motivates you to stay in teaching/education?

Highly Effective Teachers Only/Instructional Coaches

What do you believe has allowed you to become a highly effective teacher?

What are mistakes you see new teachers making that make them less effective?

How can new teachers develop their skills within the classroom?

In your opinion, what are reasons you see new teachers leaving the field of teaching?

How do you work to develop new/ineffective teachers?

Appendix B

Survey

Section 1-Teacher Demographics

1. What is your gender?

- Male Female Other Do not wish to answer

2. What is your race or origin? (select all that apply)

- White Black Hispanic, Latino, or Spanish origin Asian
 American Indian or Alaska Native Native Hawaiian or Other Pacific Islander Other

Do not wish to answer

3. Which of the following best describes your teaching experience? (Based on answer will skip to next question or next section)

- Pre-Service teacher New teacher (1-5 years of teaching experience)
 Established Teacher (More than 5 years of teaching experience)

4. How many years have you been a teacher? _____

5. How many years have you taught at your current school? _____

6. What grade do you currently teach? _____

7. Have you taught any other grades or subjects? If so which ones? _____

8. What is your highest degree obtained (Bachelors, Masters, Ph.D., Other)

9. What was your major in college? _____

10. What was your latest overall teacher evaluation level?

10. Have you ever been named Teacher of the year in your school? (Y/N)

11. Have you ever been named Teacher of the year in your district? (Y/N)

12. Are you a national board certified teacher? (Y/N)

13. Have you ever been on a required plan of action to improve your teaching? (Y/N)

14. If yes, are you currently on a plan of action to improve your teaching? (Y/N)

Section 2-Teacher Behaviors

15- 26 (Use Scale below)

1-Never, 2-Rarely, 3-Sometimes, 4-Often, 5-Very Often

*Indicates reversed scored item

15. How often do you reward students with extrinsic awards (stickers, tokens, certificates, etc.) for completing academic tasks?*

16. How often do you allow for student choice of academic tasks?

17. How often do you set learning related goals for individual students?

18. How often do you provide specific feedback to students on goals or on individual work?
19. How often do you allow for students to learn from each other?
20. How often do you communicate with parents in regards to student academics?
21. How often do you discuss academics with your students one-on-one?
22. How often do you discuss others aspects of students' lives (home, hobbies, etc.) with students one-on-one?
23. How often do you push students to take risks within your classroom?
24. How often do you push students to ask questions when they are confused?
25. How often do you read research articles related to teaching and learning?
26. How often do you have to stop instruction to address behavior problems?*
27. How many professional development sessions do you attend a year?

Section 3- Grit Scale: 1-7 use scale

1. New ideas and projects sometimes distract me from previous ones
2. Setbacks don't discourage me.
3. I have been obsessed with a certain idea or project for a short time but later lost interest.
4. I am a hard worker.
5. I often set a goal but later choose to pursue a different one.
6. I have difficulty maintaining my focus on projects that take more than a few months to complete.
7. I finish whatever I begin.
8. I am diligent.

Final question:

Would you be willing to speak to the primary investigator for 30-45 minutes regarding your teaching or future teaching? Please provide an email below if you would like to be considered for the interview portion of this study. Thank you!

Table 1

Teacher Demographics

Teacher	Gender	Race	Years Teaching	Current grade taught or coached	Last Teacher Evaluation	Teacher of the year in your school	Teacher of the year in your district
New							
Teacher 1	Female	Hispanic	0.5	5th	N/A	No	No
Teacher 2	Female	White	0.5	4th	N/A	No	No
Teacher 3	Female	White	0.5	4th	N/A	No	No
Teacher 4	Female	White	0.5	2nd	N/A	No	No
Developing							
Teacher 5	Female	White	2	2nd	Developing	No	No
Teacher 6	Female	African American	8	3rd	Developing	No	No
Highly Effective							
Teacher 7	Female	White	16	2nd	Highly Effective	Yes	No
Teacher 8	Female	Hispanic	15	5th	Highly Effective	Yes	No
Teacher 9	Female	White	6	3rd	Highly Effective	Yes	No
Teacher 10	Female	White	9	2nd	Highly Effective	Yes	Yes
Teacher 11	Female	White	5	Kindergarten	Highly Effective	Yes	No
Coaches							
Coach 1	Female	White	9	Elementary	Highly Effective	Yes	No
Coach 2	Female	White	10	Elementary	Highly Effective	Yes	Yes
Coach 3	Female	White	40	Elementary	Highly Effective	Yes	No
Coach 4	Female	White	8	Elementary	Highly Effective	Yes	No

Table 2

Descriptive Statistics

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
PD Attended								
New	4	6.25	.957	.479	4.73	7.77	5	7
Developing	2	5.00	.000	.000	5.00	5.00	5	5
Highly Effective	9	9.56	2.351	.784	7.75	11.36	8	15
Total	15	8.07	2.658	.686	6.59	9.54	5	15
Research Read								
New	4	2.75	.500	.250	1.95	3.55	2	3
Developing	2	2.50	.707	.500	-3.85	8.85	2	3
Highly Effective	9	4.00	.707	.236	3.46	4.54	3	5
Total	15	3.47	.915	.236	2.96	3.97	2	5

Table 3

ANOVA Results

	Sum of Squares	df	Mean Square	F	Sig.
PD Attended					
Between Groups	51.961	2	25.981	6.637	.011
Within Groups	46.972	12	3.914		
Total	98.933	14			
Research Read					
Between Groups	6.483	2	3.242	7.410	.008
Within Groups	5.250	12	.437		
Total	11.733	14			