

**QUALITIES OF EFFECTIVE TEACHERS:  
HOW PROFESSIONAL DEVELOPMENT AND EVALUATION CAN SUPPORT  
TEACHER  
GROWTH AND SUCCESS**

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## QUALITIES OF EFFECTIVE TEACHERS:

### HOW PROFESSIONAL DEVELOPMENT AND EVALUATION CAN SUPPORT TEACHER GROWTH AND SUCCESS<sup>1</sup>

#### What Are the Skills of Effective Teachers?

Teachers matter. Not only do teachers matter in the lives of students while in the classroom, but the effect teachers can have on students long-term in regard to attending college, earning a higher salary, living in a higher-quality area, and saving for retirement shows the important role teachers play in the lives of their students (Chetty et al., 2014). If teachers make this much of an impact long-term for students, it shouldn't be surprising that the quality of the teacher is the most important school-related factor impacting student achievement (Hanushek & Rivkin, 2010; Hattie, 2015; Nye et al., 2004). Understanding teacher effectiveness has become a growing body of research examining the idea that specific characteristics and behaviors matter in teaching with regards to student achievement as well as other desired outcomes (Muijs et al., 2014).

Teachers need to have subject matter knowledge, pedagogical knowledge, curricular knowledge, learner knowledge, and cultural and community knowledge (Mehta & Doctor, 2013). This professional knowledge and the ability to adapt its application is what leads to rigorous and flexible teaching (Knievel et al., 2015; Voss et al., 2011). Having the ability to interweave these different forms of knowledge is complex and requires teachers to draw on many skills and attributes in different combinations at different times to produce student learning (Stronge, 2018).

Teachers need to be skilled at planning and preparing for instruction. When looking at teacher planning, teachers need to focus on instruction by organizing their instructional time, setting learning objectives, and using student learning data. Teachers need to prioritize instruction and student learning. While that statement seems like a foregone conclusion in the profession, it can manifest in different observable ways. Consistency and organization are ways teachers can prioritize instruction as it allows time to focus on teaching and learning (Curby et al., 2013). In the classroom you can see this consistency and organization by teachers:

- preparing materials in advance (Stronge & Xu, 2015),
- following a consistent schedule and maintaining procedures and routines developed at the beginning of the school year (Stronge & Xu, 2015),
- implementing clear and smooth transitions (Kelley et al., 2010),
- limiting disruptions and interruptions by handling administrative tasks quickly (Gettinger & Walter, 2012; Kane et al., 2011), and

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<sup>1</sup> Significant portions of the literature review contained in this report were adapted from Stronge (2018) *Qualities of Effective Teacher (3<sup>rd</sup> Ed.)* and Stronge & Xu (2021) *Qualities of Effective Principals (2<sup>nd</sup> Ed.)*

- working collaboratively with the administration and implementing an appropriate behavioral management system (Gettinger & Walter, 2012; Kane et al., 2011).

Once the instructional time is preserved teachers can think deeply, thoroughly, and thoughtfully about instructional planning. Teachers must set learning objectives that are clearly stated, in alignment with the instruction and assessment, and at the appropriate depth and breadth of learning to meet the needs of students and instructional time (Stronge & Xu, 2015). Teachers carefully plan which instructional strategies to be used, when to use them, and for how long based on student needs (Cotton, 2000; Spear-Swerling & Zibulski, 2014; Swanson, 2011). Lastly, when planning, teachers need to be able to use student learning data to plan. It is important to use these data to determine students' readiness for learning new information, monitor student progress and adjust instruction, develop differentiated instruction, group students for learning, and set goals (Waugh & Gronlund, 2012).

While planning is a vital skill, being able to deliver the instruction is also a needed skill. Teachers should be able to use a variety of instructional strategies, differentiate instruction, have high expectations for students and communicate them, promote complex and higher order thinking, use high-quality questioning, and engage students in their learning (Stronge, 2018). The instructional strategies a teacher uses in the classroom matter greatly as they impact students affectively, behaviorally, and cognitively. Therefore, being skilled at deploying and having a wide berth of instructional strategies is vital for any teacher (Capraro et al., 2017). An example of this can be found in Hattie's (2017) research which analyzes the effect sizes of 256 different instructional strategies and behaviors (note effect sizes [ES] of 0.8 and higher are considered to be a large effect, 0.5 to 0.8 a medium effect, and below 0.5 a small effect). The ES for selected instructional strategies include the following:

- Jigsaw method (1.20 ES)
- Scaffolding (0.82 ES)
- Feedback (0.70 ES)
- Problem solving teaching (0.68 ES)
- Concept mapping (0.64 ES)
- Direct instruction (0.60 ES)
- Mastery learning (0.57 ES)
- Engagement (0.56 ES)
- Questioning (0.48 ES)
- Small group learning (0.47 ES)
- Cooperative learning (0.40 ES)

In addition to being able to use a variety of instructional strategies, teachers must be able to differentiate instruction to meet the needs of the diverse learners in their classrooms. Teachers should be skilled at differentiating the content, learning activities, and assessments (Tomlinson, 2014) in order to engage individuals with their differing abilities, achievement, and ways of learning in their classroom (Connor et al., 2013). Due to the various academic needs of individuals in the classroom teachers need to be effective communicators. Teachers need to be able to give clear and focused explanations of the content during instruction when giving examples or guiding students in practice, as well as explaining directions on how to complete

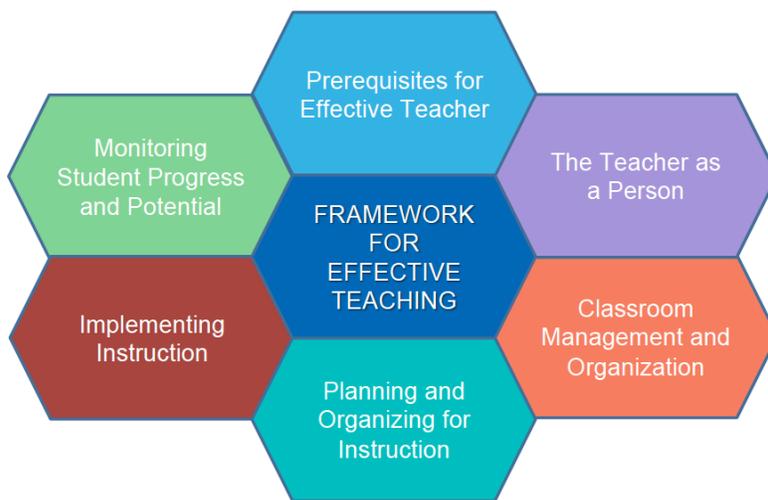
activities or assessments (Grossman et al., 2013; Lee & Kim, 2016; Mazer, 2013). Additionally, it is important that teachers clearly communicate the expectations for student achievement and the students' role in striving to meet those high expectations (Rojas & Liou, 2017; Rubie-Davies et al., 2015). Teachers can set high expectations by using instructional strategies that encourage complex thinking and the use of higher order thinking skills. By integrating subject areas and knowledge, including meaningful conceptualization as opposed to memorization, and using scaffolding and supports that allow students to take academic risks, teachers engage and challenge students (Dietrich et al., 2015; Imafuku et al., 2014; Morris & Reardon, 2017; Pitzer & Skinner, 2017). Questioning is another skill teachers can use to promote higher level thinking.

By asking a combination of concrete lower-level questions and higher-level questions teachers can help build knowledge and push student thinking further (Smart & Marshall, 2013). On average, teachers ask about 50 questions in a class period, most of which are lower-level thinking questions and only 13-17 percent are open ended (Eliasson et al., 2017). In addition, to asking questions teachers need to be adept at giving students wait time and to take care to not accept incorrect answers without probing or helping scaffold students to give a more complete and thoughtful response (Mason, 2012; Walsh & Sattes, 2016). Questions should be considered prior to instruction in the planning process, during implementation, and in order to assess students' knowledge in alignment with the instructional objectives and desired outcomes (Walsh & Sattes, 2016; Weiland et al., 2014). All these skills used during instructional delivery should be to support student engagement in learning. Ensuring students are engaged in their learning is vital as much of their time in the classroom is devoted to instruction. Students' engagement is supported by the classroom teacher creating a positive classroom environment and paying attention to the pacing of the lesson, using appropriate questioning, explaining with clarity both the content and directions, and matching the students' skill level to the challenge level of the activity (Bundick et al., 2014; Shernoff et al., 2014; Strati, et al., 2017).

Teachers must be skilled planners and implementors of the curriculum, but they also must have astute assessment skills. Assessment can come in many forms such as pre-assessment, formative assessment, summative assessment, self-assessment, and feedback, and teachers should be able to implement each. Aligning these classroom assessments with the intended learning objectives and the instruction provided is a skill teachers can develop that correlates with student achievement (Fulmer & Polikoff, 2014). In addition, teachers should use the data from well aligned assessments to make instructional decisions such as grouping, reteaching, and adjusting instruction (Bertrand & Marsh, 2015; DeLuca et al., 2016; Schildkamp et al., 2017; Tomlinson, 2014).

A framework for organizing the guiding qualities of effective teachers is presented in Figure 1.

Figure 1.1: Framework of Effective Teaching



Source: Stronge, J.H. (2018). *Qualities of Effective Teachers* (3<sup>rd</sup> Ed.). ASCD.

### **Can Teacher Effectiveness Be Improved through Professional Development and Support?**

While it is important to know what skills teachers possess that make them and their students successful, a vital question is: *Can teachers improve these skills?* The short answer is yes: These skills can be improved at all levels from quality preservice and in-service professional training and development. Novice teachers can cultivate the skills, behaviors, and characteristics desired through awareness, such as observing other teachers, receiving feedback from peers, building collegial relationships, and participating in effective learning experiences (Stronge, 2018). Teachers currently in the profession need professional development that is of high-quality to sustain and improve their teaching skills and the professional development needs to be “collegial, challenging, and socially oriented because learning entails these characteristics” (Stronge, 2018, p. 257). A body of research exists which documents how to formulate professional development in a way that ensures teacher improvement and student achievement. Merchie et al., 2018, found that two categories of instructional change have emerged as a result of professional development “changes in instructional strategies or practices or in changes to interaction patterns” (p.8). Within the extant research, eight features of professional development have been found to be effective intervention strategies for teachers.

- 1) Content focus- The professional development should focus on and should be informed using evidence from student learning either formative or summative.
- 2) Pedagogical knowledge- The professional development should focus on ways to improve the teaching of the content.

- 3) Coherent & evidence-based- The professional development should be in alignment with teacher standards and the teachers' goals and based on research.
- 4) Ownership- The professional development should meet the teachers' professional interests and identified needs.
- 5) Duration- The professional development is best if it is extended in duration and intensive. Research suggests activities that are spread out over time and include approximately 20 hours of contact time or more (Desimone, 2009).
- 6) Collective or collaborative participation- The professional development takes place collaboratively with colleagues. An example would be observing another teacher or having a colleague observe and provide feedback on current practices.
- 7) School or site-based- The professional development should be worked into the teachers' daily work.
- 8) Active learning- The professional development should utilize the cycle of inquiry and reflection. It should help teachers to be the co-authors of their own learning and not just a consumer of knowledge.

(Sources: Desimone 2009; Hammerness et al., 2005; Kang et al., 2013; Kedzior 2004; Postholm 2012; Timperley et al., 2007; Van Veen et al., 2012; Wayne et al., 2018)

A ninth feature has emerged in more recent research: Trainer quality. The professional development should be led by an expert in the field with a deeper understanding of the concept so that teachers can receive individual feedback and have the opportunity to address their concerns and skills (Cheng & So, 2012; Morrison, 2014; Van den Bergh et al., 2015; Walker et al., 2012).

In addition to professional development, the act of having a mentor teacher can lead to improved teaching skills. Goldhaber et al. (2020) found that when a preservice teacher's mentor is highly-skilled and effective that the students' effectiveness is impacted in math and in a smaller way in English/Language Arts. While most research on mentoring focuses on preservice teachers, research on teachers' professional communications with peers exists. While the relationship is different than a mentor-mentee relationship, this professional peer relationship allows teachers to reach out to professional peers to share best practices, to get advice or help, and to work together for student learning (Stronge, 2018). Teachers who participate in this type of collaboration have students that improve at greater rates and have better achievement in math and reading (Ronfeldt et al., 2015). While this collaboration is not the same form of mentoring that is discussed with novice teachers, it gives teachers the opportunity to learn from each other in a way that is meaningful to their daily work and supports them in their areas of interest. A study by Bressman et al. (2020) considered mentoring among experienced teachers and found that it is not common practice, but that teachers identified areas where having a mentor might be useful specifically when discussing how quickly things change within education and keeping up with the ever-evolving practices. Experienced teachers mentioned having flexibility, collaboration, and personalization as important aspects of mentoring, as well as a more collegial mentoring relationship as opposed to a hierarchical one (Bressman et al., 2020).

Like mentoring, instructional coaching is a method for helping improve teacher skills. Coaching defined broadly is characterized as an instructional expert working with teachers in a

manner that is individualized, intensive, sustained, context-specific, and focused (Kraft et al., 2018). Kraft et al. (2018), found that instructional coaching has a positive effect on teachers' instructional practices but that it varies across programs; however, programs that focused on content-specific coaching and on general pedagogical practices consistently positively impacted instructional practice by one-half of a standard deviation. In addition, it was found that teacher coaching had a positive impact on student achievement for content-specific coaching at 0.18 SD and a smaller effect for general coaching programs (0.07 SD), which was not statistically significant. Coaching where training groups were used had a significant impact on teacher's instructional practices as well as pairing coaching with resources and/or materials such as curriculum (Kraft et. al, 2018). While these results look promising, there are some hurdles to implementation, but Moody (2019) suggests ways to solve these problems:

- Broaden the definition of coaching
- Develop a tiered system of coaching to divide teachers based on the level of coaching needed.
- Involve more people in the coaching process
- Use technology to help
- Collect data on coaching and reassess throughout the school year.

In summary, teacher skills do matter in student achievement and ensuring teachers skills are continuously improving and updating is a large undertaking. There are many methods for professional development that will improve teacher skills, which will in turn improve student achievement.

### **How Should Teacher Evaluation Be Designed to Improve Teacher Performance and Impact Student Achievement?**

The purposes for teacher evaluation are two-fold: improving performance and accountability. Teacher skills and practices can and should be evaluated and diagnosed for strengths and weaknesses. While there is disagreement on the way to design a teacher evaluation system there is agreement that teachers should know their teaching strengths and weaknesses and receive feedback on how to improve (Dee et al., 2019). Evaluating for the purposes of improving performance is a form of professional development, growth, and improvement and involves helping teachers learn about, reflect upon, and improve their teaching craft (Firestone & Donaldson, 2019). The accountability purpose of teacher evaluation is important in determining if professional goals are being met and if the teacher is effective (Plotner, 2018; Stronge & Tucker, 2003).

Evaluation is important in impacting teacher skills as teachers can improve their performance by 4.5 percentile points by participating in teacher evaluation (Taylor & Tyler, 2012). If just participation in teacher evaluation improves performance, it then makes sense to understand what practices are important in teacher evaluation. The teacher evaluation system is beneficial in many ways to include assessing the effectiveness of teachers, identifying areas for improvement, individualizing professional development, and improving instruction (Stronge & Xu, 2021). If the goal is high-quality teacher evaluations which lead to improved quality teaching< these four characteristics of the teacher evaluation process should be in place: “a positive context for teacher evaluation, good communication between the principal and teacher

throughout the evaluation process, a commitment to teacher evaluation, and technically sound practices” (Stronge & Xu, 2021, p.117). Each of these characteristics will help building a community that values learning and in a way that is fair and objective. In fact, a well-designed evaluation system will promote dialogue about effective instruction within the school during evaluation interactions especially when the evaluations are performance-based (Firestone & Donaldson, 2019; Kraft & Gilmour, 2016; Taylor & Tyler, 2011).

Teacher evaluation should rely on “a balanced system of multiple measures, without disproportionate weight assigned to any one measure” (Close et al., 2018). There are many benefits to having a performance-based and multifaceted teacher evaluation including increasing the accuracy and objectivity of the evaluation, having the ability to better differentiate between high- and low-performing teachers, being able to identify strengths and weakness, and providing meaningful and specific feedback about the teacher’s practice (Delvaux et al., 2013; Hill et al., 2011).

Teacher evaluation traditionally has been based on classroom observations, and while observation is a helpful way to collect data for classroom teachers, alone, it is too limiting. Observation does not provide a complete or fair picture of the teacher’s performance as it is susceptible to unreliability, instability, and bias (Hill et al., 2012; Werner, 2018). Observation also does not relate directly to student learning (Dynarski, 2016). Multiple sources for data collection are necessary to compile a complete and more comprehensive picture of teacher performance and give more validity to the evaluation (Braun, 2015; Close et al., 2018; Measure of Effective Teaching, 2013).

Portfolios – or teaching artifacts - actively engage teachers in the evaluation process and encourage them to be reflective as to their practice while helping them to showcase their professional journey and those skills which cannot be seen such as planning (Darling-Hammond, 2014). From research we know that teacher quality is the most important school-related factor influencing student achievement, so it makes sense to include student achievement in a fair and reasonable manner in a comprehensive evaluation system for teachers. Using student achievement data is helpful but using such data should be done with careful consideration as isolating the teacher’s impact on the achievement data can be difficult. Further, determining the value-added impact of the teacher can be especially difficult due to a lack of fair and accurate measures. Additionally, using value-added measurement has both strengths and liabilities and is still evolving. Regardless of how it is used, including student achievement progress data can be politically charged (Stronge & Xu, 2021). While it is not common practice in K-12 education, when using student surveys in a teacher evaluation system, it has been found that feedback from students about the teacher’s performance is statistically significant to the student achievement demonstrated (Kuhnfeld, 2017; Swanson & Ritter, 2018). However, these types of evaluations can be seen as threatening and should be used with a degree of caution (Stronge & Xu, 2021).

In summary, teachers matter. Ensuring teachers continue to develop and improve their craft is important to student achievement. Through high-quality professional development and teacher evaluation the skills teachers possess can be nurtured to impact student learning.

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