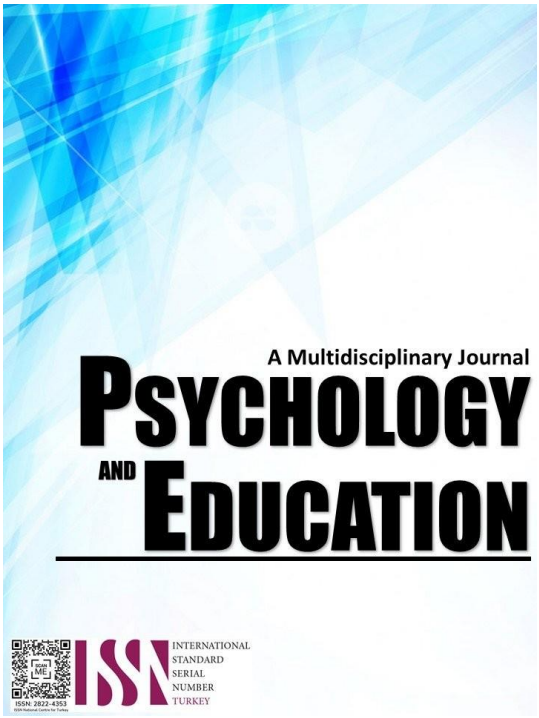
HIGH-LEVERAGE INSTRUCTIONAL PRACTICES: THROUGH ESTABLISHING AND MAINTAINING SCHOOL-COMMUNITY EXPECTATIONS



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Research Article

High-Leverage Instructional Practices: Through Establishing and Maintaining School-Community Expectations

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Abstract

The study explored the establishment and maintenance of school community expectations towards high leverage instructional practices. The respondents were parents, alumni and members of organizations. The researcher utilized a qualitative design. The results revealed that all parents-participants are under the age range of 32 years old and above, predominantly females, and attain graduate schooling. Most of the alumni participants are under the age bracket of 20-25 years old, predominantly males and reach high school level. Many of the organization participants are under the age bracket of 32 years old and above, predominantly females and also reach graduate schooling level. Based on the assessment of the establishment and maintenance of parents' expectations, the following themes were generated: Effective Lecture Pedagogy. The central theme revolves around improving the effectiveness of lectures in the classroom; Visual Learning. The central theme revolves around the importance of visual aids in enhancing student learning and catering to diverse learning styles; Experiential Learning. The central theme revolves around the importance of hands-on learning experiences and the use of three-dimensional tools to facilitate deeper understanding and engagement; Active Learning and Knowledge Retention. The central theme revolves around the importance of active learning strategies, such as recitation, drills, and question-and-answer sessions, in reinforcing learning, improving knowledge retention, and developing essential skills; Student-Centered Learning. The central theme revolves around shifting the focus from teacher-centered instruction to student-centered learning, where students actively engage in the learning process through discussions, demonstrations, and presentations; Differentiated Instruction and Support. The central theme revolves around the importance of providing differentiated instruction and support to meet the diverse learning needs of all students; Balancing Teaching and Administrative Demands. The central theme revolves around the challenges of balancing instructional time with the demands of administrative tasks for teachers; Differentiated Instruction and Support. The central theme revolves around the importance of differentiated instruction and providing targeted support to meet the diverse learning needs of all students; Assessment and Evaluation. The central theme revolves around the use of tests and quizzes to assess student learning and inform instruction. Developing Higher-Order Thinking Skills; The central theme revolves around fostering critical thinking, problem-solving, and communication skills through student-centered activities like discussions, explanations of thinking, and open-ended questions; Technology Integration in Education. The central theme revolves around the effective and meaningful integration of technology across all subject areas to enhance student learning; and Collaborative Learning. The central theme revolves around the importance of cooperative learning strategies in fostering student engagement, collaboration, and social-emotional development.

Keywords: *high-leverage, instructional practices, establishing, maintaining, school-community, expectations*

Introduction

Efforts to achieve integrity in the implementation of educational reforms and policies have long been considered a challenge in large part due to a failure to account for local context. In their efforts to achieve fidelity with policy and program goals, policymakers and implementers often neglect to account for the particularities of their organization and environment. A current approach, aimed at adaptation to local context in implementation, comes from improvement science and its practice of continuous improvement. Continuous improvement is a reform strategy in which implementers engage in an intentional and deliberate process of goal setting, enactment, and analysis that, in turn, informs the next cycle of implementation and improvement. Through this structured adaptation, implementers tailor policy and program goals with local conditions and constraints.

Furthermore, while educational practitioners have been at the forefront of continuous improvement efforts and its emergence within the field for some time, only recently have researchers begun turning to the approach to implement high-leverage educational problems. "High leverage" refers to educational approaches that have been found in the field to have an impact on student academic, social-emotional, and behavioral outcomes or teacher activities. These are approaches in which there is broad consensus that, if implemented with integrity, there is a high likelihood that they will lead to high-quality, positive change. This article reviews empirical research that studied the implementation of high-leverage practices using continuous improvement strategies and identified seven high-leverage strategies on which there are studies of their implementation using a continuous improvement approach. Each section provides research that establishes the high-leverage practice, as well as improvement research on the high-leverage practice. The six topics are instructional leadership and collaboration, school turnaround, social-emotional learning, professional development, and use of data.

High-leverage practices are the fundamentals of teaching. These practices are used constantly and are critical to helping students learn important content. The high-leverage practices are also central to supporting students' social and emotional development. These high-

leverage practices are used across subject areas, grade levels, and contexts. They are "high-leverage" not only because they matter to student learning but because they are basic for advancing skill in teaching.

High leverage instructional practices (HLIP) do just as their name implies—deliver high impact for SPED students and their learning. When incorporated into the classroom, these pedagogical approaches have proven to consistently improve the student experience.

High-leverage practices (HLPs) and evidence-based practices (EBPs) when used together can become powerful tools for improving outcomes for students with disabilities and those who struggle. This brief shows the promise of these practices in advancing educator preparation and practice.

High-leverage practices (HLPs) and evidence-based practices (EBPs) when used together can become powerful tools for improving student outcomes. This brief is designed to show the promise of these practices in advancing educator preparation and practice and, subsequently, outcomes for students with disabilities and those who struggle. We begin by defining HLPs and EBPs and sharing examples of how educator preparation programs are integrating them in their candidates' learning opportunities and conclude with an illustration of how they can be seamlessly integrated into instruction provided as part of multi-tiered systems of support (MTSS).

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High-Leverage Teaching Practices (HLPs) are critical practices that research has demonstrated can impact student achievement and be used across different content areas and grade levels. They form a "common core of professional knowledge and skill that can be taught to aspiring teachers across all types of programs and pathways" (Ball & Forzani, 2011, p. 19). HLPs can provide infrastructure to support effective teaching and consistent learning for every student to succeed.

High-Leverage Practices include the following: Leading a discussion; Explaining and modeling content; Eliciting and interpreting; Diagnosing patterns of student thinking; Implementing norms and routines for discourse; Coordinating and adjusting instruction; Establishing and maintaining community expectations; Implementing organizational routines; Setting up and managing small group work; Building respectful relationships; Communicating with families; Learning about students; Setting learning goals; Designing lessons; Checking student understanding; Selecting and designing assessments; Interpreting student work; Providing feedback to students; and Analyzing instruction.

While teachers work away in their classrooms, they sometimes forget some of the awesome educational ideas and research they can use to support their students. Researchers like John Hattie have trawled tens of thousands of educational papers to find, summarize and rank the best instructional approaches by how much they improve student understanding, creating a gold mine for teachers to use (Victorian Government, 2022).

Teachers set and maintain community expectations and establish classroom environments that preserve students' dignity and autonomy, while allowing for a productive and safe classroom community. They understand the difference between the helpful use of boundaries to provide structure and the oppressive use of power to control. They develop proactive and reactive systems to establish, maintain, and respond to these expectations and behaviors in ways that focus on both the community and students' learning. Choosing and using expectations and agreements requires discretion because many common expectations for behavior privilege dominant ways of being related to race, class, and gender and lead to harmful consequences for students.

When district administrators, school leaders, or teachers in classrooms use continuous improvement strategies, they are acknowledging that educational practices are consistently evolving. School stakeholders have a number of continuous improvement strategies that they draw from when implementing educational practices. In this review of the implementation of high-leverage practices that have been implemented with continuous improvement approaches, six approaches are identified: lesson study, plan-do-study-act (PDSA), design-based thinking (DBT), peer reflection, and networked improvement communities (NICs). Fernandez and Yoshida 2004 describes lesson study as a targeted form of continuous improvement in which teachers focus on a specific lesson and share their process of improvement with their colleagues and students. According to Tichnor-Wagner, et al. 2017, plan-do-study-act (PDSA) is an approach where implementers identify their plan, carry it out, use data to study the outcomes of their plan, act on their findings, and then start the process anew. In design-based thinking, implementers engage in iterative cycles in which they participate in a process of problem identification, theory building, research, and responding to results. This approach is detailed further in Mintrop 2016. Proger, et al. 2017 describes NICs as a research-practice partnership where researchers and school districts work together to identify problems and engage in systematic and collaborative research to test approaches to these problems. Through NICs and peer reflection, Hannan, et al. 2015 asserts that teachers work in networks of peers to engage in a process of self-reflection and peer support. In addition to the strategies themselves, studies find that there are factors that either facilitate or impede the success of continuous improvement strategies in educational contexts, thus affecting the quality of implementation of the high- leverage practice.

Anderson and Kumari 2009 identify eight characteristics schools need to create a culture of productive continuous improvement. These include sufficient access to external resources; sustainable leadership; clear expectations regarding the roles and responsibilities of

participants; professional development initiatives; actionable goals; effective organization; and consistent opportunities for review, reflection, and revision. Edgecombe, et al. 2013 finds that small-scale changes (as opposed to school-wide improvement initiatives), a lack of organizational support structures, and inadequate chances for self-reflection and revision negatively influenced the integrity of school-based continuous improvement efforts.

Educator preparation programs have come under sharp criticism in recent years for failing to demonstrate the impact of their graduates on the achievement of their students. Teachers and leaders are key to improving outcomes of students with disabilities. Preparation experiences must include well-supervised opportunities for candidates to practice with feedback about what they are learning in coursework. Field placements should be carefully selected to reinforce what candidates have learned in coursework. To move in the direction of tightly structured learning opportunities for teacher candidates, scholars in general and special education (Ball & Forzani, 2011; McLeskey & Brownell, 2015) have argued that teacher educators need to identify a critical set of practices that are essential to improving student learning and behavior and can be learned in coursework, deliberately practiced in field experiences carefully structured by faculty (e.g., tutoring small groups of students in identified practices), and generalized to more loosely structured field experiences.

These critical practices, also known HLPs, should be those that research has demonstrated can impact student achievement and be used across different content areas and grade levels. These HLPs should also be those that teacher candidates can learn through practice and feedback. They would form a "common core of professional knowledge and skill that can be taught to aspiring teachers across all types of programs and pathways" (Ball & Forzani, 2011, p. 19). HLPs can provide infrastructure to support effective teaching and consistent learning for every student to succeed.

Perceptions of students' behavior, understanding, effort and engagement occur through the lens of the social identities (racial, ethnic, linguistic, gendered, class-based, etc.) of teachers and children. Because of the close relationship between dominant White middle-class norms and the culture of schooling, the classroom environment and teachers' interactions with children often, explicitly or invisibly, limit opportunities for students who do not share these norms. In contrast, this practice calls on teachers to manage the classroom environment in ways that keep students in the classroom, make positive, significant differences for children, and disrupt inequitable patterns that flow from broader sociocultural structures. Central to this practice is a teacher's high level of regard for students as full humans and an unwavering respect for their rights. It is interwoven with the work of building strong relationships with students as individuals and as a community. It differs from traditional notions of "classroom management," which have been associated with ideas and systems related to compliance and control, exclusion, and the need to get children to "obey."

To extend the HLPs that Deborah Ball and her colleagues developed for special education, the CEEDAR Center, the Council for Exceptional Children (CEC), and the Teacher Education Division of CEC supported a group of experts to generate HLPs for special education teachers in grades K-12. This High-Leverage Practices Writing Team developed HLPs in four domains: (a) collaboration, (b) assessment, (c) social/emotional and behavioral support, and (d) instruction (see below). The identified HLPs were supported by research on student learning or policy/legal foundations in the Individuals with Disabilities Education Act (IDEA).

Under Collaboration: Collaborate with professionals to increase student success; Organize and facilitate effective meetings with professionals and families; Collaborate with families to support student learning and secure needed services.

Under Assessment: Use multiple sources of information to develop a comprehensive understanding of a student's strengths and needs; Interpret and communicate assessment information with stakeholders to collaboratively design and implement educational programs; and Use student assessment, analyze instructional practices, and make necessary adjustments that improve student outcomes.

Under Social/Emotional and Behavioral Support: Establish a consistent, organized, and respectful learning environment; Provide positive and constructive feedback to guide students' learning and behavior; Teach social behaviors; and Conduct functional behavioral assessments to develop individual student behavior support plans

Under Instruction: Identify and prioritize long- and short-term learning goals; Systematically design instruction toward a specific goal; Adapt curriculum tasks and materials for specific learning goals; Teach cognitive and metacognitive strategies to support learning and independence; Provide scaffolded supports; Use explicit instruction; Use flexible grouping; Use strategies to promote active student engagement; Use assistive and instructional technologies; Provide intensive instruction; Teach students to maintain and generalize new learning across time and settings; and Provide positive and constructive feedback to guide students' learning and behavior.

McLeskey and Brownell (2015) noted that (a) many of the general HLPs are appropriate for all teachers, and (b) many of the HLPs identified for special education vary only in intensity and focus. Table 1 illustrates commonalities and distinctions across the two sets of HLPs. Understanding the increasingly intensified practices needed as special and general education teachers teach students with disabilities is important.

The following case example illustrates reading instruction using HLPs (see bold text below) and EBPs (see italicized, underlined text below) for Reading K-5 (Lane, 2014) and Writing Instruction (Troia, 2014) across tiers. Specific examples are included below:

High-leverage practices include the following: Teach cognitive and metacognitive strategies; Scaffold supports; Use instructional technology; Use active student engagement; Use flexible grouping; Provide positive feedback; Provide explicit instruction; Provide

intensive instruction; and Adapt curriculum tasks.

Similarly, Evidence-based practices have the following: Provide vocabulary instruction; Teach making inferences; Teach modeling; Teach paraphrasing; and Teach process: Outlining

On the other hand, educator preparation programs have come under sharp criticism in recent years for failing to demonstrate the impact of their graduates on the achievement of their students. Teachers and leaders are key to improving outcomes of students with disabilities. Preparation experiences must include well-supervised opportunities for candidates to practice with feedback about what they are learning in coursework. Field placements should be carefully selected to reinforce what candidates have learned in coursework. To move in the direction of tightly structured learning opportunities for teacher candidates, scholars in general and special education (Ball & Forzani, 2011; McLeskey & Brownell, 2015) have argued that teacher educators need to identify a critical set of practices that are essential to improving student learning and behavior and can be learned in coursework, deliberately practiced in field experiences carefully structured by faculty (e.g., tutoring small groups of students in identified practices), and generalized to more loosely structured field experiences.

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A synthesis of research around proficiency-oriented, communicative language teaching suggests that a broad range of characteristics contribute to what is perceived as effective FL instruction, both from the perspective of teachers and students (Mehrparvar & Karimnia, 2018). Numerous research findings on teacher effectiveness within the field of FL education have uncovered that effective language teachers possess common dispositions, have a high level of content knowledge, and deliver instruction in an organized and clear way (Barnes & Lock, 2010; Borg, 2006; Brosh, 1996). In general, empathy and accessibility are the most consistently mentioned elements of effective teacher dispositions, encompassing a vast number of the descriptors of good teaching mentioned in the literature that connect to student interest, understanding students, and staying relevant in trends and topics relating to current student life to connect deeper to student backgrounds (Brosh, 1996; Glisan & Donato, 2017; NBPTS, 2010). Thus, getting to know students may invite empathy and is key to being an effective teacher.

Accessibility encompasses many of the dispositions and characteristics discussed in the literature, including providing feedback, being available to provide that feedback, demonstrating organization, and providing timely information related to assignments, among others (Brosh, 1996; NBPTS, 2010). According to Dewar (2002), students view accessibility as a major aspect of effective teaching.

Contributing to the research around language teaching effectiveness, several notable publications to support language educators in the implementation of high-leverage teaching practices (HLTPs) have appeared in the past decade (e.g., Clementi & Terrill, 2013; Glisan & Donato, 2017, 2021; VanPatten, 2017). Responding to a call for practice-based teacher education, Hlas and Hlas (2012) drew from the research on

HLTPs in mathematics to develop an initial framework that could be applied in FL education. The researchers identified four HLTPs that could connect to FL teaching: (a) anticipating student errors and misconceptions during planning, (b) making connections between multiple representations, (c) leading a classroom discussion, and (d) teaching through problem solving. The authors also recognized that integrating HLTPs requires further examination to verify their impact on learning and that implementing HLTPs would be improved by opportunities to deconstruct and rehearse the practices in teacher education programs.

Kearney (2015) examined the ways in which two novice FL teachers enacted one HLTP: leading an open-ended group discussion. Their analysis uncovered a number of micro-practices and offered additional insight on the impact of HLTPs on classroom discourse. Several implications from this work influenced the premise of the current study, including the importance of a focus on relationships between classroom discourse, teachers' practices, and student learning. However, continued research linking programmatic goals (e.g., developing communicative proficiency), practices, and micro-practices at a granular level is needed to enrich our understanding of classroom interactions in real time.

Following the preliminary work on HLTPs in FL education, Glisan and Donato (2017) outlined seven HLTPs that encompass a range of second language acquisition (SLA) research findings from theoretical and practical perspectives. Several of the HLTPs echo standards set forth by NBPTS (2010) and ACTFL/CAEP (2013), such as using target language (TL) and facilitating TL comprehensibility, creating opportunities for interaction and interpersonal communication with and between students, and providing feedback to support learner performance. In addition, Glisan and Donato (2017) presented HLTPs to promote interpretation and discussion of authentic texts, a contextualized and dialogic focus on form through PACE, the teaching of products, practices, and perspectives in a dialogic context, and an iterative cycle to deconstruct, reflect, rehearse, enact, and assess these HLTPs in language classrooms (Grossman, 2011; Lampert et al., 2013).

Similarly, VanPatten (2017) provided specific considerations for communicative language teaching that encouraged educators to frame

classroom practices from a stance that supports SLA. Nevertheless, these considerations do not provide a framework for enacting specific practices in a classroom setting. Glisan and Donato (2021) expanded the work on HLTPs in FL education by introducing an additional set of core practices which include: (a) establishing a meaningful and purposeful context for language instruction, (b) planning for instruction using an iterative process of backward design, (c) engaging learners in purposeful written communication, (d) developing contextualized performance assessments, and (e) embracing and reconstructing the practices. At present, Glisan and Donato's (2017, 2021) work provides the most complete synthesis of earlier research on core practices and their impact on student learning in FL teaching. In addition, the proposed steps of deconstructing, rehearsing, and evaluating HLTPs can be easily integrated into language teacher preparation and professional development programs due to their clear guidance and opportunities for peer interaction and practice.

Challenging classroom behaviors are a leading cause of beginning teacher stress and attrition (Allday et al., 2012; Conroy et al., 2009). Beginning teachers express difficulty in addressing inappropriate classroom behaviors which impact student engagement and may limit effective teacher-student relationships, both of which have been found to be predictors of student success. Students who feel supported and valued by their teachers tend to engage more and have fewer inappropriate behaviors (Berliner, 1990; Hattie, 2009). HLPs focus on developing positive learning environments that maximize student engagement, leading to improved student outcomes.

There are three HLPs that support teachers' ability to engage students in the classroom (see Figure 1). HLPs should be taught in conjunction with evidence-based practices (EBPs). EBPs are teaching strategies that are effective for certain populations of learners and have been validated through research (Cook & Cook, 2013). Not only are preservice teachers legally mandated to use EBPs (i.e., Individuals with Disabilities Education Improvement Act, IDEIA, 2004), but literature supports the effectiveness of these strategies. When they are used effectively, they increase outcomes for students with and without disabilities (Scheeler, Budin, & Markelz, 2016; Maheady, Smith, & Jabot, 2013).

Specifically, these three HLPs focus on teacher modeling of content and skills and on reinforcing student academics and behavior through feedback using specific praise.

The HLP Explaining and Modeling Content, Practices, and Strategies pairs with the EBP of explicit modeling, which is a strategy that is highly regarded in the field of special education (Teaching Works, n.d.). Explicit modeling occurs when a teacher explains knowledge and demonstrates a particular skill. Modeling allows all students to observe the cognitive processes involved in a specific learning strategy (Baumann, Jones, & SeifertKessell, 1993). Teachers can use modeling for both behavioral skills (i.e., raising your hand to answer a question) and academic skills (i.e., solving a word problem). It can also be used to demonstrate how to use cognitive processes effectively and teach students how they can self-monitor their progress (Baumann et al.,1993). Modeling is an engaging and effective teacher practice that facilitates students' acquisition of new knowledge and skills (Higgs & McMillian, 2006). Explicit modeling is beneficial for all students, but particularly students with disabilities (Archer & Hughes, 2011).

Another well-validated approach to promote a positive classroom is the use of specific behavioral praise (Allday et al., 2012; Conroy et al., 2009). Specific behavioral praise is when a teacher conveys an explicit reference to a desired behavior (e.g., "Jonathan, I like the way you are quietly sitting at your desk with your journal out. This shows me you are ready to learn."). Setting clear expectations for students in the classroom enhances engagement and decreases off-task behaviors, as students understand what exactly is expected. Similarly, when teachers use specific academic praise, they provide feedback to all students on why an answer is correct (e.g., "That's right, Maria. This shape is a triangle. We know it's a triangle because there are three sides and three vertices.").

In an intervention study of three preservice teachers' use of specific praise, the largest gains were observed after participants had received performance feedback on their practice sessions (Simonsen et al., 2010). Findings highlight the importance of including aspects of feedback when preparing teachers to use specific praise. The present study extends this work by looking at behavior and academic praise both jointly and individually, investigating the effectiveness of performance feedback delivery models, and allowing participants to acquire new skills through deliberate practice within a mixed reality environment (e.g., avatars).

There is an emerging body of literature that urges teacher educators to examine the way we prepare preservice teachers (Leko et al., 2015; Schles & Robertson, 2019; Sutherland et. al., 2003). High quality teacher preparation programs provide numerous opportunities for purposeful practice, meaningful performance feedback, and targeted coursework (Scheeler, Budin, & Markelz, 2016). Furthermore, it is important that teacher preparation programs introduced EBPs and provide preservice teachers the time and space to practice and receive performance feedback on how they are implementing these strategies (Schles & Robertson, 2019).

Performance feedback is a systematic way to provide feedback to novice teachers as they learn and acquire new instructional skills (Noell et al., 2000, 2002; Rathel, Drasgow, & Christle, 2008). Performance feedback should include four components: review of data, corrective feedback, praise for correct implementation, and addressing any preservice teachers' questions or concerns (Codding et al., 2005). Studies have indicated that preservice teachers who receive performance feedback have shown an increase in the use of the targeted skill or strategy (Codding et al., 2005; Noell et al., 2002; Rathel, Drasgow, & Christle, 2008).

Simulators are beneficial to use in teacher preparation programs as they allow preservice teachers to couple pedagogical content from their coursework with deliberate practice in a safe and controlled environment. This setting allows for explicit classroom instruction that exposes preservice teachers to a range of classroom conditions and behaviors (Simonsen et al., 2008). Further, simulators provide

an opportunity for preservice teachers to experience challenging behaviors while delivering instruction and receive timely performance feedback.

An important aspect noted in the abovementioned studies is the use of performance feedback to increase preservice teacher use of specific praise. Scheelar (2008) stated that providing performance feedback promotes learning a new skill and the ability to transfer that newly acquired skills into the actual classroom. Cavanaugh's (2013) review of performance feedback indicated that it is an effective coaching technique to improve teachers' use of specific praise in the classroom. The literature also suggests the use of performance feedback is an effective approach to improve both preservice and in-service teachers' use of specific praise (Akalin & Sucuoglu, 2015; Duchaine, Jolivette, & Fredrick, 2011).

Deliberate practice is a phrase used to describe activities that are designed to improve preservice and in-service teachers' practice. Deliberate practice activities are based on five principles: 1) push beyond one's comfort zone; 2) work toward well-defined, specific goals; 3) focus intently on practice activities; 4) receive and respond to high quality feedback; and 5) develop a mental model of expertise (Deans for Impact, 2016). These principles are based on research from across a wide range of fields and have been shown to improve teacher performance.

Teacher preparation programs often struggle to find appropriate placements which provide preservice teachers the opportunity for deliberate practice. A growing response to this challenge is the use of simulated environments (i.e., virtual and mixed-reality) to provide more realistic practice opportunities. The use of simulations is a well-validated approach for candidates in fields outside of education such as military and medical training (McGaghie et al., 2010). Simulations allow individuals to learn and master new skills in an environment that does not put others at risk (Dieker et al., 2014). Simulated environments enable teachers to practice decision-making and receive feedback through virtual responses and peer observers (Brown, 2000).

There are a few mixed-reality operating systems on the market that have been used with preservice teachers. TLE TeachLive™ is one such simulator system which uses avatars puppeteered by a simulation specialist. Mixed-reality simulation provides preservice teachers an opportunity to develop their pedagogical content knowledge via a controlled instructional environment (e.g., controlling for learning or behavioral challenges).

TLE TeachLive™ is a simulated environment that transcends disciplines to allow many different fields to play with the simulations developed using the underpinning code. The system currently uses either student or parent/teacher avatars that were created using 3-D modeling and computer animation techniques. The resulting avatars are controlled by artificial intelligence and a human operator who embodies the avatars. The avatars look, talk, and interact like typical humans and provide a safe and effective playground for teachers, administrators and parents to experience the environment (Dieker, Hynes, Hughes, Hardin, & Becht, 2015, p. 12).

Although simulation research is limited, preliminary research shows that teachers who participated in four 10-minute simulation sessions demonstrated positive changes in their teacher behaviors and were able to translate the targeted skill to the classroom (Hynes, Hughes, & Straub, 2014). Furthermore, an increase in student achievement outcomes was observed for participants. Given that preservice teachers need deliberate practice along with expert feedback to develop effective classroom practice, mixed-reality classroom simulation is a promising approach for teacher preparation programs (Leko et al., 2015).

Judge et al. (2013) investigated the effects of a mixed-reality simulator on six preservice teachers' use of differential reinforcement of incompatible behavior in a simulated classroom. Differential reinforcement includes decreasing undesirable classroom behaviors while reinforcing desirable behaviors through verbal prompting, precise praise, and planned ignoring. Participants were assigned to one of three conditions: a) video-training only; b) video-training followed by email feedback from instructor, followed by peer group feedback; and c) video-training followed by peer group feedback then email feedback. Findings indicated an increase in the use of specific praise to increase student engagement. Participants found the peer group feedback more helpful than the email feedback.

In 2010, the National Council for Accreditation of Teacher Education (NCATE, 2010) published a report titled Transforming Teacher Education Through Clinical Practice: A National Strategy to Prepare Effective Teachers. This influential document called for turning the education of teachers upside down.

To prepare effective teachers for 21st century classrooms, teacher education must shift away from a norm which emphasizes academic preparation and course work loosely linked to school-based experiences. Rather, it must move to programs that are fully grounded in clinical practice and interwoven with academic content and professional courses. (p. ii)

Since the publication of this document, CAEP, the successor to NCATE and now the national accrediting body for teacher preparation programs), has revised program approval standards to enact these recommendations. The recently approved CAEP Accreditation Standards for Educator Preparation (2013a) now place major emphasis on high-quality clinical practice. This emphasis is illustrated in Standard 2, Clinical Partnerships and Practice—one of five standards used for the approval of teacher preparation programs. This standard states that teacher education programs must ensure "that effective partnerships and high-quality clinical practice are central to preparation so that candidates develop the knowledge, skills, and dispositions necessary to demonstrate positive impact on all P-12 students' learning and development" (CAEP, 2013a, p. 6).

These clinical experiences are intended to ensure that graduates of approved teacher education programs are classroom ready (CAEP,

2013b). CAEP recommends that typical and suggested measures of performance for classroom readiness should include assessments of "teaching practices at key points along a developmental continuum, including but not limited to documentation of expected instructional practices and candidate performance" (CAEP, 2013a, p. 40). In response to this recommendation, several states and many teacher preparation programs have begun to use measures of classroom practice for program evaluation and/or approval (Wei & Pecheone, 2010), and the use of these measures is rapidly spreading. For example, as of September, 2015, one such measure—the edTPA (The Stanford Center for Assessment, Learning, and Equity [SCALE], 2015)—was being used by 633 educator preparation programs in 35 states, and policies regarding the use of this measure (either required or as an acceptable alternative) were in place in 11 states (The American Association of Colleges for Teacher Education [AACTE], 2015).

Methodology

In trying to answer the indicated questions above, the researcher used the qualitative research design which states that qualitative research design is a research method used extensively by scientists and researchers studying human behavior, opinions, themes and motivations.

Qualitative research methods are probably the oldest of all scientific techniques, with the ancient Greek philosophers qualitatively observing the world around them and trying to understand and explain what they saw.

While qualitative methods are sometimes assumed to be "easier" or less rigorous than quantitative ones, the fact is that information of this kind can provide a depth of understanding about phenomena that cannot be achieved in other ways. In this study, it was utilized to assess the teachers high stake practices towards their SPED learners.

The method of gathering data is through interview questionnaire, which is a product of a thorough reading of related literature and studies. After the construction, the questionnaire was validated by the experts and she askes the help of her former professors in the graduate school in the revision of the survey. Moreover, the last step in the validation is proposal defense where the comments and suggestions of the panel were included in the revision.

The population of the study were parents, alumni and organization members. The locale was chosen because the researcher observed the need to improve high leverage instructional practice to teachers.

The participants were five (5) parents, five (alumni) and five (5) members of organizations, randomly selected. After the gathering of data and asking permission from the different offices, the gathered data were subjected to statistical treatment of data.

Results and Discussion

Table 1. *Profile of participants*

Profile	*Parent*		*Alumni*		*Organization*	
Age	f	%	f	%	f	%
20-25	0	0	4	80	0	0
26-31	0	0	1	20	1	20
32 >	5	100	0	0	4	80
Total	5	100	5	100	5	100
Sex						
Male	2	40	3	60	1	20
Female	3	60	2	40	4	80
Total	5	100	5	100	5	100
Educational Attainment						
Elementary	0	0	0	0	0	0
High School	0	0	3	60	0	0
College	1	20	2	40	1	20
Graduate Studies	4	80	0	0	4	80
Total	5	100	5	100	5	100

Table 1 shows the following profiles of the participants:

Parents. Out of 5 parent participants, all (100%) were under the age bracket of 32 years old and above. Participants were predominantly females (60%) rather than males (40%). Most of the parents reached graduate studies (80%) followed by 1 or 20% bachelor's degree.

Alumni. Out of 5 alumni participants, the majority were under the age range of 20-25 years old (80%) followed by 26-31 years old (20%). Participants were predominantly males (60%) rather than females (40%). Most of the alumni participants reached high school (60%) followed by those who attained bachelor's degrees (40%).

Organization. Out of 5 organization participants, the majority were under the age bracket of 32 years old and above (80%) followed by 26-31 years old (20%). Participants were predominantly females (80%) rather than males (20%). Most of the organization participants reached graduate studies (80%) followed by those who completed bachelor's degrees (20%).

This suggests a group with a vested interest in their children's education and potentially higher expectations for the school environment. This could reflect the traditional role of mothers as primary caregivers and educators within the family. This group likely has more recent experiences with the school system and may offer valuable insights into the current school climate. This could indicate a potential bias in the sampling method or a lower participation rate among female alumni. This suggests a potentially lower socioeconomic background compared to the other groups, which could influence their perspectives on school expectations. Similar to parents, this group likely has a strong understanding of educational best practices and a vested interest in improving school outcomes. This could reflect the higher representation of women in education-related roles.

The high level of education among parents suggests they may be more actively involved in school activities and more likely to participate in discussions about school expectations. Their older age may bring a more mature and experienced perspective to the discussions. The younger alumni cohort can provide valuable insights into the current school climate and the experiences of recent students. The higher representation of high school graduates may offer a unique perspective on the school's impact on students from diverse backgrounds. The high level of education and experience within the organization group can provide valuable insights into best practices in education and effective strategies for establishing and maintaining positive school climates.

While the provided data has some limitations, it's crucial to ensure a more diverse range of participants in future discussions. This includes considering age, gender, socioeconomic background, and educational attainment to ensure a broader range of perspectives. Actively involve students in the process of establishing and maintaining school community expectations. Utilize data on student behavior, academic performance, and school climate to inform the development and implementation of school-wide expectations. Foster ongoing communication and collaboration among all stakeholders, including parents, alumni, staff, and students, to ensure that school expectations are effectively communicated, understood, and upheld.

Assessment of the establishment and maintenance of parents' expectations

Table 2.1. *Lectures, perhaps occasionally soliciting brief student input or using the board or smart TV to highlight a key term or present an outline*

Parent	*Alumni*	*Organization*
• Teachers should be extended more time and variations in and during lectures, variations in instructional resources • As a parent, my task is to support my child's learning by encouraging active participation and helping them engage with the material. I expect lectures to be interactive and focused using Smart TV to highlight key terms to present clear outlines to reinforced lessons. • Engage your child in brief discussions about topics they are studying in school. Use home resources like a whiteboard to visually outline study plans. • "Texts should be large enough to be seen at the back. • Calling students methodically- name roulette, popsicle sticks, etc.”	• Allow students to actively contribute to the learning process and can be more memorable than passive learning. • Lectures are good to introduce a topic but follow this up with activities that allow students to share their ideas. • I would prefer to use the Smart TV to highlight a key term or present an outline. I would suggest demonstrating examples of the lesson. • Lecture activities are needed to allow students to share ideas. • As an alumnus Smart TV brought a lot of learning opportunities for me, and I suggest teachers should continue to use this.	• Smart Board is a great help for us students because it offers a lot of opportunities for us to explore more learning tools. • The Smart TV is a great tool for engaging students in the lesson, however, the teacher must be well-adjusted with technology to use it effectively. • Teachers should exercise or implement these strategies, so student be exposed to technologies. • I agree with the use of board or smart TV since most learners nowadays are visual learners and well-equipped with technological advancements. • Using Smart Board gives more support to learners who learn visually.

Major Theme:

Effective Lecture Pedagogy: The central theme revolves around improving the effectiveness of lectures in the classroom. This encompasses various aspects such as:

Active Learning: Shifting from passive to active learning experiences for students.

Technology Integration: The role of technology, particularly the Smart TV, in enhancing teaching and learning.

Teacher Professional Development: The need for teacher training and support in utilizing effective teaching strategies and technologies.

Student Engagement: Strategies to increase student participation and attentiveness during lectures.

Codes:

Active Learning:

"Allow students to actively contribute"

"Engage your child in brief discussions"

"Lecture activities are needed to allow students to share ideas"

Technology Integration:

"Use Smart TV to highlight key terms"

"Smart Board is a great help"

"Smart TV is a great tool for engaging students"

Teacher Professional Development:

"Teachers should be extended more time"

"Teachers should be well-adjusted with technology"

Student Engagement:

"Calling students methodically"

"Demonstrating examples of the lesson"

"Texts should be large enough to be seen"

Interpretation:

Parents: Emphasize the importance of active learning and the role of technology in supporting their child's learning. They advocate for interactive lectures and clear communication from teachers.

Alumni: Highlight the positive impact of technology, particularly the Smart TV, on their learning experiences. They emphasize the need for teachers to effectively utilize technology and engage students actively.

Organization: Recognize the value of the Smart Board in supporting visual learners and the importance of teacher training to effectively implement technology in the classroom.

Analysis:

Convergence of Perspectives: All stakeholders (parents, alumni, and the organization) agree on the importance of active learning and the potential of technology to enhance the learning experience.

Technology as an Enabler: The Smart TV and Smart Board are seen as valuable tools for engaging students, enhancing visual learning, and facilitating interactive discussions.

Teacher Training is Crucial: Effective technology integration requires adequate teacher training and support to ensure that teachers are equipped to utilize these tools effectively.

Need for a Balanced Approach: While technology offers significant potential, it should be used in conjunction with other effective teaching strategies to create a well-rounded learning experience.

Implications:

Shifting Pedagogy: Educators need to move away from traditional, teacher-centered lectures towards more student-centered, interactive approaches that actively engage learners.

Investing in Technology and Teacher Training: Schools need to invest in appropriate technology infrastructure and provide ongoing professional development opportunities for teachers on effective technology integration and instructional strategies.

Creating a Collaborative Learning Environment: Fostering a collaborative learning environment where students can actively participate in discussions and share their ideas is crucial for effective learning.

Utilizing a Multi-faceted Approach: A combination of traditional teaching methods, technology integration, and active learning strategies is likely to be most effective in meeting the diverse learning needs of students.

Further Considerations:

Addressing Equity: Ensuring equitable access to technology and support for all students is crucial to avoid exacerbating existing inequalities.

Assessing the Impact: Regular evaluation of the impact of technology integration on student learning outcomes is essential to refine and improve teaching practices.

Beatty et. al. (2021) used clickers to pose questions during lectures can increase student engagement and check for understanding.

Crouch and Mazur (2001) found that students discuss and debate concepts with their peers before answering questions, leading to deeper learning. The study of Prince and Felder (2006) noted that collaborative learning activities during lectures can enhance student understanding and promote critical thinking.

Table 2.2. *Demonstrates a concept, using two-dimensional graphics such as drawings on the board, overhead projector, or computer*

Parent	*Alumni*	*Organization*
• demonstrates a concept using two-dimensional graphics such as drawings on the board, overhead projector, or computer. • These will help students with disabilities. • The use of clear engaging two-dimensional graphics like drawing or digital visuals to aid comprehension. • Use colorful graphics. Provide charts that are posted in the classroom. • Use simple two-dimensional graphics such as diagrams or charts on the board or screen to visually represent the relationship.	• Demonstrating a concept using 2-dimensional graphics helps students who are visual learners. Match this with other activities to cater to other learners as well. • I would prefer drawings on the board as demonstrations. I suggest elaborating on the lesson while demonstrating. • Reinforce learning with drawings, diagrams, or charts together, online resources, or graphics to explain ideas. Encourage them to create their concept. • Elaborate lessons while demonstrating. • Drawings should be colorful to attract students.	• The overhead projector is a great help, especially for those who are visual learners. • Suggestion: 2D and 3D manipulatives are great visual tools to help students conceptualize ideas, however, the teacher must provide and set clear expectations regarding the activity. • Provide hand-outs or printed materials such as a weekly bulletin that is more interactive. These printed materials should have more graphics and interesting features. that would engage readers. • For students who love to draw this will be very useful. • As mentioned, anything visual will be greatly helpful to students. • Computers help students accomplish tasks quicker.

Major Theme:

Visual Learning: The central theme revolves around the importance of visual aids in enhancing student learning and catering to diverse learning styles.

Codes:

Visual Aids:

"Demonstrates a concept using two-dimensional graphics"

"Use of clear engaging two-dimensional graphics"

"Drawings on the board"

"Overhead projector"

"Diagrams or charts"

"2D and 3D manipulatives"

Learning Styles:

"Helps students who are visual learners"

"Students with disabilities"

Engagement:

"Colorful graphics"

"Elaborate lessons while demonstrating"

"Interactive printed materials"

Teacher Role:

"Teacher must provide and set clear expectations"

"Encourage them to create their concept"

Interpretation:

Parents: Value visual aids like drawings and charts as helpful tools for their children's learning, particularly for students with disabilities. They emphasize the importance of clear and engaging visuals.

Alumni: Recognize the value of visual learners and advocate for a variety of learning methods to cater to different learning styles. They suggest incorporating hands-on activities and encouraging student creativity.

Organization: Emphasizes the importance of visual aids like the overhead projector and 2D/3D manipulatives. They also highlight the need for clear expectations and engaging materials.

Analysis:

Strong Emphasis on Visual Learning: All stakeholders recognize the importance of visual learning and the value of using two-dimensional graphics to enhance student understanding.

Diversity of Learning Styles: There is an understanding that students learn in different ways, and visual aids are crucial for catering to diverse learning needs.

Teacher Role is Key: Effective use of visual aids requires careful planning and implementation by teachers, including setting clear expectations, providing engaging materials, and encouraging active student participation.

Beyond Static Visuals: While two-dimensional graphics are valuable, there is also recognition for the potential of more dynamic approaches like 3D manipulatives and hands-on activities.

Implications:

Integrating Visuals into Instruction: Educators should consciously integrate visual aids into their teaching, such as drawings, diagrams, charts, videos, and presentations.

Creating a Visually Rich Learning Environment: The classroom environment should be visually stimulating, with the use of posters, displays, and other visual cues.

Providing Opportunities for Student Creation: Encourage students to create their own visual representations of concepts, such as drawings, models, and presentations.

Addressing Diverse Learning Needs: Utilize a variety of teaching methods and materials to cater to the diverse learning styles of all students, including visual, auditory, kinesthetic, and tactile learners.

Teacher Professional Development: Provide teachers with training on effectively using visual aids in instruction and creating engaging visual learning experiences.

Further Considerations:

Accessibility: Ensure that all visual aids are accessible to all students, including those with visual impairments.

Technology Integration: Explore the use of technology to create and present dynamic and interactive visual aids.

Assessment: Develop assessment methods that evaluate students' understanding of concepts presented visually.

A study by Iqbal et al. (2022) found that the use of infographics significantly improved students' understanding and retention of complex scientific concepts. Hamdani et al. (2021) found that the use of interactive simulations and animations significantly increased student engagement and motivation in science classrooms. A study by Mayer (2014) demonstrated that the use of visuals can help students develop deeper understanding and higher-order thinking skills.

Table 2.3. *Demonstrates a concept using Three-dimensional tools such as manipulatives, models, or other objects*

Parent	*Alumni*	*Organization*
• demonstrates a concept using Three-dimensional tools such as manipulatives, models, or other objects. • These are good because they will truly help students experience great learning. • The use of three-dimensional tools like manipulatives or models to help visually and tangibly demonstrate concepts fostering deeper understanding and engagement. • Setting expectations/routines on getting, using, and keeping the materials. • Provide immediate feedback.	• This is also true with using 3D tools in teaching. • Manipulatives would be very efficient for my education. • Building models with household items, educational toys or kits, or simple experiments (playdough or building blocks). • This is a great way to help students. • Models and manipulatives are helpful tools for teaching school children.	• 3D tools give us students the same actual experience of the thing being taught. • Suggestion: 2D and 3D manipulatives are great visual tools to help students conceptualize ideas, however, the teacher must provide and set clear expectations regarding the activity. • Introduce arts, and crafts activities where students could use and produce 3 dimensional tools and outputs. • Students will learn best in these ways. Learning by doing. • This is more effective for learning to happen if students get to manipulate classroom materials. • Using models allows learners to simulate the actual event or conditions.

Major Theme:

Experiential Learning: The central theme revolves around the importance of hands-on learning experiences and the use of three-dimensional tools to facilitate deeper understanding and engagement.

Codes:

3D Tools:

"Demonstrates a concept using Three-dimensional tools"

"Manipulatives, models, or other objects"

"3D manipulatives"

"Building models"

"Arts and crafts activities"

Experiential Learning:

"Help students experience great learning"

"Fostering deeper understanding and engagement"

"Learning by doing"

"Simulate the actual event or conditions"

Teacher Role:

"Setting expectations/routines"

"Provide immediate feedback"

"Provide and set clear expectations"

Student Engagement:

"This is a great way to help students"

"Students will learn best in these ways"

Interpretation:

Parents: Strongly believe in the value of hands-on learning and the effectiveness of 3D tools in helping students truly understand concepts. They emphasize the importance of clear routines and immediate feedback.

Alumni: Recognize the effectiveness of manipulatives and models in their own education and advocate for their continued use. They suggest incorporating real-world applications and hands-on projects.

Organization: Emphasizes the importance of 3D tools in facilitating conceptual understanding and the need for clear expectations and guidelines for their use. They also suggest integrating arts and crafts activities that utilize 3D elements.

Analysis:

Strong Support for Experiential Learning: All stakeholders strongly support the use of 3D tools and hands-on learning experiences to enhance student learning.

Focus on Deeper Understanding: 3D tools are seen as valuable for moving beyond abstract concepts and allowing students to experience and interact with them in a tangible way.

Importance of Teacher Guidance: Effective use of 3D tools requires careful planning and implementation by teachers, including setting clear expectations, providing appropriate materials, and guiding student exploration.

Potential for Creative Expression: 3D tools can be integrated into various subjects, including arts and crafts, to foster creativity and engagement.

Implications:

Investing in 3D Learning Resources: Schools should invest in a variety of 3D learning resources, such as manipulatives, models, building blocks, and art supplies.

Creating Hands-on Learning Opportunities: Educators should actively incorporate hands-on learning activities and the use of 3D tools

into their instruction across all subject areas.

Providing Teacher Training: Teachers should receive training on effectively using 3D tools in instruction, including lesson planning, classroom management, and assessment strategies.

Fostering a Creative and Inquiry-Based Learning Environment: Encourage student exploration, experimentation, and problem-solving through the use of 3D tools and hands-on activities.

Assessing Student Learning in 3D Environments: Develop assessment methods that evaluate student understanding and skills developed through the use of 3D tools.

Further Considerations:

Accessibility: Ensure that all students have equitable access to 3D learning resources and support.

Safety: Prioritize safety considerations when using 3D tools and materials.

Integration with Technology: Explore the use of technology to enhance 3D learning experiences, such as 3D printing and virtual reality.

A study by Järvelä and Sälö (2023) found that the use of 3D models in science education significantly improved students' understanding of complex concepts and their ability to apply knowledge to real-world problems. Hence, the study by Lee et. al. (2021) found that the use of virtual reality simulations in STEM education significantly increased student interest and motivation, leading to improved learning outcomes.

Table 2.4. *Leads learners in recitation, drills, or question-and-answer sessions*

Parent	*Alumni*	*Organization*
• Lead learners in recitation, drills, or question-and-answer sessions. • Teachers should be patient in doing this; this will truly help students. • Reinforce learning while helping the learner develop confidence and a deeper grasp of the material. • Provide immediate feedback. Provide conditions for students to work together. • Students should share their ideas and actively participate.	• This is a great way to help students develop their communication skills which is needed in social interactions. • I think question and answer would help a lot. Drills are acceptable. • Flashcards, Trivia games, or even family quiz nights to reinforce learning. • Recitation will develop communication skills needed in social interactions. • Teachers should guide students for higher level learning through drills, especially in Math.	• Drills will make us master the said topic. • Math Task: Individual or partner recitation of multiplication table. Q&A session: The teacher asks the students about multiplication tables to reinforce memorization. • Should be part of the daily routine, use different read-aloud strategies. • Teachers should normally and regularly implement these in the classroom. These will boost student confidence. • It is helpful for students to share thoughts and ideas through strategy. • Giving prompts allows students to have guidance on the expected response.

Major Theme:

Active Learning and Knowledge Retention: The central theme revolves around the importance of active learning strategies, such as recitation, drills, and question-and-answer sessions, in reinforcing learning, improving knowledge retention, and developing essential skills.

Codes:

Active Learning Strategies:

"Lead learners in recitation, drills, or question-and-answer sessions"

"Recitation, drills, or question-and-answer sessions"

"Flashcards, Trivia games"

"Math Task: Individual or partner recitation"

"Q&A session"

Knowledge Retention:

"Reinforce learning"

"Reinforce memorization"

"Master the said topic"

Skill Development:

"Develop confidence"

"Develop communication skills"

"Higher level learning"

Teacher Role:

"Patient in doing this"

"Provide immediate feedback"

"Guide students"

"Use different read-aloud strategies"

Student Engagement:

"Students should share their ideas and actively participate"

"Students should share their thoughts and ideas"

Interpretation:

Parents: Value recitation, drills, and Q&A sessions as effective methods for reinforcing learning and building student confidence. They emphasize the importance of patience and providing immediate feedback.

Alumni: Recognize the value of these strategies in developing communication skills and critical thinking abilities. They suggest incorporating interactive elements like flashcards and trivia games.

Organization: Emphasizes the importance of regular practice through drills and Q&A sessions, particularly for subjects like math. They also highlight the importance of providing clear guidance and prompts to support student learning.

Analysis:

Strong Support for Active Learning: All stakeholders recognize the value of active learning strategies, such as recitation, drills, and Q&A sessions, in enhancing student learning.

Beyond Rote Memorization: While these strategies can reinforce memorization, there is also an emphasis on their potential to develop higher-level thinking skills, such as critical thinking, communication, and problem-solving.

Teacher Guidance is Key: Effective implementation of these strategies requires careful planning and guidance from teachers, including providing clear instructions, scaffolding student learning, and creating a supportive and encouraging learning environment.

Variety is Important: Utilizing a variety of active learning strategies, such as games, group discussions, and real-world applications, can keep students engaged and motivated.

Implications:

Integrating Active Learning Strategies: Educators should regularly incorporate recitation, drills, and Q&A sessions into their teaching, adapting them to the specific subject matter and learning objectives.

Creating a Supportive Learning Environment: Foster a classroom environment where students feel comfortable participating, sharing their ideas, and asking questions.

Providing Timely and Specific Feedback: Provide immediate and constructive feedback to students during these activities to help them identify areas for improvement and build their confidence.

Connecting to Real-World Applications: Connect recitation, drills, and Q&A sessions to real-world situations and applications to make learning more meaningful and relevant for students.

Utilizing Technology: Explore the use of technology to enhance these activities, such as online quizzes, interactive games, and virtual simulations.

Further Considerations:

Addressing Student Diversity: Adapt these strategies to meet the diverse learning needs and preferences of all students.

Avoiding Overuse: Avoid over-reliance on rote memorization and ensure that these activities are used to develop deeper understanding and critical thinking skills.

Assessing Student Learning: Regularly assess student learning outcomes from these activities to determine their effectiveness and make necessary adjustments.

Research by Roediger and Karpicke (2006) demonstrated that retrieval practice, such as testing and self-quizzing, is highly effective for improving long-term memory and knowledge retention. A study by Prince and Felder (2006) found that active learning strategies can enhance student engagement, motivation, and the development of critical thinking skills. A study by Freeman et. al. (2014) found that active learning strategies can significantly reduce student failure rates and improve student attitudes toward learning.

Table 2.5. *Observed/monitored student-led whole-class discussions or demonstrations related to math and science*

Parent	*Alumni*	*Organization*
• Observe/monitor student-led whole-class discussions or demonstrations or demonstrations related to math and science. • These are great tasks for the teachers; they can give teachers an idea of what to do and will help students in math and science. • To support my child by observing and encouraging student-led discussions or demonstrations in Math and Science expecting these activities to promote critical thinking, collaboration, and deeper understanding of the concept. • Constantly moving around and providing support. Give feedback on students' work. • Clear instructions to ensure safety.	• This task is needed to help students focus and not stray away from the discussion. • It is not my task. • Organize family discussions or small demonstrations wherein the child can explain concepts or conduct experiment (mini-science fair) • It will help students focus on the discussion. • Teachers should teach students Math and Science.	• some students need to know and see the exact steps before following certain procedures. • Suggestion: Make sure that the teacher provides feedback to the students after the discussion or demonstration. • Clear and explicit instruction and expectations, ensure safety and complete materials provide rubric, practice student for presentation. • Math and Science are two great subjects. Teachers should give more emphasis to subjects. • The teacher being a guide on the side allows students to be more accountable for their learning. • Setting expectations for us students allows for a more organized system for conducting scientific investigations.

Major Theme:

Student-Centered Learning: The central theme revolves around shifting the focus from teacher-centered instruction to student-centered learning, where students actively engage in the learning process through discussions, demonstrations, and presentations.

Codes:

Student-Led Activities:

"Student-led whole-class discussions"

"Student-led demonstrations"

"Student-led presentations"

Active Learning:

"Promote critical thinking, collaboration"

"Deeper understanding of the concept"

"Active participation"

Teacher Role:

"Observe/monitor"

"Provide support"

"Give feedback"

"Clear instructions"

"Guide on the side"

Student Engagement:

"Focus on the discussion"

"Accountable for their learning"

Interpretation:

Parents: View student-led discussions and demonstrations as valuable learning experiences that promote critical thinking, collaboration, and deeper understanding. They emphasize the importance of teacher support and guidance.

Alumni: Recognize the value of these activities in fostering student engagement and accountability. They suggest incorporating real-world applications and providing clear instructions.

Organization: Emphasizes the importance of clear instructions, safety protocols, and providing feedback to students. They also recognize the need for careful planning and preparation for these activities.

Analysis:

Shifting Towards Student-Centered Learning: There is a strong emphasis on shifting the focus from teacher-centered instruction to student-centered learning, where students are actively involved in the learning process.

Developing Higher-Order Thinking Skills: Student-led activities are seen as valuable for developing critical thinking, communication, collaboration, and problem-solving skills.

Teacher Role as Facilitator: The teacher's role is crucial in supporting student-led activities, providing guidance, facilitating discussions, and providing constructive feedback.

Importance of Clear Expectations: Clear instructions, safety guidelines, and rubrics are essential for ensuring the success of student-led activities.

Implications:

Creating Opportunities for Student-Led Learning: Educators should create opportunities for students to lead discussions, conduct demonstrations, and present their findings.

Fostering a Collaborative Learning Environment: Create a supportive and collaborative classroom environment where students feel comfortable sharing their ideas and engaging in respectful dialogue.

Providing Effective Feedback: Provide timely and constructive feedback to students on their presentations and discussions to help them improve their skills and understanding.

Integrating Real-World Applications: Connect student-led activities to real-world problems and challenges to make learning more meaningful and relevant.

Developing Student Leadership Skills: Encourage student leadership roles in planning and organizing these activities, such as group leaders, presenters, and facilitators.

Further Considerations:

Addressing Student Diversity: Ensure that all students have equal opportunities to participate in and benefit from student-led activities.

Assessing Student Learning: Develop appropriate assessment methods to evaluate student learning outcomes from these activities.

Technology Integration: Explore the use of technology to support student-led activities, such as online collaboration tools, presentation software, and video recording.

Numerous studies have shown that student-centered learning approaches, such as project-based learning, inquiry-based learning, and collaborative learning, lead to significantly improved student learning outcomes compared to traditional teacher-centered instruction Hmelo-Silver, et al., 2007). A meta-analysis by Kirschner, Sweller, and Clark (2006) found that guided instruction, which provides some structure and guidance while still emphasizing student engagement, can be more effective than unguided discovery learning. A study by Thomas and Brown (2000) found that project-based learning can increase student motivation, self-efficacy, and critical thinking skills. A study by Boaler (2016) emphasized the importance of creating a growth mindset in students and providing them with opportunities to explore and discover knowledge on their own.

Table 2.6. *Provides individual or small group tutoring as needed during individual seatwork or small group tutoring activities involving everyone on assignments*

Parent	*Alumni*	*Organization*
• Provide individual or small group tutoring as needed during individual seatwork or small group tutoring activities involving everyone on assignments. • I expect teachers to do tutoring for my son although my son is in the Gifted program. • I am expecting to offer targeted assistance as needed to ensure every student is actively engaged and	• This is a nice strategy. • It is not my task. • one on one or small group study sessions at home to help them with their assignments. Break down tasks into manageable parts, offer guidance, and work with siblings for collaboration. • This is a very good strategy	• One-on-one support is needed for some students to complete their work. • Small group tutoring is essential for addressing individual needs, especially for struggling students. • Assign grouping based on specific criteria, allow students to ask clarificatory questions, and assess further needs of students. • After-school activities can also work and help our students have good academic achievement.

progressing with their assignment. • Identify student weaknesses. Do not forget to provide support for mid-level students. • Small group tutoring will help struggling students.	that I want to suggest. • Teachers should continue or provide students with tutorial classes.	• Having small groups or one-on-one instruction as well as afterschool tutoring is beneficial to the students. • Pulling a small group during activities helps clear confusions among us students

Major Theme:

Differentiated Instruction and Support: The central theme revolves around the importance of providing differentiated instruction and support to meet the diverse learning needs of all students.

Codes:

Differentiated Instruction:

"Provide individual or small group tutoring"

"Targeted assistance as needed"

"Identify student weaknesses"

"Small group tutoring will help struggling students"

"One-on-one support is needed for some students"

Student Support:

"Ensure every student is actively engaged"

"Address individual needs"

Teacher Role:

"Identify student weaknesses"

"Provide support for mid-level students"

"Assign grouping based on specific criteria"

"Assess further needs of students"

Student Engagement:

"Actively engaged and progressing with their assignment"

"Clear confusion among us students"

Interpretation:

Parents: Expect teachers to provide individualized support to students, including those in gifted programs. They emphasize the importance of identifying and addressing individual student needs.

Alumni: Recognize the value of small group tutoring as an effective learning strategy. They suggest incorporating real-world applications and encouraging peer-to-peer learning.

Organization: Emphasizes the importance of differentiated instruction and the use of small group tutoring to address the diverse learning needs of all students. They highlight the need for careful planning and assessment to ensure the effectiveness of these interventions.

Analysis:

Recognition of Diverse Learning Needs: All stakeholders recognize the importance of addressing the diverse learning needs of students and providing appropriate support.

Value of Small Group Instruction: Small group tutoring is seen as an effective strategy for providing individualized attention, fostering peer-to-peer learning, and addressing specific learning challenges.

Teacher Role as Facilitator: Teachers play a crucial role in identifying student needs, planning and implementing effective tutoring strategies, and providing ongoing support and feedback.

Beyond Remediation: While small group tutoring can be beneficial for struggling students, it can also be used to enrich the learning experiences of all students by providing opportunities for deeper exploration and critical thinking.

Implications:

Implementing Differentiated Instruction: Educators should implement a variety of instructional strategies, including small group tutoring, to address the diverse learning needs of all students.

Providing Ongoing Assessment and Support: Regularly assess student progress and adjust instructional strategies accordingly.

Creating a Supportive Learning Environment: Foster a classroom environment that encourages peer-to-peer learning, collaboration, and risk-taking.

Professional Development for Teachers: Provide teachers with training and professional development opportunities on effective differentiation strategies, including small group instruction and tutoring techniques.

Utilizing Technology: Explore the use of technology to support small group tutoring, such as online learning platforms and collaborative tools.

Further Considerations:

Addressing Equity: Ensure that all students have equitable access to tutoring and other support services.

Building Relationships: Foster strong relationships between teachers and students to build trust and create a supportive learning environment.

Involving Parents: Involve parents in supporting their child's learning, such as through home-based tutoring or participating in school-based tutoring programs.

A study by Cerna et. al. (2021) found that differentiated instruction had a positive impact on student engagement, motivation, and academic achievement in a diverse classroom setting. Differentiated instruction can increase student engagement and motivation by making learning more relevant, interesting, and challenging for individual students. A study by Pozas et al. (2021) found that differentiated instruction can enhance student motivation and self-efficacy by providing students with opportunities to learn at their own pace and in ways that are meaningful to them.

Table 2.7. *Works on administrative tasks, such as record keeping, while students work on assignments*

Parent	*Alumni*	*Organization*
• works on administrative tasks, such as record keeping, while students work on assignments. • This might be difficult for the teacher. I suggest "Educational Assistants" and "Fellow Educators" can help. • My task is to ensure minimal distractions and allow them to focus on their learning while I stay organized and supportive. • Do admin tasks during prep time not during instructional period. • Monitor student progress.	• It is better to monitor the students while they work so that when they need clarifications on the task they do, you are readily available. • Remedials would be something that can help me with work. • Organizing their study schedule, checking their homework, and updating a family calendar with school events. • Monitor students while they work to better assist them. • This is not my task.	• occasionally but not all the time because there are students who need on one support. • Working on administrative tasks, such as record keeping may not be essential, but it is important in maintaining the overall functioning of the classroom. • Keep time stamps to keep the students on task; provide pauses to monitor students' progress. • These will be done after class. • This can be done during planning time so the teacher can assist the students who are having a hard time with the assignments. • Teachers should focus on assisting students inside the classroom.

Major Theme:

Balancing Teaching and Administrative Demands: The central theme revolves around the challenges of balancing instructional time with the demands of administrative tasks for teachers.

Codes:

Administrative Tasks:

"Record keeping"

"Administrative tasks"

Instructional Time:

"Work on assignments"

"Monitor student progress"

"Assist students"

Teacher Support:

"Educational Assistants"

"Fellow Educators"

"Remedials"

Time Management:

"Do admin tasks during prep time"

"Keep time stamps"

"These will be done after class"

"Planning time"

Interpretation:

Parents: Recognize the importance of minimizing distractions during instructional time and suggest seeking support from colleagues or educational assistants to manage administrative tasks.

Alumni: Emphasize the importance of teacher availability to support students during independent work time. They suggest prioritizing student needs over administrative tasks during instructional time.

Organization: Acknowledges the importance of administrative tasks but emphasizes the need to prioritize student support during instructional time. They suggest scheduling administrative tasks during non-instructional time, such as planning periods.

Analysis:

Conflicting Demands on Teacher Time: Teachers face competing demands on their time, including instruction, student support, and administrative tasks.

Impact on Student Learning: The ability of teachers to effectively support student learning can be impacted by the time spent on administrative tasks during instructional time.

Need for Efficient Work Practices: Teachers need to develop efficient strategies for managing administrative tasks to maximize instructional time.

Importance of Support Systems: Providing teachers with adequate support, such as from educational assistants and colleagues, can help them effectively manage their workload and prioritize student needs.

Implications:

Streamlining Administrative Processes: Schools should explore ways to streamline administrative processes to minimize the time burden on teachers.

Providing Adequate Support Staff: Schools should provide adequate support staff, such as educational assistants, to assist teachers with administrative tasks.

Scheduling Flexibility: Allow teachers flexibility in their schedules to accommodate both instructional and administrative responsibilities.

Professional Development: Provide teachers with training and professional development opportunities on time management and organizational skills.

Prioritizing Student Needs: Emphasize the importance of prioritizing student learning and support during instructional time.

Further Considerations:

Technology Integration: Explore the use of technology to automate or streamline administrative tasks, such as grading, attendance tracking, and communication.

Workload Reduction Strategies: Investigate strategies for reducing teacher workloads, such as workload audits and task analysis.

Teacher Well-being: Consider the impact of administrative workload on teacher stress and burnout and implement strategies to support teacher well-being.

Studies consistently show that teachers are facing increasing workloads due to a growing number of administrative tasks, such as data entry, standardized testing, and increased accountability measures (The Education Endowment Foundation, 2021; OECD, 2022). A study by Blewett & Kenny (2021) found that teachers experiencing high levels of administrative workload were more likely to

experience burnout and consider leaving the profession. A study by Boyd et al. (2021) found that teachers with high administrative workloads were less likely to implement innovative teaching practices and provide individualized attention to students. Research emphasizes the need for systemic changes to address the issue of teacher workload, such as streamlining administrative processes, providing adequate support staff, and reducing the emphasis on high-stakes testing (The Education Endowment Foundation, 2021).

Table 2.8. *Provides remedial or enriching instruction to a pull-out group while the rest of the class works on assignments*

Parent	*Alumni*	*Organization*
• provides remedial or enriching instruction to a pull-out group while the rest of the class works on assignments. • I like this accommodation. I like one-on-one teaching. • I want to ensure that students receive the support or challenges they need while the rest of the class continues their assignments independently. • Identify students who need such support. Provide varied materials (level) for students to work. • Keep track of time.	• This is a good way to manage time and work on kids who need help. • I like that idea. • Provide targeted support for their learning by offering additional instruction or enrichment activities tailored to their needs. • Remedial is a very good help to those students who need extra support. • After school activities will help.	• Pull-out helps students to get away from distractions and give more focus on the lesson taught. • This is important to help the students catch up on missed activities. • Choose a location that would not bother the rest of the class, ensure monitoring of the bigger group while doing the pull-out, and keep track of time. • I like remedial classes; this will help students especially those shy students who are having a hard time in class. • This is helpful not only for struggling students but as well as the advanced ones. • Pull out small groups as needed to help struggling students catch up with the lesson or activity.

Major Theme:

Differentiated Instruction and Support: The central theme revolves around the importance of differentiated instruction and providing targeted support to meet the diverse learning needs of all students.

Codes:

Differentiated Instruction:

"Remedial or enriching instruction"

"Pull-out group"

"Targeted support"

"Varied materials (level)"

Individualized Support:

"One-on-one teaching"

"Support they need"

"Help struggling students"

"Catch up on missed activities"

Teacher Role:

"Identify students who need such support"

"Keep track of time"

"Monitor the bigger group"

"Choose a location that would not bother the rest of the class"

Student Engagement:

"Focus on the lesson taught"

"Get away from distractions"

Interpretation:

Parents: Value individualized instruction and support for their children. They see the pull-out model as an effective way to provide targeted assistance to students who need extra help or enrichment.

Alumni: Recognize the value of remedial and enrichment programs in addressing diverse learning needs. They emphasize the

importance of providing targeted support and creating a supportive learning environment.

Organization: Emphasizes the importance of careful planning and implementation of pull-out programs, including identifying student needs, selecting appropriate materials, and ensuring a smooth transition for both the pull-out group and the remaining class.

Analysis:

Strong Support for Differentiated Instruction: All stakeholders recognize the importance of differentiated instruction and the need to provide targeted support to meet the diverse learning needs of all students.

Effectiveness of the Pull-Out Model: The pull-out model is seen as an effective strategy for providing individualized instruction and support to small groups of students.

Teacher Expertise is Crucial: The success of pull-out programs depends on the teacher's ability to effectively identify student needs, plan and deliver appropriate instruction, and manage both the pull-out group and the remaining class.

Importance of Careful Planning and Implementation: Careful planning and implementation are essential to ensure the effectiveness of pull-out programs, including selecting appropriate materials, creating a supportive learning environment, and monitoring student progress.

Implications:

Implementing Differentiated Instruction: Schools should implement a variety of differentiated instruction strategies, including pull-out groups, to address the diverse learning needs of all students.

Providing Ongoing Professional Development: Provide teachers with training and professional development opportunities on effective differentiation strategies, including planning and implementing pull-out programs.

Allocating Resources: Allocate adequate resources to support pull-out programs, including materials, staffing, and space.

Monitoring and Evaluating Program Effectiveness: Regularly monitor and evaluate the effectiveness of pull-out programs to ensure that they are meeting the needs of students.

Involving Parents: Involve parents in the planning and implementation of pull-out programs, such as through parent-teacher conferences and volunteer opportunities.

Further Considerations:

Addressing Equity: Ensure that all students have equitable access to pull-out programs and other forms of differentiated instruction.

Building Relationships: Foster strong relationships between teachers and students in the pull-out groups to build trust and create a supportive learning environment.

Technology Integration: Explore the use of technology to support pull-out programs, such as online learning platforms and educational software.

Cerna et. al. (2021) found that differentiated instruction had a positive impact on student engagement, motivation, and academic achievement in a diverse classroom setting. Differentiated instruction can increase student engagement and motivation by making learning more relevant, interesting, and challenging for individual students. Pozas et. al. (2021) found that differentiated instruction can enhance student motivation and self-efficacy by providing students with opportunities to learn at their own pace and in ways that are meaningful to them. Tomlinson (2017) emphasized the importance of differentiated instruction in fostering student independence, self-regulation, and metacognition, which are crucial 21st-century skills.

Table 2.9. *Administers a test or a quiz*

Parent	*Alumni*	*Organization*
• administers a test or a quiz. • The test should be according to the child's needs; provide modification. • As a parent, I want to ensure a calm and organized environment and expect clear instructions and fair assessment. • Provide clear directions. • To assess student understanding.	• Vary the kind of test given. • That would be very helpful and improve my knowledge. • Create practice quizzes to prepare them. • Tests or quizzes are based on student needs. • Teachers should not give so many tests.	• At the end of the lesson, a test or quiz is given to check student understanding. • Once a week, every Friday. This is to measure progress and assess student understanding. • Immediate feedback on students' work. • Do this maybe twice a week • This can be done after a unit/lesson is done. • Assessing students allows teachers to see what lessons or topics need to be taught again.

Major Theme:

Assessment and Evaluation: The central theme revolves around the use of tests and quizzes to assess student learning and inform

instruction.

Codes:

Assessment Methods:

"Administers a test or a quiz"

"Tests or quizzes"

Learning Assessment:

"Assess student understanding"

"Measure progress"

"Check student understanding"

Instructional Guidance:

"Inform instruction"

"Lessons or topics need to be taught again"

Student Support:

"Clear directions"

"Provide modifications"

"Immediate feedback"

Frequency and Format:

"Vary the kind of test given"

"Create practice quizzes"

"Once a week, every Friday"

"Twice a week"

Interpretation:

Parents: View tests and quizzes as a means of assessing student learning and identifying areas for improvement. They emphasize the importance of clear instructions, fair assessments, and appropriate accommodations for individual student needs.

Alumni: Recognize the value of tests and quizzes in evaluating their own learning and identifying areas for growth. They suggest varying the types of assessments and providing opportunities for practice.

Organization: Views tests and quizzes as essential tools for measuring student learning, informing instruction, and identifying areas for improvement. They emphasize the importance of regular assessments and providing timely feedback to students.

Analysis:

Assessment as a Key Component of Instruction: All stakeholders recognize the importance of assessment as an integral part of the teaching and learning process.

Multiple Purposes of Assessment: Assessments serve multiple purposes, including measuring student learning, providing feedback to students, and informing instructional decisions.

Importance of Valid and Reliable Assessments: It is crucial to use valid and reliable assessment methods that accurately measure student learning and provide meaningful feedback.

Balancing Assessment with Learning: While assessments are important, it is crucial to strike a balance between assessment and instruction to avoid overwhelming students and creating undue stress.

Implications:

Developing High-Quality Assessments: Teachers should develop high-quality assessments that are aligned with learning objectives, are fair and equitable, and provide meaningful feedback to students.

Utilizing a Variety of Assessment Methods: Utilize a variety of assessment methods, including quizzes, tests, projects, presentations, and observations, to get a comprehensive picture of student learning.

Providing Timely and Meaningful Feedback: Provide timely and specific feedback to students on their assessments to help them identify areas for improvement and develop their understanding.

Using Assessment Data to Inform Instruction: Use assessment data to inform instructional decisions, such as adjusting lesson plans, providing additional support to struggling students, and challenging advanced learners.

Further Considerations:

Reducing Test Anxiety: Implement strategies to reduce test anxiety among students, such as providing ample preparation time, creating a supportive and low-stress testing environment, and emphasizing learning over grades.

Using Assessment to Foster Student Growth: Focus on using assessment as a tool for learning and growth, rather than simply as a means of assigning grades.

Involving Students in the Assessment Process: Involve students in the assessment process by having them self-assess their own work and set learning goals.

Brookhart (2017) emphasized the importance of using multiple methods of assessment to gather evidence of student learning and provide a more holistic understanding of student progress. The focus has shifted from assessment of learning (primarily for grading) to assessment for learning, which emphasizes the use of assessment to improve student learning (Stiggins, 2005). Wiliam and Thompson (2007) highlighted the importance of involving students in the assessment process, such as through self-assessment and peer assessment, to enhance their learning and metacognition. Technology is increasingly being used to support assessment, such as through online quizzes, automated grading systems, and learning analytics Means et. al., 2009). Russell et. al. (2019) explored the use of technology to personalize learning and provide students with individualized feedback.

Table 2.10. *Stimulates student discussions of approaches to solving problems, explanations of their scientific and mathematical thinking, or open-ended questions*

Parent	*Alumni*	*Organization*
• stimulates student discussions of approaches to solving problems, explanations of their scientific and mathematical thinking, or open-ended questions. • Teachers should implement these for higher-order thinking skills of the students. • As a parent, I am expecting to foster critical thinking, clarity, and deeper understanding through open-ended questions. • Promote a collaborative and open discussion environment. • To assess students, each group explains the reasoning behind choices.	• It is very helpful to let the students explain their thinking so that you'll understand where they are at. • I would agree with that. • Encourage them to explain their thinking process for scientific and mathematical problems. Ask open-ended questions that prompt critical thinking and deeper understanding. • It will help student with their critical thinking skills. • Teachers should explain well their lessons through examples.	• Make sure to provide feedback. • Suggestions: 1. Monitor meaningful and thoughtful conversation when students are having a group discussion about a particular topic. 2. Provide feedback. • provide learning questions, sentence stems, and visuals to prompt students' oral recitation to allow students to communicate their thoughts, and reflection at the end of the lesson. • Teachers should bring their students to higher levels through problem-solving activities. • HOTS or higher-order thinking Skills allows students to be more engaged in learning. • Prompt students to ask higher-order thinking questions and promote critical thinking among learners.

Major Theme:

Developing Higher-Order Thinking Skills: The central theme revolves around fostering critical thinking, problem-solving, and communication skills through student-centered activities like discussions, explanations of thinking, and open-ended questions.

Codes:

Higher-Order Thinking Skills:

"Higher-order thinking skills"

"Critical thinking"

"Problem-solving"

"Scientific and mathematical thinking"

Student Engagement:

"Student discussions"

"Explanations of their thinking"

"Open-ended questions"

Communication and Collaboration:

"Promote a collaborative and open discussion environment"

"Communicate their thoughts"

Teacher Role:

"Stimulates student discussions"

"Promote critical thinking"

"Provide feedback"

"Monitor meaningful and thoughtful conversation"

Interpretation:

Parents: Value the development of critical thinking skills and believe that student discussions and open-ended questions can foster deeper learning and understanding. They emphasize the importance of creating a supportive and collaborative learning environment.

Alumni: Recognize the value of explaining their thinking processes and engaging in discussions as crucial for developing critical thinking and problem-solving abilities. They emphasize the importance of teacher guidance and clear explanations.

Organization: Emphasizes the importance of cultivating higher-order thinking skills through student-centered activities. They suggest strategies like providing feedback, using open-ended questions, and creating a supportive learning environment.

Analysis:

Shifting from Rote Learning to Deeper Understanding: There is a strong emphasis on moving beyond rote memorization and towards deeper learning that emphasizes critical thinking, problem-solving, and communication skills.

Student-Centered Learning Approach: Student-centered activities, such as discussions and explanations of thinking, are seen as essential for fostering active learning and engagement.

Teacher as Facilitator: The teacher's role is crucial in facilitating these discussions, asking probing questions, providing constructive feedback, and creating a supportive learning environment.

Developing 21st-Century Skills: These activities are essential for developing 21st-century skills such as critical thinking, communication, collaboration, and problem-solving, which are crucial for success in the modern world.

Implications:

Integrating Higher-Order Thinking Skills: Educators should integrate activities that promote higher-order thinking skills, such as problem-solving, critical analysis, and creative thinking, into all subject areas.

Creating a Culture of Inquiry: Foster a classroom culture that values inquiry, exploration, and open-ended questions.

Providing Opportunities for Student Discussion and Collaboration: Create opportunities for students to engage in discussions, share their ideas, and learn from each other.

Using Effective Questioning Techniques: Utilize a variety of questioning techniques, including open-ended questions, probing questions, and wait time, to encourage deeper thinking and critical analysis.

Providing Constructive Feedback: Provide regular and constructive feedback to students on their thinking processes, problem-solving strategies, and communication skills.

Further Considerations:

Addressing Student Diversity: Ensure that all students, regardless of their background or learning style, have equal opportunities to participate in and benefit from these activities.

Assessing Higher-Order Thinking Skills: Develop appropriate assessment methods to evaluate student progress in developing higher-order thinking skills.

Technology Integration: Explore the use of technology to facilitate student discussions, collaboration, and the development of higher-order thinking skills.

Studies have shown that instructional approaches that emphasize higher-order thinking skills, such as critical thinking, problem-solving, and creativity, lead to improved student learning outcomes, including deeper understanding, increased knowledge retention, and

improved academic performance. Hmelo-Silver et. al. (2007) demonstrated the effectiveness of project-based learning in fostering higher-order thinking skills and improving student learning outcomes. Engaging in activities that require higher-order thinking skills can increase student engagement and motivation by making learning more challenging, interesting, and meaningful. Boaler (2016) emphasized the importance of providing students with opportunities to explore and discover knowledge on their own, which can foster a love of learning and enhance motivation.

Table 2.11. *Demonstrates the uses of technology across disciplines*

Parent	*Alumni*	*Organization*
• demonstrates the uses of technology across disciplines. • Children should be exposed to technology across disciplines. • As a parent the integration of technology will help students use digital tools effectively to enhance learning problem-solving and activity in various subjects. • Let students help one another. • Demonstrate a tool or software that enhances analysis.	• Technology is an important part of education nowadays, but make sure to use it well. • I would appreciate a supervisor in case of difficulties. • Use educational apps, videos, and online tools to explore topics together. • Technology is very useful nowadays to aid students' needs. • Teachers should update themselves on technology.	• Technology is a major tool in education these days using it across disciplines allows a smooth transition from one tool to another. • Multimedia resources can bring subjects to life and keep students interested in the lesson; however, it must be used thoughtfully. • Students can confidently use and manipulate multi-media technology such as computers, and video/photo editing. • Teachers should do this regularly. This is what we need in today's time. • In this age of technology, the use of it is becoming a need for a successful learning process to happen. • Using technology across disciplines allows students to incorporate their learning from one discipline to another.

Major Theme:

Technology Integration in Education: The central theme revolves around the effective and meaningful integration of technology across all subject areas to enhance student learning.

Codes:

Technology Integration:

"Demonstrates the uses of technology across disciplines"

"Integration of technology"

"Use of technology across disciplines"

Learning Enhancement:

"Enhance learning problem-solving and activity"

"Enhance analysis"

"Keep students interested in the lesson"

"Aid students' needs"

"Successful learning process"

Teacher Role:

"Demonstrate a tool or software"

"Use educational apps, videos, and online tools"

"Update themselves on technology"

Student Skills:

"Use digital tools effectively"

"Confidently use and manipulate multi-media technology"

Interpretation:

Parents: Recognize the importance of technology integration in education and expect teachers to effectively utilize digital tools to enhance student learning across all subjects.

Alumni: Acknowledge the significant role of technology in modern education while emphasizing the need for careful and meaningful integration. They highlight the importance of teacher training and support in effectively utilizing technology.

Organization: Emphasizes the importance of technology integration across disciplines to enhance student learning and prepare them for success in the digital age. They highlight the need for thoughtful and purposeful use of technology.

Analysis:

Technology as a Powerful Learning Tool: All stakeholders recognize the potential of technology to significantly enhance student learning when used effectively.

Need for Meaningful Integration: There is a strong emphasis on the need for meaningful and purposeful integration of technology, rather than simply using technology for technology's sake.

Teacher Training and Support: Effective technology integration requires adequate teacher training and ongoing professional development to ensure that teachers are equipped to effectively utilize technology in their teaching.

Developing Digital Literacy Skills: Technology integration provides students with opportunities to develop essential 21st-century skills, such as digital literacy, critical thinking, and problem-solving.

Implications:

Investing in Technology Infrastructure and Resources: Schools need to invest in appropriate technology infrastructure, including high-speed internet access, devices, and software, to support effective technology integration.

Providing Teacher Training and Support: Provide teachers with ongoing professional development opportunities on effective technology integration strategies, including lesson planning, assessment, and student support.

Developing Digital Literacy Curricula: Develop and implement curricula that explicitly address digital literacy skills, including responsible technology use, critical evaluation of digital information, and online safety.

Creating a Supportive Learning Environment: Create a supportive and collaborative learning environment that encourages students to explore and experiment with technology.

Addressing Equity: Ensure equitable access to technology and digital resources for all students, regardless of their socioeconomic background.

Further Considerations:

Addressing Ethical and Social Implications: Address the ethical and social implications of technology use, including online safety, digital citizenship, and responsible use of information.

Monitoring and Evaluating Technology Integration: Regularly monitor and evaluate the effectiveness of technology integration efforts to ensure that they are meeting the needs of students and achieving desired learning outcomes.

Studies have shown that effective technology integration can significantly enhance student learning outcomes, including improved academic achievement, increased engagement, and a deeper understanding of concepts. Cuban et. al. (2021) explored the impact of technology-rich learning environments on student achievement and found positive correlations between technology integration and improved academic outcomes. Technology can increase student engagement and motivation by making learning more interactive, personalized, and enjoyable. Hamdani et. al. (2021) found that the use of interactive simulations and animations significantly increased student engagement and motivation in science classrooms.

Table 2.12. *Sets up and monitors or supervises cooperative learning activities*

Parent	*Alumni*	*Organization*
• Set up and monitor or supervise cooperative learning activities. • do it through small-grouped or focused-group discussions. • As a parent, I expect to foster collaboration, communication, and responsibility among students while ensuring they stay engaged and productive. • Provide suitable apps and/or materials. Set a time limit on the use of technology. (Tech Breaks) Group students according to their interests. • Assign clear roles within each group; provide guidelines for collaboration.	• This is one strategy that helps students work well with others, but monitoring is important because, at times, not all students in the group are working. • Collaborate with family members. Supervise these activities to ensure everyone is participating. • Monitoring students is needed to make sure they are on task. • Teachers should let students collaborate with other students. • Collaboration allows learners to learn with each other.	• Suggestions: Set up well-structured activities and monitor interactions. The teacher ensures that the students actively participate and share ideas. • Assign grouping according to criteria, assign a role for each member of the group, and provide clear and explicit instruction/expectations. • Teachers should intensify the use of this method for developing the social skills of the students. • Collaborative learning promotes cooperation among learners. • Cooperative learning needs to be monitored and have a set of expectations to become successful.

Major Theme:

Collaborative Learning: The central theme revolves around the importance of cooperative learning strategies in fostering student engagement, collaboration, and social-emotional development.

Codes:

Cooperative Learning Strategies:

"Cooperative learning activities"

"Small-grouped or focused-group discussions"

"Collaborative learning"

Student Engagement:

"Engaged and productive"

"Actively participate and share ideas"

"On task"

Collaboration and Communication:

"Foster collaboration, communication, and responsibility"

"Collaborate with family members"

"Work well with others"

"Learn with each other"

Teacher Role:

"Set up and monitor or supervise"

"Provide guidelines for collaboration"

"Monitor students"

"Assign grouping according to criteria"

"Set up well-structured activities"

Interpretation:

Parents: Value cooperative learning as a valuable strategy for fostering collaboration, communication, and responsibility among students. They emphasize the importance of clear expectations, effective monitoring, and a supportive learning environment.

Alumni: Recognize the benefits of cooperative learning for developing social skills and enhancing learning. They emphasize the importance of effective monitoring to ensure that all students are actively participating.

Organization: Emphasizes the importance of careful planning and implementation of cooperative learning activities, including clear instructions, group roles, and ongoing monitoring. They recognize the potential of cooperative learning to develop essential social and academic skills.

Analysis:

Benefits of Cooperative Learning: All stakeholders recognize the numerous benefits of cooperative learning, including enhanced learning, improved social skills, and increased motivation.

Teacher Role as Facilitator: The teacher plays a crucial role in facilitating effective cooperative learning by carefully planning activities, setting clear expectations, monitoring student interactions, and providing constructive feedback.

Importance of Structure and Support: Effective cooperative learning requires a well-structured environment with clear roles, responsibilities, and expectations for all group members.

Developing 21st-Century Skills: Cooperative learning provides students with opportunities to develop essential 21st-century skills, such as communication, collaboration, teamwork, and problem-solving.

Implications:

Integrating Cooperative Learning: Educators should regularly integrate cooperative learning activities into their instruction across all

subject areas.

Training Teachers on Cooperative Learning Strategies: Provide teachers with training and professional development opportunities on effective cooperative learning strategies, including group formation, role assignment, and monitoring techniques.

Creating a Supportive Learning Environment: Foster a classroom environment that is conducive to collaboration, communication, and mutual respect.

Assessing Cooperative Learning: Develop appropriate assessment methods to evaluate student learning and growth in cooperative learning environments.

Involving Parents: Involve parents in supporting cooperative learning activities at home, such as through family projects and collaborative activities.

Further Considerations:

Addressing Student Diversity: Ensure that all students, regardless of their learning styles, abilities, or backgrounds, have equal opportunities to participate and benefit from cooperative learning activities.

Preventing Free-Riding: Implement strategies to prevent free-riding and ensure that all group members are actively contributing to the learning process.

Technology Integration: Explore the use of technology to support cooperative learning activities, such as online collaboration tools and virtual learning environments.

Numerous studies have demonstrated that cooperative learning strategies can significantly enhance student learning outcomes, including improved academic performance, deeper understanding, and increased knowledge retention. Johnson and Johnson (2009) provided a comprehensive overview of cooperative learning, highlighting its benefits for student learning and social-emotional development. Springer et. al. (2009) found that cooperative learning strategies generally have a positive impact on student achievement compared to traditional instruction.

Conclusions

It is concluded that all parents-participants are under the age range of 32 years old and above, predominantly females, and attain graduate schooling. Most of the alumni participants are under the age bracket of 20-25 years old, predominantly males and reach high school level. Many of the organization participants are under the age bracket of 32 years old and above, predominantly females and also reach graduate schooling level. Based on the assessment of the establishment and maintenance of parents' expectations, the following themes were generated: Effective Lecture Pedagogy. The central theme revolves around improving the effectiveness of lectures in the classroom; Visual Learning. The central theme revolves around the importance of visual aids in enhancing student learning and catering to diverse learning styles; Experiential Learning. The central theme revolves around the importance of hands-on learning experiences and the use of three-dimensional tools to facilitate deeper understanding and engagement; Active Learning and Knowledge Retention. The central theme revolves around the importance of active learning strategies, such as recitation, drills, and question-and-answer sessions, in reinforcing learning, improving knowledge retention, and developing essential skills; Student-Centered Learning. The central theme revolves around shifting the focus from teacher-centered instruction to student-centered learning, where students actively engage in the learning process through discussions, demonstrations, and presentations; Differentiated Instruction and Support. The central theme revolves around the importance of providing differentiated instruction and support to meet the diverse learning needs of all students; Balancing Teaching and Administrative Demands. The central theme revolves around the challenges of balancing instructional time with the demands of administrative tasks for teachers; Differentiated Instruction and Support. The central theme revolves around the importance of differentiated instruction and providing targeted support to meet the diverse learning needs of all students; Assessment and Evaluation. The central theme revolves around the use of tests and quizzes to assess student learning and inform instruction. Developing Higher-Order Thinking Skills; The central theme revolves around fostering critical thinking, problem-solving, and communication skills through student-centered activities like discussions, explanations of thinking, and open-ended questions; Technology Integration in Education. The central theme revolves around the effective and meaningful integration of technology across all subject areas to enhance student learning; and Collaborative Learning. The central theme revolves around the importance of cooperative learning strategies in fostering student engagement, collaboration, and social-emotional development.

These recommendations are aimed at enhancing overall teaching and learning by addressing key themes identified in the assessment:

Prioritize Active Learning: Minimize passive lecturing. Implement strategies like peer instruction, group work, and hands-on activities. Encourage student participation through discussions, questions, and presentations.

Leverage Technology Strategically: Integrate technology meaningfully, not just for the sake of it. Utilize technology to enhance learning, not replace it. Ensure equitable access to technology for all students.

Differentiate Instruction: Cater to diverse learning styles and needs. Provide varied instructional materials and activities. Offer support and enrichment opportunities for all students.

Foster a Collaborative Learning Environment: Encourage group work, peer learning, and student-led discussions. Create a supportive and inclusive classroom climate. Develop essential social-emotional skills through collaborative activities.

Develop Higher-Order Thinking Skills: Pose challenging questions and problems that require critical thinking and problem-solving. Encourage students to explain their reasoning and justify their answers. Foster creativity and innovation in learning.

Utilize Effective Assessment: Employ a variety of assessment methods, including formative and summative assessments. Provide timely and constructive feedback to students. Use assessment data to inform instruction and make adjustments.

Balance Teaching and Administrative Demands: Streamline administrative tasks to maximize instructional time. Seek support from colleagues and utilize available resources. Prioritize student learning and well-being.

Create a Visually Rich Learning Environment: Utilize a variety of visual aids, such as images, videos, and demonstrations, to enhance learning and cater to diverse learning styles.

Foster a Positive School Climate: Establish and maintain clear and consistent expectations. Build strong relationships between teachers, students, and parents. Create a safe and supportive learning environment for all students.

References

ACTFL/CAEP (2013). Program standards for the preparation of foreign language teachers.https://www.actfl.org/sites/default/files/caep/ACTFLCAEPStandards2013_v2015.pdf

Akalin, S., & Sucuoglu, B. (2015). Effects of classroom management intervention based on teacher training and performance feedback on outcomes of teacher-student dyads in inclusive classrooms. Educational Sciences: Theory and Practice, 15(3), 739-758.

Allday, R. A., Hinkson-Lee, K., Hudson, T., NelisenGatti, S., Kleinke, A., & Russel, C. S. (2012). Training general educators to increase behaviorspecific praise: Effects on students with EBD. Behavioral Disorder, 37(2), 87-98.

Andrews, S., & McNeill, A. (2005). Knowledge about language and the "good language teacher." In N. Bartels (Ed.), Applied linguistics and language teacher education (pp. 159-178). New York, NY: Springer.

Archer, A., & Hughes, C. (2011). Explicit instruction: Effective and efficient teaching. NY: Guilford Publications.

Ball, D. L., & Bass, H. (2003). Toward a practice-based theory of mathematical

Ball, D. L., & Forzani, F. M. (2009). The work of teaching and the challenge for teacher education. Journal of Teacher Education, 60, 497–511.

Ball, D., & Forzani, F. (2010). What does it take to make a teacher? Phi Delta Kappan,92(2), 8-12. doi:10.1177/003172171009200203

Ball, D., & Forzani, F. (2010-2011). Teaching skillful teaching. Educational Leadership, 68,40-45.

Ball, D., & Forzani, F. (2011). Building a common core for learning to teach: And connecting professional learning to practice. American Educator,35(2), 17-21, 38-39.

Baumann, J. F., Jones, L. A., & Seifert-Kessell, N. (1993). Using think alouds to enhance children's comprehension monitoring abilities. The Reading Teacher, 47(3), 184-193.

Berliner, D. C. (1990). What's all the fuss about instructional time. The nature of time in schools: Theoretical concepts, practitioner perceptions, 3-35.

Brosh, H. (1996). Perceived characteristics of the effective language teacher. Foreign Language Annals, 29(2), 125-136.

Brown, A., & Cocking, R. (Eds.). (2000). How people learn. Brain, mind experience, and school. Washington, DC: National Academy

Brownell, M., Ross, D., Colon, E., & McCallum, C. (2005). Critical features of special education teacher preparation: A comparison with general education. The Journal of Special Education, 38(4), 242-252. doi:10.1177/00224669050380040601

Clementi, D., & Terrill, L. (2013). The keys to planning for learning: Effective curriculum, unit and lesson design. ACTFL

Codding, R. S., Feinberg, A. B., Dunn, E. K., & Pace,G. M. (2005). Effects of immediate performance feedback on implementation of behavior support plans. Journal of Applied Behavior Analysis, 38(2), 205-219.

Conroy, M. A., Sutherland, K. S., Snyder, A., AlHendawi, M., & Vo, A. (2009). Creating a positive classroom atmosphere: Teacher's use of effective praise and feedback. Beyond Behavior, 18, 18-26.

Cook, B. G., & Cook, S. C. (2013), Unraveling evidenced-based practices in special education. Journal of Special Education, 46, 71-

82.

Council for Accreditation of Educator Preparation. (2013a). CAEP accreditation standards. Washington, DC: Author. Retrieved from file:///Users/admin/Downloads/caep-2013- accreditation-standards.pdf

Davis, E., & Boerst, T. (2014). Designing elementary teacher education to prepare well-started beginners. Ann Arbor, MI: TeachingWorks, University of Michigan School of Education.

Dewar, K. (2002). On being a good teacher. Journal of Hospitality, Leisure, Sport and Tourism Education, 1(1), 61–67.

Dieker, L. A., Hynes, M. E., Hughes, C., & Straub, C. (2014). Using virtual rehearsal in TLE TeachLivETM mixed reality classroom simulator to determine the effects on the performance of mathematics teachers (Technical Report), Orlando: University of Central Florida.

Dieker, L. A., Kennedy, M. J., Smith, S., Vasquez III, E., Rock, M., & Thomas, C. N. (2014). Use of technology in the preparation of pre-service teachers (Document No. IC-11). Retrieved fromhttp://ceedar.education.ufl.edu/tools/innovationconfigurations/

Doerr, H. M. (2006). Examining the tasks of teaching when using students' mathematical thinking. Educational Studies in Mathematics, 62, 3-24. doi:10.1007/s10649-006-4437-9

Duchaine, E. L., Jolivette, K., & Fredrick, L. D. (2011). The effect of teacher coaching with performance feedback on behavior-specific praise in inclusion classrooms. Education and Treatment of Children, 34(2), 209-227.

Foorman, B., & Torgesen, J. (2001). Critical elements of classroom and small-group instruction that support reading success in all children. Learning Disabilities Research & Practice, 16, 203-212.

Forzani, F. (2014). Understanding "core practices" and "practice-based" teacher education: Learning from the past. Journal of Teacher Education, 65(4), 357-368.doi:10.1177/0022487114533800

Franke, M. L., Webb, N. M., Chan, A. G., Ing, M., Freund, D., & Battey, D. (2009). Teacher questioning to elicit students' mathematical thinking in elementary school classrooms. Journal of Teacher Education, 60, 380-392. doi:10.1177/0022487109339906

Gee, J. P. (2008). A sociocultural perspective on opportunity to learn. In P. A. Moss, D. C. Pullen, J. P. Gee, E. H. Haertel, & L. J. Young (Eds.), Assessment, equity, and opportunity to learn (pp. 76-108). New York, NY: Cambridge University Press.

Gersten, R., Compton, D., Dimino, J., Santoro, L., Linan-Thompson, S., & Tilly, D. (2009). Assisting students struggling with reading: Response to Intervention (RtI) for elementary and middle schools. Washington, DC: Institute for Education Sciences.

Glisan, E. W., & Donato, R. (2017). Effective foreign language teaching: Broadening the concept of content knowledge. Foreign Language Annals,50(4), 821–828.

Glisan, E. W., & Donato, R. (2021). Enacting the work of language instruction: Vol. 2. High-leverage teaching practices. ACTFL.

Grossman, P. (2011). Framework for teaching practice: A brief history of an idea. Teachers College Record, 113(12), 2836–2843.

Grossman, P., & McDonald, M. (2008). Back to the future: Directions for research in teaching and teacher education. American Educational Research Journal, 45(1), 184–205.

Grossman, P., Hammerness, K., & McDonald, M. (2009). Redefining teaching: Re-imagining teacher education. Teachers and Teaching: Theory and Practice, 15(2), 273-290.

Hattie, J. (2009). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. Routledge.

Higgs, A. L., & McMillan, V. M. (2006). Teaching through modeling: Four schools' experiences in sustainability education. The Journal of Environmental Education, 38(1), 39-53.

Hynes, M. E., Hughes, C., & Straub, C. (2014). Using virtual rehearsal in TLE TeachLivETM mixed reality classroom simulator to determine the effects on the performance of mathematics teachers (Technical Report), Orlando: University of Central Florida.

Judge, S., Bobzien, J., Maydosz, A., Gear, S., & Katsioloudis, P. (2013). The use of visual-based simulated environments in teacher preparation. Journal of Education and Training Studies, 1(1).

knowledge for teaching. In B. Davis & E. Simmt (Eds.), Proceedings of the 2002 annual meeting of the Canadian Mathematics Education Study Group(pp.314).Edmonton,AB:CMESG/GCEDM.

Korthagen, F. A. J., Kessels, J., Koster, B., Lagerwerf, B., & Wubbels, T. (2001). Linkingtheory and practice: The pedagogy of realistic teacher education. Mahwah, NJ: Lawrence Erlbaum.

Kucan, L., Palincsar, A., Busse, T., Heisey, N., Klingelhofer, R., Rimbey, M., & Schutz, K. (2011). Applying the Grossman et al. theoretical framework: The case of reading. Teachers College Record, 113(12), 2897-2921.

Lampert, M. (2005, March). Preparing teachers for ambitious instructional practice: Learning to listen and to construct an appropriate response. Paper presented at the annual meeting of the American Educational Research Association, Montreal, QC.

Lampert, M. (2010). Learning teaching in, from, and for practice: What do we mean?

Lampert, M., Franke, M.L., Kazemi, E., Ghousseini, H., Turrou, A.C., Beasley, H., Cunard, A., & Crowe, K. (2013). Keeping it complex: Using rehearsals to support novice teacher learning of ambitious teaching. Journal of Teacher Education, 64(3), 226–243.

Leinhardt, G. (2004). Instructional explanations: A commonplace for teaching and a location for contrast. In V. Richardson (Ed.), Handbook of research on teaching (4th ed., pp. 333-357). Washington, DC: American Educational Research Association.

Leinhardt, G., & Steele, M. D. (2005). Seeing the complexity of standing to the side: Instructional dialogues. Cognition and Instruction, 23(1), 87-163.doi:10.1207/s1532690xci2301_4

Leko, M. M., Brownell, M. T., Sindelar, P. T., & Kiely, M. T. (2015). Envisioning the future of special education personnel preparation in a standards-based era. Exceptional Children, 82, 25-43.

Levine, A. (2006). Educating school teachers. Washington, DC: The Education Schools Project.

Maheady, L., Smith, C., & Jabot, M. (2013). Chapter 6 Utilizing Evidence-Based Practice in Teacher Preparation. In Evidence-based practices

McDonald, M., Kazemi, E., & Kavanaugh, S. (2013). Core practices of teachereducation: A call for a common language and collective activity.Journal of Teacher Education ,64(5),378386.doi:10.1177/0022487113493807

McGaghie, W. C., Issenberg, S. B., Petrusa, E. R., & Scalese, R. J. (2010). A critical review of simulation-based medical education research: 2003-2009. Medical Education, 44(1), 50-63.

McLeskey, J., & Billingsley, B. (2008). How does the stability of the teaching force influence the research-to-practice gap? A perspective on the teacher shortage in special education. Remedial and Special Education, 29(5), 293-305. doi:10.1177/0741932507312010

McLeskey, J., & Waldron, N. (2011). Educational programs for elementary students with learning disabilities: Can they be both effective and inclusive? Learning Disabilities Research and Practice, 26(1), 48-57. doi:10.1111/j.1540-5826.2010.00324.x

Mehrparvar, F., & Karimnia, A. (2018). Second language teaching effectiveness from the perspective of university students: A case study of departments of applied linguistics. Discourse and Communication for Sustainable Education, 9(1), pp. 64-78

Noell, G. H., Witt, G. J., Gatti, S. L., & Connell, J. E. (2002). Consultation, follow-up, and behavior management intervention implementation in general education. School Psychology Review, 3, 217-234.

Noell, G. H., Witt, G. J., LaFleur, L. H., Mortenson, B. P., Ranier, D. D., & LeVelle, J. (2000). Increasing intervention implementation in general education following consultation: A comparison of two follow-up strategies. Journal of Applied Behavior Analysis, 33, 271-284.

Rathel, J. M., Drasgow, E., & Christle, C. C. (2008). Effects of supervisor performance feedback on increasing preservice teachers' positive communication behaviors with students with emotional and behavioral disorders. Journal of Emotional and Behavioral Disorders, 16(2), 67- 77.

Rosenshine, B., & Stevens, R. (1986). Teaching functions. In M. C.Wittrock (Ed.), Handbook of research on teaching (3rd ed., pp. 376-391), New York, NY: Macmillan.

Rosenshine, B., & Stevens, R. (1986). Teaching functions. In M. C.Wittrock (Ed.), Handbook of research on teaching (3rd ed., pp. 376-391), New York, NY: Macmillan.

Scheeler, M. C., Budin, S., & Markelz, A. (2016). The role of teacher preparation in promoting evidence-based practice in schools. Learning Disabilities: A Contemporary Journal, 14(2), 171-187.

Scheeler, M. C., Budin, S., & Markelz, A. (2016). The role of teacher preparation in promoting evidence-based practice in schools. Learning Disabilities: A Contemporary Journal, 14(2), 171-187.

Schles, R. A., & Robertson, R. E. (2019). The role of performance feedback and implementation of evidence-based practices for preservice special education teachers and student outcomes: A review of the literature. Teacher Education and Special Education, 42(1), 36-48.

Sutherland, K.S., Alder, N., & Gunter, P.L. (2003). The effects of varying rates of opportunities to respond to academic requests on the classroom behavior of students with EBD. Journal of Emotional and Behavioral Disorder, 11, 239- 248.

Sykes, G., Bird, T., & Kennedy, M. (2010). Teacher education: Its problems and someprospects. Journal of Teacher Education, 61(5),

464-476.doi:10.1177/0022487110375804

TeachingWorks. (2015). High-leverage practices. Retrieved fromhttp://www.teachingworks.org/work-of-teaching/high-leverage-practices

VanPatten, B. (2017). Situating instructed language acquisition: Facts about second language acquisition. Instructed Second Language Acquisition, 1(1), 45–59.

Wei, R., & Pecheone, R. (2010). Assessment of learning in pre-service teacher education.

Windschitl, M., Thompson, J., Braaten, M., & Stroupe, D. (2012). Proposing a core set ofinstructional practices and tools for teachers of science.Science Education, 96(5), 878-903. doi:10.1002/sce.21027

Windschitl, M., Thompson, J., Braaten, M., & Stroupe, D. (2012). Proposing a core set of instructional practices and tools for teachers of science. Science Education, 96(5), 878-903.

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