Improving Education for California Students via Professional Development

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This brief provides recommendations for the professional development (PD) of teachers, administrators, and school personnel in order to improve student outcomes. The significant achievement gap for diverse learners—including students with disabilities, a vast majority of whom are also culturally and/or linguistically diverse—can be reduced through high quality and ongoing PD. Unfortunately, there are numerous barriers to effective PD. To address these barriers, this brief outlines recommendations for best practices in PD for teachers and other school staff. Strategies for integrating evidence-based practices (EBPs) into existing educational initiatives are also provided, along with methods for improving the school-system climate in order to reduce barriers to providing and sustaining innovative training and intervention methods.

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PACE
Policy Analysis for California Education

Introduction

Significant efforts are being made to close the achievement gap so all students in California—including students with disabilities—have equitable access to high quality education and can reach their highest potential. High quality teachers are key to closing this gap, as teacher qualifications are the primary factor related to student success—especially for diverse students.[1] Therefore, developing systemwide supports to improve access and providing corresponding professional development (PD) to ensure successful implementation of innovative strategies are key to improving outcomes for all students throughout California.

Significant Achievement Gaps Between Students With and Without Disabilities

Recent changes to the funding and accountability system (i.e., local control funding and accountability) and the addition of the California School Dashboard have shone a light on student groups most in need of additional supports. This includes students of color, English language learners, youth in foster care or who are experiencing homelessness, and students with disabilities. Additional specific funding in California has narrowed achievement gaps between White students and students of color as well as between economically disadvantaged and more affluent students.[2] However, more work to ensure equity for students with disabilities is needed. In California, 11.7 percent of students (or over 725,000 students) have an identified disability qualifying them for special education. According to the Dashboard, students with disabilities are "in the orange," indicating that they perform extremely low in most areas including English, mathematics, and college/career preparation. Only 10.8 percent of students with disabilities are prepared for the transition to adult life. This is consistent with research indicating that, when compared to their peers without disabilities, students with learning disabilities or speech language impairments had significant learning gaps in reading and math, even after receiving special education services.[3] These gaps may be even greater for the significant majority of students who have disabilities and also live in poverty (88 percent), are in foster care (75 percent), or are English language learners (84 percent).

Systemwide Supports for Implementing Evidence-Based Practice in California

Recent system-based changes in California have led to a shift from a compliance enforcement and consequence-based model to a "Statewide System of Support" model that provides resources for improving services in struggling districts. This shift reflects the belief that the failures of districts, schools, teachers, and students are due to a lack of resources required for success. This differentiated assistance model can be applied at the system level to struggling Local Education Agencies (LEAs) who receive resources through the Statewide System of Support as well as at the individual level to students who access Multi-Tiered Systems of Support (MTSS).

Training leaders and educators to provide differentiated assistance using MTSS ensures every student has access to what they need when they need it. Implementing MTSS helps prevent unnecessary special education referrals.[4, 5] Effective use of evidence-based practices (EBPs) in an MTSS framework results in improved academic and social-emotional outcomes for students with disabilities.[6] However, in order to produce better outcomes, MTSS must be implemented effectively. Thus, leaders need to understand how to use the framework and educators need to be trained in appropriate EBPs.

Both the Every Student Succeeds Act (ESSA) and the Individuals with Disabilities Education Act (IDEA) recommend EBPs, though they are challenging to integrate successfully into school practices. Improved outcomes for students with disabilities occur when MTSS grounded in EBP is implemented in an environment in which administrators and direct providers are trained and supported in their efforts to implement EBP. When implemented well, PD provides educators with an opportunity to change practices to include EBP and improve outcomes for students with disabilities.[7] High quality PD, mentoring, and support increase teacher retention and could help to address the problem of attrition in special education disciplines.[8] Because research clearly identifies the benefits of inclusive education for the majority of students, PD in EBP must extend beyond special educators to general educators, paraprofessional educators, and administrators.

To successfully support PD in a way that sustains EBP, administrators must understand the system supports necessary to build both the capacity and sustainability of these practices. This brief describes current barriers and challenges California faces when implementing PD and EBP, along with research-supported methods and models for overcoming these challenges.

Barriers to Effective Professional Development and Possible Solutions

Pre- and In-Service Training Lacks Sufficient Content on High Incidence Disabilities

Educators may not be receiving the pre-service training or PD opportunities needed to understand and adequately support students with disabilities. Teachers often report feeling ill-equipped and under-prepared to support students with disabilities in both specialized and inclusive settings.[9] As one general education teacher put it: "We spent too much time reading about students with disabilities, but not enough on how to structure the classroom to be individually responsive to students' needs."[10]

Currently, specific learning disabilities, including dyslexia and dysgraphia, are the most common qualifying disabilities for special education in California (37.8 percent), followed by speech language impairments (20.7 percent), autism (15.1 percent), and other health impairments (typically ADHD; 13.1 percent).[11] Many students with these

high incidence disabilities have the cognitive ability to learn at their grade level when teachers understand and support their learning needs.[12] It is imperative for all educators to understand these disabilities as they will inevitably interact with and support these students. Learning the common patterns of strength and areas of need for students with disabilities along with understanding associated EBP will allow educators and administrators to identify and implement the necessary supports.

Educators and Leaders May Have Negative Attitudes and Beliefs About Inclusion

School personnel's positive attitude towards innovation and inclusion is vital to the success of training in EBP.[13] Teachers who are open to learning new things are more likely to welcome training and coaching as well as to use new practices successfully. An educator's unconscious bias may interfere with their willingness to use EBP or to include students with disabilities in their classroom. For example, teachers and school leaders often believe that students with disabilities have significant academic, behavioral, and social-emotional needs that cannot be met successfully in a general education setting.[14] They may believe that including students with disabilities could compromise the education of more typically developing students. Teachers may also feel they are not responsible for or capable of educating students with disabilities and may have concerns regarding how to manage disruptive behavior.[15] Further, educators often incorrectly attribute disruptive behaviors and learning challenges to laziness, deliberate opposition, poor parenting, or manipulation. These false beliefs can result in the use of ineffective and harmful punitive or exclusionary practices.[16] These concerns can lead teachers to reject the notion that students with disabilities can be included in general education classrooms.[17]

Successful PD begins by addressing these attitudes and by giving educators an understanding of research that supports inclusion of students with disabilities and notes that this inclusion benefits all students. If educators understand that, when used by both special education and general education staff, EBP supports learning and inclusion, this may increase positive attitudes, the use of effective strategies, and successful PD.

Current Professional Development Opportunities Use Ineffective Learning Practices

While PD offers the promise of promoting educator use of EBP to improve student outcomes, teacher training practices must be evidence based as well. In general, training topics must be relevant, linked to Local Control and Accountability Plan (LCAP) goals and priorities, and include adult learning practices. PD must include coaching, ongoing supervision, and performance feedback.

Delivering educational content identified as relevant to teachers is important for motivating professional learning and making PD effective.[18, 19] Administrators and personnel responsible for selection of PD topics need training in data-based decision-

making and knowledge of EBP to identify topics that address the needs of their program. Special education program improvement reviews (PIR) and personnel needs assessments that use data from the Dashboard will help build relevant PD plans linked to LCAP priorities. Objective data can also determine PD effectiveness. Each PD event should result in measurable learning objectives for educators and should follow up skills-based performance indicators. This might include knowledge assessments and fidelity checklists to measure PD results and determine ongoing support and coaching needs.

Commonly used didactic "train and hope" methods have not resulted in improved use of effective practices by teachers or improved student outcomes. In one study, teachers who participated in a week-long workshop in direct teaching did not generalize their skills to the classroom.[20] In the absence of feedback, these teachers performed fewer than 80 percent of learned strategies correctly. This challenge often occurs when trainers have expertise in EBP but do not understand adult learning practices. Practice sustainment requires ongoing coaching with skilled trainers that is tailored to a specific program and students. Components of successful PD include active learning practices, theory building, demonstration, low-risk practice, performance-based feedback, and job-embedded coaching.[21] Even teachers with extremely positive attitudes toward EBP and inclusion need high quality training, coaching, and feedback to perform successfully. It is also imperative to include paraprofessional educators in PD because many schools rely on them to provide instruction and support to students with disabilities in mainstream settings.[22]

Leaders Require Training in Implementation Practices and Evidence-Based Practice Support

Educators cannot be expected to sustain the use of EBP in their programs without support from leaders at all levels: state, county, district, school. To ensure successful implementation of effective PD, leaders must believe that students with disabilities can make substantial progress with effective use of EBP. Having a strong implementation climate improves teacher satisfaction and retention as well as student outcomes.[23, 24, 25] Therefore, leaders need training in implementation of leadership practices—such as providing time, funding, and resources for high quality PD; focusing on EBP; and rewarding staff for effective EBP implementation—to ensure EBP sustainment. Leaders should be trained in data-based decision-making about the supports needed to facilitate PD and to sustain new practices. Leadership must clearly specify the importance of PD and successful inclusion of students with disabilities through alignment of goals with other state and district initiatives. When leaders provide clear guidance and facilitate support for effective implementation, trainees report an increased sense of competence and satisfaction.[26]
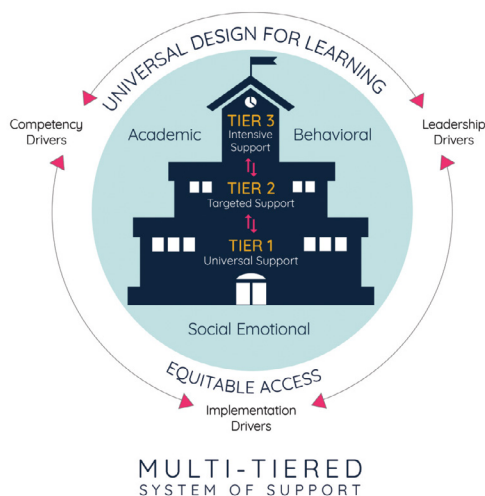
Evidence-Based Practices for Inclusion Must Fit Within a Multi-Tiered System of Supports

Professional development on supporting students with disabilities must fit within a framework of supports for all students to reduce siloed thinking around special and mainstream education. MTSS, a framework recommended in California, is designed to provide necessary supports for all students based on their unique needs along a continuum from universally designed instruction to highly intensive strategies.[27] A fundamental component of MTSS is the implementation of EBP in the context of Response to Intervention (RTI), which involves data-based decision-making about which students may benefit from additional support and structure (see Figure 1).[28]

Figure 1. MTSS as a Framework for Implementation of PD and EBP.

Note. Figure from novakeducation.com/mtss-vs-rti-what-is-the-difference. Used by permission of the Massachusetts Department of Elementary and Secondary Education. Permission does not imply endorsement by MA DESE.

MTSS is comprised of three tiers outlining instruction and supports that increase in intensity, duration, and individualization based on student needs. Tier 1 includes core school curriculum, positive behavior supports, and social-emotional learning (SEL) for all, including students with high incidence disabilities. These are used in the context of general education without complex materials and can be maintained by appropriately trained teachers. One example is high quality, intentional phonics instruction, which improves reading and spelling performance in early readers—including students with reading disabilities.[29] This helps prevent struggling readers from needing more intensive services.

Universal Design for Learning (UDL) is another example of a valid method for effective Tier 1 support within MTSS. UDL accounts for individual differences and learning preferences (engagement) by providing students with options for receiving information (perception) and demonstrating what they know (action and expression).[30] UDL helps teachers design instruction to reach a full range of student needs from the onset and no longer feel they have to "retrofit" instruction for one or two students. In fact, teachers have described UDL as a framework that "catches all students in the net instead of letting some fall through."[31] This promotes greater inclusion and a sense of belonging; it can be applied to a range of students including those who do not qualify for special education but need variation in instruction, such as English language learners. UDL is associated with higher engagement; autonomy; reading and writing outcomes; and peer social interactions.[32]

Basic classroom positive behavior supports and practices are also essential Tier 1 interventions. These include the use of effective classroom management strategies such as positive reinforcement, environmental arrangements, explicit classroom expectations, proactive responses to inappropriate behaviors, and corrective feedback.[33] Universal supports and instruction in SEL are also essential components of Tier 1 instruction. Quality Tier 1 SEL programs lead to significant improvements in social-emotional skills, attitudes, academic performance, and positive social behaviors.[34] Important elements of successful SEL programs include a coordinated, sequenced set of activities; active learning to teach new skills with at least one component focused on developing a social skill; and explicit targeting of SELs rather than working on general positive behavior. Social skills training (SST) is one example of an EBP for supporting SEL associated with improvements in social competence and reductions in antisocial behavior.[35]

Tier 2 involves more intensive supports commonly implemented in small group contexts with lower student-to-teacher ratios. This often involves increased adult supervision, positive reinforcement, precorrection, and academic supports. Tier 2 supports may include practice with social-emotional and self-regulation skills as well as a focus on understanding the function of challenging behaviors. Teachers trained in MTSS know how to use data to identify when a student needs additional Tier 2 supports and can request additional training and/or resources to add necessary strategies.

Tier 3 includes more intensive, one-on-one individualized intervention strategies for students who continue to have challenges even after the addition of Tier 2 supports. For example, intensive Tier 3 reading instruction focused on teaching explicit reading comprehension strategies is effective for improving reading comprehension in students with significant reading challenges.[36] Tier 3 includes the use of a multidisciplinary team that has highly specialized knowledge of interventions and EBP. This team may need additional training and coaching to effectively implement interventions with fidelity. Tier 3 supports are reduced over time based on student progress. Students may access Tier 3 supports at various times as their unique needs ebb and flow during their educational careers.

Approximately 90 percent of students can be successfully educated through Tier 1 and Tier 2 instruction.[37] This means every teacher does not need to be an expert on every EBP for every student and every disability, because few students will need the highest level of intervention. Rather, all teachers and school staff should understand and implement Tier 1 and Tier 2 strategies with fidelity and know where to go and to whom to turn for additional supports. When teachers implement MTSS Tier 1 strategies effectively, schools see an associated reduction in suspensions and discipline referrals, increase in academic achievement, and promotion of positive perceptions of school safety.[38]

Recommendations for Professional Development to Improve Outcomes for Students with Disabilities

1. Conduct basic introductory training for all educators in high incidence disabilities including learning disabilities, speech and language challenges, autism, and ADHD so they understand common strengths and learning needs.

2. Focus PD experiences on overcoming unconscious biases and helping educators understand cultural, neurological, and/or environmental causes of challenging behaviors and learning deficits.

3. Teach administrators and educators responsible for PD to use inquiry and data to determine staff development needs, and to link training to knowledge and performance outcomes of participants, LCAP goals, and student data.

4. Use evidence-based methods for PD that include active learning practices, theory building, demonstration, low-risk practice, performance-based feedback, and ongoing job-embedded coaching and data-based supervision.

5. Train leaders to understand and utilize implementation leadership strategies that promote effective capacity building and successful implementation of EBPs.

6. Train school leaders and teams to implement tiered systems of supports, such as MTSS, which include EBPs at all levels of support.

7. Provide PD opportunities in Tier 1 EBPs—including how to implement UDL instruction, how to implement EBPs for classroom behavior management, and how to teach and implement strategies for SEL—to all staff.

8. Increase teacher use of Tier 1 high quality instruction and implement universal screenings for academic and social-emotional challenges so students who need more intensive supports can receive them as early as possible.

9. Provide PD opportunities in Tier 2 EBPs to designated staff. These may include more intensive reading instruction, social skills groups, and peer-mediated interventions as well as frequent behavior check-ins and home–school communications.

10. Provide PD opportunities in Tier 3 EBPs to designated specialist staff. Ensure that they are trained to implement these interventions with fidelity and to coach others in using the interventions.

Table 1. Key Components of High Quality Professional Development

Component	Description/Purpose	Leadership Support	Example
Key Components for Training			
Information Sharing	Provide information to educators that increases awareness and knowledge of a topic.	Proactively determine and seek training to address all staff needs.	Presentation on classroom structure to support students with ADHD at a staff meeting.
Competency Training	Learning experiences that include active learning, modeling, and low-risk practice with feedback to set up skill base for implementation and coaching with feedback.	Seek out high quality training from individuals with expertise in an EBP that fits school context, goals, and student needs.	Workshop training in Tier 2 reading intervention including hands-on practicing, viewing lesson plans, observing others using strategies (live/video), and "think-pair-share."
On-Site Coaching	Observations plus performance feedback with goal of reaching fidelity to EBP in the context where ongoing instruction is delivered.	Build time into school hours for teachers to receive input and reflect; train specialist to assist with coaching.	Job-embedded practice in complex autism EBP (trainers observe and coach educators within context of their classroom).
Feedback and Reflection	Input for and reflections by educators on their implementation to better understand how to use strategies and make changes.	Build time for educators to receive input and reflect; recognize successful implementation.	Trainer observes and coaches; teachers rate own use of strategies; could include video feedback and/or lesson plan feedback.
Key Components for Sustainment			
Ongoing Consultation	Provide continued support to troubleshoot issues that arise for skills sustainment and drift prevention.	Make time for discussion and practice; develop EBP champions and model classrooms.	Ongoing check-ins with expert EBP trainers; opportunities for group troubleshooting around challenging behavior.
Performance-Based Evaluation	Use of teacher performance measures to accurately and comprehensively capture the range of teacher knowledge and skills.	Recognize and reward EBP use; base future training and promotion on effective EBP use.	Measure inputs (e.g., licensures), content knowledge, educational attainment, processes (fidelity), and outputs (student outcomes).
Professional Learning Communities	Groups of educators collaborate to share ideas and troubleshoot challenges, facilitating a common understanding of how to best support students.	Provide time and facilities for teachers to meet as a group.	"Job alike" meetings, California Autism Professional Training and Information Network (CAPTAIN); monthly Professional Learning Community meetings in district.
Team-Based Problem Solving	Collaboration among personnel to utilize individual expertise, provide consistency of support across settings, and troubleshoot common challenges.	Model collaboration; include paraprofessionals, specialists, teachers, and administrators in problem solving.	After an increase in challenging behavior, team reviews fidelity of Positive Behavior Support strategies, student data, parent concerns, and staffing to develop a classroom behavior plan.
Data-Based Decision-Making	To make well-informed treatment decisions based on objective, ongoing data collection.	Review data and recognize use of data-based decision-making; provide appropriate assessment tools.	Review student data to determine whether a Tier 2 math intervention is successful, and when to reduce or increase supports.

Table 2. Resources for Evidence-Based Practices and Professional Development

Resource	Website/Reference	Content
IRIS Center	iris.peabody.vanderbilt.edu/resources/ebp_summaries	Summaries of EBPs, high-leverage practices, sample PD activities, etc.
What Works Clearinghouse	ies.ed.gov/ncee/wwc	Reviews existing research on different programs, products, practices, and policies in education.
IDEAS that Work	ccrs.osepideasthatwork.org	Resources for teachers and families to address social, emotional, behavioral, and academic skills.
Learning Policy Institute	learningpolicyinstitute.org	Research-based reports and resources on effective educational practices to connect policymakers, researchers, educators, and community groups.
CAST: Center for Applied Special Technology	cast.org	Resources on UDL including descriptions of components and examples, as well as videos.
Autism Focused Intervention Resources and Modules	afirm.fpg.unc.edu	Online training modules for each of the 27 EBPs for autism.
CAPTAIN	captain.ca.gov	Web-based materials and resources that align with EBPs for autism.
California Department of Education MTSS Framework	cde.ca.gov/ci/cr/ri	Describes California's use of MTSS and how EBP and inclusion fit into the framework.
Council for Exceptional Children	cec.sped.org/Standards	Details PD standards in special education.

Endnotes

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