Getting Down to FACTS

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Meeting Students Where They Are: The Challenge of Differentiation in California Schools

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Introduction

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Differentiation means adjusting instruction based on what students currently know and need. It involves consistently and responsively adapting what is taught, how it is taught, and how learning is assessed, while holding high expectations for every learner. Differentiation is now especially important as post-pandemic learning patterns have widened the range of academic needs within many classrooms, leaving teachers responsible for supporting students working at very different levels. The evidence suggests that differentiation cannot rest on individual teachers' efforts alone; it depends on well-designed curricular materials and assessments, professional training and support, and school- and system-level structures that make targeted instruction feasible. Differentiation and targeted instruction are central to improving student outcomes and advancing equity.

This brief synthesizes evidence from a set of Getting Down to Facts III reports that speak directly to this theme, drawing most heavily on Loeb and Ziegler's analysis of relationship-based personalized learning and high-impact tutoring and Laski, Rainey, and Kightlinger's review of strategic staffing models. It also incorporates findings on the paraeducator workforce, special education staffing, and the potential role of technology as enabling infrastructure. These studies frame differentiation as a system design challenge shaped by how schools organize time, staffing, and supports.

Key Findings

1 **Current ways of organizing teaching and learning in most K–12 classrooms do not provide sufficient opportunities for targeted instruction and individualized feedback.**

Most classrooms are still structured around one teacher responsible for a large group of students, with limited time, staffing flexibility, or built-in support for small-group instruction and frequent adjustment based on student need. As a result, differentiation often depends on individual teachers working within classroom structures that were not designed to make targeted instruction routine.

2 **Strategic staffing models that include paraeducators and other support staff can expand schools' capacity for differentiated instruction, but training and coordination are needed.**

By rethinking how schools organize educators' time and responsibilities, strategic staffing models can increase differentiation and improve teacher and student outcomes. However, paraeducators are most effective when their instructional roles are clearly defined and supported through job-embedded training, supervision, and planning time with teachers.

3 **High-impact tutoring can support differentiation, and districts across California are increasingly taking this approach.**

Evidence demonstrates strong learning gains from high-impact tutoring programs that meet specific design criteria (e.g., frequent sessions, small groups, alignment with core instruction, and sustained tutor-student relationships). California has committed billions of dollars to tutoring and related supports, and more than 80 percent of districts reference tutoring in their strategic plans, indicating broad uptake even as quality and implementation vary.

4 **Technology can support differentiation, while human relationships and instructional judgment remain central to student engagement and learning..**

Technology can make differentiation more feasible in several ways, including embedding frequent checks for student understanding, organizing learning data to support flexible grouping, and streamlining documentation and communication. However, these tools work best as supports for teachers and staff, not substitutes.

5	**Differentiation for students with disabilities depends on coherent systems of shared responsibility across general and special education.**

As more students with disabilities spend substantial time in general education classrooms, effective differentiation requires coordinated roles, shared goals, and consistent routines for planning and support. Silos between general and special education can make supports fragmented, impeding both inclusion and differentiation.

The Evidence Behind These Findings

Current ways of organizing teaching and learning in most K–12 classrooms do not provide sufficient opportunities for targeted instruction and individualized feedback

Loeb and Ziegler argue that the dominant model of whole-class instruction is designed for a broad middle range of performance and is not well suited to the level of heterogeneity now typical in California classrooms. They document that many students are performing below grade-level expectations, a finding supported by Reardon's technical report. Rising rates of special education identification, along with the finding that most of these students are served in general education classrooms for most of the school day (Kaler, O'Neill, Strach, and Moffitt), also provide evidence of the increased heterogeneity in California's classrooms. Loeb and Ziegler suggest that whole-class instruction provides limited opportunities for sustained individualized feedback and adjustment, particularly for students who need additional instructional support. Their report concludes that systems need structured mechanisms beyond the core classroom to deliver targeted instruction at the right level consistently and at scale.

Strategic staffing models that include paraeducators and other support staff can expand schools' capacity for differentiated instruction, but training and coordination are needed

Laski and co-authors describe strategic school staffing as a framework for reorganizing educator roles, time, and pay to better align expertise with student needs. Rather than a single model, strategic staffing is built on tenets of collaboration, distributed leadership, and differentiation and might include expert teachers mentoring more novice teachers, teams of educators sharing responsibility for a larger group of students, and career pathways that offer greater opportunities for advancement. They find that strategic staffing models can improve teacher and student outcomes, but that the effectiveness of

these models depends on local design and enabling conditions, including discretion to innovate within regulatory and fiscal constraints. They also report that many California principals are interested in pursuing strategic staffing, but often do not feel they have sufficient professional discretion to implement more innovative staffing approaches.

Complementing this research on strategic staffing, Lemons, Balasubramanian, Katz, and Unnikrishnan's study of paraeducators in California highlights that paraeducators represent a rapidly growing (but often unstable and under-supported) segment of school staff, and that their effectiveness depends on clear roles, training oriented to instructional and behavioral support, and scheduled collaboration with teachers, which are frequently absent in schools.

Kaler and co-authors' analysis of California's special education staffing underscores why this broader staffing lens matters for differentiation: meeting student needs depends on an ecosystem of staff. These reports suggest that staffing innovations can make differentiation more feasible, but only when schools invest in role clarity, supervision, and coordination routines.

High-impact tutoring can support differentiation, and districts across California are increasingly taking this approach

Loeb and Ziegler synthesize evidence from multiple meta-analyses showing that tutoring can generate substantial learning gains when it meets "high-impact" design criteria, including frequent sessions, small group sizes, alignment with classroom instruction, data-informed teaching, and sustained tutor-student relationships. They also find that during-school tutoring models tend to be more effective and equitable than after-school approaches, in part because they achieve higher participation and stronger alignment with core instruction, while after-school programs face persistent barriers such as transportation and voluntary attendance. Lower-intensity or loosely structured tutoring, such as drop-in homework help, produces much smaller or null effects, making program design consequential. Ultimately, the central challenge is districts' ability to implement tutoring with sufficient dosage, consistency, and alignment to produce those benefits at scale.

Using California-specific evidence from district leader interviews, surveys, and case studies, Loeb and Ziegler also find that tutoring investment is widespread in the state. Districts report significant commitments, and many reference tutoring in strategic planning. Some of this tutoring is connected to the Expanded Learning Opportunities Program (ELO-P), which provides a major funding stream for before-school, after-school, summer, and intersession programs. ELO-P may be part of the solution, but tutoring delivered through expanded learning still needs the core conditions associated with high-impact tutoring, including sufficient dosage, alignment with classroom instruction, consistent tutor-student relationships, and reliable access for the students most in need. Loeb and Ziegler also find that California's tutoring capacity is often underrecognized and only loosely connected to the

research base. Many schools are already providing tutoring-like supports, including intervention models, but districts do not consistently define these efforts as high-impact tutoring or connect them to the evidence base. This can obscure existing capacity and reduce coherence in implementation. The state's challenge, then, is organizing existing tutoring efforts, including those supported through ELO-P, into more coherent models with consistent dosage, instructional alignment, and workforce supports.

Technology can support differentiation, while human relationships and instructional judgment remain central to student engagement and learning

Barnard, Agnew, and Loeb frame technology (including AI) as potentially most valuable when it functions as institutional infrastructure that reduces barriers to effective practice by coordinating time, grouping, staffing, and data; embedding continuous assessment; and expanding access to professional learning supports. They argue these supports could make targeted instruction and differentiated supports more feasible at scale, while cautioning that AI systems do not substitute for the caring adult relationships and instructional expertise that underpin effective learning experiences.

Kozleski, writing about leveraging technology for special education, similarly argues that technology can reduce the administrative and cognitive load of differentiation through real-time progress monitoring, adaptive supports, and improved communication and documentation. She emphasizes that strategically integrating these tools into multi-tiered support frameworks can help schools better meet the diverse needs of students with disabilities while reducing the data-management burden on educators. Across these reports, the consistent message is that technology can enable differentiation by improving information flow and reducing burden, but the core work of motivating, engaging, and teaching students remains relational and human (Barnard et al.; Kozleski).

Differentiation for students with disabilities depends on coherent systems of shared responsibility across general and special education

Through the analysis of interviews with California principals, Kaler and co-authors find that while principals express commitments to inclusion, they also perceive barriers to its implementation, including limited staffing and resources, siloing of responsibility between general and special education staff, and a lack of training and support. These conditions can lead to notions of, "You're responsible for the kids with IEPs," rather than shared responsibility for instructional needs. Relatedly, Kozleski argues that delivering flexible, individualized supports within MTSS/RTI and inclusive settings is constrained by the cognitive and administrative load placed on educators; without structures that support collaboration and coordinated implementation, differentiation and intervention systems can remain inconsistent. These reports suggest that effective differentiation for students, including those with disabilities, depends on coherent systems that make shared responsibility operational, not just aspirational.

Implications for California

The research points to four areas where the evidence on differentiation has direct bearing on decisions California is now facing.

Systematizing high-impact tutoring

Given the strong evidence for high-impact tutoring and California's broad uptake and investment, the state's main challenge is ensuring that tutoring is consistently defined, well implemented, and available to the students most likely to benefit. The evidence suggests the value of a shared statewide definition of high-impact tutoring and of aligning funding rules with the delivery conditions the research supports. It also points to the importance of workforce development and of connecting existing school-level practice to the broader evidence base, including consistent tutors, sufficient instructional time, integration with the core curriculum, and reliable identification of student need. These conditions would make it more likely that tutoring improves differentiation, program quality, and student outcomes (Loeb & Ziegler).

Differentiating and coordinating staffing roles

Evidence on strategic staffing and paraeducators suggests that differentiation depends in part on staffing flexibility and on how well the paraeducator workforce is supported and professionalized. The findings point to staffing as an important design lever, one that can expand differentiated instruction when schools have enough discretion to build team-based roles and flexible grouping structures rather than relying on one-size-fits-all staffing patterns (Laski et al.). At the same time, the rapidly growing paraeducator workforce appears to be an underused source of instructional capacity. The evidence suggests that paraeducators are most likely to improve differentiation when they have clear roles, quality training, strong supervision, and dedicated time to collaborate with educators (Lemons et al.).

Leveraging technology as enabling infrastructure

The reports suggest that generative AI and digital platforms may be valuable as institutional infrastructure and as a coordination layer that integrates data, scheduling, and staffing to make differentiation more operationally feasible. By supporting real-time progress monitoring, flexible grouping, adaptive content delivery, and streamlined documentation and communication, technology may reduce administrative burden and allow educators to devote more attention to the relationships and instructional judgment that drive engagement and learning. At the same time, the evidence underscores that these tools require clear policies and professional learning so they support effective teaching and sustained adult support (Barnard et al.; Kozleski).

Strengthening inclusion as a foundation for differentiation

The evidence suggests that as more students with disabilities spend substantial time in general education classrooms, differentiation increasingly depends on whether responsibility for their learning is shared across general education, special education, and related service providers (Kaler et al.). When roles and instructional responsibility are siloed, supports can become fragmented and inconsistent. These findings point to the importance of clearer role expectations and stronger routines for co-planning and coordinated implementation within inclusive classrooms so differentiation functions as a coherent system rather than a set of separate services (Kaler et al.; Kozleski).

Conclusion

Across these reports, the central message is consistent: differentiation is necessary to meet the range of student needs in California classrooms, but it is difficult to deliver reliably within current classroom structures and without a shared understanding of what drives quality differentiation. Approaches with strong evidence, such as high-impact tutoring and team-based staffing, depend on implementation conditions that are often uneven across schools, including staffing flexibility, role clarity, training and collaboration time, and coherent routines for using data to adjust instruction.

The evidence also suggests that California's next opportunities lie in strengthening coherence and creating enabling conditions across what already exists. Systematizing high-impact tutoring, strengthening and coordinating staffing roles, using technology to reduce burden and improve coordination, and making shared responsibility operational in inclusive settings all point toward a common aim: building durable infrastructure so targeted instruction and individualized feedback become routine features of schooling rather than exceptional services available only in some places.

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