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Governance Brief

Key Considerations for Implementing a Blended Learning Program

Introduction and background

Many school districts are considering the use of a blended learning instructional approach (blended learning is when students receive a significant amount of learning through both onsite and online instruction). Despite a number of advantages that blended learning offers, schools that have implemented blended learning programs have encountered a number of significant challenges along the way. This brief will introduce some of these common challenges and other key considerations before starting a blended learning program.

The motivations for starting a blended learning program are varied, but can be very compelling for a variety of reasons. Based on current blended learning school experiences, the blended learning approach offers the potential to reduce costs (usually personnel), the ability to better customize learning to individual student needs, the potential to raise student test scores and improve other student outcomes, and the ability to increase course offerings—especially for small schools.

Blended learning comes in many forms, including but not limited to the following models: students take whole courses online to supplement their school's traditional course offerings; students rotate onto computers for a portion of the school day for targeted learning that complements their traditional classroom experience; and students participate in a "flipped" classroom experience whereby they learn new instructional points online at home and then apply the skills the following day with their teachers in the classroom.

While blended learning offers many potential advantages and numerous design options, there are also many challenges associated with implementing a

blended learning instructional program. Some of the biggest challenges that schools implementing a blended learning program have run into include:

1. Insufficiently skilled and trained school personnel
2. Inability of school leaders to change negative attitudes and pre-conceived beliefs about the use of technology for instructional purposes
3. Instructional design that does not adequately react to individual student needs
4. Instructional design that does not properly align online learning with the face-to-face learning curriculum
5. Inadequately designed and inadequately supported technology infrastructure
6. Incompatible technology programs that do not allow for easy student performance tracking and data analysis
7. Teacher and student dissatisfaction with the quality and effectiveness of online instructional programs

Research

The current research on the relationship between the use of instructional technology and student achievement in K-12 school environments offers mixed results. In many studies, instructional technology is credited with having a positive impact on student outcomes, while in other studies the outcomes are deemed minimal at best.^{6,7,8} Because simply using technology provides no guarantee of improved student learning, much of the research currently focuses more on understanding *how* instructional technology is best utilized. Perhaps the most important factor in determining the effective use of instructional technology appears to be a school's technology leader-

ship.^{2,4} Researchers suggest that school leaders who receive sufficient training in technology and actively support technology initiatives at their schools play a critical role in determining the successful use of instructional technology. Based on their research, Anderson and Dexter² conclude “technology leadership has greater leverage on desired outcomes than does technology infrastructure and expenditures” (p. 73).

Research also suggests that school leaders of blended learning programs must carefully consider how to implement quality control measures.⁵ For some schools, it would appear that a school leader’s ability to effectively select high-quality course providers is critical to their students’ learning success.³ Reporting in the *Association for the Advancement of Computing in Education Journal*, researchers suggest that schools using online course providers that provide consistent and uniform instructional quality can help their schools close the achievement gap.³

A recent multi-site case study¹ of blended learning charter schools in California concludes that blended learning school leaders should possess the abilities to:

- » Design and implement a technology-based instructional program that customizes learning to each individual student
- » Oversee the proper development of the school’s technology infrastructure
- » Work with teachers to collect, analyze, and react in real-time to student performance data
- » Experiment with and adapt to new and changing technologies
- » Create a school culture that embraces technology and change
- » Lead teachers to work in fundamentally new ways

Pertinent laws and regulations

When using a blended learning instructional approach, districts need to take into account several key considerations, including teacher credentialing requirements when using online instruction, whether the instructional format affects how the school/district calculates their annual instructional minutes, and whether the instructional design would be considered independent study in nature.

Teacher credentialing: Teacher credentialing requirements are described in Education Code sections 44200-44401. The California Commission on Teacher Credentialing helps establish how teachers attain and maintain their credentials. Schools must determine when using online instruction whether an on-site or online teacher—if there is one—should be the credentialed teacher of record and to ensure that the designated teacher holds the appropriate credential.

Annual instructional minutes: The Education Code mandates that students receive a minimum number of instructional minutes per year; this number varies based on the grade level of the students. A variety of factors, including whether instruction is conducted by an appropriately credentialed instructor, are used to determine what counts toward the annual instructional minute calculations. Districts will want to review Education Code sections 46000-46611 and pertinent audit regulations to ensure that students’ online work either qualifies for inclusion in the annual instructional minute requirements or is time spent above and beyond these requirements.

Independent study: Education Code section 51747 allows for schools to establish independent study programs. Whether the online portion of a given blended learning program would be considered to be independent study is an important point of clarification since any program that is designated as such triggers a variety of highly regulated documentation and tracking procedures. If there are any doubts, districts are recommended to check with their auditor to clarify whether a school’s use of online instruction would be considered independent study.

District policy implications

When considering using a blended learning program, districts will want to review their policies regarding: teacher certification (see CSBA sample policy BP 4112.2), school calendar and school year (see CSBA sample policies BP 6111 and BP 6112), independent study (see CSBA sample policy BP 6158), and student's use of technology (see CSBA sample policy BP 6163.4).

Questions for governance teams

- » What would we hope to achieve by implementing a blended learning program?
- » Would blended learning be the best option for achieving our desired outcomes?
- » Which model of blended learning would we implement and why would this model be most effective for meeting the desired outcomes?
- » How would we train and/or recruit school leaders to successfully operate a blended learning instructional model?
- » How would we build support and buy-in for this new program?
- » What would be the costs for establishing and maintaining the required technology infrastructure, contracting with the online instructional program providers, training staff and other related costs?

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Additional resources

The Clayton Christensen Institute website (www.christenseninstitute.org) offers a number of resources on blended learning, including a searchable database of the blended learning schools in the United States.

The International Association for K-12 Online Learning website (www.inacol.org) provides a variety of resources on online learning, including a searchable database of research associated with online learning.

References

1. Agostini, M. (2013). The Role of Leadership in Starting and Operating Blended Learning Charter Schools: A Multisite Case Study. Retrieved from: <http://idea.library.drexel.edu/handle/1860/4093>.
2. Anderson, R. E., & Dexter, S. (2005). School technology leadership: An empirical investigation of prevalence and effect. *Educational Administration Quarterly*, 41(1), 49-82.
3. Cakir, H., Delialioglu, O., Dennis, A., & Duffy, T. (2009). Technology enhanced learning environments for closing the gap in student achievement between regions: Does it work? *Association for the Advancement of Computing in Education Journal*, 17(4), 301-315.
4. Dawson, C., & Rakes, G. C. (2003). The influence of principals' technology training on the integration of technology into schools. *Journal of Research on Technology in Education*, 36(1), 29-49.
5. Ellis, R. A., & Calvo, R. A. (2007). Minimum indicators to assure quality of LMS-supported blended learning. *Journal of Educational Technology & Society*, 10(2), 60-70.
6. Kara, I. (2008). The effect on retention of computer assisted instruction in science education. *Journal of Instructional Psychology*, 35(4), 357-364.
7. Tienken, C. H., & Wilson, M. J. (2007). The impact of computer assisted instruction on seventh-grade students mathematics achievement. *Planning and Changing*, 38(3), 181-190.
8. Wenglinsky, H. (1998). *Does it compute? The relationship between educational technology and student achievement in mathematics*. Princeton, NJ: Educational Testing Services Policy Information Center.