Face-to-Face vs. Online Development? Do Both! The Power of the Blended Model

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Despite promising statistics and the undeniable popularity of online and blended learning models, there are many educators and school administrators who are, understandably, skeptical about the effectiveness of these models, and the extent to which students and teachers who participate in them learn as much as they would learn if they were sitting in a classroom, in front of an instructor who "delivers" the content.

This article highlights the results of a study by the U.S. Department of Education* on the effectiveness of online and blended models as they compare to face-to-face models of education. It addresses key questions of interest to teachers, professional development coordinators, and district administrators: What is it about the blended model that makes it a more conducive way of learning than using a purely online or a traditional face-to-face program? How can online learning be effectively combined with established face-to-face programs to provide participants with blended models? The article concludes with friendly advice for teachers, professional development coordinators, and district administrators in transitioning to blended models.

Why are blended models more effective than online and face-to-face models?

The U.S. Department of Education (ED) meta-analysis showed that students who took courses online outperformed students who took courses in a face-to-face format, with students involved in the blended model having the greatest advantages of all three. Why are blended models (models that combine online and face-to-face instruction) more effective than purely face-to-face ones and purely online ones? What is it about combining online and face-to-face learning that creates the best formula for effectiveness and engagement? It would be naïve to think that just because the content is put
in an online format it will magically translate into an enchanted performance on the part of the students. Since the online and face-to-face programs included in the meta-analysis differed in terms of time spent, curriculum and pedagogy, it is important to look into these variables in more detail.

**The Time Factor**

Online learning lends itself more easily to increased learning time than face-to-face instruction. In face-to-face instruction, there is usually a set amount of time and little flexibility to expand that time if needed. Since time is so key to learning, this very factor plays an important role in students’ enhanced performance in blended models. Another factor related to time spent is the frequency of the contacts. With blended models, students and teachers have the opportunity to interact more frequently at any given time, even if the interactions are brief. In face-to-face environments, getting together for a very short session is usually not viable, as it would require more planning, in many cases finding a suitable location to meet, and making arrangement to be physically present at the agreed-upon time.

**The curriculum and pedagogy factors**

While it is unfortunate that the study didn’t include conclusions regarding the other two factors—curriculum and pedagogy—it is understandable because these two variables are so difficult to control and compare, and there is a scarcity of studies that analyze them. How can we easily and reliably compare one curriculum to another when there are so many content areas, and so many curricula for each one? It is hard to find two or more teachers who are teaching exactly the same curriculum, and if we do find those teachers, it is likely that the pedagogy used in the classes is different. Another complicating factor about pedagogy is that it is not independent of the content area; that is, what is considered good pedagogy for teaching math might not be good pedagogy for teaching reading and vice versa. With that in mind, how can we reliably compare several pedagogies for different content areas and draw sound conclusions? And if we limit ourselves to comparisons within one content area, how can we reliably extrapolate the results to other content areas? It is clear that there is a strong need for these types of studies, and there is hope that we will see such studies in the future.

The meta-analysis by the ED included some insights about factors related to pedagogy and curriculum. The factors that were mentioned as contributing to the enhanced performance among students in blended groups include: rich student-teacher synchronous and asynchronous communication and an enhanced ability for the teacher to personalize instruction.

**The interactions factor**

Another factor that may play an important role in explaining why blended and online programs can yield higher performance is the more often and longer interactions around the topic of instruction (with the teacher, other students, or other members of the community who might know about the content). These interactions result in wider exposure to more content, easier use of data to inform instructional decisions, and an opportunity to expand the confines of the topics at hand in an almost unlimited way. Also, these interactions often offer the opportunity and expectation to use writing, which promotes sense-making and fosters a sense of responsibility and accountability.

**Why do the results of the ED study apply to professional development for teachers?**

The ED meta-analysis included studies primarily focused on participants in the higher education, medical, and military training settings. Two main reasons make it plausible to extrapolate these results to the teaching profession. First, in thinking about the higher education settings, many teachers who participate in professional development were likely in a higher education setting at one time themselves. Second, the studies in the medical and military setting share a common professional development purpose with teacher education, namely, the learning of skills that need to be emulated. In
the same way that a junior doctor can benefit from an online course in which she or he sees a video of a veteran doctor performing a diagnosis, using a sophisticated machine for a specific treatment, engaging in a difficult conversation with a client, or doing a surgery, a teacher can benefit from watching and analyzing videos of veteran teachers engaging students in classroom discussions, making a diagnosis of student understanding based on their work, planning a class, and delivering instruction.

How do blended models enrich a teacher’s community?

Teaching professionals have typically been, and continue to be, isolated The Teaching Gap (Stigler & Hiebert, 1999) compellingly explains this sad fact. Teachers benefit from having face-to-face interactions with other teachers, coaches, and in some cases outside experts. However, a trend is taking place in higher education that seems to apply directly to the teacher professional development arena, and indicates a shift regarding the perception of who needs online or blended models of education.

Traditionally, online models were thought more appropriate for students who need to balance the responsibilities of family, work, and getting a degree, and face-to-face models were considered more suitable for students who can be on campus. That perception is changing radically. In an article in ESchool News in January 2010, several university professors shared their views on online and blended models, indicating that students value having face-to-face interactions once in a while, but not necessarily all the time.

We do have student feedback that said, “(We) value that face-to-face time together. It doesn’t need to happen all the time, but we do like what that brings to the learning experience.”

In the same article, Leslie Mercer, Associate Vice Chancellor for Planning at MnSCU (Minnesota State Colleges and Universities), says that many students are taking courses from more than one school at the same time, getting additional opportunities to learn from teachers and professors that they wouldn’t have access to if they were confined to learn only in the face-to-face environment.

In the same vein, it can be significantly beneficial to provide teachers with different options. Teachers typically juggle many obligations, and therefore can benefit from the flexibility offered by purely online or blended models. Blended models can combine face-to-face sessions with several online follow-ups that give teachers opportunities to get expert and peer advice on current instructional issues, when they need it, in small increments, and connected to what they are teaching.

Furthermore, blended models provide teachers with an opportunity to break the isolation of the classroom, giving them not only face-to-face community but also an online community that they can access at almost any time. Many educators belong to one or more social networking sites. Educators who are not members of these social networks are still familiar with sites such as Ning, Teachertube, or Ednet, to mention a few. Many educators use content-sharing tools not only personally and professionally, but also in the classroom. Through the use of technology teachers now have the ability to share ideas, resources, and knowledge not only with people in their district or school but also with educators across the country and around the globe. The popularity of these tools and many others is a clear testament of teachers’ need for collaboration and a sense of community.

How can professional development and district administrators venture into blended models?

Professional development supervisors and district administrators should be encouraged to explore ways in which they can support the emergence of blended models in their district or schools. Blended models emerge easily from environments where face-to-face programs are already established and where a portion of the curriculum can be added in an online
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format. Many schools and districts, where most of the learning takes place face-to-face, could venture first into blended models by adding a few portions of the curricula in an online format. While entirely online models are highly attractive because of the cost savings, blended models are, as discussed, most effective. The specific ways in which each district decides to structure and implement a blended model requires time, effort, and coordination. Discussions around how to implement blended models that meet the needs of each district need to take place among those responsible for professional development and student achievement in the district.

Before closing, it is important to remember that while the online and blended models offer advantages, they are not a panacea. Just as face-to-face professional development needs to be held to high standards of quality and transparency, so do blended models.

Final Remarks

It is clear that online and blended models of education are here to stay, as John Watson states,

_Emerging models in other countries, such as Singapore and Australia, as well as in higher education, suggest that a large part of the future of education will involve providing content, resources, and instruction both digitally and face-to-face in the same classroom....This blended approach combines the best elements of online and face-to-face learning. It is likely to emerge as the predominant model of the future–and to become far more common than either one alone._ (2008, 3)

A strong word of encouragement goes to those who are in a position to make decisions regarding professional development programs: Explore how incorporating online components to already successful face-to-face professional development can improve your teachers’ learning. Give teachers the best of both worlds—face-to-face and online—thereby creating flexible effective blended models that adapt easily to their needs and their busy lives.

REFERENCES


About the ED Meta-analysis:

*The analysis of existing online-learning research by the U.S. Department of Education (ED) consists of a detailed meta-analysis, and is part of a broader study of practices in online learning conducted by SRI International for ED’s Policy and Program Studies Service.

The analysis comprised a systemic research of the literature from 1996 to 2008 that identified more than a thousand empirical studies of online learning in various settings, such as medical, career, military training, and higher education.
The studies contrasted online to face-to-face instruction, measured student performance, had a rigorous research design, and provided the information necessary to calculate and effect size. Fifty-one independent effects from forty-six different studies were identified. From these studies, four specific questions were addressed:

1. How does the effectiveness of online learning compare with that of face-to-face instruction?
2. Does supplementing face-to-face instruction with online instruction enhance learning?
3. What practices are associated with more effective online learning?
4. What conditions influence the effectiveness of online learning?

One reason why this meta-analysis is important and different from previous studies is because the search was limited to studies of Web-based instruction (thereby eliminating studies of video-and audio-based telecourses or stand-alone, computer-based instruction); had random-assignment or controlled quasi-experimental designs; and examined effects only for objective measures of student learning (not student or teacher perceptions). For more details about this study go to:


The Learning Styles Factor and the ED Meta-analysis

Contrary to the popular belief that online and blended models might be more effective depending on the learning styles, this study showed that variations in implementation on online learning did not affect student learning outcomes significantly. Furthermore, the effectiveness of online-learning approaches was evident in several different content and learner types.