

Hybrid Learning: A Summary of Current Models and Research

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Abstract—Hybrid learning is quickly becoming more popular in schools across the United States. What exactly is hybrid learning? How is it different from other teaching methods? And what does research say about hybrid learning? This paper summarizes the current knowledge on hybrid learning, along with pros and cons of each type of hybrid learning.

Keywords—*hybrid learning; technology in the classroom; blended classroom; flipped classroom.*

I. INTRODUCTION

Hybrid learning is a classroom orientation that combines traditional, online, and collaborative methods [5] [6]. In some literature, it is also called “blended” learning. According to Crawford, Barker, and Seyam, “[h]ybrid classes are a mix of online and face-to-face instruction. Generally, the online portion is between 30 and 79 percent of the total class schedule” [2]. There are many different definitions of hybrid learning and of what it includes. There is no one correct way to do it. Hybrid learning can and should be tailored to the specific needs of a classroom [8].

The rest of the paper is structured as follows. In section 2, different methods of hybrid learning are described. In section 3, current research on hybrid learning is summarized. Finally, the conclusions are in section 4.

II. WHAT DOES HYBRID LOOK LIKE?

Hybrid learning is different from other types of instruction. First, hybrid learning is different from classrooms that use technology because hybrid does not need to involve technology at all [3] [6]. Hybrid enables transformative uses of technology, and does not just use technology for technology’s sake [3]. As said by Lin, “simply putting materials on the Web will not guarantee that students engage with and learn from them” [3]. Second, hybrid learning is not merely an online course. Hybrid can have online components, but it also incorporates different teaching and learning techniques. Asynchronous learning is usually an individual learning effort. Hybrid can have individual parts, but it is not 100% independent [3].

What does hybrid look like? Hybrid learning can be done in many ways and can involve a lot of different multimedia [3]. One way that hybrid learning can happen is in a traditional classroom, where only some students get hybrid lessons [6]. This would work well for students who are gifted and need an extra challenge, or for students who need

remediation [3] [6]. “The first important strength of hybrid learning was that it provided multiple modes of delivery that were more focused on meeting the diverse needs of the learners” [3]. Those students get their individual differentiation, while others continue with the lesson. This method can be difficult because it involves more work for the teacher. “The workload associated with designing and implementing hybrid courses may seem overwhelming, especially for less experienced hybrid instructors” [3]. Also, students may not be willing or able to complete assignments that are different from what their peers are doing.

Another example of what hybrid looks like could be a flipped classroom. In a flipped classroom, the students learn the content on their own as “homework”, while activities are done in class [6]. Many students struggle with traditional homework, and they may have a better chance of succeeding if they complete those assignments in class with the assistance of peers and teachers. Removing lecture time from the classroom allows for more authentic experiences. Also, it can train students to be independent learners at home [3]. The downsides for this method include availability of technology. Students without technology at home would have difficulty completing online notes or watching videos [3]. Students who do not have a computer at home would be unable to complete any computer-based assignment. Students have to be self-directed enough to complete their work at home. “Well-designed online learning... demands that learners accept increased responsibility for their learning” [3]. Without that work at home, the classwork would be useless. Teachers would have to re-teach the lesson, taking away the benefit of flipping the classroom in the first place. Students must be motivated and organized enough to complete their content lessons at home.

A third example of hybrid learning is blended lessons. This is where traditional classroom practices are blended with newer technology applications [6]. With all of the resources available online, classroom materials can be extremely flexible. Students can learn the same content in many ways. Note that blended lessons must use technology when it fits, and teachers should not force technology into a lesson [6]. The major downside to this is when technology does not work. If a part of the lesson relies on technology, faulty devices or malfunctioning Internet can disrupt the entire classroom. “Issues such as lack of technology skills and lack of high-speed access for online components of the course could negatively impact student attitudes toward

learning” [3]. An example of this is Flash simulations that are common in science classrooms. Flash does not work well with Apple products, so schools that use iPads or Mac computers may not be able to use those resources.

A fourth example of hybrid learning is the hybrid rotation model. This is similar to what elementary teachers have done for a long time, but adapted for older students. There are three stations – direct, independent, and collaborative. In the direct station, teachers work directly with the students [6]. This is a good chance to work one-on-one with students who need some individual attention. In the independent station, students work independently on an assignment [6]. This would be an opportunity to incorporate technology such as educational videos. In the collaborative station, students work in small groups to complete an assignment [6]. Collaborative can involve technology, traditional paper work, or both. The station names and functions may change a bit depending on what version of this model is used, but the underlying concept is the same. The major advantage of the rotational model is that students learn the same topic in three ways. Additionally, students get to work with both teachers and peers, which makes the lesson more social and student centered. Difficulties in this model include timing and work completion. The teacher has to determine how quickly or slowly to move students through each station. Moving too quickly will cause the students to rush and not really learn much from their stations. Moving too slowly risks students misbehaving or distracting others if they get done early. “It seems that instructors need to be more sensitive to the course goals when deciding the amount of time required for the online component, and to design online activities that are in full alignment with course goals” [3]. Another downfall is the students’ ability to work together. Some students do not understand exactly how to collaborate, and may need to be explicitly taught how to collaborate with peers.

III. RESEARCH ON HYBRID

Researchers agree that blended or hybrid learning can have benefits for students. According to Alducin-Ochoa and Vázquez-Martínez, who studied university students using blended learning, “the BL [blended learning] modality enabled students to control their learning process and received constant feedback, which provided them with better opportunities to understand and to broaden their knowledge” [1]. The U.S. Department of Education released a meta-analysis in 2010 that agrees. “The overall finding of the meta-analysis is that classes with online learning (whether taught completely online or blended) on average produce stronger student learning outcomes than do classes with solely face-to-face instruction” [4]. Blends of online and face-to-face instruction showed stronger learning outcomes, with a significant effect size of +0.35 [4]. From the perspective of the educational institution, hybrid can be an effective way to offer more classes while reducing the

overall load on the school. “Research at the University of Central Florida found that hybrid courses allowed the university to offer more classes at peak demand times of the day” [2]. There is a lot more research available for specific classrooms and hybrid learning, and there is still much more that can be learned as technology changes over time [6].

IV. CONCLUSIONS

In conclusion, technology is a part of all of our lives and should naturally be a part of our classrooms. Integrating technology into classrooms has proven to be effective in multiple studies. However, what is actually effective in any one classroom depends on the students [6]. There are multiple ways for teachers to use technology in the classroom. Teachers should use what is best for their students to achieve the best instructional outcomes. Do not use technology just for the sake of using technology. Find what works for the students, and know that what works might change from class to class [6]. Teachers have always been able to adapt to new learning conditions. The advances in hybrid learning can definitely increase learning for all students.

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REFERENCES

- [1] J. Alducin-Ochoa, and A. Vázquez-Martínez, “Hybrid learning: An effective resource in university education?,” *International Education Studies*, vol. 9, no. 8, pp. 1-14, 2016. DOI: 10.5539/ies.v9n8p1.
- [2] C. Crawford, J. Barker, and A. Seyam, “The promising role of hybrid learning in community colleges: Looking towards the future,” *Contemporary Issues in Education Research*, vol. 7, no. 3, pp. 237-242, 2014 DOI: 10.19030/cier.v7i3.8645.
- [3] Q. Lin, “Student views of hybrid learning: A one-year exploratory study,” *Journal of Computing in Teacher Education*, vol. 25, no. 2, pp. 57-66, 2009. Available from <http://www.tandfonline.com/toc/ujdl20/current>, 2018/1/26.
- [4] B. Means, Y. Toyama, R. Murphy, M. Bakia, and K. Jones. *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies*, Washington, D.C.: U.S. Department of Education, Office of Planning, Evaluation, and Policy Development, 2010.
- [5] M. B. Pinto and W. Anderson, “A little knowledge goes a long way: Student expectation and satisfaction with hybrid learning,” *Journal of Instructional Pedagogies*. Available from <http://www.aabri.com/jip.html>, 2018/1/26.
- [6] H. Staker and M. B. Horn, “Classifying K-12 blended learning”, *Innosite Institute*, 2012.
- [7] J. Thompson, “6 blended learning models: When blended learning is what’s up for student success,” *eLearning Industry*, 2016. Available from <https://elearningindustry.com/6-blended-learning-models-blended-learning-successful-students>, 2018/1/26.