

3.13

HyFlex Teaching and Learning at Bow Valley College

Svetlana Miftahov-Rapaport

I. Introduction to the chapter

Throughout the past two years of the global pandemic, educators all over the world have been trying to reinvent themselves by adjusting their teaching practices and redesigning their classes to fit into this new virtual teaching mode. There definitely was a lot of discomfort, challenges, and resistance at the beginning, but it soon became a new normal. When postsecondary institutions finally announced that we were going back on campus, many of my colleagues and I couldn't wait to get back to the classroom to have face-to-face interaction with our students. And while the face-to-face interactions felt so familiar and exciting, the traditional classroom did not look the same. It became a Modern Classroom. So instead of going back to the old normal, we were so used to, we had to go, once again, through the process of adjustment and reinvention of ourselves and our teaching practices.

To clarify, Modern Classroom is the name for the HyFlex classroom at Bow Valley College (BVC) in Calgary, Alberta, Canada. This classroom has been equipped with the technology for HyFlex teaching, allowing a mix of students to be present in the physical classroom or join the class virtually. While the HyFlex classroom provides high flexibility and accessibility, it creates multiple challenges for educators as they are required to provide both a virtual and a traditional classroom experience supporting student learning. Reflecting on my personal experience and one of my colleagues, while teaching in a HyFlex classroom is an exciting new experience for many, it often feels like teaching two different class modalities simultaneously, which brings multiple challenges and increases the workload.

In this chapter, I would like to share what I have learned through the literature review and my professional development, as well as how we at Bow Valley College embrace this new reality and enhance our HyFlex teaching and learning practices by applying Universal Design for Learning (UDL) techniques and Students' Voices. I am so grateful I found Dr. Brian Beatty's book this year and used it quite a lot in my teaching practice and my Master's research. And now, I see this as a great opportunity to give back. I hope that the tips, strategies, and ideas I share in this chapter will support and inspire others the way this book has inspired me!

II. The Why of Modern Classroom

While HyFlex teaching and learning is not new, I believe that the Covid-19 pandemic has taken it to a

level many institutions, educators, and students haven't experienced before. We must also consider the fact that the needs and skills of the students and educators have undergone a serious transformation during the past two years of dominantly virtual education. To keep up with this new environment and meet the needs of our diverse learners, The Modern Classroom at Bow Valley College provides an innovative space where learning can happen either face-to-face, remotely, or in a HyFlex format. It combines new technology to support different ways of learning and offers flexibility for learners and educators. At BVC, we welcome students from all over the world. We also know that our learners have many responsibilities outside of college, such as families and jobs. During the Covid-19 pandemic, we have discovered how much our learners appreciated the flexibility in their studies and being able to learn from home. Also, during the lockdowns and travel restrictions in the past two years, many of our international students could not come to Canada to start their studies, but thanks to the Modern Classroom technology, we were able to welcome our new learners virtually. Today, our learners want and need freedom and choice of how and when they engage in their learning experience. By offering HyFlex classes, we thrive to remove education barriers by providing high flexibility and access.

In the summer of 2021, when we had just started offering HyFlex courses, I was one of the instructors involved in the pilot project in this teaching and learning modality. I believe HyFlex learning is here to stay and will only grow and evolve in the future. Being a big fan of new technological advancements and a teacher by calling, I am extremely excited to have the opportunity to combine these two passions of mine, but I also believe that while technology is able to transform and enhance educational experiences for both students and teachers, technology in the classroom should never be the end goal. We must remember that the goal is to enable access to learning and enrich the learning (and teaching) experiences, and this is my ultimate goal as an educator. As BVC's vision statement says, "We open doors and open minds by creating opportunities for learners, employees, employers, and communities, and by shaping the future of college education" (Bow Valley College, 2022). And I believe the HyFlex education mode helps us do just that.

III. What do the literature, students, and faculty say?

As an educator, a HyFlex teaching modality was new to me. But I also knew I didn't need to reinvent the wheel or have all the answers. So, I decided to turn to those who knew better. I chose the topic of HyFlex teaching and learning for my Master's research and conducted a literature review where I was able to find some valuable insights. Also, being a learner-centered teacher, it was really important for me to know what the students had to say about their HyFlex course experience. So, after running the course in this modality for the first time, I conducted an anonymous survey to see students' perspectives. In addition to the student survey, I was also able to collect information from the faculty through an anonymous survey to learn more about their experience teaching HyFlex courses. All the information collected helped inform my HyFlex teaching practice, and I'd like to share the results with you.

What does the literature say?

In the literature review, I found four key themes regarding how the HyFlex modality affects education and the experience of both teachers and learners. The four key themes are summarized as follows:

- Student-centered approach
- The role of technology
- Social relations and social presence

- Institutional support

Student-centered approach

As Dr. Beatty emphasizes in this book, the fundamental drive to use a hybrid approach in teaching and learning is to be able to meet the needs of both online and in-person learners and “when students are given the freedom and ability to choose which mode to participate in from session to session, they are able to create their own unique hybrid experience” (Unit 2, 2019, para 2). Also, Caulfield (2011) emphasizes a learner-centred perspective in his book *How to Design and Teach a Hybrid Course*. He argues that students in a hybrid course have the same expectation as students in any teaching and learning environment. The author stresses that, first and foremost, students must be treated fairly and equitably in any modality. They must be provided with opportunities to safely express themselves, get constructive feedback, and have easy access to learning tools. Another case study presented by White et al. (2010) concluded that as long as teaching in a hybrid environment based on similar learner-centred learning outcomes and motivation, it does not have a negative impact on the student learning process.

The role of technology

Technology has revolutionized our world and daily lives (including education) as it makes everything easier and faster. In a study conducted by Raes et al. (2018), they provide an overview of the worldwide evidence on the benefits, challenges, and design practices of the synchronous hybrid course. One of the positive highlights they present is that hybrid course offering creates educational equality by providing access to educational content and removing the barriers of physical location. In addition, it provides flexibility in course attendance and helps to accommodate certain work and family commitments adult learners have. Moreover, Raes et al. (2018) emphasize that a hybrid approach to teaching and learning allows access to a larger variety of courses regardless of the location of the students or where the course is typically taught and provides more opportunities to invite guest speakers and experts to the class (as it no longer requires their physical presence) which helps to meet the diverse needs and personal interests of the learners. In another paper on Synchronodal Classes, Bell et al. (2014) predict that hybrid learning will become increasingly common in a range of courses. They emphasize that technological advancements will help to make hybrid learning more accessible and effective. They also address the point of ever-changing technology, and while it presents some challenges, especially when it comes to adopting new teaching practices, they argue that it will provide new solutions.

On the other hand, Justin Reich (2020) discusses the latest educational technologies that were supposed to create transformation but instead caused many troubles. In the book *Failure to Disrupt-Why Technology Alone Can't Transform Education*, Reich (2020) argues that instead of disrupting systems of inequality, technology “reproduces inequalities embedded in the systems. New apps, software, and devices are put in the services of existing structures and systems, rather than rearranging them” (p. 149). He also points out that despite the belief that free and easy access to technology can democratize education, research shows that “new technologies, even free ones, disproportionately benefit already advantaged students” (p. 150).

Social relations and social presence

A HyFlex learning environment is generally viewed as engaging and relevant as it provides a high level of flexibility. And with the increased access and flexibility, this environment affects social

relations among learners and instructors. Dr. Beatty (2019) emphasizes the importance of social presence in the hybrid learning environment and highlights that “communities are formed when people with a shared goal are connected to each other as they complete common activities and share meaningful experiences.” (Unit 2.2, para 5). He also says that to connect online and classroom students in meaningful ways, we must use learning activities that help support and encourage the development of a meaningful learning community.

Chen and Chiou (2012) found in their study that students in a HyFlex learning environment felt a strong sense of community as this learning environment provided alternative ways of communication and contributed to increased students’ motivation because of its convenience. In an additional study, Raes (2021) explores HyFlex learning designs and practices and compares these to traditional in-person programs, she found that there were no significant differences between the students present in-class and online and their understanding of the concepts, but there were significant differences found in the levels of engagement. Raes (2021) highlights in her findings that having innovative technologies does not guarantee a good learning experience, and she shows in the results of the study that:

Two-thirds of the students indicated that the actions of the teacher during the course (epistemic design) and having the feeling that you are not alone (social design) are the most important for engendering engagement. Nonetheless, social design and epistemic design are closely interrelated with set design, as a certain teaching space can better support interaction and a sense of belonging (p. 155).

Institutional support

In today’s new reality, educational institutions understand the importance of investing in and creating technology-enhanced learning spaces. As Daffron & Caffarella (2021) stress, “with the emergency that the COVID-19 virus created and the push of institutions and organizations to try and function as normally as possible, educators and trainers across the world were suddenly forced to learn about teaching online, whether they want it or not” (p. 55). And while research shows there are many organizational benefits when it comes to HyFlex teaching and learning, it is important to ensure that we create these new learning spaces that are effective for both students and educators.

Dr. Beatty (2019) addresses the challenges faced by the faculty when required to effectively teach in both classroom and online environments at the same time. He stresses that most of the teachers have more experience teaching in a face-to-face environment, and for that reason, it will require more effort to adapt to the online teaching portion in the hybrid environment. He also emphasizes that this challenge becomes even bigger when faculty are required to serve in-class and online students simultaneously, “ensuring that students are engaged in a single learning community regardless of their participation mode” (Unit 2, para 6). Dr. Beatty (2019) also highlights the increased workload that comes with hybrid teaching, which includes an increased time to develop a course plan and material, the requirement to learn new skills and technologies, and delivery of instruction as well as out-of-class interactions with the students in multiple modes.

In their study, Raes et al. (2019) highlight some pedagogical and technological challenges in the synchronous hybrid learning environment. They emphasize that a hybrid teaching and learning environment requires a shift in pedagogical approaches that will include the use of new technologies, adaptation of the learning activities and increased competencies in using technologies. Also, a hybrid

environment increases educators' mental load as they need to pay attention to two locations (in-class and online students) and ensure that the online students feel included in the learning environment as they do not have the same observation as the students who are present in the physical classroom have. Raes et al. (2019) stress that these challenges increase the workload for educators, and educational institutions must provide pedagogical and technological training and support for educators. In later research by Raes (2021) on HyFlex teaching and learning, they wanted to explore teachers' experiences in this new environment. The research found that while some teachers felt lucky to have experienced the new teaching spaces, not every HyFlex teaching and learning space would have the same facilities and support. Raes (2021) highlights that when designing hybrid spaces for teaching and learning, "it is crucial to take into consideration pedagogical, social and technical elements as being part of the epistemic, social and set design of a learning and teaching space" (p. 155).

In Lakhali et al. (2017) research, the authors presented a literature review of blended synchronous course delivery mode and found that "the promises of a blended synchronous course delivery mode can only be realized if those in charge of its implementation can overcome important challenges" (p. 51). They discussed the challenges related to the technologies used, the approach to course design, and the relationships between in-class and online students. Lakhali et al. (2017) stress that there is more effort required to design a blended synchronous course as it demands much more physical and social preparation. If the organization does not recognize these efforts, it makes faculty feel unsupported.

What do students say?

During the Fall 2021 semester, I collected voluntary anonymous feedback from students at the Chiu School of Business at Bow Valley College on their experience in the HyFlex course. A total of 88 students participated, and the summary of their feedback is presented below:

Question 1: How did you attend most of your classes in the course:

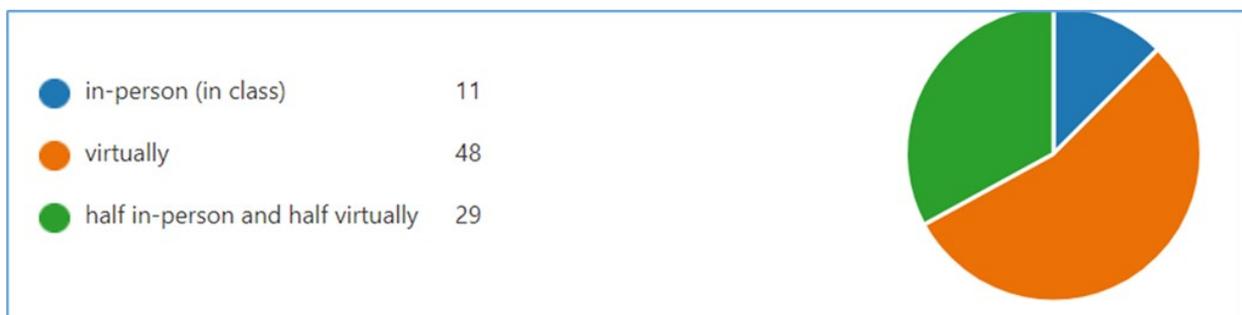


Figure 1. Student survey response to Q1

Question 2: What did you like most about the Modern Classroom?

Table 1. Student Responses to Q2

In-Person	Virtually	Both
<ul style="list-style-type: none"> • Flexibility • Better focus • Engagement • Interactions <p><i>*many students who attended classes in person emphasized the flexibility the hybrid Classroom provides</i></p>	<ul style="list-style-type: none"> • Flexibility & Accessibility • Not having to commute • Save time and money on transportation • Having more time to study • Recorded classes • Health and Safety • Accessibility • Small group interactions • Online tools 	<ul style="list-style-type: none"> • New technology • New experience • Interaction • Flexibility and Accessibility

Question 3: What did you like least about the Modern Classroom?

Table 2. Student Responses to Q3

In-Person	Virtually	Both
<ul style="list-style-type: none"> • Low in-class student attendance • Not enough interaction with students who are online • Technical issues during the class <p>“Sometimes it makes it very intimidating when you are the only person that shows up in class with the instructor.”</p>	<ul style="list-style-type: none"> • Issues with technology • Lack of interactions • Inconsistency in delivery • Hard to focus • Not enough interaction with students who are in-class 	<ul style="list-style-type: none"> • Lack of proper communication between in-class and virtual students • Technical issues (internet connection, in-class camera doesn't always follow the instructor) • Wearing masks makes in-class communication challenging • Lack of interactions

Question 4: Reasons for attending classes virtually

Table 3. Student Responses to Q4

- **Health and safety**
“anxiety of returning to school due to the pandemic,” “scared to catch the virus,” “new coming cases of covid19.”
- **Weather conditions.**
- **Life-work-school balance.**
- **Expensive and time-consuming commute to the College. Expensive parking.**
- **Long line at the entrance to show proof of vaccination.**
- **Sanitary issues due to COVID-19.**
- **Proof of vaccination.**
- **Traveling.**
- **Tight schedule, and a lot of assignments.**
- **Low number of students in class.**

Question 5: How would you rate your Modern Classroom experience?

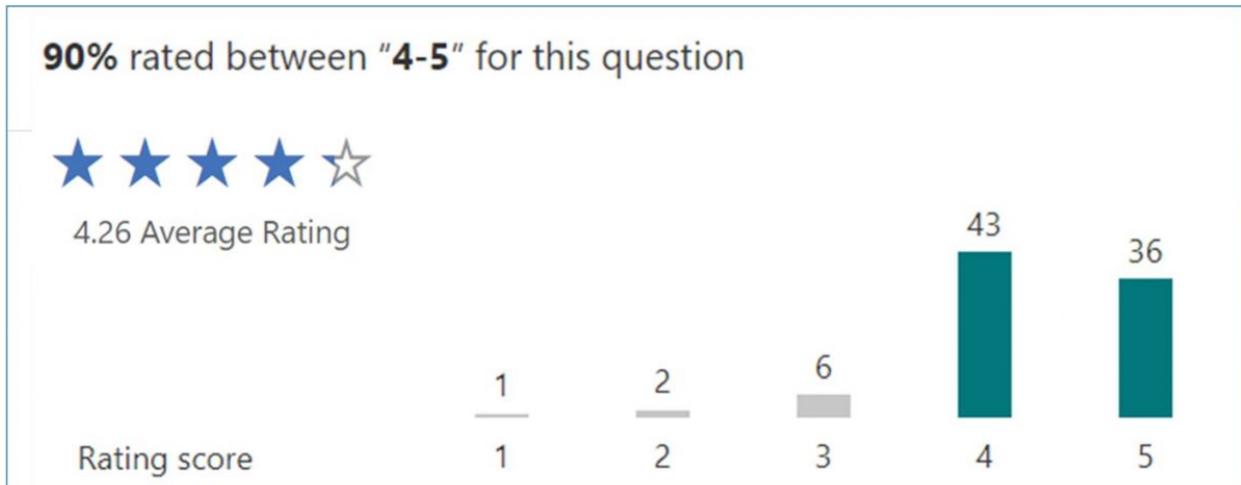


Figure 2. Student survey response to Q5

What do the faculty say?

In addition to the student feedback, I was also able to collect anonymous feedback on the BVC’s faculty experience teaching in the HyFlex classroom. A total of 18 faculty members participated and the summary of their feedback is presented below:

Table 4. Faculty Survey Responses

What do you like about teaching in a HyFlex course?	What don't you like about teaching in a HyFlex course?
--	---

- Modern Technology
- Accessibility and flexibility for learners
- Flexibility of the delivery in one class
- New teaching approach (creativity and out of comfort zone)

- Technical issues during the class
 - Classroom management
 - *“feels like teaching 2 different classes at the same time.”*
 - Increased workload (prep time)
 - Stress and Uncertainty
 - Low interaction between in-class students and online students
-

Combining Literature Review and Survey Results

Both the literature review and results of the student survey show that, on the one hand, students appreciate the access and flexibility that a hybrid learning environment provides. In this environment, they have the freedom to be members of both learning communities, in-class and online, and can form close relationships with members of both subgroups (Beatty 2019). On the other hand, building connections and engaging with their peers remains the leading indicator contributing to their positive learning experience in a hybrid classroom. As presented in the survey results, both groups of students, in-class and virtual, indicated that one of the main disadvantages of their HyFlex learning experience was when they did not have proper interactions with their peers.

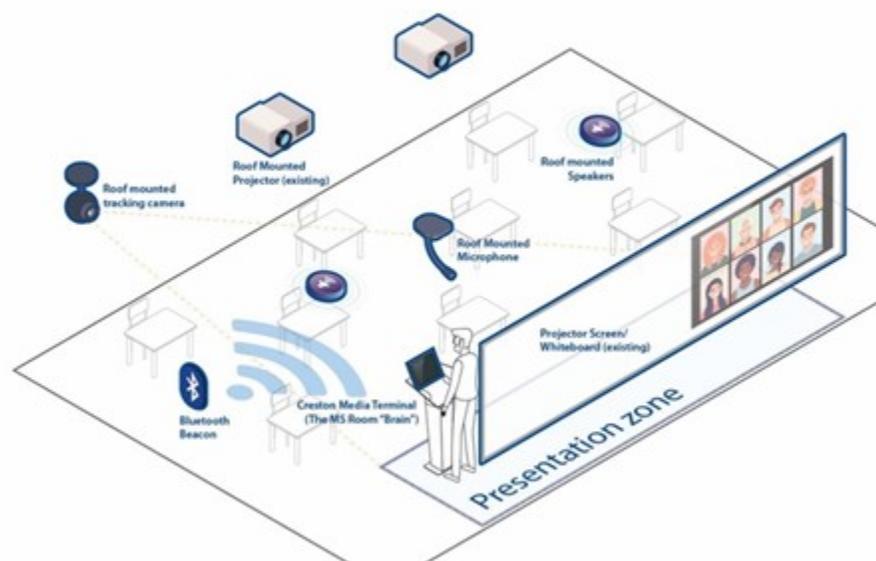
When it comes to educators' experience, the survey results and the literature review strengthen the importance of institutional support in creating a meaningful HyFlex learning experience. Dealing with new technologies, adapting to the new ways of teaching and having an increased workload adds stress to instructors' daily teaching practice. The required shift in pedagogical approach, acquisition of the new competencies in using technologies and increased mental load, were also addressed by Raes et al. (2019), Lakhali et al. (2017), and Beatty (2019) when discussing educators' experience teaching a HyFlex course. Based on the faculty survey results and findings by White et al. (2010), one of the most significant challenges educators face in a HyFlex environment was related to the difficulty of teaching face-to-face and online students simultaneously. BVC's faculty members stressed in the survey that teaching in a hybrid classroom often feels like teaching two different classes at the same time. In addition, Raes et al. (2019) and White et al. (2010) highlighted the importance of educational institutions to provide adequate support, pedagogical and technological training and support for educators.

IV. This is how we do it at Bow Valley College

We all probably know what the oxygen mask protocol on the airplane says- we should put our mask on first before assisting others. The same rule applies in the teaching practice. We must support educators first, who then will take care of and support their learners. I am lucky to work with a group of fantastic, like-minded people at Bow Valley College, with whom we are able to create a wonderful learning community and help each other grow personally and professionally. This community includes faculty, a leadership team, and a learning design team. Together we ensure that all faculty members have access to relevant training and materials that help to enhance teaching practice and reduce stress. It also helps to create collaboration among faculty members and aligns with BVC's values of

Inclusion and Creativity. Our learning design team creates professional learning opportunities for faculty and provides support in instructional practices and the use of educational technology, including the HyFlex mode of teaching and learning. We have an incredible UDL Community of Practice where we regularly interact, learn and share how we apply UDL in our teaching practice by creating opportunities that allow for student choice and agency. We also run HyFlex Practice Learning Circles, a monthly meeting where faculty members are able to share their best practices in HyFlex courses, ask questions and bounce ideas off each other.

Modern Classroom Configuration



Configuration may vary depending on the classroom.

Figure 3. Bow Valley College Modern Classroom (2022)

Student Engagement is a win-win situation

When it comes to student engagement in a HyFlex environment, I always want to ensure that in-class and virtual students not only have equal opportunities to participate but also get to know each other better. There are a couple of activity examples I incorporate in my classes:

- **30-Second Challenge:** one of the activities I do at the beginning of each HyFlex course is a fun icebreaker to encourage online and in-class students to communicate with each other. In this activity, students in class and students online are assigned into groups, and they need to come up with a 30-second Challenge for another group. When everyone is back, I ask the in-

class groups to challenge the groups online and vice versa. Examples of the challenges could be literally anything (the funnier the better): *do 5 pushups in front of the camera; say Hooray as a group 3 times as loud as possible; sing Happy Birthday to You as a group as loud as possible*, and so on. **This activity is usually lots of fun. It helps students get to know their classmates better, reduces some stress but, most importantly, creates a dialogue between the in-class and online students, improving their communication throughout the semester.**



Figure 4. Students at Bow Valley College (2022)

- **Blended Groups:** in many in-class activities, I mix the in-class and online students when working on group projects. To be able to do that, learners are assigned to the virtual breakout rooms (on Zoom or MSTEams). If it's an in-class activity, students in-class as well as students online join the virtual class on Zoom or MsTeams and randomly (or manually) are assigned to the breakout rooms. One of the concerns I've had before trying this out is how this would work for the in-class students if they don't have proper devices with them. However, it worked out just fine as students don't even have to have their laptops with them; using their smartphones is more than enough. So, I use blended groups for both in-class activities and presentations. **I found that this approach helped me to bring the in-class and online students together, provided them with more opportunities to collaborate and made them feel like they were sharing the same learning spaces, even though technically they weren't.**



Figure 5. Instructor and Students at Bow Valley College (2022)

- **Online collaboration tools**

During the past years of virtual teaching and with the growing popularity of hybrid courses, I have been experimenting with multiple online engagement tools. They were very useful during virtual classes and keep being useful today in a hybrid class to create collaboration between the in-class and online students. For example, doing Mind-mapping on Jamboard or creating a Wordcloud in Menti, all these tools help students in a hybrid class to collaborate, share ideas and be a part of the same learning space. Here is a list of the tools I like and use the most:

- **Jamboard-** a digital interactive whiteboard developed by Google
[Click here](#) to watch a video tutorial, “The Ultimate Guide to Google Jamboard.”
- **Mentimeter-** an easy-to-use presentation software where you can create fun and interactive slides.
[Click here](#) to watch a video tutorial, “5 Ways to use Menti to Engage and Interact with Students.”

- **Kahoot!**- is a game-based learning platform used as educational technology
[Click here](#) to watch a video tutorial, “Create a Quiz Game with Kahoot.”
- **MS Forms**- an online survey creator, part of Office 365, allows users to create surveys and quizzes with automatic marking. The data can be exported to Microsoft Excel
[Click here](#) to watch a video tutorial, “How to use Microsoft Forms.”
- **Branching in MSForms**-You can add branching logic to a survey or quiz so that it changes according to the responses to specific questions. ... In a survey or quiz that branches, questions appear only if they are relevant to the respondent.
[Click here](#) to watch a video tutorial, “How to use Microsoft Forms Branching.”
- **Nearpod**- Nearpod helps educators make any lesson interactive, whether in the classroom or virtual. The concept is simple. A teacher can create interactive presentations that can contain Quizzes, Polls, Videos, Collaborate Boards, and more
[Click here](#) to watch a video tutorial, “How to use Nearpod.”
- **Miroboard** - Miro is the online collaborative whiteboard platform that enables distributed teams to work effectively together, from brainstorming with digital sticky notes to planning and managing agile workflows
[Click here](#) to watch a video tutorial, “How to use Miro.”
- **Slido**- Use live polling, word clouds, quizzes and more to engage your audience in real-time. Slido is easy to use and integrates with PowerPoint.
[Click here](#) to watch a video tutorial, “How to use Slido for Live Polls in PowerPoint Presentation
- **Poll Everywhere**- Create simple surveys in minutes and let people vote. Turn feedback into actions
[Click here](#) to watch a video tutorial on how to use it.
- **Padlet**- From a web app that lets users post notes on a digital wall.
[Click here](#) to watch a video tutorial on how to use it.

When you don't know what to do, ask your students

I am a survey freak. I love including my students in the decision-making process for my courses. It is also a great UDL practice that allows for student choice and agency. One of my biggest concerns when developing the HyFlex course lesson plan was that I never knew for sure how many students would be in class and how many would join virtually. To plan my classes better and have some level of certainty, I implemented a quick solution: Polly Feedback. This is an online survey I post for my students before each class to check how many students will be in-class and how many will join online. Students and I can see the results of the survey right away:



Sender: Svetlana Miftahov Rapoport | Open | Anonymous

How are you planning to attend the upcoming class on March 3rd?

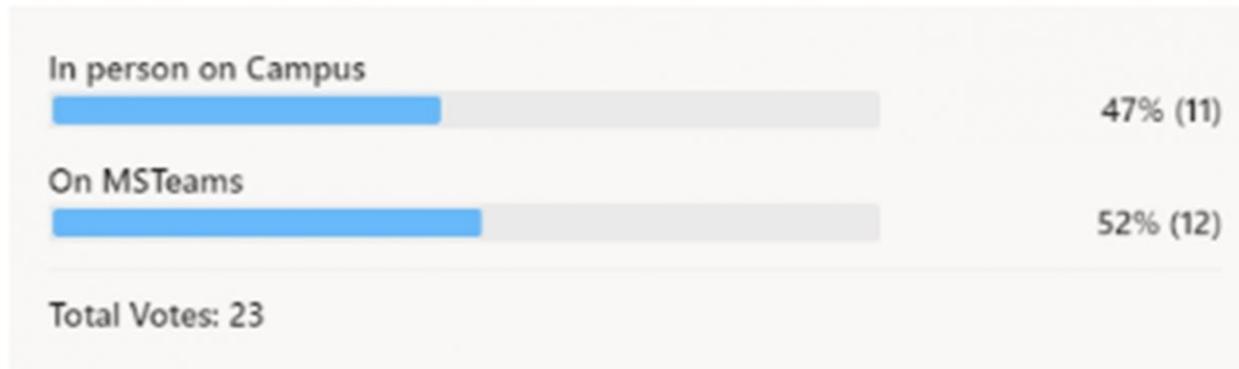


Figure 6. Ask your students!

Knowing how many students will be in class and how many online helped me to prepare the class material properly (hard copies and digital copies of handouts) and plan engagement and learning activities accordingly. Today, I utilize this practice in every HyFlex class, and it helps students and me have better learning and teaching experiences.

An additional practice I utilize in my courses is planning activities and exams for the course together with the students. Here is an example of a Final Exam Planning Survey (Figure 7) and Final Exam Questions Survey (Figure 8). This approach helps me build the exam in a way that meets my students' needs (and "wants") and makes them active participants in their assessment planning. The survey is distributed to the online and in-class students prior to or during the class. The first survey (see Figure 7 below) is completed individually, and the second survey (see Figure 8 below) is completed in groups of four. I use MS Form to create the survey, but you can use any other survey platform you are familiar with:

FINAL EXAM Planning

1. What type of questions would you like to see on the Final Exam?

Short Answer

Multiple Choice

2. How would this type of questions help you to demonstrate your knowledge of the course material?

3. Based on your experience on the Mid-Term Exam, did you have enough time to complete the exam?

yes

no

4. Based on your experience on the Mid-Term Exam, what was your main challenges during the exam?

5. If you could choose, how would you like to do your Final Exam

Written (on D2L)

Verbal

6. What is one thing you'd like to have on your final exam that will help you to succeed?

Figure 7: Final Exam Planning Survey

The image shows a digital form titled "Final Exam Questions" with a "Questions" tab selected. The form contains five numbered questions, each followed by a text input field labeled "Enter your answer". The questions are:

1. Chapter 9 questions: Communicating in Organizations
2. Chapter 11 questions: Conflict and Negotiation in the Workplace
3. Chapter 12 question: Leadership in Organizational Settings
4. Chapter 14 question: Organizational Culture
5. Chapter 15 question: Organizational Change

Decorative elements include a green plant icon in a grey pot on the left and right sides of the form, and a yellow and orange background with a dark orange border.

Figure 8: Final Exam Questions

Students' Voices

Today, our students have been through a full year of their HyFlex courses, so we wanted to hear from them again. Using the student feedback, we are able to try some new initiatives that put our students in leading positions in the classroom. Our student feedback will continue to influence the decisions we make in the Modern Classroom and HyFlex courses.

Modern Classroom Wins [8:22 min]: *Students share their stories and the benefits of the Modern Classroom approach*

<https://edtechbooks.org/-qgQg>

The Modern Classroom Challenges and Opportunities [11:02]: *Students discuss their challenges learning in the Modern Classroom*

<https://edtechbooks.org/-dMeh>

V. Conclusion

Disruptive technological innovations are happening in today's world, laying a new foundation for a learning society. Technology forces us to gain new skills. Today, more than ever, we see the importance of combining human and tech-savvy skills when expanding our learning horizons. I do not believe that technology will ever replace great teachers. However, when great teachers use technology wisely, it helps to create transformational learning experiences. We all know that technology has enormous potential to address educational needs more efficiently and enrich learner experiences by removing barriers and providing an individualized student learning experience, and this is what I believe a hybrid classroom offers. But we must remember that technology in the classroom is not the end goal. Enabling access to learning and enriching the learning experience is the goal. As Reich (2020) suggests:

If the energy and excitement generated by new technologies could be applied not just to technology but to technology and systems change combined, that would provide the best possible chance for the field of learning at scale to meaningfully improve how people learn in school and beyond (p. 243).

I am excited for the future of education and the opportunities the HyFlex modality provides. And while the future itself is uncertain, I believe if we continue learning, sharing, and caring for one another, we will be able to build a big global learning community that will help create transformational educational experiences and make the world a better place.

References

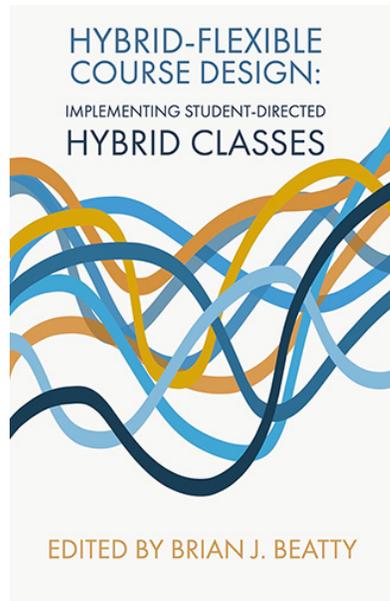
Beatty, B. J. (2019). Hybrid-flexible course design. *Implementing student student-directed hybrid classes*. <https://edtechbooks.org/-jqcG>

Bell, J., Sawaya, S., & Cain, W. (2014). Synchromodal classes: Designing for shared learning experiences between face-to-face and online students. *International Journal of Designs for learning*, 5(1).

Bow Valley College. (2022). *Open Doors Open Minds- Introduction to Bow Valley College Strategic plan*. <https://edtechbooks.org/-biw>

Butz, N. T., & Askim-Lovseth, M. K. (2015). Oral communication skills assessment in a synchronous hybrid MBA programme: does attending face-to-face matter for US and international students?. *Assessment & Evaluation in Higher Education*, 40(4), 624-639.

- Caulfield, J. (2012). *How to design and teach a hybrid course: Achieving student-centered learning through blended classroom, online and experiential activities*. Stylus Publishing, LLC.
- Chen, B. H., & Chiou, H. H. (2014). Learning style, sense of community and learning effectiveness in hybrid learning environment. *Interactive Learning Environments*, 22(4), 485-496.
- Daffron, S. & Caffarella R. (2021). *Planning programs for adult learners: A practical guide. 4th edition*. San Francisco: Jossey-Bass.
- Reich, J. (2020). *Failure to Disrupt: Why Technology Alone Can't Transform Education*. Harvard University Press.
- Lakhal, S., Bateman, D., & Bédard, J. (2017). Blended Synchronous Delivery Mode in Graduate Programs: A Literature Review and Its Implementation in the Master Teacher Program. *Collected Essays on Learning and Teaching*, 10, 47-60.
- Raes, A., Detienne, L., Windey, I., & Depaepe, F. (2020). A systematic literature review on synchronous hybrid learning: Gaps identified. *Learning Environments Research*, 23(3), 269-290.
- Raes, A. (2022). Exploring Student and Teacher Experiences in Hybrid Learning Environments: Does Presence Matter?. *Postdigital Science and Education*, 4(1), 138-159.
- Szeto, E. (2014). A comparison of online/face-to-face students' and instructor's experiences: Examining blended synchronous learning effects. *Procedia-Social and Behavioral Sciences*, 116, 4250-4254.
- White, C., Ramirez, R., Smith, J., & Plonowski, L., (2010). Simultaneous Delivery of a Face-to-Face Course to On-Campus and Remote Off-Campus Students.



Mistahov-Rapaport, S. (2022). HyFlex Teaching and Learning at Bow Valley College. In B. J. Beatty (Ed.), *Hybrid-Flexible Course Design*. EdTech Books.
https://edtechbooks.org/hyflex/bow_valley_college