7.3 High-End HyFlex Hardware and Tech Coaching for Teachers

Pima Community College Adult Basic Education for College and Career

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Description of program and learners

Pima Community College (PCC) Adult Basic Education for College and Career prepares learners for success in college, career, and life by providing high-quality, relevant instruction based on individual learner needs. PCC empowers learners to achieve their academic and personal goals and provides workforce preparation. As an open-admissions community college within the diverse setting of Pima County, Arizona, PCC provides comprehensive and flexible life-long learning opportunities to promote learner success and to empower every learner, every day, for every goal.

The program piloted its HyFlex model beginning in July 2021, although not all classes utilized HyFlex. There were in-person classes for lower-level learners. They were adding more HyFlex; however, some classes were purely virtual. Teacher/Ed Tech Coach Vi Hawes had told her virtual class that they were going to pilot a HyFlex model. All learners first joined virtually before attending in person, which helped them transition from virtual to HyFlex.

Recruitment and Orientation

Students could call and enroll at any of the three learning centers and then take a placement test to determine their classes. During this onboarding process, Student Success Coaches and other instructors provided support to students. In addition, students were introduced to the college's LMS, D2L Brightspace, their school email accounts, and exclusive student resources and privileges.

HyFlex in Action: Course and Instruction

Planning

The HyFlex program used a curriculum made for a traditional in-person classroom and adapted it for the HyFlex model. To make it equitable — the same instruction provided to both in-person and online synchronous students — all students used worksheets provided remotely through their D2L LMS.

Delivering Instruction

For group work, in-person learners had laptops or other digital devices with microphones. The group work was all done online in real time. Everyone was in breakout rooms. Vi paired in-person learners with online learners. Although there were some audio feedback challenges at the outset, these were worked out. When her learners were all virtual, they had been accustomed to working in breakout rooms together. The HyFlex model had a similar feel, so for those who were originally doing remote learning, this was not a challenge. The only hurdle was the logistics — getting used to the equipment and getting comfortable multitasking.

Learners in the HyFlex program could choose and move fluidly among in-person, synchronous online, and asynchronous online instruction. Using Picktime scheduling software, learners reserved an in-person spot if spots were available. Vi opened ten slots; sometimes only five were reserved. Before each class began, Vi checked the equipment. She turned on the synced speaker/microphones. If there were synchronous online breakout groups that day, she prepared them. She made sure Zoom information was up and that learners had what they needed to log in. She made sure she had working headphones for in-person learners.

Before a session began, Vi told or messaged both in-person and online learners about where to find the Zoom link, since both needed to log in to Zoom, and she reminded them of the time the class session began. After allowing five minutes for the online learners to come in and get settled, she informed learners that she was recording the class. She then shared her screen for learners to see online and in person, on the classroom smartboard or on their personal digital device. After breakout sessions, everyone came back together and reviewed what they had learned. Vi described and sometimes demonstrated the homework, showing how learners could access the assignment. Finally, there was an informal formative assessment to check their understanding in which all the learners were in Zoom and visible on the screen.

The first HyFlex cohort had a volunteer to help in-person learners so Vi could focus on online learners. The volunteer also helped online learners by monitoring the chat. Without a volunteer, Vi asked a tech-savvy learner to monitor the chat. Volunteers and some learners also assisted other learners with the technology. Vi regularly used Google Slides for both in-person and online learners. She provided both groups with notes for grammar and exercises. What was projected in class was shared on-screen for online learners. Physical copies *and* digital copies were available. Everyone had access to the slides and to video recordings of classes.

Technologies

For hardware, the program used Smartboards, wireless speakers, Jabra Bluetooth speakers with surround sound and microphones installed, and an OBSBOT classroom tracking camera. Every in-person learner used a digital device (laptop, tablet or phone) and Zoom, D2L Brightspace, Burlington English, Odysseyware, EdReady, and Picktime Scheduling for software

All classes had electronic whiteboards, SMART boards, connected to the teacher's computer. The SMART board could project anything that was on that computer. Vi placed two synced SMART boards in separate parts of the room which, she said, worked great for both in-person and online learners, with no audio feedback issues, and no lag. The OBSBOT tracking camera followed her and tracked her voice. It was positioned at the front of class. It could be set to show the learners, too, or not to follow anyone. Other HyFlex classes used additional equipment, such as a Logitech camera at the back of the class. There were SMART boards in each classroom, at the front and back.

Vi offered these two technology tips:

- Be sure wireless speakers are charged at the end of class session
- Don't move too fast in the classroom with an OBSBOT camera, as it may not be able to follow you

Technical Support and Training for Teachers and Learners

Tech Support

Tech support was provided by the College's IT team. They provided the equipment and helped in using it. The college loaned laptops, iPads, and hotspots to learners. Help was specifically provided for the HyFlex pilot classes. Learners also received tech support from the college — for example, through in-person "Tech Corners" — to troubleshoot issues on learners' personal laptops or smartphones.

Teacher Training

Vi found that some teachers and learners needed more digital literacy and training, including about computer basics; their lack of these skills, she learned, took time away from teaching. Teachers were concerned about the HyFlex

learning curve. She would like to see the administration provide more workshops and training for reluctant teachers. Vi demonstrated equipment and also enabled teachers to talk about how they could adapt it. She believed that teachers needed support in using the equipment and implementing it in their classroom. They needed to know HyFlex best practices and more about andragogy. Specifically, they needed to know how to balance in-person and online modes of HyFlex. As a HyFlex coach, Vi was able to demonstrate the technology. She also offered online office hours for teachers. HyFlex demonstrations and discussions were also offered in teachers' professional learning groups. Vi found that video recordings of HyFlex classes were also useful. (See links to our HyFlex video series which features Vi as one of the teachers.)

Implementation: Lessons Learned

Data Collected for Program Improvement

Vi conducted a learner survey in the middle of the class term. Learners reported that they liked the flexibility and engagement in both modalities. She also surveyed them at the end of the pilot about how to make the next HyFlex term(s) better. She asked about how often they attended class, their mode preference(s), what events in their lives prevented them from attending class, the device(s) they used, their internet connection reliability, and their needs for learning resources. Some staff at the college were looking at comparison data. All Vi's students completed her classes — evidence, she believed, that the HyFlex model was working.

Benefits

Benefits for the program included the use of specific hardware and software, particularly the online platform and online curriculum; learning assessment; higher learner attendance and retention; and increased learner digital literacy skills.

Benefits for learners included flexibility — the ability to choose learning modes based on learning preferences and lifestyles, and being able to easily switch from online or in-person mode.

In one of the HyFlex pilot cohorts, no learners wanted to come in person — most likely, Vi surmised, because of the COVID Delta variant. When they did come in person, she thought it was to see their classmates, because they were more engaged (even wearing masks) in person and because there were fewer complicated technology logistics, so learning was easier.

Challenges

Challenges included the need for professional development and training specific to the HyFlex model; resistance or reluctance by some staff to use HyFlex; classroom management when dealing with both in-person and online learners; engaging both in-person and online learners during class; onboarding learners; and technology support for teachers and learners. Vi noted that additional planning was needed on top of the normal time teachers allotted for planning and developing curriculum.