

Hybrid Education Design Jam Resources

Key personas to consider

Note: These personas are optional but may help inform your design decisions. Think about the challenges each persona faces in a hybrid education environment.

Remote Student – Sarah

Location: 2 hours from campus, rural area

Tech: Reliable but modest internet (occasional video freezing). Primarily uses a laptop and smartphone.

Goals:

- Actively participate in class discussions.
- Feel more connected to her peers and instructors.
- Achieve a balanced academic workload while managing part-time work.

Pain Points:

- Struggles to hear in-room discussions clearly, leading to difficulty engaging.
- Feels disconnected from the class and left out of in-person group work.
- Tech issues like freezing videos or poor audio quality hinder participation.

Behavioral Traits:

- Prefers self-paced learning but is willing to engage when there's clear, structured guidance.
- Hesitant to speak up in virtual spaces without visual cues or structured prompts.

Needs:

- A solution that ensures smooth communication, with minimal tech disruptions.
- Opportunities for real-time engagement and collaboration with in-person peers.

In-Person Student - Miguel

Location: Attends classes on campus

Tech: Tech-savvy and comfortable with digital tools.

Goals:

- Engage deeply in class discussions and activities without delays.
- Minimize disruptions caused by the inclusion of remote students.
- Balance face-to-face interactions with remote participants in meaningful ways.

Pain Points:

- Frustrated when in-class activities slow down for remote students.
- Loses focus during tech-heavy or poorly integrated online elements in the classroom.
- Feels like remote students don't always get the same experience.

Behavioral Traits:

- Prefers interactive, hands-on learning and values direct, face-to-face engagement.
- Can get frustrated when remote tech isn't well integrated into the class experience.

Needs:

- A solution that integrates remote students smoothly into the in-person experience.
- Minimal delays or disruptions caused by remote student participation.

Hybrid Instructor - Professor Chen

Location: 15+ years teaching, 2 years in hybrid settings

Tech: Comfortable with basic technology but not advanced tools.

Goals:

- Facilitate an inclusive and equitable learning environment for all students, both remote and in-person.
- Manage the complexity of hybrid teaching without feeling overwhelmed by tech.
- Foster meaningful engagement with both groups of students simultaneously.

Pain Points:

- Struggles to divide attention effectively between remote and in-person students.
- Worries about creating an unequal learning experience for remote students.
- Limited time for technical setup or managing multiple tools during class.

Behavioral Traits:

- Patient and attentive but often stressed by time constraints.
- Hesitant to experiment with new tech unless it's simple and easy to use.
- Focused on creating a seamless learning experience without adding complexity.

Needs:

- A solution that minimizes technical complexity, allowing easy management of both groups.
- Tools or strategies that help facilitate real-time engagement without overburdening the instructor.

Common challenges in hybrid education

1. **Participation Imbalance:** Remote students often participate less frequently in discussions and activities compared to in-person students
 2. **Audio Quality Issues:** Remote students may struggle to hear in-room discussions; in-person students may have difficulty hearing remote contributions
 3. **Connection & Community:** Remote students commonly report feeling disconnected from the learning community
 4. **Attention Management:** Instructors typically find it challenging to divide attention between physical and virtual spaces effectively
 5. **Activity Transitions:** Moving between lecture, group work, and individual activities can create disjointed experiences in hybrid settings
 6. **Technology Friction:** Setup time, technical difficulties, and tool switching can interrupt learning flow
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Existing technology landscape

Consider the tools and hardware commonly used in hybrid learning environments.

Common Hardware

- Classroom camera (often fixed position, limited coverage)
- Room microphone (often inadequate for capturing all in-room voices)
- Instructor laptop/computer
- Projection screen or display
- Student personal devices (laptops, tablets, smartphones)

Common Software

- Video conferencing platform (Zoom, Teams, Google Meet)
 - Learning Management System (Canvas, Blackboard, Moodle)
 - Collaborative tools (shared documents, digital whiteboards)
 - Polling/quiz tools (often separate from main platforms)
 - Chat/messaging features (often underutilized or overwhelming)
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Promising approaches

Successful Tactics

- **Buddy System:** Pair remote and in-person students to encourage engagement.
- **Remote Student Advocate:** A rotating role where in-person students advocate for remote students' perspectives.
- **Structured Participation:** Use protocols (e.g., taking turns, mixed breakout rooms) to ensure everyone is engaged.
- **Hybrid-Specific Activities:** Design activities specifically tailored for hybrid settings, rather than adapting traditional ones.
- **Community-Building:** Use intentional activities to foster connection between in-person and remote students.

Emerging Solutions

- **360° Cameras & Spatial Audio:** Create a more immersive remote experience.
 - **Seamless Digital-Physical Collaboration:** Spaces designed for digital-physical interaction.
 - **Asynchronous + Synchronous Blends:** Combine preparation tasks that students can complete asynchronously with live application during synchronous sessions.
 - **Mixed Reality:** Experiment with shared virtual spaces for an immersive hybrid experience.
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Design considerations

Equity Factors

- **Technology Access & Reliability:** Consider varying internet speeds, device availability, and platform accessibility.
- **Time Zone Differences:** Accommodate students in different time zones for synchronous activities.
- **Cultural & Language Barriers:** Keep in mind different cultural norms and language preferences.
- **Learning Style Differences:** Address diverse learning needs (e.g., visual, auditory, kinesthetic).
- **Physical Learning Environments:** Adapt designs for different classroom setups and spaces.

Implementation Realities

- **Instructor Prep Time:** Focus on solutions that don't require extensive setup.
- **Technical Support:** Consider the availability of technical support (it may be limited).
- **Budget Constraints:** Keep cost in mind when designing solutions that involve new technology.
- **Scalability:** Ensure that the solution works for different class sizes, from small seminars to larger lectures.