

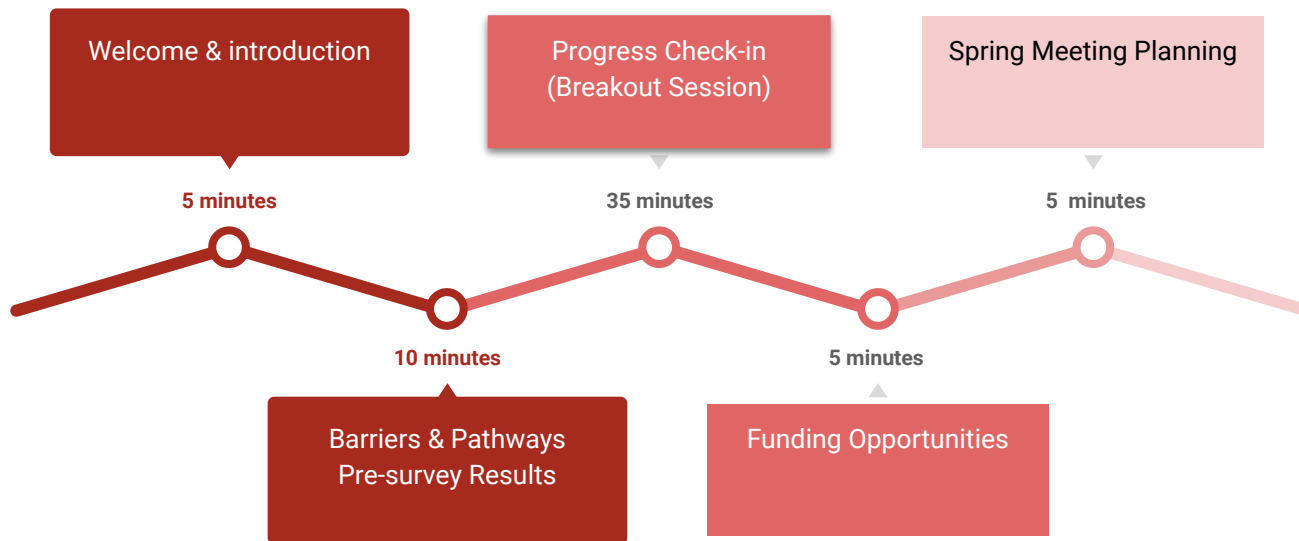


XR-FLC Cohort A Bi-Weekly Meeting

Jan. 14, 2022



Agenda





Barriers & Pathways Pre-Survey Results



Prior experience with XR devices

Answer	%	Count
I have never used any XR devices	31.25%	5
HTC VIVE	18.75%	3
Google Cardboard	12.50%	2
Oculus Quest (1 or 2)	12.50%	2
Other, please specify	12.50%	2
HP WMR Headset	6.25%	1
Microsoft HoloLens (1 or 2)	6.25%	1



Perceptions towards XR

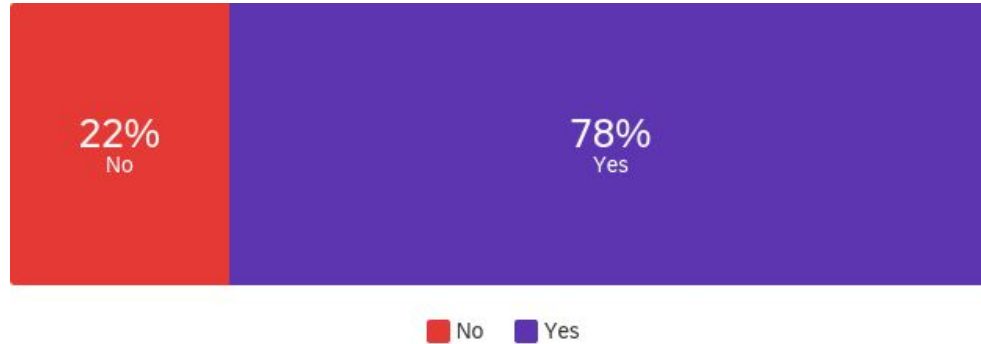
Likert Scales

- 1 - Strongly disagree
- 2 - Somewhat disagree
- 3 - Neither agree nor disagree
- 4 - Somewhat agree
- 5 - Strongly agree

Field	Min	Max	Mean	SD	Count
I found XR technology mostly easy to use	2	4	3.44	0.83	9
I found XR technology mostly comfortable to use	2	4	3.56	0.68	9
I found XR technology mostly enhanced my intended experience and activity	3	5	4.22	0.63	9
I found XR technology mostly affordable	1	4	2.78	1.13	9
Overall, my prior experience with XR was mostly positive	3	5	3.67	0.82	9



Prior use of active learning strategies



- iClicker
- Purpose Games
- Rapid prototyping
- Think-Pair-Share (TPS)
- Peer Review
- Pear Deck
- Kahoot!
- ConcepTests
- Molecular model kits



Perceived Barriers Internal to Faculty

Field	Min	Max	Mean	SD	Count
Faculty lack awareness of available XR learning content for the discipline	3	5	4.22	0.79	9
Faculty lack access to essential XR learning content in the discipline	3	5	4.22	0.63	9
Faculty lack access to essential XR hardware	2	5	4.00	1.25	9
Faculty lack access to essential XR software	3	5	4.44	0.68	9
Faculty lack interest in using XR in teaching and learning	1	5	2.89	1.37	9
Faculty lack time to adopt XR	2	5	3.89	1.29	9
Faculty lack time to implement XR	1	5	3.56	1.71	9



Perceived Barriers Internal to Faculty

Field	Min	Max	Mean	SD	Count
Faculty lack basic technological skills for integrating XR in teaching and learning	1	5	2.67	1.33	9
Faculty lack basic pedagogical understanding for integrating XR in teaching and learning	1	5	2.44	1.34	9
Faculty perceive that classroom management is more difficult when using XR technology	1	4	2.44	0.96	9
Faculty think XR technology is unreliable	1	4	2.33	1.05	9
Faculty feel that using XR technology is risky	1	4	2.33	1.25	9
Faculty fear using XR technology	1	4	2.56	1.26	9



Incentive and Infrastructure Related Barriers

Field	Min	Max	Mean	SD	Count
It is a relatively low priority of teaching and learning innovation with XR technology at my institution	2	5	3.56	0.96	9
There are limited institutional resources to allow teaching and learning innovation with XR technology	3	5	4.22	0.79	9
There is a lack of technical support for the adoption of XR in teaching and learning	2	5	3.56	1.07	9
There is a lack of administrative support for the adoption of XR into teaching and learning	2	5	3.44	1.07	9
There is a lack of training on using XR in teaching and learning at the institution	2	5	3.78	0.92	9
There is a lack of adequate financial support to develop customized XR-based learning activities	2	5	4.11	0.99	9
There is a lack of reward from the administration for using XR technology in teaching and learning	2	5	3.89	0.99	9



Workload and Training Related Barriers

Field	Min	Max	Mean	SD	Count
There is limited research literature convincing that the use of XR technology is valuable in my discipline	2	5	3.00	0.94	9
The adoption and implementation of XR technology causes an additional workload on my responsibilities	3	5	4.33	0.67	9
There is a lack of professional development and training on using XR in teaching and learning	2	5	3.56	1.07	9
The training on integrating XR causes an additional workload on my responsibilities	2	5	4.33	0.94	9
There is a lack of sharing, discussion, or support XR technology among peer faculty in my college and institution	1	5	3.22	1.47	9



Classroom and Student Related Barriers

Field	Min	Max	Mean	SD	Count
Existing XR software is inappropriate for students in my course(s)	1	5	3.33	1.25	9
Existing XR software is incapable of meeting student learning objectives in my course(s)	1	5	3.44	1.42	9
It takes students too much time to understand how to use XR technology	1	3	2.33	0.82	9
Students find it distracting to use XR in the classroom	1	4	2.67	0.94	9
Students find it mentally uncomfortable to use XR in the classroom	1	3	2.56	0.83	9
Students find it physically uncomfortable to use XR in the classroom	1	3	2.67	0.67	9
There is a fear among students for using XR technology	1	3	2.56	0.83	9
XR technology does not fit well for my course(s)	1	3	1.78	0.92	9



Expectations on XR-FLC



Expectations on the project team

I am expecting to be provided the tools necessary to use successfully the XR in my course

Be supportive for the cohort, as this is a very new area for almost all of us. Our workload is already pretty crazy so we will need some additional motivation.

Guidance on where to locate resources

Provide content or places to find content.
Help training.

Provide guidance and support when we need

Provide help and support when needed.

provide resources and insight into using XR

Provide support (\$, mental/emotional)



Expectations on cohort faculty

I hope XR-FLC cohort faculty assists and facilitate the implementation.

Set a realistic goal for themselves. Create a plan that results in a pridedful result.

Sharing of resources, activities, and outcomes

Share ideas and content areas.

Sharing project experience and collaboration

I expect them to share their experience and to let others know if something worked well for them.

Work well together

Generate ideas, help each other

Expectations on yourself

As a novice myself in using VR, XR, I am hoping to be comfortable with the devices first, then be able to use them effectively for my course.

Make the time required to implement initial exposure of XR in the classroom.

Asking for help, and sharing of activities and outcomes

Find interactive ways to use VR. Think outside the box. How it can be used for learning, but also for development, outreach.

Create a workable VR App for my course

I expect myself to be diligent while trying out the technology, thoughtful while making assignments for students, and helpful while sharing lessons learned.

develop XR products

excel



Breakout Session - 35 min

- Backward Design Stage 1: Desired Results
- Backward Design Stage 2: Assessment Evidence
- Backward Design Stage 3: Learning Plan
- Timeline for implementation and assessment





Funding Opportunities

- Cal State Innovate
 - Spring Deadline TBD
 - <https://calstateinnovate.org/>
- CSUPERB (Education & Research in Biotechnology)
 - Various deadlines from mid Jan to mid Feb
 - <https://www.calstate.edu/impact-of-the-csu/research/csuperb>
- Chancellor's Office Awards for Research, Scholarship and Creative Activity
 - Fresno State (Deadline: Feb 22): <http://www.fresnostate.edu/academics/grants/faculty/rsca.html>
 - San Jose State (Deadline: Feb 4): <https://jsu.infoready4.com/#competitionDetail/1853368>
 - Sonoma State (Deadline: Mar 25): <https://sonoma.infoready4.com/#competitionDetail/1858348>



Spring Meeting Planning

- Mid Year Evaluation Focu Group Meeting (Feb 18)
- Future XR-FLC Meetings (Feb - May)
 - 11am - noon on Jan 28, Feb 11, Feb 25, Mar 11, Apr 8, May 6
- Monthly Office Hours
 - 11am - noon on Jan 21, Feb 18, Mar 25, Apr 22

