

XR Training

Group 3: XR Training Task Force Clarissa Anderson, Kathleen Maturan, Jacquelyn Piansay, Sid Yi





Team Member Responsibilities

- Recruitment Leads Sid (Internal/GMU), Kathleen (External)
- Interview Leads Sid, Kathleen
- Research Ethics Leads Clarissa, Jacquelyn
- Data Analysis Leads Kathleen, Clarissa
- Data Synthesis Leads Jacquelyn, Clarissa

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O1 Product Concept



Concept Overview

Background

George Mason University's Learning Support Services (LSS) unit is currently building an XR lab which will allow faculty to gain hands-on experience with XR technologies for education. XR refers to cross reality or extended reality and extends the gamut of virtual, augmented, and mixed reality environments.



Source: Softengi



Concept Overview (cont.)



Challenge

- Lab expected to offer various equipment including Oculus headsets and VR stations
- Many faculty have little to no experience with XR
 - Perceived gap in the knowledge and skills needed to properly handle the equipment and how to apply these innovative technologies within learning environments

Proposal

- Establish a certification process for faculty interested in utilizing the XR lab's resources
 - This project will only focus on the faculty training; student training will be on hold for future development

Concept Statement

To be a leader in the increasingly popular remote and online learning space, George Mason University (GMU) aims to promote greater digital literacy and to support the introduction of cutting-edge learning technologies. As such, the GMU Learning Support Services (LSS) unit is building an XR lab to educate faculty on the instructional capabilities of this technology. Once launched, faculty will require proper usage training to utilize the lab space and its equipment.

We are seeking solutions to create instruction to foster faculty buy-in for the XR learning technologies, along with in-person certification to ensure proper usage of the equipment. Through our research and data elicitation, we hope to understand faculty's needs and the experience of SMEs in order to create an effective, sustainable training/certification path for faculty wanting to utilize the XR lab.



02 **Data Elicitation**



Usage Research Questions

How can we establish faculty buy-in for XR as an educational tool?

What is the best way to train faculty to properly use tech tools?



Full Interview Question Set



Faculty Interview Questions

Introduction

- 1. Tell me about your role at work. What does a typical day at work look like for you?
- On a scale of 1-5, with 1 being not very familiar and 5 being very familiar, how would you rate your familiarity with XR technology (VR, AR, MR)? Why?
 - a. If they mention using XR tech...
 - i. In what ways have you used XR tech either personally or professionally (e.g., games, professional development, etc)?

Digging In Questions

- 3. What do you know about XR Tech?
- a. What do you know of resources that GMU provides for XR tech?
- 4. What are your general thoughts or feelings about XR tech?
- . If follow up is needed...

i.What aspects of XR interest you?

ii.What aspects of XR might hinder you from using this tech?

- 5. Have you used or experienced XR tech in a learning environment before?
- a. If so, tell me one of your most recent experiences using XR tech in a learning environment

i.What did it help you accomplish?

ii.What challenges did you come across?

iii.What appealed to you?

iv. What happened when you got to the lab?

b. If no, why not?

i.Are you interested in utilizing XR technology for your courses? Why or why not?

- 6. What would motivate you to use an XR lab or utilize XR tech in your classes?
- What types of support or resources would help you feel confident using an XR lab?

SME Interview Questions

Introduction / "Getting to Know You"

- 1. Tell me about your role at work.
- 2. What does a typical day at work look like for you?
- 3. On a scale of 1-5, with 1 being not very familiar and 5 being very familiar, how would you rate [university name] faculty's familiarity with technology? Why?

Digging In Questions

- 4. What are the most important XR topics for faculty to learn?
 - o Of the topics you noted, which would be the most important topics for IDs who have little to no previous experience with XR tech?
- 5. What are some benefits of incorporating XR tech into course design?
- 6. What are some best practices to determine a faculty member's level of proficiency in XR?
- 7. How do you train faculty on your campus in using new tech in the XR lab?
 - o If follow up is needed...
 - What is the best method to train individuals on XR: a series of workshops, an online course, etc.?
 - o How do you measure the success of the training?
- 8. How has the XR lab impacted teaching and learning experiences at your university?
 - What have been your biggest successes with your XR lab? What do you think made it a success?
 - What have been your biggest challenges with faculty using your XR lab? How have you tried to manage those challenges?
- 9. How do faculty commonly use the XR lab?
 - o What departments use the lab most often?
 - o In what capacity do they use the lab?
 - How often do they need user support?
- 10. How much user support do faculty typically need when using the XR lab?
- 11. What are some ways to advocate for more integration of XR in the design of learning experiences?



Participants

Internal Interviewees

1 GMU SME - Instructional Technologist

2 GMU Faculty (Learners) - Both familiar with XR tech

External Interviewees

SME from Stevens Institute of Technology - XR Lab Manager and Senior Instructional Designer



Interview Recruitment Plan



Hybrid approach to interviews: In-Person and Zoom

GMU SME

Sid maintained communication with GMU SME as they're coworkers

GMU Faculty (Learners)

 Reached out to GMU SME for faculty and other Blackboard administrators who have expressed interest in XR

External SMEs

- Reached out to GMU SME for relevant contacts at other universities
- Conducted desk research for universities with established XR labs and contact SMEs for informational interviews



Research Ethics & Data Sources

Consent & Data Collection

- Consent form provided in advance via email, must be signed
- Verbal description of ethics at the beginning of the interview
- Recording permissions included in consent form
- All data was anonymized



Maintaining & Storing Data Sources

- Each interviewee assigned a unique ID which was logged in a spreadsheet
- Participant contact information stored in a separate spreadsheet
- Recordings, transcriptions, and other raw data stored in Zoom, Kaltura, and Google Drive (will be deleted at the conclusion of the Spring 2023 semester)

03 Data Analysis

RAW DATA

Interview 1

Participant ID Interviewer: Sid Note-taker: Clarissa, Jackle Date: 2/1/23

Notes 2/V23

Notes						
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Important to develop an experience for tradents, rather than rose memorization	Important floal #2 - engagement with AR (e.g., Zapper, Broper)	There are many All horse that are tempting because an interpretable because an interpretable because an interpretable because a part of the pretable because a part of the pretable because a part of the pretable because a	Results of transportating (III) and this content designs - threatists, an objective, the second body tops of proteom sources	exceed to learn 30 printing		
	Complete Control of Co	stouts use Trakerces to learn faculty on 20 printing	For AR, would use the languigane or Zeoper - defining project Januari examples though	But 18 for any analysis with the drop section who drop the 17 plants made to finally publishing up the for the role of products and and of any legal cars.		
CMC+ care a bestine up the ceasing reculate shareful of SE, from basis plan VE and oil facur. Off the basis, property, built pack \$2.00	Came out the steps maybe going to do to create AR experiences coetly away to co	According a service of the control o	Topic this econy to hydrogy curry protein a gir feating of featings in protein to release proper their territory feating acceptably some wide.	Imperior on strongs governed to a superior of the strong o		
o challenge represents that expense remotely	Render removation can be difficult show and last not as effective as hands on projects.	access to economiest and similar rainces bearing (a.g., itemos, may not have freecosts)	Trouby nort (from) to perme sense of only model root in VE wit- model root a bended on and so till."	ask specific feedback questions post training		
Specific questions for feedback necessing rather than being too open ented	eggin man vangaj pulamanin faliaju in erina ajan au i sau aut na francisca, fast i ajan aust dajum sira ana sau p ajan taran ka sau p	a couple courses nave (seen created (see to foculty expeniences with the XX Na.)	Execute point artist dispolic floring to she can be foreign to other the en protect on sport to the lost thereby	Success having faculty and address are the space at an encommon to opening and cross		
Interview is here hearly thereof only have experienced beauting with After classes along ten incompanies over other	stationar travers out put their mid expectations have leadly valid to the most to do not the special non-do you take that	faculty generally use the XH lab as a space to explore sectiVR tech	departments into use the late more often. Longitud Employers Studies (S.O., Visual Purforming Arts (E.VAN)	continuoperi co en shulesto may read supportir oughout the course, disconding to his the properi a special de-		
The emphasion of a more in the control of the contr	insportant to have made for passive to get formula unit-market hazague not every face accepts to a	Society tend to only seed support in the beginning stages	Reced to promote awareness of XX through IDs as well	number one challenge to getting board and sufficient board for comparing open and party people.		

Interview 2

Participant	ID	Interviewer:	Sid
		Note-taker:	Clarissa, Kathleen
Enemer 1		Date:	2/2/23

Notes				
inetricts Graduate Muderns & develope core courses with Wiley.	Has developed a decays course floored on AR 6 XR	challenging to time provi incomingly with new precial full methody that come along	or os an umbreita term trust recompasses AM, VP, and mixed reality	Knows of the Horizon Certain or increase in that includes a malarization above or gain others out
most titre acces acces to save a discussion to recomp to second guaran	Created on opureriest shikes! mustly graning course.	mict develop a knowledge base and grow that incomedge base	continues from augmented really to virsus seatty to	Entero Tierre is also a studio rosce on criso unere studento can h Dis enganestos of s
Other responsitions include adverse contents going presentations, residently self- responsitional and compression right for the principle.	must create a flux revolution for the cases for students. So where will have given an exercise consumption of the section of cases.	health care & writtery fields are pushing the develope using XR	SAME THE STATE A CONNECTION THAT AMERICAN STATEMENT FOR ANY STATEMENT SHARING	They comedine share displaces to everes at Hores Hall
Mas relationships setting CEO's or composite paragraphic mode VO, XT or AT for the military.	must create a seel warrill problem blatement that can be odd would by the bethrology	cost barriers to entry	center of an allowing of a rights read out solver internation is one and andre earl world	of control on the control of control on the control of the control
At eaching time to be one facili where anything is presented from home a great management house	ben fin tooks that you can be see count in some of a train analysis and then mode	Spiriture of empiriments in the medicine se would need at heart \$400 for mount or make quart hearther	defines VE as made up of completely made and there is no roof world or our correct roofly	Arregion and house to Fuse Computing 20 with now stoke of the with this stake of procures
Presented at Immersive Learning Bescarch Herbidek conference	Uses in course : Bipper-emple aguinented tool trust a novice can use	Coding not injustrati but to shape the presonant to suit the specific application it to useful.	students are pushing the state of the art, anexyctor providing content & tools	Professor Chang Y computer screen has a lab
others unique perspective from the tracking lesse of using the reck	Musi consider which soot to use importance of baseline knowledge	Challenging to request outing as a prerequisite.	Bes the ability to recreate expensences or augment there	Bits is challenge in incremental resour- are evaluation and to its access them
expension to make the use of VR and non-VR expensions	problem focused real world experiences	sees educators as having the ability to architect the future of using the tools	Bec the abiting to collect class from users	Students who are in making or history regist not know an available to the
housed office hours in VR	Focus on design over the tisk because tech is changing to frequestly	how do you know if what your doing is successful?	Color colorino in the real Color belonde 6 con lead to hope officials 60% to by legging common minister made	Russing more corporation at their mile corposity ince fulficity that are a using the fact)
	Challenging students to "wode in the natura" of AID	equity of using tools that aligns over the values of the instances	Framqueous mouse extraction sheet the per- less has retained the protection for the cost policy protection	nould the to see in communities before leasily to per stude to access the tex
	Bridge-She Learning Network	dosignors must have an awarress of efficial implications.	it is impossed to couple Al to make flueron learning more effected	ideing the profit the operation to a attention from students
	Door is for disclosed to name or or incommon of some or they can begin to have their use to design	Fnd goal is the learning not the technology	It is important for faculty to hear from the microsine, from use of tech positively invasible forming	Issue of not know what is available. also not known where to get vise
	mode for the students, until they can be & then set their took with it structured property	human contered design thinking		Conventions or maniples for lead feculty) to expect & experiment of

Interview 3

Participant ID	Interviewer: Note-taker: Date:	Sid Sid, Clarissa 2/9/23	

They can a Pin Quest headow, that Porton but \$601 unow sport it, that out stray NR and AR thosps. In that parametrisk	Utilizes XXI peripherals the CXI codes to enhance real tile expectences.	Open not know what MR is as a concept	They feel they are a 3 in series of femiliarity with XX but in reality, they are more of a 5 or 5.	Transplacement recommended to the control of the co
Worked yoth VSGI (Maginia Serious Generally suiture) on a project before	Belleves XX for education is limited	Comp. Silve season malmon Planes Socialments to Social Secretary Engineering Completes and Completes Social And Co	Tools should be embaced by all to be intovative	Núcuelos must elept changing times and septimológico or fire o going to deciento tim difectado di al estimo
Importance of strategation of coucotton	bese of noncombesity been to be a because of both without recessoring develop personal consultation?	XX alous personal emotions to grow through expensional flar emotionals.	XR can also help in research and care collection	XR reakes learning and porticipating increases activated more attractive.
SHE STREET, CHARLES AND THE MAN A MAN AND ADMINISTRATION OF A LOSS OF ANY AND ADMINISTRATION OF A LOSS OF	Some faculty are scared of XR, 33, and new technologies	For the most part, people are dissort to sectodogy	People are aware of the took out not using them	Finish need to leave to the control
Success e aglintary marked in the form of activates sessional and contaminant on exercising the soon for education	Incomance of having a physical space to some with XXII	Cost is a prohibitive factor regarding XIII usage	Must establish clear guidelines on capacity of the apace	heads assignment in his to come the controller and street to their come constitution

continuence on an operation for each	mon with the	usage	capacity of the space	consect specifically
Interview 1 N	lotes			
En important to their faculty feur to manipul et all stages student upon so they consider wild stage III soon day could burne, un	Pricely ecode-treey editors industries and second expension to the Social can be shown bearing creat	AR tooks are easily accessible to faculty and shutter is	Fittis un chopf richide d'hanning hichorodo fundamentes (parier es gant of représado embording)	Basing should runkwater among to seek thoughts so through meand with data moving on a noveled (0.500 KTM) MD.
Traces count determ the to seminal upon error reposing equipment in the little	Training should start, with ARI become thereby a smoller learning curve.	Air can be incorporated into both synchronous and approximation of courses.	Ro exclet to build faculty buy-in as quality AR experiment reactly available.	Creating content can be time consuming on who is consisting on who is devotoding the meterial.
East Emplicated, executing, regist for president and consist of the construction of the dependent are recorded, the cost bedget.	Examples of AP tools lectude Zapper and Elipper.	its reary easy to create an awater and to access virtual spaces remotely.	Ex incoment to direction an experience for students rather than resting on little incomercials.	Two important topics to include in training on whitel species and engagement with SR.
There are many sensitive loss that don't require much feat man.	Students were rearly exceed to leave 3D printing in a course.	Hason on projects are essential to essential to essenting the finalty's level of profession.	Tive asset Traverced to seen Security on 3D printing.	For AR: No coad project desire RR strong purples the project game or Zepox.
Proceed facility serving or especialists and surficiely principles that facility can have other than the Mill predict Coeff	My class is target apires weekly modules.	Yn edgito corve put the steps the services guing to do to dreate Alt experiences	I would bour a viciology-byle baning on cray- lever basic skills.	Feculty need to try draigs out to person, such as wearing a VIII headset.
in person noticely give described an expensive refers they can be well not extrap more brights.	ins challenging replicating "sangible" experiences secretary.	Herwide Individual can be difficult.	Access to equipment also arros remote storing.	I reelly-west faculty to get the sense of virty they should leverage XXI in their carriculum.
t's inpotent to ask specific feedback outsides to come the success of the binning.	it is most helpful to use specific questions for levisheds.	The bigger impact white XR 90 her bear increasing heady source and of her minimaligns of a book \$540.	Multiple courses have been present due to faculty experience was XX less.	In contrast to other lists on compute, the XV-No has an explanation (0.000 T/V file 1000) (bettierbes)
One success has been having both faculty and students use the XR lab.	Faculty generally use the XR lob as a space to explore sectiVIR sect.	The departments with one the lest-most other are School of integrative studies (SSS and Visual Fortaming Arts (CVFA).	For disperts, aper support varied depending on how the project to opeced cut.	Faculty usually only needs support in the beginning stages.
One challenge is understanding locally outcomes or expectations most the space.	The number one chollenge is getting buy-it.	The alignate distribution is flowing that have to common the me increase that has not a flower than the increase through the t	The facility at my university are not nery familiar sets learning sectionary.	As all transactional Technologis i provide gones' support to fourband and saudens using the extraology and devices
As an Employment Technologie, second focusy hourse use and coose the seas for their section.	Training must account for a vide range of critic and since of critically with earling sectionage.	Triving should consider what processes knowledge is reported first all.	Content disastion requires a sit of a warning curve, expectedly for left and reced metry.	Training may record to secretar createstations structure a pocación with XX sects.
Complet shatus assect nouse Spatial c. Meta Faction, and Professions	Tempore boxed AM facts make it easy to GRAMP COMONIC	There's should address price about 50mg	Experiences to virtual reality are real experiences.	recipo sing 18 sun ros conte de 31 sulture reperinto antigonem de fron 1900 tourn and product some
Learning technologies charlenge students to think differently about solutions to problems.	Stations often two environmental appropriation to problem solving with learning technologies.	It is a challenge to find controlled to popularly manage the space and people from to use the less.)	Students find new instructive ways to one 38 soois that are laterant must the expected way	Feculty should be able to stating ash unser VR sail be effective and when it work be
the need to promote extrement of KR through instructional decign.	For lifereining light faculty to solve total of processor certons even doing any cightli work.	this important to Sociodal Autor to Audocoa landward for 32 facts us not environmental audocoa is	My class starts with an oversteat of XR, then bosses on VR and AR.	I include an opposition in its an any production of provided the company of the c
The VII section of my class focuses on low flowing projects.	The AR section of my class focusies on build an AR app.	A workshop should include an overview of 3R is and now incess be used in a course.	A vonatop stoud for students on engage stought schand row to bereits their earling.	Incorson workshoos get participants thilleng
One creatings is secting facility have to use the spect on tury to with their sect for the cosessors.	Another big challenge is ligating out what feculty name to do with the sauce.	to important to yet in the control of project that yet control along from the attention of the control of the c	Faculty with expensions secting using KR con seg to support rise socilly users.	Snow-and-toll is not as effective as nance on projects.
Some reamers may not have their own freathers.	Another succession having focusty and museum unerthe space to experiment and order.	The XXI so has desided a space where footly can cond and experience the social transposes.	Foculty should be able to shedly what the technology is	Feculty should be able to decorbe how the becomingly is used in a variety of fields.
Fecursy should be sold to identify which took you have				

Interview 4



	Notes			
As a faculty member, its responsible for instruction of graduate students.	Lalso develop-core courses.	Edeveloped a design course that focuses on AR, VR, and XR.	five very familiar with ARREST technology	fin newto XR to but the not new session.
Tare XX to over a community promote off rea-AR VIII, or more really	My other separatelyses provide addition in datum, givery productions, in tiping with seeman projects 2 visition with the Links with the	Courses and technology should be more acceptible to students.	Ex Important to develop a knowledge base for students and grow that knowledge base	I in challeng rooms his prior introduction that places of facility that come does
Final X 100% rando except for special orgunizations such as meetings or special guests.	Solver unality and malena of 12 years 100m; 1 to 1 dear one has specified of after our work the 14 meetings.	Linewidus shore are a variety of locations (sep. House Control, stude states). The Nillians of the control of the population of the popula	I fell statement they start meet to have \$400 heatest because 7mg can go to the small file in companyation traffied.	I think there are of AR technolinescences acres university
XR gives us the codey to reclinate experiences, or expensit them is a sole environment.	in terms of XR tech, there are some barriers to entry expecially with VR	I know that cost is a barrier to entry.	Ny cuconet often aris il it's necessary for them to purchase their york header).	bible rodings secessing it my source, some bear snowbrage is no
Deprise sample supreme to the con- minary or temporal sample and of expensive can use other carbox	I ceffee AR as a suppling of a risplat read and where information is revenued in the read world.	national New Company made up of code and time is no included or our Commitmenty	Thoruse is imposed but its execution to base on design because their industrial formation.	Cooling tank required to the control of the control
Designors must have an automost of the othical implications of using these XX tools.	I construit an augmented virtual reality gaming course.	Edde on modicinate is fore-rock to the cost to state that arrive inflood are often brownings of the Sets of coding	It's Important to have occorne knowledge se you know which toded to use	provide students for all or VP too to use a grown water as protein water to (artise) despit
I want students to be prepared for the rectavores whose they leave the university.	Students need to be oblig errors of either or not what they're during is successful or not.	It the continues; official analysis companies have be bearing and of using the bearing and of using the bears.	For presented the model for my XR course at the beneave Learning Research Notices conference	My XX course problem forward contact around world experience
I understand XR to be an unfinite term that encompasses AR VR, and record realty.	I challenge students to "waters the waters" of too	In making my own ommopies I are modeling for docume of at they can do before their their one with 6 smartured proteoms.	White ignory or the sound and contact as the maturator, the above to are mady the ance passing boundaries	its challenging require coding prerequisite
Treat the students to Treat come orier recoverage of these tools comey can begin to hartes their use in deeps.	XIII systems also allow us to collect data.	XR helps transprople and safe environment where they can feet from resources.	Date from All technisms has numero andersonal hearthey serie saling the book to problem some	It is important integrate Alto in bursen learns more efficien
TERM CHOOL SCHOOL STORY TO STORY TO WHITE WITH THE STORY TO STORY THE STORY	I won't to make sure of people can use these took understand them, and make positive use for them.	Part of my job is ensuring equity of access to and use of XX techs.	The hands case & mistry felor are pushing the envelope in ferms of using XR.	Data considers with facine because these to more effective in by logging comm monetair media
Feculty duri? understand the benefits of using XXI fech	Most deutered don't knoon what resources are assistate and how to access them	Sudem my not income the ofference indicates arrange of the common	Expedition to take the property of 18 property or 1	I would like to oce coordination bets becally to get such to Arreads the fail
it is inconstrator focusly to have from the modern allow from the modern allow from the modern pendually impacts surrough	Exec educators as flowing the ability to architect the floure of using these tools.	We should consider accreases for students and faculty who sternTraces	INSTANCE (SURE 1231) III INSTANCE SURE IN HELD SURE INSTANCES (STANCE (ACCOUNTS SURE INSTANCE) (ACCOUNTS SURE INSTANCE) (ACCOUNTS SURE INSTANCE)	Title the ability recrease or aug experiences
There autocounts with CFOs or Especially access who mans visit RR or All for the military.	I find it interesting to mix the use of VR and mix VR experiences.	it's an excend time to be in a ford vitice anything is possible.	We're in a time and field where if you have a great stee, you can build it.	One sisse is to soutly don't in where evelable them.
To ready auction to be an analysis and the design management type of places where anything is possible.	the heated office hours in IR with gapging on and students in the Harden wandpece	it's difficult to have to wast about your discipline and lie as opport with the took	its important for faculty to trave access to help	Once though are a troy from borth in where or new to standed with looks
Sudents have come as some some self and things their required even never observed of on my even.	Student numbers to a real cooling orders that can be noticed by the technology	Focusty are reluctant to explain NR scent due to their lack of familianty with it.	description Scalp is compercised the many does they are a mady shoetsting and their untermarty with the secti	Conodor mong gridle (if the oper to goe nowness) students.
The end goal is the learning, not the technology.	if preparation as in the stage on the stage of the stage	Esuggest histing could events to bring people into the hoy and learn about XX.	Bittly country and and dependent manufactured or the protection of the protection of the second country and the pro- position.	Foculty may not to learn yet and new technolog
Don't be afraid to make learning experiences fun?	Parking may be bestare to learn about 30' tech because of its parking company	Facally are shapped for time as they need to conduct research for tenure.	Feculty deet understand how XR tech can benefit them.	I Sook what the sta- all easy kness at design and used it frame the technic

Terr as bootens Professor ship develops and spectral courses resided to health producing and specty.	Traditional Rooter Wondar's Unit sec Thirk a rightney set don't individue.	I can a Pro-Cover Associate and by our other XR and XR straps sharp personal life.	I utilized XXII perpensis like QR codes to enhance real life expensinces.	I have notices what Militance for
Experiensal learning through XR is important.	There a lot of expensesce creating and viceling with simulations.	I would note myself on a 3 in terms of familiarity with XR	Two never had any expensance with MR.	I'm premy femiliar with VR and AR.
The worker with the rights sensus twining incosts publish on a project before.	I betwee XR for education is firstless.	I use AR to capture students interest	All supplements becomes having annionalists to considerate and order and ordered	These tools should be embraced by if to be renovative
XR allows personal emotions to grow frough experiencing the environment.	Feority destriction how to text seeings VID sock sittles recong persons consultation.	transvetton in mountain is essential.	Education must except to changing sines and cochecages	Higher Education of Decorate extinct if or DOT'T EMBIGGO NON DOWNING NOT.
xit conneign in research and case coloction.	30 redes rearing and participating in research activities increasing an activities.	All pornerpy shead be enforced as a rold refler trans a resnetth that will bele constitute over companies.	Same Soutly are scared of XR AL and new technologies.	Por the most part, people are drawn to facthrology.
Support for feculty is definitely needed.	Faculty need technical excellents and considering on You'ld tenerage the tools for 60,000 or.	Faculty need to know how students are using XR tools	Faculty need to severage XR soots and admovaledge its edistance	People are aware of the tools but even't using there
Its espectal to have a physical space to expices and work with XR.	Cost is a profittible factor regarding XR usage.	We must establish clear guicelines on the capacity of the lab.	I need codition on Squitting our hater in soles fine our could like the our could like the specifically litting steaders	XX provides greater apportunity for connection
XR technology can be used to inspire empathy.	308 sectiology can help students understand the affective appeals of a situation.	Conjustice to have a conjustation with manufacture disciplinal end statistic organization how so see AS in my courses.	XR tech helps to ongage students.	I'm on board and ready to start using XR sect.
itie need a path and a clear vision to get faculty to utilize XR sech.	Persisting an assessment for source uppeyand characteristics and stronger and stronger and source and stronger and stronger and source and stronger	My wealers resemble section 2 consistency of consistency of accordance only people do what they be	I not retroduction rading at practice cases. decelerating and or ranking in one on, about charted.	I can use the present of XII boost on my experiences with simulations.
De need a clear path and vision to get lecuity on their way to utilizing XIX toch	A hope benefit of 78 tech o being size to process real one, recover mit read, or wan discover recome before that happens.	The good of my mode may resident is makened and no see if processors a revenue of the connection between the connection acceptance trades for my white beautiful processors acceptance to the connection of the co	Sinulations allow us to vitualize the unseen and shoor people why II notices.	Smutters has better semesters that can betters influence people after and electricities before
Legistics are to have supported aregular to develop a contemporary martinisms.	Procusy served to acknowledge that those tools crest	Faculty need to Tiguer (all how to leverage XR tech in oducation.	We must expect to how today's his mercure containing presented with characteristic decreases for a Nother	We must account to a today's learners are soneursing one could information (e.g., 1 today
ille can't roly solely on textbooks to educate today's learners.	Houring today's forming medition technolists couldn't be fairned from him they'be without experiencing reside.	Having the terriphoen will him advance for increased use of the two among flourly.	Howing students be reacted about the tech will also entice toculty to explore it.	Everyone arrows about the MIX
There's so much confusion around the offerent labs/spaces on campus.	We need to figure out how to property brand the 3 R lab.	the read to differentees the SIR left from the MIX and other labs on comput		





Initial Insights

Strengths

- Students are often innovative in their utilization of XR tech and enjoy using it
- Can start with simple
 XR tools that are
 widely available

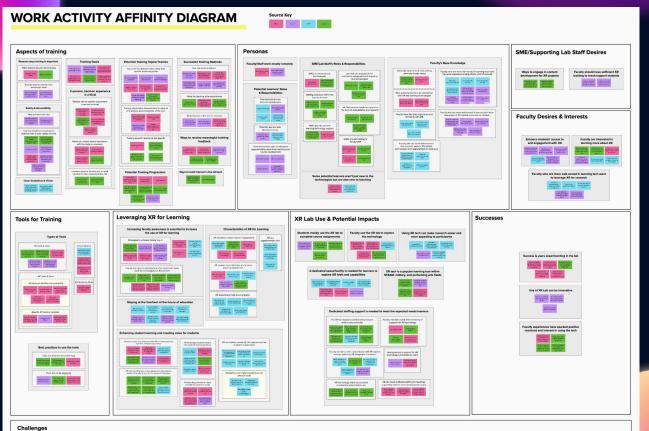
Challenges

- Wide range of faculty's familiarity with XR tech
- Many constraints to consider (e.g., cost, time, staffing)

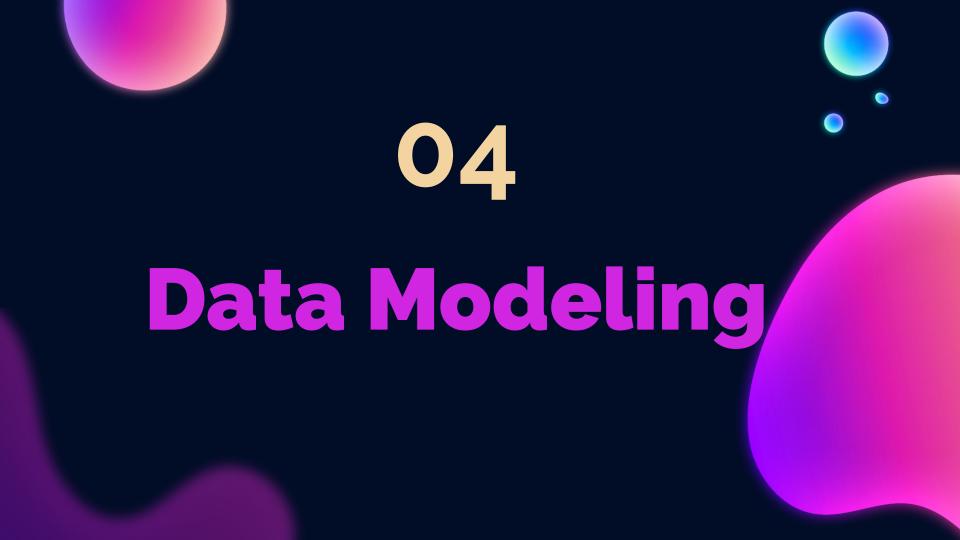
Opportunities

- Demonstrate value add to faculty
- Create fun and simple learning experiences
- Leverage remote elements to supplement in-person training



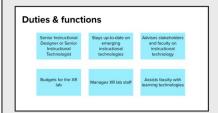






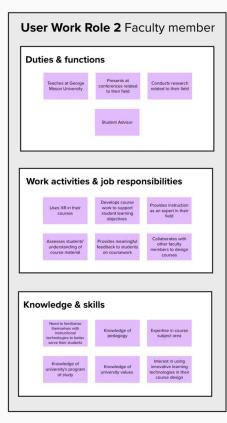
USER WORK ROLES

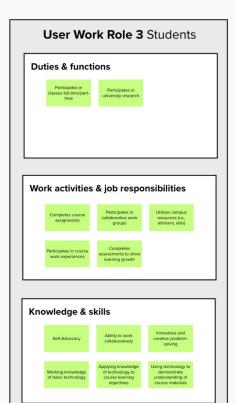
User Work Role 1 XR Lab SME



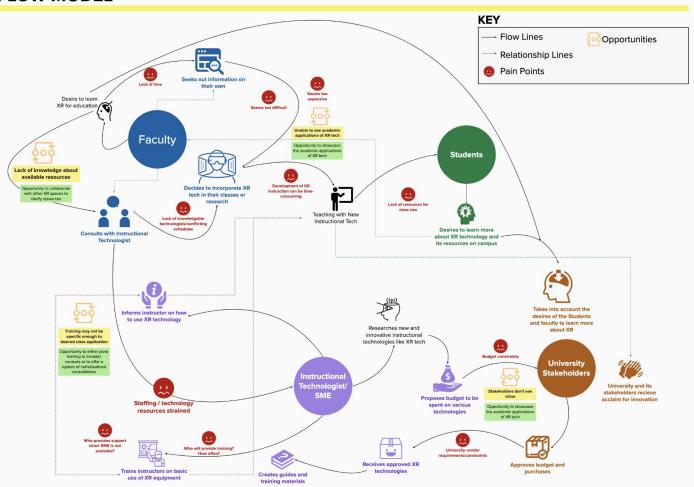








FLOW MODEL



05 User Stories

INITIAL BRAINSTORMING

Potential User Stories/Requirements

	experienced perienced)	Instructional Designers	Instructional Technologists (SME)	University Admins (Internal Stakeholders)	External Stakeholders	Students (Current)	Prospective Students
As a faculty member, I want to receive sufficient XR tech support so I can effectively teach.	As a faculty member, I want to know where I can send my students on campus so they can utilize XR resources.	As an instructional designer, I want to know if XR technologies are beneficial or detrimental to learning so that I can provide the best advice possible for our faculty members	As an instructional technologist, I want the resources and the space to teach faculty how to use cutting-edge instructional technology for more effective and engaging learning.	As an internal stakeholder, I would like to know how investments into XR technologies are providing benefit to the university so that I can feel confident in investments made towards XR for learning	As an external stakeholder, the successes of University use of XR further prove the university's commitment to innovation and learning	As a student, I want my instructor to be able to utilize new and emerging technologies so I can stay engaged in courses.	As a prospective student, I want to go to a university that supports innovative technology and learning so that I can feel more engaged with learning, and excited about learning goals
As a professor, I'd like to be able to consult with someone who can help my tailor the use of XR technology to my course.	As a faculty member, I want training to fit my already busy schedule so that I can be sure I have enough time to invest in learning a new technology	As an instructional designer, I want to know how these XR technologies align with learning theories so that I can properly suggest XR tech to interested faculty	As an instructional technologist, I want faculty to be able to utilize the lab with little guidance so that my time isn't solely taken up by aiding in basic XR usage	As a university admin, I want the university to be a leader in teaching and learning so that we can attract more students, funding, and recognition	As an external stakeholder, I want the university to receive acclaim to be able to attract more students.	As a student, I want to learn how to properly use XR technologies, so that I can successfully complete my course assignments.	As a prospective student, I want to be able to see other students successfully utilize XR technology to achieve their learning goals so that I might try to apply them to my personal learning goals
As a professor, I want the resources to be able to research specific use cases of XR technology on my own.	As a faculty member, I want to see my colleagues' successes with XR technology, which will inspire me to use it more in the classroom.		As an instructional technologist, I want to be able to support the volume of instructors wanting to use the space and learn so that I do not become overwhelmed				
As faculty member, I want to know how I can leverage XR resources for my students so that they can be engaged in learning	As a faculty member, I want to learn how to leverage XR tech in my courses, so that my students can learn more effectively.						
As a faculty member inexperienced with XR tech, I want to know how I can leverage the technology to enhance my students' learning experiences.							





User Story 1

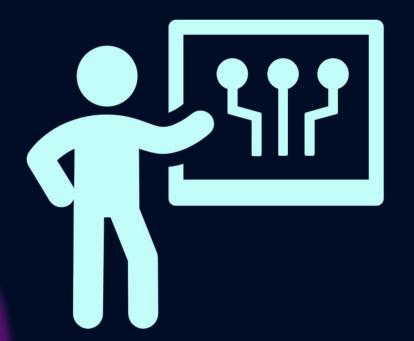
As a professor, I want training for XR technology to fit into my already busy schedule so that I don't have to sacrifice the quality of my teaching or research to learn a new technology.

User Story 2

As a professor, I want to be able to access support in the form of one-on-one consultations to tailor the use of XR towards appropriate course concepts and learning goals.



Instructional Technologists



User Story 3

As an instructional technologist, I want to be able to appropriately support the volume of instructors wanting to use the space and learn in a way that does not overwhelm my schedule and other commitments.

User Story 4

As an instructional technologist, I want to ensure training is easily accessible and requires little in-person guidance so I can enable faculty members to utilize XR on their own.



Students

User Story 5

As a current student, I want my instructor to utilize new and emerging technologies so I can engage more deeply in courses, and utilize it for creative problem-solving.

User Story 6

As a prospective student, I want to go to a university that supports XR technology so that I am able to leverage innovative skills in my personal goals and the workforce after graduation.





Stakeholders



User Story 7

As an external stakeholder, I want GMU to utilize and showcase XR technology to prove the university's commitment to innovation and learning.



User Story 8

As an internal stakeholder, I want the university to be a leader in teaching and learning so that we can attract more students, funding, and recognition.



Overall Insights



Key Design Requirements

- Faculty and Instructional Technologists have competing priorities with regard to how much individualized attention should be provided
- However, they agree that initial training shouldn't take much time away from their daily tasks

Additional Considerations

 Student and Stakeholder interests showcase potential motivating factors for faculty to learn and demonstrate their new skills in XR, and will inform some of our future training and faculty buy-in tactics



Thanks!

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