

Instructor's Guide

MARCH 2021



HOW TO IMPLEMENT A CVR ASSIGNMENT IN YOUR COURSE

The goal of the CVR program is to take an existing assignment with "traditional" outputs (e.g. essay, presentation) and adapt it into a Virtual Reality deliverable, while ensuring students achieve the same learning outcomes.

CVR program is meant to make assignments more engaging for students, allow them to use new technologies, and explore new ways of learning (outside of didactic teaching).

This book will guide you through adapting or creating a CVR assignment for your course.

It was created to be used in conjunction with the faculty development workshop, but it can be used as an independent resource.

This book will (1) suggest ways to effectively design an CVR assignment and (2) encourage you to complete a mini-assignment of your own. You can refer to the "Equipment Guide" document for instructions on how to use the VR equipment.



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Where to Start?

Starting from scratch can be daunting. It can be helpful to look at assignments you have already given your students and are comfortable assessing (grading?). It may only take a few minor tweaks to update a traditional assignment into a CVR one!

Take a look at your current syllabus and review your existing projects. Do any seem appropriate for a multi-media deliverable? Would any benefit from a refresh?

When adapting an existing project (or creating a new one - courageous instructor that you are!) consider the criteria below:



The **value** of the assignment.

Our suggestion: no less than 15% of the total grade



The **amount of time** given to complete the assignment

Our suggestion: no less than 5 weeks



Is it an individual or **group** assignment?

2-5 members

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The way in which the assignment is submitted or **evaluated**

*Our suggestion: a*n assignment that involves sharing with the entire class - either through presentation, or online posting



The **objectives of** the assignment

Our suggestion: groups between

Our suggestion: assignments that explore: spaces/environments/ events; skills-based learning; and empathy-building

VR allows users to take on new perspectives while providing the immersion necessary for embodied thinking, a key component of empathy



Remember, these are just suggestions, and there have been examples of successful projects outside these boundaries - so please do not let these limit your imagination!



Assignment Description

Now that you have selected an assignment to adapt, enter the description as it appears in your syllabus (or elsewhere if in greater detail) on the left. On the right, make notes about aspects or elements you know you will have to adapt in order to make it viable for CVR.



Here is an example of an assignment where the final deliverable is a report, and suggestions on how to change the description to meet the new requirements/ outcomes.

end of course means an ak	Example assignment description: eHealth 4320 HLST	
amount of time ←	final paper (20% of course grade)	
appropriate <	You will be expected form groups (3-4 students) and be assigned themes (eHealth domains based on the week of presentation/ submission) from which you will be responsible for selecting a specific topics (an eHealth solution/ application).	appropriate # of students
keep this as written - this could be made into a storyboard and have it due early in the semester so you have time to provide feedback	Group membership should be decided by the second week of the course, and groups need to submit a "project proposal" for approval via Moodle by 11:55pm on or before Jan 27 stating their chosen application and a brief explanation of how it relates to their assigned eHealth domain.	-> this could be done in front
think about providing a separate reference document, or include as credits at the end of the film	Final papers should: (1) describe the eHealth application, and its technical requirements/ elements in detail (2) how the selected e-solution has changed how healthcare is delivered and/or experienced (3) the strengths, weaknesses, opportunities, threats. Findings should be based on evidence provided through research studies and position papers by professional bodies (this will be reflected by referencing peer-reviewed articles). Critical reviews should address concepts learned in class; arguments and recommendations should be feasible. Submit your papers through Moodle and come prepared to present your project to the class.	of a camera most interesting to show in VR
	*Papers are generally submitted online and presented during the last class of the semester. You can do the same with CVR. It is best to have CVR projects viewed in a headset to take advantage	



of the medium!

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Assignment description

Notes (what you may need to adapt)



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Take the existing grading rubric you have designed for your traditional assignment and highlight the elements that may need to be updated. Consider including the following aspects:

- Ability to apply or abstract course content
- Make good use of the 360-medium
- Consider confidentiality and consent for filming

Here is an example of a grading rubric and suggestions on how to change it to meet the new requirements / outcomes.

Category	Expectation	Value	
Cover page	 Title, Class, Students name, Date Neatly finished – no errors 	5%	turn this into title & credits
Introduction	 The introduction is engaging Clearly states the paper's purpose (thesis/ topic), and "why we should care" and Previews the structure of the paper 	10%	might remove
Body	 Clearly describes findings from the literature and how it applies to the topic Concepts learned in class are appropriately covered Addresses emerging issues (e.g. ethics, sustainability, social determinants of health) Include as appropriate figures, graphs, and tables 	20%	might remove, can replace with appropriate "scenes" that convey the topic in a way that is easy to understand could be included in credits or as a separate document could be replaced with clarity of speech, flow, tone and volume
Discussion	 Provides critical commentary of topics discussed in the paper Address issues/ questions raised in class Provides logical/ feasible recommendations Considers future area of study/ evaluation/ implementation/ interest 	24%	
Conclusion	Restate the purpose/ thesis/ topic andSummarizes most important points/ evidence	8%	
Citation & Bibliography	 Reference list and embedded citations are in the correct format with no errors. Include more than 10 major peer-reviewed articles. 	8% 4	
Peer-edited draft	 Append a peer-edited version of your paper. Track-changes should be visible	5%	
Mechanics	 No or few errors in grammar, punctuation, capitalization, and spelling 	10%	
Organization / Flow	 Writing demonstrates logical organization and subtle sequencing of ideas through well- developed paragraphs 	10%	
Total		100%	
	used to show as a waybe breach this int	a naflaation	

needs to change - maybe break this into reflection → notes and signed consent forms if people are visible in the film...



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Grading rubric elements

Percentage Value How can you address each element with CVR?



Past Student Submissions

Think about one successful, and one not-so-inspiring assignment that students have submitted in the past. Reflect on how you can adapt the CVR assignment to help maximize understanding and outcomes for students, and limit or avoid the potential for them to "miss-the-mark"



Example of successful assignment

What did you like? Could anything make it even better?

Example of assignment that needed improvement

What didn't work? What could be done to improve it?



Brainstorm Project Ideas

Now imagine yourself as a student in your class completing this assignment. Actually take yourself through the thought-process of coming up with a project idea using VR, and think about how it can achieve the learning objectives of the assignment.

Here is an example of an assignment: select an eHealth solution/ application and discuss how the selected e-solution has changed how healthcare is delivered and experienced.

IDEA 1

Introduction of Electronic Patient Records in Primary Care clinics.

Can be interesting to set up VR camera in a clinic (with consent) and use time-lapse function to capture two scenarios: how busy things were with paper files, and how calm they are now when assistants are at the computer - maybe less complaining about lost files... easily booking visits, or changing availability of doctor's schedules, sending prescriptions to the pharmacy and referrals to other clinics and noticing the void where the fax machine once sat.

IDEA 2

Type 1 diabetics keeping track of their daily lifestyle habits/ insulin levels in special smartphone application with Bluetooth enable monitor.

Could try to film it from "firstperson point-of-view" to help build empathy... experience of a person with diabetes, always needing to remember to log data in journal, even when out with friends, can be embarrassing... maybe consider filming from a lower height to reflect a child's perspective and then higher camera height to show the same event from the parent's perspective.

IDEA 3

Tracking of COVID transmissions and educating the public using Smartphone tracing and online, dynamic informational websites

This example is actually hard to represent with VR film.



Now create one for yourself: List some ideas - try to come up with at least 3 (You can later include this as a suggestion for your students):

IDEA 1

IDEA 2

IDEA 3



Project Timeline

Submitting projects on-time can be challenging for students. CVR projects may require even a little more planning in order to juggle elements outside of students' control (e.g. access to the filming location, access to editing software tools).

What better way to understand the difficulties students may face than by trying it yourself! Choose one of your three ideas you came up with and create a project timeline. Suggest weekly tasks to ensure you stay on track. (You can later provide this as an example to your students.)

	Here is an example of a five-week project timeline with	weekly tasks:
Week	Tasks	Member Responsible
1	 Brainstorm project ideas (have fun with this!) > Think about which are feasible to complete using VR > It can help to envision a preliminary storyboard 	Entire team
2	 Create your storyboard/ narrative and start the script Scout possible locations for filming 	Vlad is good at drawing
3	 Take a first stab at filming (remember the "Filming Tips" sheet!) Analyze what works and what doesn't with this medium Make note: What may you need to add to complete all aspects required for the project? Maybe some additional audio to convey parts of the story, or add narrative, music? Do you need to add title, credits (e.g. if you need to cite sources?) 	Eva to complete this by xx latest
4	 Continue/ complete filming (make any changes to location, lighting etc. identified in your initial attempts) Revisit the grading rubric and assignment requirements to make sure you are providing everything 	Lora promised to work on this ¬
5	 Finish editing Take a look at your magnificent work on Youtube, but also in a VR HMD Upload/ submit your assignment! 	



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Week

Tasks

Member Responsible



Experience VR!

It's your turn to try! Take the camera and tripod with you, and take notes on your experience. Remember to look at the filming tips page!

How long did it take you to set up?

What was fun?

What challenges did you face?

What do you wish you had known or done different?



Gather Feedback

Present your CVR project back to the faculty workshop attendees. It's best to share your work in the VR headset to get the full experience! Provide them with your grading rubric and see if your deliverable matched your assignment description and objectives.

Did the audience understand your VR film?

Did it achieve the learning objectives of the assignment?

Can they offer any suggestions to improve the assignment: e.g. clarity of description, level of detail in rubric?

Now that you have completed your very own CVR project, you should be better equipped to think about ways to improve the current assignment and other opportunities to incorporate VR into your course!

