



Training on 360 Virtual Reality (VR) Educator



Introduction:

This online training was jointly organised by the Commonwealth Educational Media Centre for Asia (CEMCA), New Delhi and HELP University (HU), Kuala Lumpur for the academics in the latter institution.

The concept paper for this training was drawn up by CEMCA with inputs from HU.

This training was in line with the HU's digital transformation and the adoption of innovative technology in teaching and learning (T &L). The use of virtual reality, augmented reality as well as gamification in teaching and learning are being given focus in the lead up to their implementation university-wide in mid-2022.

Objectives:

The following objectives were defined.

At the end of the training, the participants would be able to:

- Use effectively the flexible and portable VR education system that can be accessed through various devices.
- Create 360-degree learning content and share it with their students.
- Implement various game elements to enhance the learning experience.
- Teach learners to download and engage through the learning contents.

Participants

The online training was attended by 45 faculty members of HELP University. They come from a broad range of disciplines – from Business to Psychology, from A-Levels to Post-Grad School. The name list is appended in Appendix 1.

Training mode:

The training was carried out online and synchronous, i.e. face-to-face real time, using Microsoft Teams platform. Resource sharing and announcements have made use of the university's Learning Management System as well.

Training Report

HELP University Homepage Learning Resource Centre

Course sections

Participants

Badges

Grades

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360-degree Virtual Reality Educator Online Training (Aug 2021)

Dashboard My courses 360-degree Virtual Reality Educator Online Training (Aug 2021)

[Announcements](#)

[Training Schedule](#)

This shows the timetable for the 3-day training with the contents involved. Due to the 2.5 hour difference with New Delhi, our training times are either in the early or late afternoon Please take note of the time.

[Instructor's short biodata](#)

This is the biodata of Dr. Kaushal Kumar Bhagat who is our instructor in this training workshop.











[Pre-Workshop Survey](#)

Some of the announcements made in the LMS:

Announcements

General news and announcements

[Add a new topic](#)

Discussion	Started by	Last post ↓	Replies
☆ Post-Workshop Survey	 kok cheang - 28 Aug 2021	 kok cheang - 28 Aug 2021	0
☆ Due date for submission of your VR assignment	 kok cheang - 25 Aug 2021	 kok cheang - 25 Aug 2021	0
☆ Modified APK 2.0 Modifications List	 Aishika Das - 21 Aug 2021	 Aishika Das - 21 Aug 2021	0
☆ Modified APK YouTube Link	 Aishika Das - 21 Aug 2021	 Aishika Das - 21 Aug 2021	0
☆ Gentle Reminder: Pre-workshop Survey	 kok cheang - 19 Aug 2021	 kok cheang - 19 Aug 2021	0

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Sections in the LMS:

Day 1: Fri. 20 August 2021

-  [360 VR Educator Manual](#)
-  [FAQ](#)
-  [Updated APK | 360 VR Educator](#)
-  [360 Educator | YouTube Tutorial](#)

Day 2: Sat. 21 August 2021

Please share your links for the content you have developed today (21/08/2021)

-  [Course Link Sheet](#)
-  [360 VR Educator | Modified APK 2.0](#)
-  [360 Educator | Modifications List](#)

Day 3: Sat. 28 August 2021

Please share your course link for the final assignment.

-  [Course Link Sheet](#)

Steps to share the course link:

Open the Application -> Login -> Click on the **Modify** button (Pen Icon) on top-right hand corner of the course created -> Click on **Share**. (You will be getting a message "Link successfully copied in Clipboard", validating the process). **Paste** the link in this Google Sheet.

Duration: 20 August to 28 August 2021

The training was spread over 3 sessions with 2 hours per session. Please refer to the schedule in Appendix 2. The first 2 sessions were held on consecutive days while the 3rd session was spaced out a week later to allow participants to try their hand at using the VR platform. An additional 2 hours was allocated for completing the workshop assignment between Day 2 and Day 3.

VR Assignment

Instructions to Participants: Design and develop a 360-degree VR content using 360 VR Educator. The participants are expected to use all the functionalities of the 360 VR Educator that were demonstrated on Day 1. The participants can choose the topic of their choice. Participants will be presenting their work during Day 3 (28/8/21). Give it a go. Get your feet wet!

Comments: The above assignment was successfully completed by 23 participants. Several of them were chosen to present their work during the Day 3 session. More would have completed if not for their work commitments and some technical problems. Dr. Kaushal and team gave unstinted off-site support via emails and through messages in a WhatsApp group set up specifically for this purpose.

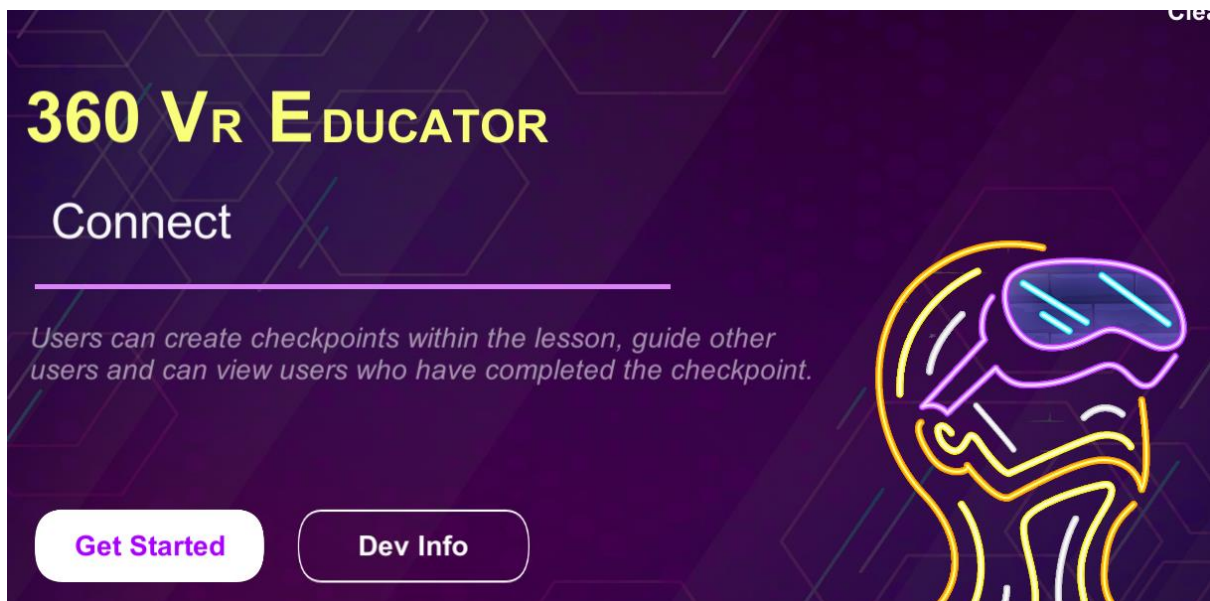
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The table below shows the participants who had submitted their assignments.

1	Name	Link for the Course Content
2	Iskandar	https://vr-49b1f.firebaseio.com/HELP University/V1JoUyeahKTZZ2sBDt0XlwIOrM63/MyCourses/-MhwZI-NH48yqcY9ztjm
3	Kanagambigai	https://vr-49b1f.firebaseio.com/HELP Academy/XQZEOl4t3jVJ1fgRK9vgQgK3VK32/MyCourses/-MhYXEG70i5CS80-CCiu
4	May Leen	https://vr-49b1f.firebaseio.com/HELP University/R9tKflPtoZVEsoS1xezwoXAIMgy2/MyCourses/-MhXVx1sg71eew1oEFnJ
5	Ernest	https://vr-49b1f.firebaseio.com/Help University/Mc0KfwPllkW3NsV7pYAROILXh742/MyCourses/-Mi-LdVFeEWaWlUJ40Nq
6	tinfah chung	https://vr-49b1f.firebaseio.com/HELP/dBygm5yMoxaXRN9ztSgdyK6SYIq2/MyCourses/-Mhbd6EVTX9voOC7u9IL
7	KC Loh	https://vr-49b1f.firebaseio.com/HELP University/UOAFvs05YkcorY2aAu9ReH5C3ac2/MyCourses/-MhYCUsglhEaf7CjOL
8	Pang HS	https://vr-49b1f.firebaseio.com/HELP University/M4WtsEaxaDN8e00qHjUueOtkcTA2/MyCourses/-Mhgr6ScFjC8ILNzQUh3
9	N. Siva Subramaniam	https://vr-49b1f.firebaseio.com/HELP University/M4WtsEaxaDN8e00qHjUueOtkcTA2/MyCourses/-Mhgr6ScFjC8ILNzQUh3
10	Li Fern	https://vr-49b1f.firebaseio.com/HELP University/esWt4oTFbMTbzvBPCfcbO20bY8s2/MyCourses/-MhXNhCcYOUSxbJ5_SIT
11	Anuar	https://vr-49b1f.firebaseio.com/HELP/w18DGfQFekOwJ01JmFballZPMPf1/MyCourses/-Mi0OmrV3D8hKX_vxB0s
12	Joyce	https://vr-49b1f.firebaseio.com/HELP University/6UV67aLb5HhMyVjoMwgYLYTPOSj2/MyCourses/-MhwW85VPdY2N0k_VaB4
13	Ze Wei	https://vr-49b1f.firebaseio.com/HELP University/9b9FYwbOvegWYX5SrxboxsKoxi2/MyCourses/-MhXFRosTPx9xgW0vGHY
14	Priyadarshini	https://vr-49b1f.firebaseio.com/HELP University/TeXv085L0aa4dabvGtOD2QDTAve2/MyCourses/-MhawsusVRx1yKVCDDk5
15	Harjeet Kaur	https://vr-49b1f.firebaseio.com/HELP University/0gKWKbku0gamr3zmi9VNA6tTQQf1/MyCourses/-MhbdGjNUN3UDzjnqOo
16	Prihadi Ditto Kususanto	https://bit.ly/3mlU9Xu
17	Bill Quah	https://vr-49b1f.firebaseio.com/HELP University/QGyUhuauS9S9qEaJ5au20iUs4Qs1/MyCourses/-Mha6cTFu3eO6mf1bDQf
18	Jamie	https://vr-49b1f.firebaseio.com/HELP University/MZnBfykWtAgvDJ7T3JkKkYgQtw2/MyCourses/-Mi4dpG7H07zk8FRYa27
19	Gopal	https://vr-49b1f.firebaseio.com/HELP/wqgSTdiePI0iHICY6mASjLgdh1/MyCourses/-Mi1bb_70SgJ-9aLJoKJ
20	Frankie Subon	https://vr-49b1f.firebaseio.com/HELP University/6D5Ak5srSsgKqnZGhsOZ0gEexD2/MyCourses/-Mi1gpZ700HfN6sUXmz4
21	Elis Johannes	https://vr-49b1f.firebaseio.com/HELP University/bvbjNGIRZWzYngnfyCJfn4ubXT2/MyCourses/-MhbE8rNAls8zyJjYaot
22	Vignes	https://vr-49b1f.firebaseio.com/HELP University/2wjjH7lwMhM6Yic5o7L9v7Ly1Pg2/MyCourses/-MhY91c74E7VAOESIVF
23	Sylvia Ng	https://vr-49b1f.firebaseio.com/Help/BanChhmbfbvAFx3JkbpTcnFyk1/MyCourses/
24	K Chandran	https://vr-49b1f.firebaseio.com/HELP Uni/80syK8gYnBbZp0yJHls2s3b1S53/MyCourses/-MiHnSIF1jNUhZBGuxA1

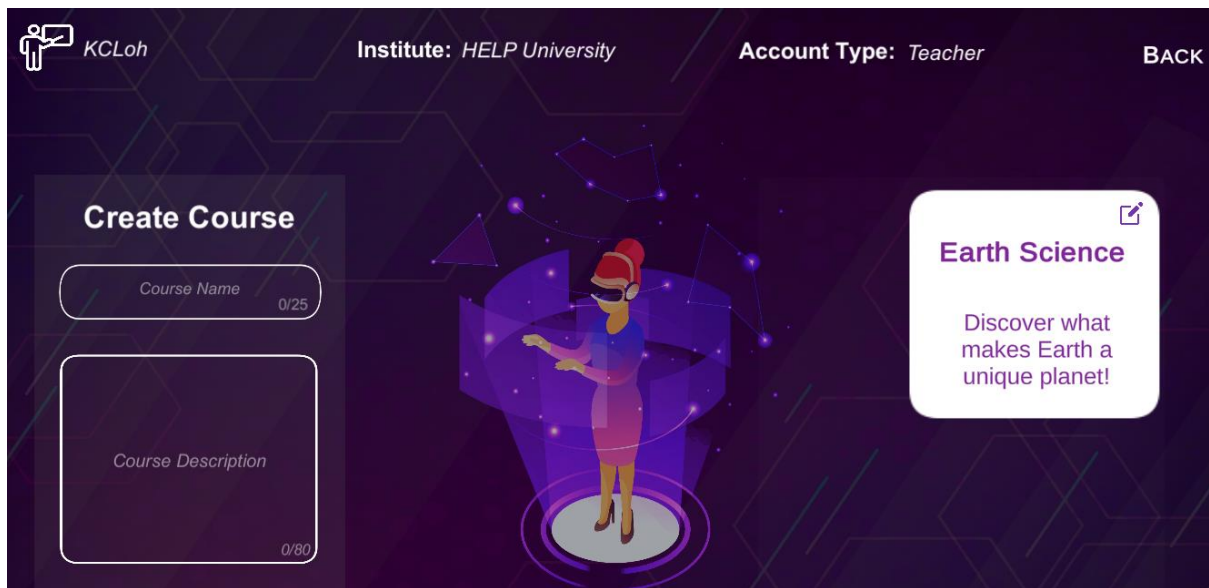
Some screenshots of the VR assignments:

Opening screen:



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Landing page:



Lesson page:



Chapter page:

The media used is a 360-degree image, and viewers can rotate to see all around the image to obtain an immersive feel to it.

There are added elements comprising: (1) panels, (2) audios, and (3) portals.

See the screenshots below illustrating elements such as:

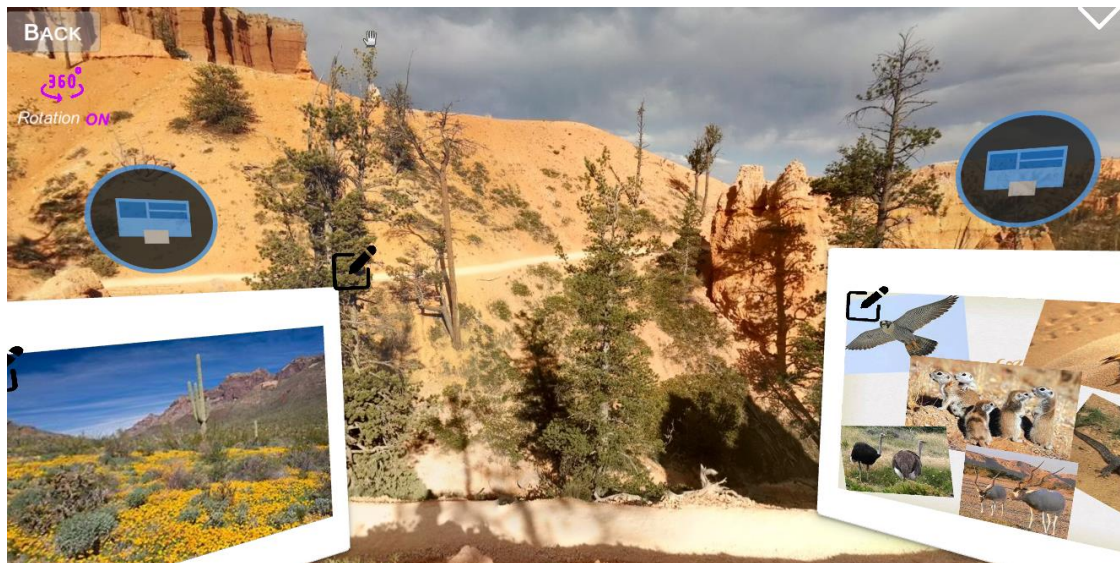
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(1) Panel element

- Panel with text and buttons – use for quizzes
- Panel with text only – use to provide information or interesting facts



- Panel with images: additional illustrations



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Audio element (presently can only support audio files in .ogg format).



Portal element (door symbol) – allows users to move between chapters.



Summary:

This workshop with its 360-degree VR platform has been a good introduction to the use of virtual reality in T & L for the university's academics. It preps the faculties to consider using VR in the wider context of teaching and affords an appreciation for its potential in providing an immersive experience for our students.

Evaluation Analysis: Feedbacks

At the end of the 3-day workshop, an evaluation and feedback form was distributed to the participants. The analysis is appended in a separate Excel file together with this document as Appendix 3.

Feedbacks are useful and are an integral part of any programme meant for its improvements. We sincerely hope that the participant comments and evaluations can provide constructive feedbacks to the developers of this VR platform.

Acknowledgements:

HELP University would like to acknowledge the valuable support and motivation given by CEMCA, New Delhi, especially its Director, Prof. Madhu Parhar, and its SPO, Dr. Manas Ranjan Panigrahi in drawing up the concept paper, identifying the resource person and implementing this training. They have been a source of strength in the series of training related to the university's transformation to online teaching and learning.

The university is indebted to Dr. Kaushal Kumar Bhagat and his team from the Indian Institute of Technology (IIT), Kharagpur, India; without them this workshop would not be possible. They have been generous in sharing their expertise and their time with the participants. Many thanks to the team members assisting in this training course, viz. Aparna Sakshi (aparnasakshi912@gmail.com), Shalini Toluchuri (shalu81092@gmail.com) and Aishika Das (1905444@kiit.ac.in).

This report prepared by

LOH KOK CHEANG
Director,
Centre for Learning & Teaching,
HELP University, KUALA LUMPUR.

Date: 7 Sept 2021

TRAINING: THE 360-DEGREE VR EDUCATOR**LIST OF CONFIRMED PARTICIPANTS**

NO.	DEPT	NAME	EMAIL @help.edu.my	NOTE
1	A LEVELS	Anuar Shamsudin	anuar	
2	A LEVELS	Aw Seng Hong	awsh	
3	A LEVELS	Jaslinder Kaur Dhillon	jaslinkd	
4	A LEVELS	Kanagambigai	kanagam	
5	A LEVELS	Pang Huey Shen	panghs	
6	ACC	Gopal Krishna a/l Veeriah	gopal	
7	ACC	Mohd Jamil b Jelani	m.jelani	
8	ACC	Chithra Latha	chithlr	
9	BUSINESS	Leu Fong Yuan	leufy	
10	BUSINESS	Liew Huey Min	liewhm	
11	BUSINESS	Lim Kok Seng	ernest.lim	
12	BUSINESS	Ooi Kok Kee	ooi.kok.kee	
13	BUSINESS	Simon Lim	simon.lim	
14	BUSINESS	Vignes a/l Gopal	vignes	
15	BUSINESS	K. Chandran	k.chandran	
16	BUSINESS	Harjeet Kaur	harjeetkjs	
17	CAREERSENSE	Tong Li Fern	tong.lf	
18	EDUC	Elis Johanes	elisj	
19	EDUC	Priyadarshini	priyadarshini	
20	EDUC	Sylvia Ng Poh Yoke	sylvia.ng	
21	ELMGS	Chung Tin Fah	chungtf	
22	ELMGS	Yan Huey Jiu	yan.hj	
23	HMC	Iskandar Dzulkarnain	iskandar.dzulkarnain	
24	HMC	Dharminder Singh	dharminderds	
25	HMC	Yu May Leen	yuml	
26	HMC	William Qualbert Quah	quahsb	
27	HMC	Siva Subramaniam	sivasm	
28	ICT	Abdul Qayoom	abdul.qayoom	
29	ICT	Fong Pui Kwan	fong.pk	
30	ICT	Naline Shanmugam	nalines	
31	LANG	Anne Beatrice	anne.b	
32	LANG	Frankie Subon	frankie.s	
33	MARKETING	Chang Te Hua	jerry.chang	Executive
34	MGT STUD	Joel Guprit Singh	joelgs	
35	MGT STUD	Renee Pramila	renne	
36	MGT STUD	Vikneswari	k.vikneswari	
37	PROVC	Gerard Louis	gerardjl	ProVC
38	PSY	Goo Lyann	lyann	Tutor
39	PSY	Ng Hui Wen	jamie.ng	Tutor

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40	PSY	Prihadi	prihadi.k	
41	PSY	Tan Ze Wei	zeweit	
42	SHOT	Hairul Hisam	hairul.hisam	
43	UOL	Choo Yeong Khong	yk.choo	
44	UOL	Kew Pei Ling, MarilyN	kewpl	
45	CORP	Leyla Tajer	leyla.t	

ABBREVIATIONS	
ACC	Accounting & Finance
EDUC	Education
ELMGS	Entrepreneurship, Leadership & Management Grad School
HMC	HELP Matriculation Centre
LANG	Languages
MGT STUD	Management Studies
PSY	Psychology
SHOT	School of Hospitality & Tourism
UOL	University of London Programmes

360-degree Virtual Reality Educator Workshop Schedule:

S. No	Date/Session	Time MST	Activity	Outcome
Day 1 (Friday, 20 August 2021)				
2.00 pm – 4.00 pm				
1	Inauguration	02:00pm to 02:20pm	<p>Introduction of Resource Person by: Dr. Manas Ranjan Panigrahi, SPO, CEMCA</p> <p>Welcome address by: Prof. Andy Liew, DVC HELP University</p> <p>Address by: Prof. Madhu Parhar, Director, CEMCA</p> <p>Address by: Prof. Paul Chan, VC HELP University</p>	
2	Session 1	02:20pm to 02:40pm	<p>Use of VR in teaching and learning</p> <p>Concept of 360-degree VR educator</p>	<p>Describe the importance of VR in the changing scenario.</p> <p>Explain the use of 360-degree VR.</p>
3	Session 2	02:40pm to 03:30pm	Demonstration 360-degree VR content/Course creation and Structure	Design and develop a content/course using 360-degree VR platform
4	Session 3	03:30pm to 04:00pm	<p>Q&A and Discussion</p> <p>Assignment to the participants</p>	<p>Discussion and reflections by the participants</p> <p>Content/course creation</p>
Day 2 (Saturday, 21 August 2021)				
12.00 pm – 2.00 pm				
5	Session 4	12:00pm to 01:00pm	<p>Show Case sample content/course using 360-degree VR platform.</p> <p>Connecting with Resource Persons</p>	Participants shared their work preparing at least one course/lessons.

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6	Session 5	01:00pm to 02:00pm	Interaction and Discussion Q&A and Discussion	Finalising the contents prepared by the participants
Day 3 (Saturday, 28 August 2021) 2.00 pm – 4.00 pm				
7	Session 6	02:00pm to 03:00pm	Presentation by the Participants and reflection by the Resource Persons	Presentation of the content
8	Session 7	03:00pm to 03:45pm	Q&A and Discussion	Discussion and reflections by the participants
9	Session 8	03:45pm to 04:00pm	Closing and Way Forward	Future Action Prepared

Title : **The 360-degree Virtual Reality Educator**
Date & Time : 20 August 2021, 2 PM - 4 PM
 21 August 2021, 12 PM - 2 PM
 28 August 2021, 2 PM - 4 PM
Instructor : Dr. Kaushal Kumar Bhagat, Indian Institute of Technology (IIT), Kharagpur, India

COURSE CONTENT		AVG	
1	THE COURSE MET THE STATED OBJECTIVES.	3.94	
2	THE COURSE HAS SIGNIFICANTLY INCREASED MY KNOWLEDGE AND UNDERSTANDING OF CONTENT, CONCEPTS AND PRINCIPLES.	3.75	
3	THE SUBJECT MATTER WAS WELL COVERED AND DISCUSSIONS WERE ADEQUATE.	3.92	
4	THE EXAMPLES PRESENTED WERE USEFUL AND HAVE HELPED TO ENHANCE MY UNDERSTANDING ON THE SUBJECT MATTER.	3.97	
5	THE COURSE IS RELEVANT TO MY WORK AND WILL ENHANCE MY PERFORMANCE.	3.19	
6	THE COURSE MATERIALS/MANUALS (INCLUDING JOB-AIDS, TEMPLATES, GLOSSARY OF TERMS, ETC.) WERE RELEVANT AND CONTRIBUTED TO THE ACHIEVEMENT OF LEARNING OBJECTIVES.	3.75	
COURSE TRAINER		AVG	
7	THE TRAINER(S) DID A GOOD JOB OF STATING THE OBJECTIVES AT THE BEGINNING OF THE TRAINING.	3.97	
8	THE TRAINER(S) MADE GOOD USE OF VISUAL AIDS (E.G. FLIP CHART, WHITE BOARDS, SLIDES).	4.08	
9	THE TRAINER(S) WAS GOOD AT KEEPING EVERYONE INTERESTED IN THE TOPIC.	3.72	
10	THE TRAINER(S) ENCOURAGES QUESTIONS AND PARTICIPATION FROM THE TRAINEES.	4.36	
11	THE TRAINER(S) MADE SURE THAT EVERYONE UNDERSTOOD THE CONCEPTS BEFORE MOVING ON TO THE NEXT TOPIC.	3.83	
12	THE TRAINER(S) SUMMARIZED IMPORTANT CONCEPTS BEFORE MOVING ON TO THE NEXT TOPIC.	3.67	
13. OVERALL, HOW WOULD YOU RATE THIS TRAINING?		EXCELLENT	9
		GOOD	17
		FAIR	6
		POOR	4
ADDITIONAL COMMENTS OR SUGGESTIONS:			
1	There are some issues with the program. It is a little frustrating using that.		
2	The product is still at its infant stage in comparison with other teaching tools. Perhaps, once all the features have been enhanced, then it may be suitable to be used.		
3	It would be better to use the app when it was already tested in this training, so it is more user friendly.		
4	This is an interesting training, however, not all ideas are applicable to my subjects. Also, more difficult to look for relevant VR materials for my subject which is business.		

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5	<p>The objectives were not clear, right from the start. I was led to believe it was a fully-fledged product but it actually was not a training but a user testing session on a developmental project. The trainers tried hard, but it was not to help trainees, but to enhance their product. The software was very buggy and not user-friendly. It does not address the needs of trainees, but to show-off what they had done, and "sell" a product that is not relevant to users. It is not appropriate for many subjects, particularly mine which is business, and aims to introduce a feature that appears to have a wow-factor but little substance for my use. Navigation is poor. Trainers are defensive of their product and though they try to assist trainees to work within their framework, it is not something that really enhance my course delivery but rather distract students from my teaching outcome.</p>
6	<p>The VR 360 Educator is a simple program to show how VR can be applied in teaching and learning. This tool is still in its development stage and obviously has many bugs. There are too many steps to follow in order to apply one simple feature in the program makes it difficult to use at times. They also have to improve on the user interface and to add more features in the program.</p>
7	<p>The platform used probably was still at the testing stage. It is not as user friendly as we thought it would be.</p>
8	<p>The 360 VR still in an experimental state. There are some areas need to be updated. Besides, not all subjects are suitable to use 360 VR in their teaching plan.</p>
9	<p>There are similar tools and application available why I should spend lots of time to learn to work with this application and present a very basic and low level work to my students. I can be more creative and use videos and slides and even available applications to help my student to learn the subject. I couldn't find any advantage for this application and training session.</p>
10	<p>Time and effort put in preparing the aid for student learning overweighs the benefits, in my opinion. However, good tool for induction set or break time work. The efforts of the presenter and his wonderful students, their detailing is remarkable.</p>
11	<p>Look forward for similar training sessions to enhance my knowledge of technology in teaching. Thank you for giving us this opportunity to learn the usage of VR technology in education. Truly appreciate the dedication and effort of the trainers.</p>
12	<p>The trainers are enthusiastic but the software used is poor, we were being used to test the software which has a lot of problems like not being to log in, size is wrong, and the panel used cannot key in the data despite numerous attempts to try.</p>
13	<p>The app should be tested against our system in HELP University. I was finding it hard as there were many technical issues I faced from the exercise. However, the team of trainer worked tirelessly to address the issue. However, my issue remains unresolved towards the end of the training.</p>
14	<p>Generally, well presented but for me I usually need a longer time to grasp and apply things that are new to me. Thank you for sharing.</p>
15	<p>This is more for the Uni. If 360 VR is the way forward - perhaps more investment on tools and other workshops on how to video and develop content for VR. And eventually making this part of the direction we would like to achieve so that learning is not forgotten. Anyhow kudos for exposing us to this technology!</p>

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The software they use seems so unstable, and the UI seems so user-UNfriendly. Not only that, but they have absolutely zero templates for our academic staff to build their classes, and are in fact told to build from scratch. The only materials they provide are 360 degree images and clickable icons seem so irrelevant to increase teaching capability.

And something XXX pointed out was that the students would probably have to load all this heavy content onto their devices for EACH LESSON. Although she brought it up during the Q&A, they simply said it won't take much bandwidth to load, which I highly doubt, to be honest.

Overall, we just feel like we're a beta test group that would provide them resources as they don't have the content to provide samples at all at the moment.