

▶ VIRAL SKILLS

UNIT 6: INTRODUCTION TO THE VIRAL SKILLS E-THEK



Funded by the
Erasmus+ Programme
of the European Union

Introduction To VR Software

- ▶ Virtual Reality is quite a powerful tool for learning and for putting knowledge into practice
- ▶ Large platforms such as Google, Facebook, and big technology companies like Lenovo, Samsung, Sony... have decided to work on giving access to VR in the classroom.
- ▶ Teachers and pedagogues are being trained in these new educational methods to make the most of them.



Unit 6: Viral Skills VR Applications

25 samples of VR applications have been taken. In a first filtering the selected VR applications have been catalogued and categorized according to:

- ▶ Content
- ▶ Interactivity
- ▶ Video content
- ▶ 360° scenes
- ▶ Self-creating experiences in VR.

Unit 6: Viral Skills E-THEK. VR Applications

Apart from the categorization described, each of them has been analyzed on the basis of the following parameters:

- ▶ Name of VR application
- ▶ Link
- ▶ Category
- ▶ Content
- ▶ Cost
- ▶ Ranking & Popularity
- ▶ VR-Headset Interactive
- ▶ Visualization/Experience
- ▶ Create Material/ Lessons
- ▶ Low-skilled/qualified learners

Unit 6: Viral Skills . VR Applications

Each organization should try and evaluate a minimum of 4 learning apps. For the selection of the VR apps, several parameters must be taken into account:

- ▶ Language: VR learning applications should be in English (many apps have different languages to choose).
- ▶ Cost: They should be free (some apps have a very low cost, and could be considered if worth being tested additionally)
- ▶ Target: They should be suitable for adults in general and specifically for low skilled/qualified adults

Unit 6: Viral Skills . VR Applications-Practice

We will then take a practical tour of the different VR applications selected, which will give an insight to each of them for the next phase. Observe, investigate, enjoy...

Various content:

- ▶ YOU TUBE VR: <https://www.youtube.com/watch?v=WsMjBMxpUTc>
- ▶ VR EDUCATION & LEARNING 360:
<https://play.google.com/store/apps/details?id=com.video.collection.playlist.vr.education.learn.kids&hl=es>
- ▶ CREATOR AVR: <https://www.youtube.com/watch?v=PXXssqbHuul>
- ▶ NYT VR: <https://www.youtube.com/watch?v=FYP95WJmW3o>
- ▶ COSPACES: <https://www.youtube.com/watch?v=zUR9i60zLo8>
- ▶ ARTE 360 VR: https://www.youtube.com/watch?v=AYI5Ay8FW_Y

Platform – Various content:

- ▶ UNIMERSIV: <https://www.youtube.com/watch?v=bCjWIPkJ19E>
- ▶ ENGAGE : <https://www.youtube.com/watch?v=N0Zxw9zdx1U>
- ▶ WHITHIN: https://www.youtube.com/watch?v=bQ_MxE_UVUU



Funded by the
Erasmus+ Programme
of the European Union

Unit 6: Viral Skills . VR Applications-Practice

World/Sites

- ▶ GOOGLE EXPEDITIONS: <https://www.youtube.com/watch?v=lw4T1WRSnig>
- ▶ GOOGLE EARTH VR: <https://www.youtube.com/watch?v=SCrkZOx5Q1M>
- ▶ WONDERS OF DE WORLD: https://www.youtube.com/watch?v=AhVhiq_n6Rk

Virtual museum

- ▶ GOOGLE ARTS & CULTURE: <https://www.youtube.com/watch?v=ln-SceumPII>
- ▶ SKETCHFAB : <https://www.youtube.com/watch?v=oedwL72p5ks>

Human body/anatomy:

- ▶ ANATOMY YOU: <https://www.youtube.com/watch?v=jDXbv1heTw0>

Mathematics /Chemistry:

- ▶ CALCFLOW: <https://www.youtube.com/watch?v=L-S7nP-ojqo>
- ▶ TIME TABLES
VR: https://www.youtube.com/watch?time_continue=11&v=8hfxsRbvZhw&feature=emb_title
- ▶ NANOME: <https://www.youtube.com/watch?v=gCNbuH9Y6hU>



Funded by the
Erasmus+ Programme
of the European Union

Unit 6: Viral Skills . VR Applications-Practice

Space:

- ▶ INTERNATIONAL SPACE STATION TOUR VR: <https://www.youtube.com/watch?v=vnPYvz2Lcdc>
: https://www.youtube.com/watch?v=Ae7P4N6lx_k
- ▶ TITANS OF SPACE: <https://www.youtube.com/watch?v=VHGwHffNQV0>
- ▶ BBC HOME A VR SPACEWALK : <https://www.youtube.com/watch?v=yj9dReMaZuE>

Language Learning:

- ▶ MONDLY: LEARN LANGUAGESVR : <https://www.youtube.com/watch?v=KmSN3-KG6cg>
- ▶ VIRTUAL VOCAB: SPANISH IN VR;

Training:

- ▶ VIRTUAL SPEECH –VR COURSE: https://www.youtube.com/watch?v=l_H8AY1tcjg
: <https://www.youtube.com/watch?v=LwqgCiYqx0M>
- ▶ AMAZON SUMERIAN: <https://www.youtube.com/watch?v=D8OTzUZza7s>
<https://www.youtube.com/watch?v=oVSVvnu3del>
<https://www.youtube.com/watch?v=aFNa6DTrfKc>



Funded by the
Erasmus+ Programme
of the European Union

Unit 6: Viral Skills . VR Applications-Practice

Visual Impairment:

- ▶ NOTES ON BLINDNES : <https://www.youtube.com/watch?v=9ViF0GBt6fQ>

History. Second World War:

- ▶ ANNE FRANK HOUSE VR: <https://www.youtube.com/watch?v=HCFUuyi-lIc>

Sport, Music, Social Events:

- ▶ OCULUS VENUES : <https://www.youtube.com/watch?v=4HAaMVUr16g>
<https://www.youtube.com/watch?v=IKoVaYKjYNY>

Unit 6: Viral Skills E-THEK.

After the validation of the selection parameters, the corresponding E-THEK template is completed. For this purpose, a template (E-Thek) has been created to facilitate the collection of data and to draw the right conclusions

- ▶ The partners have used this template with each of the VR applications, all of them suitable for adult learners with low qualifications.
- ▶ The E-Thek is designed to analyze the VR Application, with its corresponding name and category.

Unit 6: Viral Skills E-THEK.

- ▶ Each partner has completed the technical framework, the key data of each VR application and its compatibility with the different VR hardware systems, operating systems and languages will be taken into account.
- ▶ As for the contents of the VR application, the partners have considered which learning content it provides and what the Learning Outcomes are after using it, based on: Knowledge, Skills, and Competences.
- ▶ the activities provided and whether they bring added value to low-skilled and low-qualified adult learners.
- ▶ A rating scale for the application has been included taking into account the application level, ease of use, gamification level as well as the pedagogic orientation and standards.
- ▶ The objective of the SWOT analysis, of the different selected VR applications, will facilitate the adaptation of each one of them to the most suitable student-teacher context.
- ▶ a set of standards/rules will be considered to improve or guide the learning through each of the VR applications.

Unit 6: Viral Skills E-THEK.

Thanks to the analysis (E-Thek) we can see one of the biggest advantages of using VR technology in the education area: the possibility of living impossible or almost impossible experiences

Unit 6:Viral Skills E-THEK. TEMPLATE

VR Application Profile																																	
Name of VR Application	<i>Here the name of the VR learning application will be included.</i>																																
Category	<i>Here the category name to which the VR application fits best will be included.</i>																																
Name of Partner	<i>Here the name of the responsible partner will be inserted.</i>	Date of processing	<i>Please include here the last date of processing this template.</i>																														
Technical Framework & Key Data	<p><i>Please indicate here the technical framework and key data by considering the following aspects:</i></p> <p>Software-Provider:..... Software-Developer:..... Version of app:.....</p> <p>Compatible VR hardware systems:</p> <table border="0"> <tr> <td><input type="checkbox"/> Google Cardboard</td> <td><input type="checkbox"/> Oculus Rift</td> </tr> <tr> <td><input type="checkbox"/> Google Daydream View</td> <td><input type="checkbox"/> Oculus Quest</td> </tr> <tr> <td><input type="checkbox"/> Lenovo Mirage Solo</td> <td><input type="checkbox"/> Samsung Gear VR</td> </tr> <tr> <td><input type="checkbox"/> Lenovo Explorer</td> <td><input type="checkbox"/> Samsung Odyssey</td> </tr> <tr> <td><input type="checkbox"/> HTC Vive Pro</td> <td><input type="checkbox"/> PlayStation VR</td> </tr> <tr> <td><input type="checkbox"/> HTC Vive</td> <td><input type="checkbox"/> Dell Visor</td> </tr> <tr> <td><input type="checkbox"/> Acer AH 101</td> <td><input type="checkbox"/> Other:.....</td> </tr> <tr> <td><input type="checkbox"/> Oculus Go</td> <td></td> </tr> </table> <p>Compatible operating systems</p> <table border="0"> <tr> <td><input type="checkbox"/> iOS</td> <td>Version:.....</td> </tr> <tr> <td><input type="checkbox"/> Android</td> <td>Version:.....</td> </tr> <tr> <td><input type="checkbox"/> Other:.....</td> <td></td> </tr> <tr> <td colspan="2">Version:.....</td> </tr> </table> <p>Languages available</p> <table border="0"> <tr> <td><input checked="" type="checkbox"/> English</td> <td><input type="checkbox"/> Italian</td> </tr> <tr> <td><input type="checkbox"/> Spanish</td> <td><input type="checkbox"/> Other:.....</td> </tr> <tr> <td><input type="checkbox"/> German</td> <td></td> </tr> </table>			<input type="checkbox"/> Google Cardboard	<input type="checkbox"/> Oculus Rift	<input type="checkbox"/> Google Daydream View	<input type="checkbox"/> Oculus Quest	<input type="checkbox"/> Lenovo Mirage Solo	<input type="checkbox"/> Samsung Gear VR	<input type="checkbox"/> Lenovo Explorer	<input type="checkbox"/> Samsung Odyssey	<input type="checkbox"/> HTC Vive Pro	<input type="checkbox"/> PlayStation VR	<input type="checkbox"/> HTC Vive	<input type="checkbox"/> Dell Visor	<input type="checkbox"/> Acer AH 101	<input type="checkbox"/> Other:.....	<input type="checkbox"/> Oculus Go		<input type="checkbox"/> iOS	Version:.....	<input type="checkbox"/> Android	Version:.....	<input type="checkbox"/> Other:.....		Version:.....		<input checked="" type="checkbox"/> English	<input type="checkbox"/> Italian	<input type="checkbox"/> Spanish	<input type="checkbox"/> Other:.....	<input type="checkbox"/> German	
<input type="checkbox"/> Google Cardboard	<input type="checkbox"/> Oculus Rift																																
<input type="checkbox"/> Google Daydream View	<input type="checkbox"/> Oculus Quest																																
<input type="checkbox"/> Lenovo Mirage Solo	<input type="checkbox"/> Samsung Gear VR																																
<input type="checkbox"/> Lenovo Explorer	<input type="checkbox"/> Samsung Odyssey																																
<input type="checkbox"/> HTC Vive Pro	<input type="checkbox"/> PlayStation VR																																
<input type="checkbox"/> HTC Vive	<input type="checkbox"/> Dell Visor																																
<input type="checkbox"/> Acer AH 101	<input type="checkbox"/> Other:.....																																
<input type="checkbox"/> Oculus Go																																	
<input type="checkbox"/> iOS	Version:.....																																
<input type="checkbox"/> Android	Version:.....																																
<input type="checkbox"/> Other:.....																																	
Version:.....																																	
<input checked="" type="checkbox"/> English	<input type="checkbox"/> Italian																																
<input type="checkbox"/> Spanish	<input type="checkbox"/> Other:.....																																
<input type="checkbox"/> German																																	

Learning Content	<i>Please indicate here the topic of the VR application. Example: Human Anatomy</i>
Learning Outcomes	<p><i>Please indicate learning outcomes that should be achieved after applying the software as specific as possible. What knowledge, skills and competences should be imparted by the VR learning software?</i></p> <p><i>Please use the following structure:</i></p> <p>Knowledge</p> <p><i>The adult learners will be able to :</i></p> <ul style="list-style-type: none"> • ... • ... • ... <p>Skills</p> <p><i>The adult learners will be able to :</i></p> <ul style="list-style-type: none"> • ... • ... • ... <p>Competences</p> <p><i>The adult learners will be able to :</i></p> <ul style="list-style-type: none"> • ... • ... • ... <p><i>For further support, take a look at Blooms taxonomy of learning outcomes</i></p> <ul style="list-style-type: none"> • http://carleton.ca/viceprovost/wp-content/uploads/blooms_taxonomy_930x695.jpg • https://weisenfeldj.files.wordpress.com/2011/08/image17.png <p><i>and the link below to differentiate between skills and competencies:</i></p> <ul style="list-style-type: none"> • https://www.talentalign.com/skills-vs-competencies-whats-the-difference/

Unit 6: Viral Skills E-THEK. TEMPLATE

Activities provided	<p>Please describe here briefly the activities provided by the VR learning application by answering the following question:</p> <p>How will the learning content be explored or the learning outcomes achieved?</p>																				
Added value for low-skilled/-qualified adults	<p>Please describe briefly why this software provides special benefits/added value in work with low-skilled/qualified adults.</p> <p>For support have a look at</p> <ul style="list-style-type: none"> the definition of low-skilled/qualified learners provided in the Work Plan of IO2 on page 3, the document "IO2_Elaboration on low-skilled and low-qualified learners_Short profiles" on Google Drive and the information gathered about the target group during desk research in context of the Pedagogic Part 																				
SWOT analysis	<p>Please rate your VR application in the scale below in terms of the following aspects as objective as possible:</p> <table border="0"> <tr> <td>• User-friendliness</td> <td>1 <input type="checkbox"/></td> <td>2 <input type="checkbox"/></td> <td>3 <input type="checkbox"/></td> <td>4 <input type="checkbox"/></td> </tr> <tr> <td>• Pedagogic orientation and standards</td> <td>1 <input type="checkbox"/></td> <td>2 <input type="checkbox"/></td> <td>3 <input type="checkbox"/></td> <td>4 <input type="checkbox"/></td> </tr> <tr> <td>• Applicability level</td> <td>1 <input type="checkbox"/></td> <td>2 <input type="checkbox"/></td> <td>3 <input type="checkbox"/></td> <td>4 <input type="checkbox"/></td> </tr> <tr> <td>• Gamification level</td> <td>1 <input type="checkbox"/></td> <td>2 <input type="checkbox"/></td> <td>3 <input type="checkbox"/></td> <td>4 <input type="checkbox"/></td> </tr> </table> <p>*1...very poor/low; 2...poor/low; 3...OK/medium; 4...good/high; 5...very good/high</p>	• User-friendliness	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	• Pedagogic orientation and standards	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	• Applicability level	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	• Gamification level	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
• User-friendliness	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>																	
• Pedagogic orientation and standards	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>																	
• Applicability level	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>																	
• Gamification level	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>																	

	<p>Furthermore please indicate three internal strengths and weaknesses and three external opportunities and threats of the VR application, which the users should know about. Insert them in the grid below:</p> <table border="1"> <thead> <tr> <th>STRENGTHS</th> <th>WEAKNESSES</th> </tr> </thead> <tbody> <tr> <td>• ...</td> <td>• ...</td> </tr> <tr> <td>• ...</td> <td>• ...</td> </tr> <tr> <td>• ...</td> <td>• ...</td> </tr> <tr> <th>OPPORTUNITIES</th> <th>THREATS</th> </tr> <tr> <td>• ...</td> <td>• ...</td> </tr> <tr> <td>• ...</td> <td>• ...</td> </tr> <tr> <td>• ...</td> <td>• ...</td> </tr> </tbody> </table>	STRENGTHS	WEAKNESSES	• ...	• ...	• ...	• ...	• ...	• ...	OPPORTUNITIES	THREATS	• ...	• ...	• ...	• ...	• ...	• ...
STRENGTHS	WEAKNESSES																
• ...	• ...																
• ...	• ...																
• ...	• ...																
OPPORTUNITIES	THREATS																
• ...	• ...																
• ...	• ...																
• ...	• ...																
Ideal application /utilization	<p>Please recommend on how to apply best the described VR learning software by considering the following aspects and questions:</p> <ul style="list-style-type: none"> Context of ideal application →In which context would the utilization of the VR application make particularly sense? E.g.: in medical training Please indicate the context here. Instructions for preparation →What particular preparations have to be made when planning to apply this VR learning software in the context indicated above? E.g.: Does the application of the app need any specific preparations e.g. space for the learner to move, a chair, etc.? (see also Minutes of 3rd Partner-Meeting in Trim) 																

Unit 6: Viral Skills E-THEK. TEMPLATE

*Is it necessary to give some relevant information about the learning subject before the application of the software so that learners can just practice/experience what they have just heard?
Will learners need some additional information about the content of the app in advance so that learning can be fruitful?
Should the application of the software be embedded in a specific learning setting so that the app can contribute best to the learning success?
Should educators define tasks and learning objectives or give instructions in advance?
Etc.*

Please give here instructions and recommendations for adult educators.

- **Instructions for mentoring**

*→What has to be considered when mentoring the utilization of the described VR software?
E.g. Is it necessary that educator set learning objectives to support the learning success?
Would it make sense to give feedback on the learning process or discuss experiences afterwards alone with the learner/in a group?
Should the app be used in a setting with one learner or in a group?
Are there any rules or guidelines, the adult educator should share with the adult learners?
Etc.*

Please give here instructions for adult educators.

For support consider the following questions:

- *What information should be given to adult learners by the adult educator before the application of the VR software?*

- *What does the adult educator do during the application?*
- *(How) can the adult educator assist/help the adult learners?*
- *Are there any rules or guidelines, the adult educator should share with the adult learners?*
- *Should there be a discussion afterwards or the possibility to give feedback?*
- *Etc.*

- **Do's and don'ts**

→What else has to be considered when applying the VR learning software? Do you have any further advice and tips for the adult educator? Please give here recommendations on do's and don'ts.

For further support, also take a look at the information gathered during desk research in context of the Pedagogic Part. Some of the information gathered for recommendations on the setup of VR training courses might be helpful.

TESTING SESSION 1. GOOGLE EARTH VR: <https://arvr.google.com/earth/>

Each participant will try to visualize the locations and monuments chosen as World Heritage Sites by UNESCO in Europe.



Funded by the
Erasmus+ Programme
of the European Union

TESTING SESSION 2.WITHIN

VR: <https://www.with.in/>

Practice 1: CNN: Iceland is Melting.

Fly over Iceland's most famous natural wonders and discover how climate change could make it all disappear.



Funded by the
Erasmus+ Programme
of the European Union

TESTING SESSION 2.WITHIN VR

Practice 2: CNN: Toro Bravo.

Every year, thousands of amateur daredevils flock to Pamplona in the hopes of coming face-to-face with Toro Bravo – the Spanish Fighting Bull. Now, witness Spain's intense and controversial spectacle, Running of the Bulls, up close like



Funded by the
Erasmus+ Programme
of the European Union