

# Virtual Reality Against Public Speaking phobias Multiplier Events - Portugal



[Virtual reality simulator against public speaking phobia - Associação Raquel Lombardi \(associacaoraquellombardi.com\)](http://associacaoraquellombardi.com)

The fear of speaking in public is one of the most common phobias felt by human beings. Standing in front of an audience and speaking, while all eyes are on the speaker causes anxiety.

Link inscrição

[Registration for the Event: Virtual Reality Against Public Speaking Phobias - google.com\)](https://www.google.com)



Co-funded by the  
Erasmus+ Programme  
of the European Union

From this need, is born the European Project Erasmus + "Virtual Reality simulator against Public Speaking Phobia" 2020-1-PT01-KA202-078436 whose coordination is in charge of Raquel Lombardi Cultural and Social Solidarity Association, in partnership with other 5 partners, namely SC Psihoforworld (Romania), International Institute of Applied Psychology and Human Sciences (Italy), Youth Entrepreneurship Club (Greece), Gazi Universitesi (Turkey), AIJU (Spain).

This innovative European project, relies on the use of virtual reality to combat the phobia of public speaking in groups of professionals such as teachers, trainers, students, psychologists and others. The Virtual Reality will introduce the participant to a simulation of public speaking and evaluate the behaviour in real time, thus encouraging the participant to speak effectively in public.

The application can be downloaded from the Play Store (Android) and you will still need some Virtual Reality glasses adapted to your smartphone (which you can find for sale online, at a very affordable price). The Virtual Glasses have a wide range of prices that depend on the quality and brand. The minimum price is 15 euros.



## IO3 - VR Training for Public Speaking

The VR Training for Public Speaking will introduce the participant into a simulation of public speaking and evaluate the behavior on real time for encouraging the participant in effective public speaking.



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## VR Simulator

Virtual environments for the coming social phobia when public speaking.

# WHAT DOES IT INCLUDE?



## ENVIRONMENTS

- Creation of different environments (auditorium, theater, stage, etc.)
  - o Different sizes (from small (5/6 chairs to big 100 chairs)
- Creation of different levels of difficulty
  - Empty auditorium
  - Half-full auditorium
  - Full auditorium
  - People listening the speech
  - People talking, not listening
  - Etc.
- System evaluation of the speech.
- User auto-evaluation of the speech.



## RV KIT

- Based on Smartphone App
- Use of VR glasses
- App to be downloaded at Play Store (Android)
- Microphone sensor to evaluate the speech

# Technology that will be used

In order to achieve a wide implementation of this tool, at Schools, homes, etc., it has to be **cost affordable**.

That is why we have decided to make **use of already existing technology**, easy to find in the market, and already used by millions of people: **smartphones**. This Smartphone, in order to make possible the visualisation of VR environments, will be accompanied by **virtual reality glasses, in which the mobile phone is incorporated**.

The virtual glasses have a wide range of prices, depending on the quality and the brand. The one of the picture costs only 15€ and can be use with any modern smartphone. The cost is low because it does not include any electronic. The image is shown by the smartphone.

The use of this technology entails the following benefits:

- Foster attention. Virtual reality glasses immerse the user in a world isolated from the outside. With the use of this technology they can focus their attention without external visual stimulation.
- It is attractive. Nowadays, technologies capture the attention of young people. Everyone has a smartphone, app download, and share stories on social networks. The RV is a booming technology, with very good reception from those who try it.





### **Small auditorium**

The easiest level, for starters and high level of public speaking phobia



### **Medium auditorium**

The medium level, for amateur and medium level of public speaking phobia



### **Big auditorium**

The highest level, for experts and low level of public speaking phobia

### **Levels of difficulty**

**Empty  
Auditorium**

**Half-full  
auditorium**

**Full auditorium**

**Full auditorium  
People talking**



## Automatic System Evaluation

The system will **evaluate automatically the performance of the speech** through the following variables:

- **Visual contact with the public:** sensors of head movement (gyroscope)
- **Head movement:** evaluation of the user's head movements to detect stress situation (gyroscope)
- **Voice tone:** evaluation of the volume level of the speaker (microphone)
- **Duration of the speech:** evaluation of the speed when talking (microphone)

With these variables the system will define an score of the participant (always based on positive comments and feedback "well done, try again, you're improving, etc.)

## User self-evaluation

The system, after each activity, will **ask the speaker how he consider he had do the speech**. The following variables will be taken into account:

- **Self-evaluation** of how he/she have done it
- **Stress level**
- **Confidence level**
- **Final satisfaction**

This will **complete the information** obtained with the Automatic System Evaluation.

**Avatar** for providing suggestions and user guidance based on the results achieved after each activity. The avatar will provide suggestions for the variables of the evaluation with lower score, in order to improve specific aspects of the speech



## Project Results

Manual (Output 1)

[Manuals Virtual Reality Simulator Against Speaking Public Phobia \(associacaoraquellombardi.com\)](http://associacaoraquellombardi.com)

Output 2

E-learning Plataform

<https://publicspeakingphobia.aiju.info/>

Output 3

VR Training for  
Public Speaking

[SpeakingPhobia \(1\).apk - Google Drive](#)

## VRAPSP in Portugal

The use of virtual reality as a therapeutic tool to combat the phobia of speaking in public is an approach that has been gaining more and more supporters around the world, including Portugal. Through the simulation of scenarios that reproduce real situations in which the patient may face the fear of speaking in public, virtual reality allows the individual to develop skills and competences necessary to deal with this phobia in a safe and controlled way. For example, it is possible to simulate a work presentation, a speech or a class, with the advantage that the patient can practice repeatedly until they feel confident enough to deal with the situation in real life.

There are several clinics and therapy centres in Portugal that already offer virtual reality-based treatments for phobias, including the phobia of speaking in public. However, it is important that the patient is accompanied by a professional specialised in behavioural and cognitive therapy, who can guide and monitor the treatment in an appropriate and personalised way.

In short, the use of virtual reality as a therapeutic tool may be a promising approach to help people overcome public speaking phobia in Portugal and worldwide.

Unfortunately, there is no specific data available on the use of virtual reality to combat public speaking phobia in Portugal. However, we can observe that virtual reality therapy has been increasingly used in Portugal to treat a wide variety of phobias and anxiety disorders.

According to a 2020 study conducted by the Portuguese Society of Psychiatry and Mental Health, virtual reality therapy has been used in Portugal mainly to treat specific phobias, post-traumatic stress disorder and anxiety disorders. The study also highlighted that virtual reality therapy can be an effective therapeutic tool, especially for patients who do not respond well to conventional therapy. In addition, a survey conducted in 2021 by consultancy PwC Portugal in partnership with the Portuguese Catholic University showed that the pandemic has increased the demand for mental health services in Portugal. According to the study, 25% of Portuguese reported having suffered with some kind of mental health problem during the pandemic.

Although there is no specific data on the use of virtual reality therapy to treat public speaking phobia in Portugal, it is possible to state that virtual reality therapy has been increasingly recognised as an effective therapeutic approach for a variety of mental disorders, including phobias and anxiety disorders.

The use of virtual reality and e-learning platforms to combat public speaking phobias in vocational and professional education can have a significant positive impact on students in Portugal like:

### Increased Competence

By using the VR app simulator and e-learning platform, vocational and professional education students can develop the competencies necessary to deliver effective presentations and communicate effectively in public. The use of virtual reality allows students to practice in a safe and controlled environment, receiving feedback and guidance to improve their skills.

## Improved Learning Outcomes

The immersive and interactive nature of the VR app simulator and e-learning platform can provide students with an engaging and effective learning experience. By using technology to provide personalized and adaptive learning, students can better retain information and improve their academic performance.

## Reduced Negative Outcomes

Public speaking phobia can have a negative impact on a student's academic and professional success, leading to missed opportunities and decreased career advancement. The project can help students overcome their phobia, leading to reduced negative outcomes and an improved quality of life.



## Increased Accessibility

The use of virtual reality and e-learning platforms can increase access to public speaking training and resources for vocational and professional education students across Portugal. This can help ensure that all students have the opportunity to develop the necessary skills to succeed in their careers.

## **Virtual reality system as an innovative**

### **Method for teaching professions**

#### **Exposure therapy**

Virtual reality can be used to simulate public speaking scenarios, allowing learners to gradually expose themselves to different levels of stress and anxiety. This exposure therapy can help learners desensitize themselves to the fear of public speaking and develop confidence in their abilities.

#### **Feedback and coaching**

Virtual reality systems can provide instant feedback on learners' performance, such as their body language, tone of voice, and eye contact. This feedback can help learners identify areas for improvement and receive coaching on how to improve their public speaking skills.

## **Realistic simulations**

Virtual reality systems can create realistic simulations of different public speaking scenarios, such as giving a presentation to a large audience or participating in a panel discussion. These simulations can help learners prepare for real-world situations and develop their communication skills.

## **Customization**

Virtual reality systems can be customized to the specific needs of different professions, such as law, medicine, or business. This customization can provide learners with targeted training that is relevant to their profession and can help them develop the specific skills they need to succeed.

VR has the potential to transform learning and training methods by providing learners with immersive and engaging experiences. In Portugal, VR has been applied in various projects to enhance learning and training, and here are some experiences from these projects:

### **Medical training**

In Portugal, VR has been used to train medical students and professionals in complex surgical procedures. VR provides a safe environment for learners to practice procedures without the risk of harming patients, and allows learners to gain hands-on experience before performing procedures in real life.

## **Language learning**

VR has been used to provide language learners with immersive experiences that simulate real-life scenarios. Learners can practice speaking and listening skills in virtual environments, such as ordering food at a restaurant or having a conversation with a native speaker

## **Industrial training**

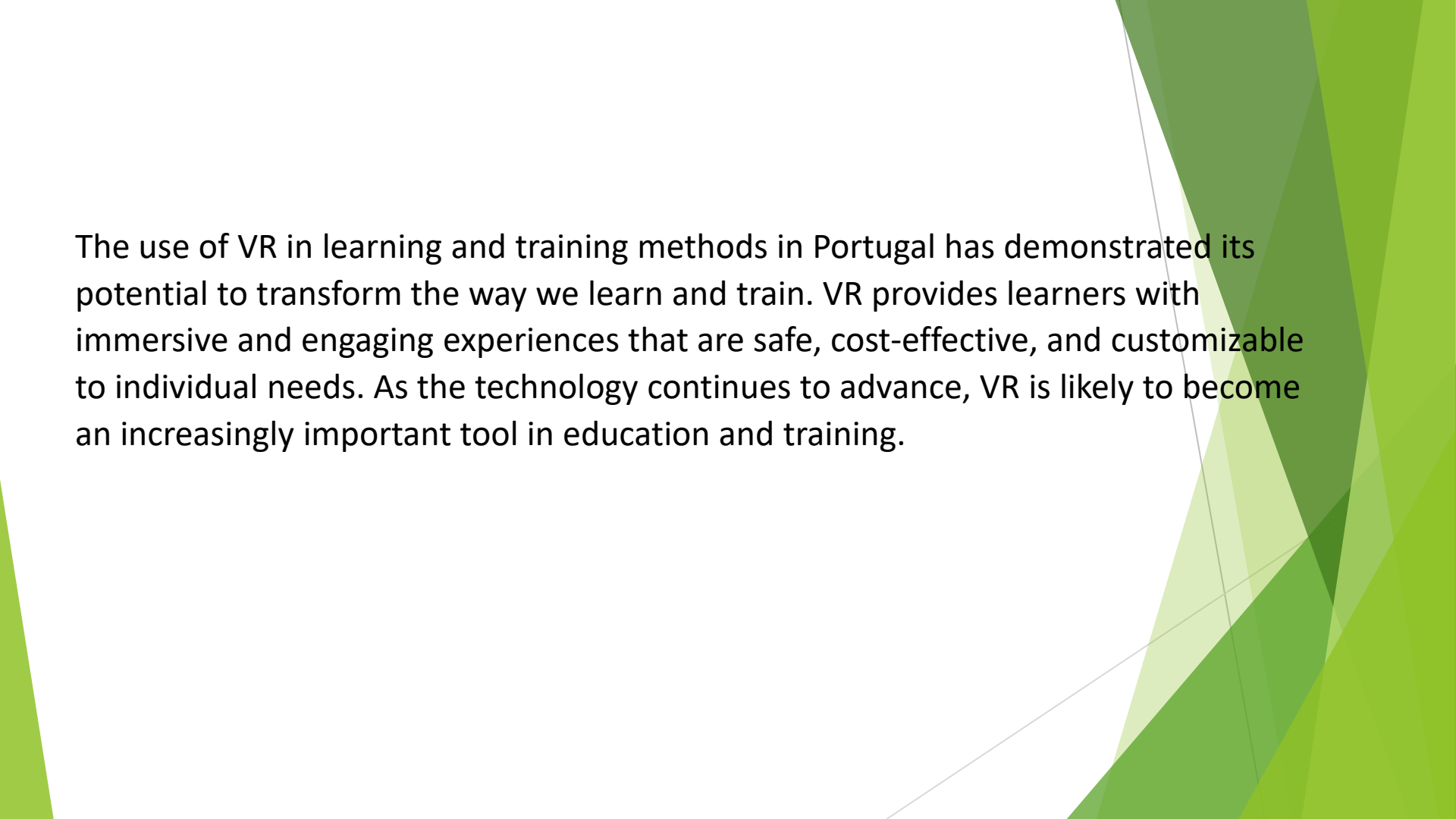
VR has been used to train workers in industries such as construction, manufacturing, and aviation. VR provides a safe environment for learners to practice skills and procedures that are difficult or dangerous to replicate in real life.

## **Cultural experiences**


VR has been used to provide learners with virtual visits to historical sites, museums, and cultural events. Learners can explore these environments at their own pace and gain a deeper understanding of the culture and history.

## **Soft skills training**

VR has been used to provide learners with training in soft skills such as leadership, communication, and teamwork. VR provides a safe environment for learners to practice these skills and receive feedback on their performance

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The use of VR in learning and training methods in Portugal has demonstrated its potential to transform the way we learn and train. VR provides learners with immersive and engaging experiences that are safe, cost-effective, and customizable to individual needs. As the technology continues to advance, VR is likely to become an increasingly important tool in education and training.

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Virtual reality system as an innovative  
method for teaching professions



Virtual reality (VR) systems offer a unique and innovative method for teaching professions. These systems provide learners with immersive and interactive experiences that allow them to practice and develop their skills in a safe and controlled environment. Here are some ways in which VR systems can be used as an innovative method for teaching professions.

## **Simulations**

VR systems can create realistic simulations of real-world scenarios, such as medical procedures, engineering designs, or emergency response situations. These simulations can provide learners with hands-on experience in a safe and controlled environment, allowing them to practice and refine their skills before applying them in real life.

## **Feedback**

VR systems can provide instant feedback on learners' performance, such as their body language, tone of voice, or decision-making skills. This feedback can help learners identify areas for improvement and receive coaching on how to improve their performance.

## **Customization**

VR systems can be customized to the specific needs of different professions, providing learners with targeted training that is relevant to their field. For example, VR systems can be used to train pilots in flight simulations or to train surgeons in virtual surgeries.

## **Collaboration**

VR systems can facilitate collaboration and teamwork among learners, allowing them to work together on complex projects or simulations. This collaboration can help learners develop their communication and leadership skills.

## **Cost-effective**

VR systems can be a cost-effective alternative to traditional training methods, as they eliminate the need for expensive equipment or materials. VR systems can also be used to train large groups of learners simultaneously, saving time and resources.

**VR systems provide a powerful tool for teaching professions, allowing learners to develop their skills and knowledge in a safe and engaging environment. As the technology continues to advance, VR is likely to become an increasingly important tool in professional education and training.**