



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.



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



VR Simulator

Virtual environments for the reduction of social phobia when public speaking.

WHAT DOES IT INCLUDE?



ENVIRONMENTS

- Creation of 3 different environments (auditorium, theater, stage, etc.)
- Creation of different levels of difficulty
 - Empty auditorium
 - Half-full auditorium
 - Full auditorium
- System evaluation of the speech



RV KIT

- Based on Smartphone App
- ANDROID Apk
- Use of Cardboards
- App to be downloaded at project website
- Microphone sensor to evaluate the speech
- Gyroscope to evaluate the head position of 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

EASY

MEDIUM

DIFFICULT

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)

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 OR **Voice Over** to guide the user during his/her speech

"Speak louder"
"Look at the audience"



Tasks distribution

- 1. User requirements:** definition of the objective to be achieved, the characteristics of the app, software and hardware needs, etc.
 - **Responsible:** SCP / **Participants:** IIAPHS and GAZI
- 2. Conceptualization of the App:** definition of the sensors to use and concept of the APP.
 - **Responsible:** AIJU
- 3. Storyline & Design of the Scenarios:** creation of the different scenarios (explained above) of the App. Elaboration of the scenarios based on the levels of difficulty. Definition of the parameters to evaluate.
 - **Responsible:** IIAPHS / **Participants:** SCP, LOMBARDI, YEC, GAZI
- 4. Technical Development of the APP and Scenarios:** programming the different scenarios and include them in the App
 - **Responsible:** AIJU
- 5. Creation of the Avatar/Voice Over:** an avatar will be created for the guidance of the user in the achievement of the goals.
 - **Responsible:** AIJU
- 6. Piloting, Satisfaction, Usability and Reporting:** Creation of a piloting methodology and data collection material. All partners will pilot the App and will create Satisfaction and Usability Reports.
 - **Responsible:** YEC / **Participants:** ALL (AIJU: only technical support)
- 7. Optimization:** based on the results of the piloting, improvement of the characteristics of the App.

