

WAVES - Widening access to virtual educational scenarios

"Have you already had previous experience in this field?", "Do you have the practical skills necessary for this job?"

Many young graduates hear these types of questions daily, during job interviews, and find it difficult to get a position because of their lack of experience in the field.

A significant number of them do not have practical experience during their studies and consequently struggle once they have to face the reality of the workplace. Sometimes, especially during internships, too much is expected and demanded of students and this can put their reliability and safety at risk.

This can be a serious problem in all kinds of work sectors but particularly in the sector of medicine and healthcare, where novice trainees can encounter real struggles if they have barely had any practical experiences during their studies.

Now, what if students or trainees were able to practice by applying learned information to a real-world task in a risk-free environment?

FROM SUBJECT-BASED TEACHING TO REAL SCENARIOS

The gap between learning and practical experience has recently been widening in Europe, especially in the field of medicine and healthcare, where students have been having fewer and fewer opportunities to experience contact with patients.

That is why Scenario-Based Learning (SBL) is being used to improve the students' understanding of the working world. SBL can be an important asset for learners as they can experience problem-based learning and compensate for the lack of practice.

However, opinions on SBL still divide the teaching communities. While some educators find it an efficient tool for learning, others are still sceptical and struggle to fit it into traditional learning platforms.

What is scenario-based learning?

Scenario-Based Learning (SBL), is an innovative teaching tool that is being increasingly used to complement subject-based teaching and lack of practical experience.

SBL relies on an "active learning" strategy that provides learners with a relatable and highly relevant learning experience since it applies **real-life situations**.

Thanks to SBL, learners can evaluate the situation, take decisions and face the consequences of their actions. Sometimes, also by learning from their mistakes.

That is where WAVES comes in! With the aim of **promoting and making virtual scenarios more accessible to a wide range of professions**, WAVES marks a turning point in the educational sector.

"WAVES" OF CHANGE

"WAVES – Widening access to virtual educational scenarios" is a Knowledge Alliance project funded by the ERASMUS+ Programme of the European Union. The alliance is composed of Higher Education Medical Institutions and businesses from the United Kingdom, Greece, Germany, Sweden and Czech Republic. Associate partners from all over the world also make up their network.

What are **Erasmus+ Knowledge Alliances**?

From 2014-2020 this initiative of the European Commission supported 158 international collaborations between partners from higher education institutions and businesses. Still, it is open to any sector and involves a wide range of stakeholders on all levels. These consortia bring their particular expertise together, amplifying innovation across their fields through collaboration by developing new and multidisciplinary teaching & learning approaches, providing entrepreneurial mindsets and relevant skills to participants, and stimulating knowledge exchange.

The fields of action are broad and include current topics such as ICT, (green) economy and sustainable energy, education, life sciences, societal challenges, etc.

In the end, the results of KAs strengthen Europe's innovation capacity in the form of novel curricula and study programs, open educational and e-learning resources, accelerators, hubs and start-ups, new products and prototypes.

The project lasted three years, from 2016 to 2018, and promoted SBL using virtual scenarios. The consortium successfully managed to make SBL more accessible and understandable to a wide teaching community. But how?

THE TOOLKITS

To meet its goals, the partners created two toolkits with different purposes.

The knowledge toolkit

The first toolkit is primarily directed at educators. Its objective is to promote virtual scenario creation and use. To do so, this toolkit contains a variety of tools such as tutorials, best practice recommendations, and examples that promote the VS technique.

In 2018, the consortium also launched an online course (MOOC) on how to use virtual scenarios to enhance effective learning. With over 8000 people enrolled, the course is having widespread success and very positive feedback in the teaching community. It is accessible on FutureLearn (<https://www.futurelearn.com/courses/virtual-scenario>).

The technical toolkit

The second toolkit provides changes or upgrades to existing virtual scenario systems to improve the accessibility for teachers and instructors. The aim of this kit is to support educators with a wide range of basic technical tools that enable the creation of virtual scenarios even without having specific technical skills.

The focus of the kit is on the improvement of two existing systems: OpenLabyrinth (<http://openlabyrinth.ca>) and CASUS (<http://www.instruct.eu/en/casus-software>). The first one is a web application that allows students to run through virtual scenarios by analysing and solving virtual patients' problems. The second one is an application that provides a rich series of tools to manage virtual scenarios, cases and users.

PROJECT SPREAD AND SUSTAINABILITY

Thanks to its stunning developments and results, WAVES is a successful story of how, by putting together brilliant minds from all over Europe, it is possible to contribute to making a real change in the Higher Education sector.

Due to their MOOC course and dissemination events, the WAVES network has grown during the three years of the project. The network's goal is to share best practices, form

new collaborations, and engage on research initiatives beyond the duration of the project.

With its wide community, WAVES has the right credentials to continue to improve the Higher Education sector and make scenario-based learning popular and accessible, with the ambition to see it employed by teachers and learners in Europe and beyond.

For further information on the Alliance, please consult the official website of WAVES:

www.wavesnetwork.eu