

## EVENT 2023

Workshop on the SAPIENS tool for potential users at the Universidad Loyola, Campus Sevilla. 15/03/2023.

In this workshop, teachers from secondary schools had the opportunity to meet and learn the SAPIENS guidelines and toolkit.

If you are interested in using the tool, please feel free to contact us. We can certainly give you helpful tips and organize a workshop with you.

Stay updated via our website. Get in quick!

<https://sapiens-project.net/>



### Workshop on the SAPIENS tool for potential users

A group of teachers from secondary schools in Seville attended a Multiplier event of the European SAPIENS project, funded by the European Union's Erasmus+ program.

David Becerra presented to the participating institutions the objectives achieved, the main details of the project, and the SAPIENS competency-based assessment tool.

The SAPIENS tool has been specifically designed to detect in detail the individual student's capabilities linked to the learning activities of a subject carried out through the tool.

The SAPIENS tool records the sequential and systematic monitoring of the learning of the students who use it, facilitating the comparison of results of individuals and groups, the analysis of the adaptation of students to the study plans according to their capacities and needs, and the definition and improvement of learning pathways. The tool is designed to adapt its application to both quantitative and qualitative subjects.

During the presentation, David Becerra showed examples of exercises and subject activities, competence maps associated with the proposed activities, individual results of several students and comparative values of students and groups of students, and other potentialities of the tool.

The audience asked about the characteristics and possibilities of using the SAPIENS tool in their subjects and with the students who attend their classes.

The SAPIENS team at Universidad Loyola is composed of professors David Becerra Alonso, Pilar Gómez del Rey, María Luisa Parody Núñez, Alfonso Carlos Martínez Estudillo, Emilio J. Morales Fernández, and Fabio Gómez Estern.

The "Skill Assessment for Personalised competence Networks" project has been funded by the Erasmus + KA226 – 'Partnerships for Digital Education Readiness' program of the European Union and is supported by the Spanish Service for the Internationalisation of Education (SEPIE).



## Events 2022 / 2023

Two Multiplier Events in Graz  
07/12/2022 & 28/03/2023

FH JOANNEUM Campus

Stay updated via our website.  
Get in quick!  
<https://sapiens-project.net/>



## Pictures from the 2 Multiplier Events in Graz



## Sapiens

As an experienced academic in the fields of research methods and statistics, I am pleased to share my positive experience with the innovative tool developed by the Sapiens project at FH JOANNEUM. The Sapiens project is a collaborative effort aimed at improving the quality of education in physics, mathematics, statistics, and economics, by providing Higher Education Professors with new online skills assessment methodologies and tools.

One of the primary objectives of the Sapiens project is to detect and evaluate learning deficiencies and gaps among students and in the class. To achieve this objective, the Sapiens team has developed an innovative tool that enables a thorough assessment of students' learning levels. The tool has proved to be an invaluable resource for my students, providing them with a comprehensive overview of their learning progress, and identifying areas where they need further support. The tool's innovative nature has enabled me to improve the quality of education that I offer my students.

## a real support.

Moreover, the Sapiens project aims to enhance the skills of Higher Education Professors in designing and implementing high-quality study plans tailored to their students' specific learning needs. The innovative tool provided by the Sapiens project has allowed my students to identify specific learning deficiencies and gaps, and thus to create targeted study plans.

*" This approach has significantly improved the quality of education that I offer my students and has helped me to address their individual needs more efficiently."*

In conclusion, the Sapiens project has been an invaluable resource for Higher Education Professors looking to enhance their students' learning outcomes. The innovative tool developed by the Sapiens team has provided a novel and effective means of assessing students' learning levels, and it has allowed my students to better understand their specific learning needs.

I highly recommend this tool to any Higher Education Professor looking to improve their students' learning outcomes.

Dr. Rupert Beinhauer, FH JOANNEUM

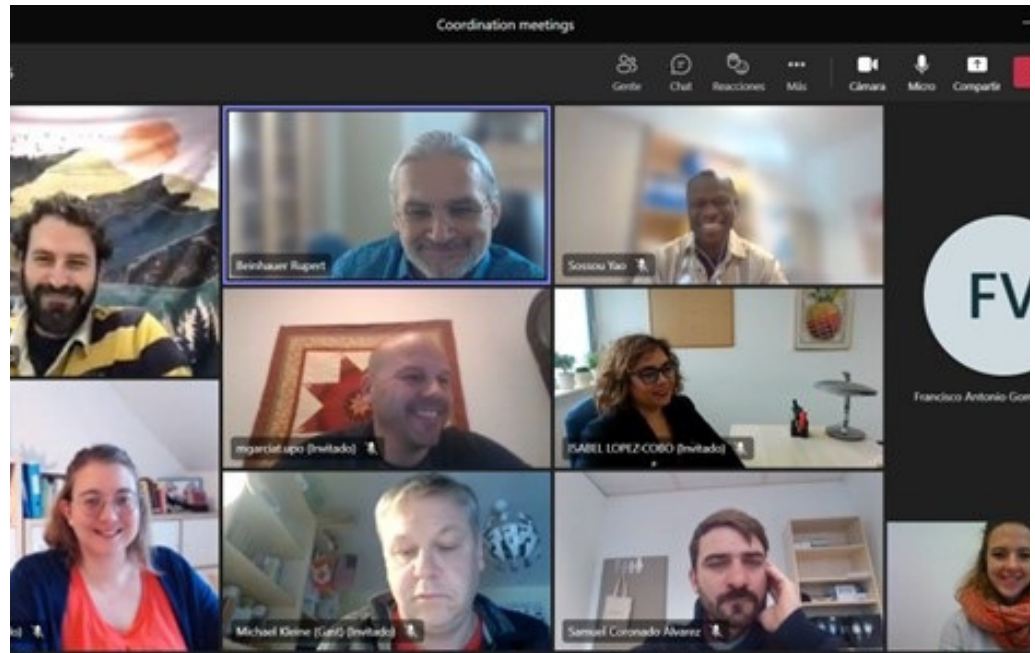


## Workshop for SAPIENS facilitators 2022

In this online workshop, project partners had the opportunity to share their contributions to the SAPIENS guidelines and toolkit, and to make suggestions for improvements.

Online  
12/12/2022

Stay updated via our website.  
Get in quick!  
<https://sapiens-project.net/>



## Impressions from the GRAZ meeting in July 2022



## SAPIENS contents fine-tuning

In December 2022, the SAPIENS partners had the chance to develop a collaborative online workshop to fine-tune the contents for the toolkit and the guidelines.

Two people per institution have participated, making contributions and suggestions for improvement.

The workshop was structured as follows:

- Firstly, there were contributions regarding the tool, experiences, and doubts from partners.
- Secondly, Universidad Pablo de Olavide explained how to deliver the course to 10 professors each institution.

Thanks to this workshop, the SAPIENS course was structured and ready to be delivered to 10 professors per institution to be tested.

## Access the toolkit and guidelines

Here you can access the guidelines:

<https://sapiens-project.net/sapiens-guidelines/>

Download the SAPIENS Toolkit:



## Event 2022

A Multiplier Event was organised by the University of Bielefeld in 2022

If you are interested in using the tool in teacher training, please feel free to contact us. We can certainly give you helpful tips and organize a workshop with you:

[michael.kleine@uni-bielefeld.de](mailto:michael.kleine@uni-bielefeld.de)

Stay updated via our website. Get in quick!

<https://sapiens-project.net/>



## Pictures from the Multiplier Event in Bielefeld



## The Useage of Sapiens

Teachers and people involved in teacher education, were able to help develop this tool and further develop it for our purpose. For this purpose, on the one hand, we have developed tasks for a preparatory course in the practice phase. These tasks were thoroughly tested. In the process, we have received positive feedback.

*"[This tool] offers one the opportunity to improve individually."*

With this feedback, we held a multiplier event in 2022 and presented the tool to a wide audience. Here, more than 50 teachers came together. Michael Kleine demonstrated the advantages and discussed various sample tasks with the participants. Judith Huget then brainstormed with the participants and came up with further ideas for integrating this tool in teacher training (and in schools).

Primarily, the participants see a use in different settings. In the professional training of teachers, i.e. the professional courses, tasks can be created due to the integration of LaTeX. Learners can learn through this tool because of the automatic feedback function. In subject-specific didactic events with exams, the tool can be used in preparation and support learners in their process.

Last year, we also added competencies to the tasks and tested how possible competency clusters could look. We were able to evaluate the different networks and compare them with each other. What is exciting here is the assignment of competencies to tasks and their approach.

On the one hand, very narrow competencies can first be identified and then tasks can be developed. On the other hand, it can be determined that competencies that are too narrow can be a hindrance and must be questioned, as in our case. More meaningful were broader competencies. Thinking this through was a good side effect of participating in this project. Thus, teaching events and their competencies can be reconsidered and thus teaching can be improved on a long-term basis on the content level.

With this tool we have been able to learn as teachers. On the one hand, we got to know a new tool, tried it out and were able to apply it more deeply in our field. On the other hand, we were also able to rethink various task formats in our subject didactic teacher training.

Prof. Dr. Michael Kleine, Dr. Judith Huget, Samuel Coronado Alvarez

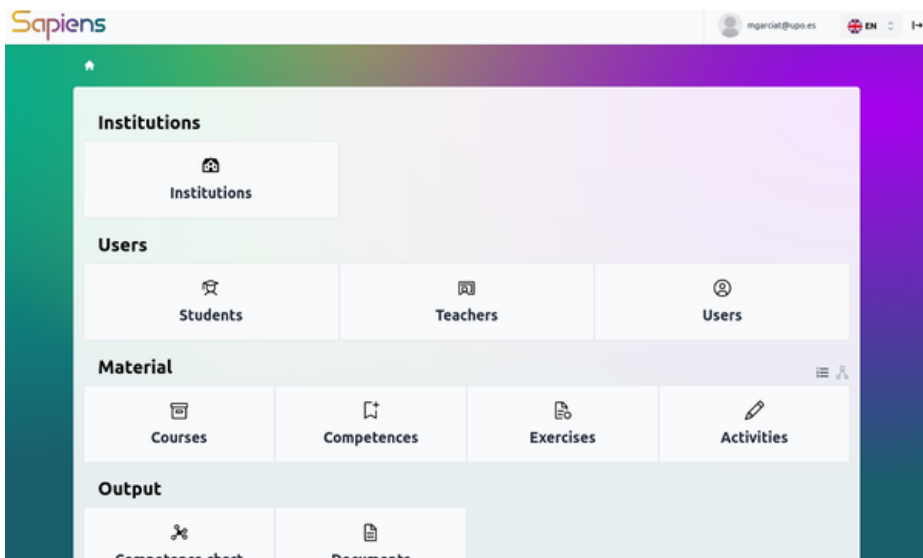


## Event 2023

On January 27 2023 Universidad Pablo de Olavide held an online workshop on the SAPIENS tool for potential users.

The workshop was addressed to teachers from the computer science degree. The event covered the key features available in SAPIENS, as well as its potential use to evaluate the degree of acquisition of students of the micro-competences in the courses involved.

<https://app.sapiens-project.net/en/login>



## The SAPIENS tool

SAPIENS is a multilingual and accessible web tool that allows the management of courses in higher education institutions. SAPIENS allows to create competency-oriented material for a specific course, including elements such as activities and/or exercises. In addition, the exercises will be assigned different competencies belonging to the subject and can be corrected automatically.

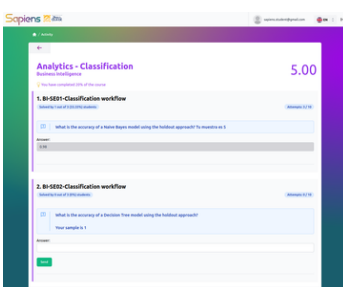
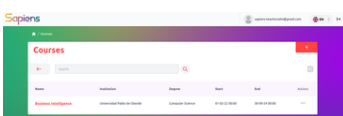
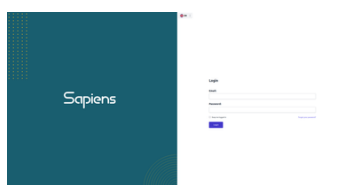
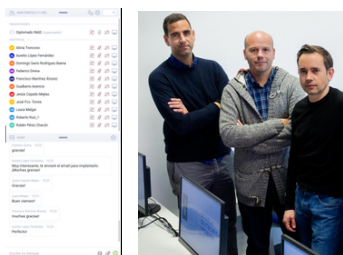
In this way, teachers can take advantage of the power of the tool, not only to correct the activities in a more objective and faster way, but also to carry out an analysis regarding the competencies that have been acquired or not by the students.

The tool has been designed to be accessible and easy to use, so that, any user, even with little IT experience, will have no problems to use it. Additionally, it is developed in a responsive way, meaning that it can be used from any platform, such as tablets, smartphones or computers.

Finally, despite its simplicity of use, the tool has been developed using the most powerful technologies, allowing it to carry out a high computational performance and a massive storage of information. Thanks to this, it is expected to be integrated with new artificial intelligence techniques for an exhaustive analysis of the stored information and thus improve the teaching process.

## Analytics

Thanks to the analysis of learning by competence provided by the tool, it is possible to redesign the courses based on the results obtained in order to identify the main difficulties of the students in acquiring the competences of the course, or to redesign the activities in order to enhance some competences that are considered key.



## Final SAPIENS meeting in SEVILLA

Partners of the consortium met on 24th & 25th March 2023 in Sevilla to discuss the project final deliverables and sustainability plan.





SAPIENS has been a truly innovative project funded by the European Union and it has set out to revolutionize the way in which we assess and improve student learning in higher education institutions.

The development of a micro-competence assessment tool is a significant achievement, and we believe that it will have a lasting impact on the way in which students learn and progress in their studies. The tool offers individualized itineraries that detect gaps in the acquisition of micro-competences and provides students with personalized exercises adapted to their needs. This approach ensures that each student's learning needs are addressed in a targeted and effective way.

By taking a holistic approach to student learning, SAPIENS has provided a unique insight into the cognitive processes involved in the acquisition of micro-competences, which will have a significant impact on future research and development in this area.

We would like to thank all those involved in SAPIENS for their hard work, dedication, and commitment to the project over the last 2 years. SAPIENS would not have been possible without your contributions, and we are proud to have been part of such an inspiring and innovative initiative.

We look forward to seeing the impact of SAPIENS in the years to come and hope that it will continue to drive forward our understanding of student learning in higher education institutions.

### *Disclaimer*

*The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

