

[ABOUT IATED](#)[CONFERENCES](#)[PUBLICATIONS](#)[IATED TALKS](#)[DIGITAL LIBRARY](#)[BOOKSHOP](#)[MAILING LIST](#)[CONTACT US](#)[LOGIN](#)

All fields:

Paper title:

25 hits per page

Authors:

Keywords:

Sort by releva...

 Fulltext search**About this paper****Appears in:**ICERI2021 Proceedings
([browse](#))**Pages:** 4473-4478**Publication year:** 2021**ISBN:** 978-84-09-34549-6**ISSN:** 2340-1095**doi:** 10.21125/iceri.2021.1031**Conference name:** 14th annual
International Conference of
Education, Research and
Innovation**Dates:** 8-9 November, 2021**Location:** Online Conference**Citation download:**[\(BibTeX\)](#) ([ris](#)) ([plaintext](#))**Other publications by the
authors:**[\(search\)](#)**Upcoming event:**

- [Announcement](#)
- [Register now](#)

PROCEEDINGS INDEXED IN
Web of Science**Crossref**

INTERACTION BETWEEN COURSE UNITS: AN EXPERIENCE IN HIGHER EDUCATION

F. Silva, P.M. Barros, J.E. Ribeiro

Instituto Politécnico de Bragança (PORTUGAL)

Given the specificity of the Higher Professional Technical Courses (CTeSP) of Portuguese Polytechnic Institutes, it is important that in the course units related to these courses is promoted, whenever possible, a more contextualized learning environment, less theoretical and more connected to practice. In order to respond to this approach, in the Safety and Environment course unit, integrated into the CTeSP in Mechanical Technology and Vehicles, was followed a methodology that involved the interconnection of this course unit with the one of Automotive Materials Processing I of the same course. It should be noted that, in recent years, it is common for students to carry out a practical group work in the area of Safety and hygiene at work, where they analyse, in a real context, the hazards, and risks associated with working with machine tools of the Mechanical Technology laboratory of the institution where they attend the course. As in the 2nd semester, students still attend the Automotive Materials Processing I course unit, where they produce a metal piece using industrial machines, also in the same laboratory, it was considered relevant to take advantage of the work they were developing in that course unit and make a connection with the Safety work. In this sense, in the 2020/2021 school year, it was proposed that students identify hazards and risks associated with the production of the metal piece they were developing, as well as establish preventive and control measures associated with its production (engineering, collective protection, and safety signs measures; personal protective equipment; work organization and administrative control; training and information). From the analysis performed, the students created a PowerPoint® presentation to show their productions and present their conclusions to the class. In general, students easily adhered to the proposed task, having committed themselves to its implementation, which was visible in the final assessment, since all those who participated in the work were approved in the course unit. In the student's opinion, the connection between the two course units, motivated them more to carry out the group work, facilitated their learning, and helped them to better understand the application of Safety concepts to the practice of mechanics (79.2%, 75%, and 83.3% agree or totally agree, respectively). Carrying out the group work, allowed them to know their difficulties, overcome some of them and improve their arguments (79.2%, 83.3%, and 95.8% agree or totally agree, respectively). It is considered that the learning resulting from this contextualized work can be useful, in order to promote a greater exchange between course units, and a greater awareness for the application of the course contents in a real context. The experience carried out can be easily replicated to other CTeSP, and can significantly contribute as a learning factor for the internship that integrates the study plan of these courses.

keywords: higher education, learning in context, interconnection, safety, laboratories.