

An integrated ePortfolio in linear algebra classes

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In September 2014 we began a pilot project for the development of ePortfolios in a core mathematics subject for undergraduate students at the [Universitat Politècnica de Catalunya](#). The aim of this pilot project is to create "integrated ePortfolios" in linear algebra classes using Mahara. That is to say an ePortfolio that makes use of a number of different ePortfolio techniques.

The Mahara ePortfolio allows us to integrate reflective activities for learners and professors through blog functions and the creation of critical incident diaries in which students of linear algebra classes reflect on their learning and experiences over a given period of time or for a given learning activity. It is the first time that a project using ePortfolios is run in a large learner group. In this case, there are 10 groups of about 80-85 students per group and all of them work individually on their portfolios. Approximately 280 of the participating Engineering School students chose to work with Mahara.

The Institute of Education Sciences of our university is also involved in this pilot project. It provides us with technical as well as pedagogical support for both teachers and students. In order to ease the work in this platform, we have prepared a template that is shown in the following figure.

The screenshot shows the Mahara ePortfolio interface. At the top, the Mahara logo is on the left, and the user name 'Judit Taberna Torres' and 'Configuració' are on the right. Below the logo is a navigation menu with 'Consola', 'Contingut', 'El meu Portafolls', and 'Grups'. The main content area is titled 'Model Algebra ETSEIB' and has an 'Edita aquesta' button. Below the title are three tabs: 'Introducció', 'Informació personal', and 'Informació acadèmica'. The 'Informació acadèmica' tab is active, showing a list of units. The first unit is 'Unitat 1' with the text: 'No hay enigmas. Si un problema puede plantearse, también puede resolverse. - Ludwig Josef Johann Wittgenstein (Viena, Austria, 26 de abril de 1889 — Cambridge, Reino Unido, 29 de abril de 1951) fue un filósofo, matemático, lingüista y lógico austriaco, y posteriormente nacionalizado británico'. The second unit is 'Unitat 1-4' with the text: 'No hi ha enigmes. Si un problema pot plantejar-se, també pot resoldre's. - Ludwig Josef Johann Wittgenstein (Viena, Àustria, 26 d'abril de 1889 Cambridge, Regne Unit, 29 d'abril de 1951) va ser un filòsof, matemàtic, lingüista i lògic austríac, i posteriorment nacionalitzat britànic. No enigmas. If a question can be put into words, then it can also be answered in words.' Below the units is a section titled 'Unitat 1' with a list of items: 'Enunciat', 'Plantejament', 'Resolució', and 'Conclusions'.