Preparing an electronic portfolio for teaching development through a Virtual Teaching Unit

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Abstract- Quality teaching is a fundamental concern in universities. The accreditation of teaching staff through quality assurance agencies responds to this commitment. At the University of Deusto, this accreditation is structured on three levels: the accreditation of teaching planning, the accreditation of its implementation and the accreditation in the review and improvement from a collegiality approach. In this paper we focus on the second one. The teaching staff must go through an accreditation assessment by preparing a teaching portfolio. The Teaching Innovation Unit offers workshops in which school coordinators accompany teachers in the preparation of their portfolios. In addition to this face-to-face training, teachers need accessible and up-to-date support documentation. In response to this need, through a teaching innovation project, a Didactic Virtual Unit (DVU) has been developed on the institutional Moodle platform to support face-to-face training. A template has been created and a variety of resources have been included, such as presentations, videos, forums and examples of each of the pieces of evidence to be presented. The results have been very satisfactory in relation to the fulfilment of the established objectives and impact indicators.

Keywords: B-Learning, Evaluation of teaching quality, Training of university teaching staff

1. INTRODUCTION

The improvement of teaching necessarily involves a review of the way it is put into practice. The process of creation and entry into the European Higher Education Area (EHEA) has meant that many of the efforts aimed at improving the quality of teaching by governmental bodies, quality agencies and institutions, as well as by the teaching staff themselves, have focused on the planning of teaching. Government bodies have established guidelines for the planning and development of teaching to meet certain common quality criteria. Institutions and quality agencies have developed the curricula for new undergraduate and postgraduate degrees according to these guidelines. In addition, the teaching staff have specified this planning in the syllabuses of the courses they work on with their students. A quality assurance system for these courses has been articulated on the basis of this scheme of shared responsibility, seeking coherence in terms of what is written and planned for their subsequent development.

However, we are also aware that the real challenge of training quality lies in its implementation. For this reason, more than a decade after the implementation of these planning mechanisms, the key questions must now focus on what and how what is being planned is being implemented, and to what extent it has served to transform teaching and learning processes and improve learning outcomes.

We know that, in compliance with the ENQA guidelines (2005, 2015), the mechanisms established for the monitoring and accreditation of degrees were designed with this objective in mind. However, our experience during this time of implementation shows that they are mainly focused on general and quantitative issues. They rarely examine what really happens in the teaching-learning processes developed by teaching staff and students, which are eminently qualitative in nature, beyond the learning outcomes expressed in rates.

The Docentia Programme promoted by Aneca (Aneca, 2006, 2015), and fostered in collaboration with the regional quality agencies for its development, aims to assess and promote the quality of teaching. Although its objectives include supporting universities in developing this quality by promoting the professional development of their teaching staff, the experience of a decade of designing and developing the model indicates that it has focused more on the evaluation of teaching and less on professional development. The model has also been carried out using mainly quantitative procedures, emulating processes and procedures learnt for the quality of degrees.

Because it was considered difficult and not very operational to promote professional development from outside the university, this Docentia Programme was defined as an internal guarantee mechanism. The truth is that in few cases has the programme helped universities to define their own model of professional development, nor has it had a clear and direct impact on the transformation of training and learning models. Aware of these limitations, Aneca has presented a new revised version of the Docentia Programme (Aneca, 2021) which, in its declaration of intent, proposes to move in this direction.

For all these reasons, these key questions remain and become even more relevant: whether the planning developed is applied, whether it serves to transform the teaching-learning processes and improve their results, or, if not, what and how it is done to improve it. The work presented here attempts to answer these questions. It relates an experience developed to collect and share the teaching practice of teachers through the use of the digital teaching portfolio. It also tells how teachers can be

accompanied to facilitate its development and to systematically reflect on their practice in order to improve it.

2. CONTEXT

The experience that we present is developed in the context described above. It takes place at the University of Deusto, as an example of a development of the Docentia Programme with a different orientation to the one described in the state of the art. It is oriented towards a previously defined training model and professional development model (Deusto, 2007). Thus, the mechanisms developed internally to assess the quality of their teaching are oriented towards these models, evaluating how the teaching staff develop the descriptions of good practice contained in them (Villa and García-Olalla, 2014).

The University of Deusto assumed the need for a transformation of its educational system at institutional level. To this end, in 2001 it published the design of its Pedagogical Framework, its Training Model (MFUD) and its Autonomous and Significant Learning Model (MAUD). This latter includes five phases: contextualisation based on experience, reflective observation, conceptualisation, active experimentation and evaluation (Deusto, 2001). The competences model on which the universities were to base their degrees necessarily meant that the teaching staff had to design their subjects orienting them towards the horizon of the professional academic profile of the degree. To this end, the axis of competences to be developed was used, and the teaching-learning strategies, activities, contents and assessment systems revolved around it. It was this new model towards which the innovation process and the professional development of its teaching staff had to be oriented.

Three evidence-based qualitative assessment procedures have been developed for the accreditation assessment of teaching: Label 1, which assesses the quality of planning; Label 2, which assesses the quality of the implementation of teaching; and Label 3, which assesses its review and improvement from a collegiality approach.

The collection and analysis of evidence for Label 1 was initially simpler due to the existence of two defined instruments that capture such planning: the syllabus and the student learning guide. Their quality is reviewed by means of 3 criteria and ten previously established indicators.

However, the amount of documents, instruments, productions and interactions that are developed in teaching-learning processes is tremendously wide and varied. For this reason, a priori, finding and agreeing on a set of relevant but measurable evidence, collecting it in some kind of support, and defining agreed criteria for the quality of good practice seemed extremely difficult. To this end, an experimental team of teachers spent two years working on an Innovation project (2011/12 and 2012/13). The outcome of their work was rated with a high degree of satisfaction by the participating team. It resulted in a procedure, support and documentation. All this was made available to the whole educational community to disseminate and extend institutionally this Label 2 accreditation process (García-Olalla, 2014).

During that first pilot experience (between 2011 and 2013) it was defined that Label 2 Accreditation aimed to ensure the orientation and promotion of student learning towards the achievement of autonomous and meaningful learning. This was

to be achieved through the appropriate management of teaching methods, the use of time, material and personal resources, and the monitoring and evaluation of the process. All of this was based on the construction of a climate and a commitment to the exigency, depth and quality of work and learning.

Without having yet defined the criteria and indicators by which this good teaching practice would be demonstrated, it was decided that the teaching portfolio would be the optimal instrument for collecting and organising evidence that could be of such a varied nature. As expressed by Fernández-March (2006:18), the portfolio is "a description of a teacher's efforts and results to improve his or her teaching, including documents and materials that together show the extent and quality of the teacher's teaching performance. At the same time they also operate within the efforts to improve educational institutions and teaching as a profession". It is a structured documentary history of a set of materials selected by the teacher to show learning, reflecting on it and its evolution. To this end, the teaching portfolio should not be an exhaustive collection of documents and materials that affect teaching performance, but it should present selected information about teaching activities and solid evidence of their effectiveness. The long experience developed by Seldin (1997) and his collaborators in developing teaching portfolios had shown and documented their beneficial effects and results, both for formative and summative purposes.

The detailed work on the type of evidence to be included and how to order them resulted in the formulation of 3 criteria that are specified in 10 indicators. The content of the portfolio is structured around them, as well as their subsequent review: learning management (methodology, time management and resources), guidance and tutoring (guidance and tutoring system), and learning assessment (information, techniques, feedback and learning outcomes).

Although they were not among the intended objectives of that project, two highly relevant lessons were learned. These have remained to this day because of the transformative potential they revealed from its beginning:

- The creation of the teaching portfolio with a digital support greatly facilitates the archiving and updating of documentary evidence and its links. It also makes it possible to share the portfolios of other teachers, and thus to have access to numerous examples of strategies for the implementation of teaching.

- The teaching staff participating in the experience valued very positively the collaborative work dynamic that emerged in the work team, as well as the richness of the exchange of experiences of teaching practice that it had allowed. They really felt that they were working in a community of professional practice.

Since then, training for the development of the teaching portfolio for accreditation has been organised in the form of workshops in which the Label 2 coordinators of the centres accompany the teachers in this process. On the other hand, given that teachers are used to using the institutional platform ALUD (based on Moodle) in their subjects, it has been decided that the portfolios will be hosted on a parallel platform called DOCENTIA.

On the other hand, the process of obtaining Label 1 has been consolidated over the last few years at the university and many of the lecturers already have this accreditation. However, the

process of obtaining Label 2 has not yet reached this level of consolidation, due to the higher level of complexity and commitment involved. The procedure has been applied for five academic years (between 20014/15 and 2018/19). In the academic year 2019/20 a new step is taken, which is the purpose of the innovation project presented here.

The General Objective of this teaching innovation project is to help teaching staff at the University of Deusto to develop a teaching portfolio that allows reflection on the implementation of their teaching as well as Label 2 accreditation.

The following specific objectives were also identified:

- Implement a course to make it easier for teaching staff to create their own teaching portfolios. This course should follow the teaching-learning cycle established at the University (MAUD), thus providing a coherent example to the teaching staff who must do the same in their subjects (Gairín, 2011).
- To present in a structured, updated and accessible way key documentation to support the face-to-face workshop.
- To facilitate the access of the teaching staff to updated material for the development of portfolios, and to the structure to be followed through a template.
- To present examples of activities for each of the MAUD phases.
- To make the experience accumulated in the external evaluation of the Label 2 available to the teaching staff through an explanatory list of the most frequent errors.
- To involve the University Community in the final design of the course through the collection, evaluation and incorporation of their suggestions for improvement.

To achieve these objectives, we proposed the creation of a course for the development of a teaching portfolio, using DOCENTIA as a support, DRIVE as a repository and Google format for all documentation.

The DOCENTIA platform is a good tool for such support. It makes it possible to collect the documentation in a structured way, to introduce explanatory comments on the contents and usefulness of the documents offered, to use links to Drive folders to access the documents, which guarantees their updating, the use of forums for questions-messages, as well as tasks to be carried out inside and outside the classroom, with the possibility of programming deadlines and a feedback system.

Moreover, the location of this course in the DOCENTIA platform allowed a double use: as a support in the face-to-face workshops and for the autonomous access of teachers who required it.

The members of the group of teachers who were going to carry it out had experience in teacher training in general and in Label 2 in particular, and came from different faculties, centres and campuses, which augured a good fit with the training needs of the teachers attending the courses. All this in a context in which the aim was to improve training programmes (Escobar, 2015), designing training plans and actions consistent with the needs of both the teaching staff and the institution itself (Fernández-March, 2003) and also integrating the development of their digital competence (González & Raposo, 2008; Díaz & López, 2009; Romero, Castejón, López & Fraile, 2017).

3. DESCRIPTION

The project is based on the use of two virtual spaces, one for the development of a Virtual Didactic Unit (VDU) that can be used by teachers to create their portfolios, and the teachers' own portfolios, created from a template and made available to the rest of the educational community.

In the case of the VDU, it was developed in seven phases, with corresponding activities, resources and time:

- 1st phase, opening of the course on the institutional platform (September - October, 2019): creation of the VDU; identification of sections; and construction of the content outline.
- 2nd phase, adaptation of previous contents (October - December, 2019): compilation of materials; adaptation to Google Drive format; and placement within the VDU.
- 3rd phase, elaboration of new contents (January - May, 2020): identification of new contents; elaboration of them taking into account the most appropriate resource (documents, videos, presentations, tasks, quizzes, forum...), applying the Google Drive format and the facilities of the platform itself; location within the VDU; and drafting of explanations for the appropriate use of each of them.
- 4th phase, experimentation with a group of teachers (June - November 2020): use of the VDU in the workshops for the elaboration of the portfolio for the 2020-2021 call.
- 5th phase, evaluation of the Unit by different agents for the collection of suggestions for improvement (June, 2021): by the teachers who use it for the elaboration of their portfolio, by the coordinators who use it as a support for the workshops and by the people in charge of the departments.
- 6th phase, evaluation of the suitability of the suggestions submitted and incorporation into the VDU (June - July, 2021).
- 7th phase, dissemination (September - October 2021): socialisation of the existence and use of the VDU in the Community of the University with the improvements introduced, as well as the results of the project in a Teaching Innovation Congress.

The other virtual space created in the project is the template (Figure 1) created to make it easier for teachers to create their portfolios. Thus, when a teacher decides to create a Label 2 portfolio, a request is made to the ICT resources department to create it on the institutional platform in one of the three official languages: Spanish, Basque or English. The template is no more than a "skeleton of labels" that the teacher uses to organise the evidence to be presented and not to forget any of it, but it is a key element, as will be seen in the results/conclusions sections. In the same template, the teacher also has the protocol where the reason for each piece of evidence and the way to present it are explained.

The context of the subject

Introduction to Economics is part of the Law Degree Programme at the University of Deusto and, togeth[...]
does not require any prerequisites beyond those required for admission to the degree.

The experience of teaching in the first year allows us to affirm that the profile of students who have rece[...]
orienting it fundamentally from a conceptual point of view in which the mathematical apparatus is implic[...]

Introduction to Economics is taught in different groups whose composition varies: only Bachelor's Degre[...]
Relations or International Relations. The size of the group varies in each case and each academic year. In [...]

Label 1- Approved Student Learning Guide

📄 Accredited Student Learning Guide Marian Aláez. Label 1 obteined in 17-18.

Assessment Committee Label 1 last report

📄 Label 1-Accreditation report Marian Aláez

Current Student Learning Guide

📄 Current Student Learning Guide 19-20 Introduction to Economics Marian Aláez

Current Syllabus

📄 2019. Current Syllabus Introduction to Economics

Last academic year, the lecturers of Introduction to Economics in the Bachelor's Degree in Law [...]
Relations, have started a very fruitful collegial work in the subjects of these degrees, which has [...]

Figure 1. First items of the template created, once filled in.

4. RESULTS

The following indicators were identified to assess the impact of this project:

- INDICATOR 1: To produce the didactic unit on the planned date and following the MAUD cycle. The unit, according to the initial project schedule, should have been completed in April 2020. However, due to the declaration of the state of alarm and the academic changes that followed, it was not completed until May 2020, after the end of the academic year.
- INDICATOR 2: To submit the developed unit for review by participants, department heads and Label 2 coordinators in order to get their suggestions for improvement. For the same reason as in the previous indicator, the didactic unit was presented to all stakeholders at the same time and not in phases as planned. The questionnaire was sent out in the second semester of this academic year 20-21 as it was considered that the respondents would be better informed to respond.
- INDICATOR 3: Obtain a minimum of 3.5/5 in the items referring to the availability of documentation. To measure this, two items have been included in a satisfaction survey: their perception of satisfaction with the course as an aid to portfolio preparation and with the relevance of the course content and resources. The average score was 4.6/5 on both items.
- INDICATOR 4: To obtain a minimum of 60% of enrolments in the implemented course from among the teaching staff submitting portfolios in the Label 2 call for 2020-2021. Although this indicator was initially outside the scope of the project, it was considered to be an important indicator of success. In this case, we do not have reliable data due to the delay in making the course available to teachers for the reasons outlined above.

However, it has been observed that the portfolios submitted for accreditation followed the template provided with the course.

- INDICATOR 5: Obtain a minimum of 80% of accreditations among participating teachers of the teaching unit who apply for the Label 2 call (2020-2021). 87% of the teachers who have applied for the call have obtained full accreditation; the rest have obtained conditional accreditation, which means that they will be able to obtain accreditation in the next call. There were no "no accreditations". However, these are global data, since, as mentioned above, there are no reliable data available on who have been users of the course developed and who have not.
- INDICATOR 6: To present the good practice at a Teaching Innovation conference. The presentation of this good practice would fulfil this indicator.

As explained above, the pandemic situation and the consequent focus of university effort on adapting teaching has generated some delays that have affected the outcome of the indicators in terms of their deadline for compliance. As a result, and due to the fact that this was a situation of force major, all the indicators can be considered to have been met, with the exception of Indicator 4, for which there is a lack of data. Likewise, Indicator 5 has had to be transformed, also due to the aforementioned data problem. In any case, given the conviction of the usefulness of the work carried out on the basis of the comments received in the survey, the missing data will be collected in the next edition of the accreditation evaluation of the teaching staff. In view of the above, we believe that the desired impact has been achieved.

The general objective "to help teaching staff at the University of Deusto to develop a teaching portfolio that allows them to reflect on the implementation of their teaching and Label 2 accreditation" has been met through the fulfilment of its specific objectives:

- We have followed the University of Deusto Learning Model (MAUD) cycle in the development of the course, reinforcing the internalisation of the model by the teaching staff.

- Access has been facilitated for Deusto teaching staff to updated material for the preparation of portfolios. Historically, the necessary documentation, both official documents and others of a practical nature to facilitate the preparation of subject portfolios, was prepared by the Teaching Innovation Unit and was made available to teachers through the coordinators of the centres via email. By creating the DOCENTIA course in this project, it has been possible to have a centralised repository of all the necessary material. In addition, by linking the documents susceptible to change with a documentation folder in Drive, its permanent updating has been guaranteed.

- The key documentation for the development of portfolios has been presented in a structured and accessible way. This documentation is being used by centre coordinators to support workshops with teachers and, autonomously, by some teachers. This has been possible thanks to the use of DOCENTIA as a learning environment, as it allows the incorporation of other types of materials such as videos, links, tasks, etc., in addition to files, all in an organised way and accompanied by explicative comments.

- Examples of activities have been incorporated in each of the phases of the MAUD cycle, as the portfolio is a tool for collecting evidence and it is required that the evidences are presented structured on the basis of this cycle. In addition, examples of completed portfolios have been shared and have received very good feedback from the evaluators. The latter have pointed out the good evolution of the portfolios presented, especially due to a better structuring of the evidences, facilitated by the availability of the template prepared for this purpose.

- The experience gained in the external evaluation of the implementation of Label 2 teaching has been made available to the teaching staff through an explanatory list of the most frequent errors. As it is a link to a drive document, its content can be efficiently updated in each edition.

- The University Community has been involved in the final design of the course, through the collection, evaluation and incorporation of their suggestions for improvement.

- The course has been disseminated through a Congress.

5. Conclusions

This project has been aimed, on the one hand, at improving teaching quality by making available to teaching staff evidence of good teaching practices carried out by their colleagues. On the other hand, it has also been used to show the user teaching staff an example of online teaching that follows the MAUD phases. This last aspect is particularly relevant in the context of a hasty change from face-to-face to remote teaching.

The sustainability of the project is ensured by the combined need for accreditation and the usefulness of the teaching unit in achieving it. This fact has been confirmed in the surveys, as well as by the fact that no new resources of any kind are required, with the exception of those dedicated to its updating. This last milestone will be carried out annually by the Teaching Innovation Unit, which is responsible for the DOCENTIA programme. Moreover, the fact that Label 2 coordinators use it in their annual workshops for teaching staff ensures its continuity.

Likewise, and due to the experience gained after having carried out a similar project to the one described here a few years earlier, focused on improving teaching planning, its transferability can be confirmed. The use of a Moodle-type platform to support teaching staff in improving the quality of teaching can be transferred to other areas, with the appropriate adaptations.

In fact, after the completion of both projects and their subsequent evaluation, the teaching team is assessing the possibility of transferring this project to the context of obtaining accreditation for teaching planning in the postgraduate field, as well as to collect and make available to the teaching staff good practices from each of the phases of the MAUD cycle.

It is worth highlighting the importance of the technological ingredient that this practice incorporates in the context of the pandemic in which it has taken place. Through its use to meet a clear need for accreditation, the teaching staff have access to an example of the use of different technologies and digital resources that they will undoubtedly transfer to their own teaching. We believe that the support they have received in its use, both in classroom and online training, has been fundamental in making this transfer possible.

In the evaluation of the project, the advisability of the combined use of a variety of resources has emerged, as well as the need for a team to assume the commitment to continuously attend to the needs that may arise in the teaching staff in the use of the platform. In the case described in this good practice, the assumption of this responsibility is assured as long as it is entrusted to the Teaching Innovation Unit, made up of staff from different centres, with training, motivation and time allocation for this task. If this important resource were not available, the practice presented would have no guarantee of being effective.

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