DESIGN AND DEVELOPMENT OF AN ACADEMIC PORTAL FOR SUPERVISED PRACTICE IN THE EDUCATIONAL AREA OF PSYCHOLOGY

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Abstract

The use of websites in higher education has increased significantly. Universities have developed various sites that fulfil both academic and administrative functions. We believe that academic portals that provide resources that support teachers and students in specific curricular activities enhance learning and teaching. Within the psychology study program, one of these activities is the Supervised Practice in which teachers advise students in activities like those they will perform in their future professional practice.

In this paper, we present and describe an academic portal aimed at teachers and students who participate in the activity Supervised Practice in the educational area of the psychology degree at the Faculty of Higher Studies Zaragoza, in the National Autonomous University of Mexico. First, we specify the characteristics that should have an academic portal for Supervised Practice. Second, we describe each one of the steps followed in its design and elaboration. Third, we describe different parts of the academic portal. Finally, we make some considerations about its implementation.

Keywords: Academic portal, educational psychology, supervised practice.

1 INTRODUCTION

The curriculum for the psychology degree at the Faculty of Higher Studies Zaragoza (FES Zaragoza) from the National Autonomous University of Mexico (UNAM) consists of eight semesters grouped in three academic training stages: basic, professional and complementary.

- Basic stage is structured during the first two semesters and aimed to teach the theoretical and methodological basis of psychology.
- Professional stage includes all remaining semesters and is grouped into four areas of psychology: 1) educational, 2) clinical and health, 3) social and 4) labor. Each area covers two semesters. Students select three out of the four areas to complete during eight semesters.
- Complementary stage includes optional subjects to be completed during the eight semesters.

Our degree is designed based on a module structure. Each module covers one semester where several learning units are located under the following systems: seminar course, research seminar and supervised practice. The two modules taught in the educational area are: 1) Psychology and Human Development 2) Psychology, Education and Society.

Since our academic portal is aimed to support a Supervised Practice modality in the educational area, it is important to mention that students will carry out activities similar to those of professional psychologist in their educational area. These activities are supervised and supported by a professor.

Each professor is in charge of one program where students cover specific topics and issues in the educational psychology field. Some of these topics are: preschool education, counselling, special education, school learning and family-school relationships.

Students face different situations and professors train them and provide them with theoretical and practical knowledge as well as continuous support. This allows them to identify the situations that most affect people and provide alternative solutions to similar issues that they will encounter once they start their professional practice. People attend to FES university clinics located in areas where families with limited resources live.

The main purpose of our academic portal (http://pspefesz.org) described on this paper is to contribute to the improvement of the teaching-learning processes in supervised practice in the educational area of the psychology degree at FES Zaragoza from the UNAM.
By using our academic portal, we intend that:

- Professors include resources of the portal in the teaching that they impart to their students.
- Students consult and implement existing resources and activities to their supervised practice.
- Similar portals are created in different areas (clinic, social, labor) of the psychology degree.
- Professors and students share their knowledge via our portal.

2 METHODOLOGY

The methodology used to support this research is named design-based research (DBR) and it is defined “as a systematic but flexible methodology aimed to improve educational practices through iterative analysis, design, development, and implementation, bases on collaboration among researchers and practitioners in real-word settings, and leading to contextually-sensitive design principles and theories” [1 pp. 6-7]. An analysis is created from a specific educational issue leading to a solution proposal which is implemented in an educational scenario. This analysis can then be evaluated so that the outcome leading to a new research cycle which translates into an iterative process producing information to improve the teaching and learning conditions in specific educational scenarios.

Next, we’ll describe the five phases covering the design, development and implementation of our academic portal.

2.1 Identifying professional roles of supervised practice students

We performed an analysis of the psychology degree curriculum focusing on the supervised practice of the educational area and on the professional roles that a student must perform. Our purpose was to identify the professional competences along with the models that guide the professors and students activities.

2.2 Identifying professors’ information needs

We researched the professors’ opinions via a study in order to understand what features and resources should be included in our academic portal [2]. We were interested on getting information about the digital skills that professors as well as their opinions about a: 1) the essential digital resources to improve the teaching-learning process, 2) how to organize these resources in the academic portal and 3) issues that will arise from the development, organization and circulation of the resources in the portal. In order to get more information, we carried out individual interviews to 31 professors and then we organized 5 sessions of joint reflection with a focus group of 10 professors.

A guide was designed for these individual interviews where we included questions about digital resources focusing on activities taking place on the supervised practice: 1) diagnostic evaluation, 2) intervention and 3) intervention evaluation. We also included questions about the digital skills of the professors and the legal framework of professional practice for psychologists.

Focus groups sessions took place once the interviews information was collected. During the focus group sessions, we reviewed several academic portals and reflected on different aspects of the supervised practice and its linking to the digital resources in order to flesh out clear guidelines for organizing the academic portal and the digital resources.

2.3 Gathering and organizing digital resources

Our professors for supervised practice have created several digital resources throughout their academic lifetime. During this phase, we reviewed these resources and produced a classification of categories in order to create a data base which allowed us to organize the existing resources as well as the future resources.

2.4 Planning and design of academic portal

We specified the essential elements of our academic portal by:

- Identifying our users’ needs
- Defining and organizing the content areas
Creating a website map

Specifying the navigation structure

Creating screenshots diagrams or wireframes

This resulted in our academic portal prototype, a first version, which was then reviewed by some users in order to make the appropriate changes.

2.5 Development, implementation and evaluation of academic portal

Once a prototype was created then we moved to developing the portal by taking into consideration three key aspects: 1) structure, 2) functionality and 3) including outstanding content. This phase is still under research. Once the portal is moved into production then it will become available to professors and students via different promotion mechanisms. Last, an evaluation process of the academic portal will take place by considering: site visits, impact on academic activities measured through focus groups of professors and users’ studies. Our main objective is to get a joint vision using these strategies which will be used to make the appropriate improvements.

3 RESULTS

This section describes the results obtained from each phase of the project. It is important to emphasize that when using a design-based research methodology each phase represents a study that provides feedback to the other phases and the research as a whole.

3.1 Professional roles of students

The two modules that form the educational area of the psychology degree include four learning units. Each unit relates to a teaching modality. The two units of supervised practice are: 1) Intervention in Human Development and 2) Psychoeducational Intervention. To meet the objectives of these units each professor develops a program with a relevant subject that belongs to any of the two previously mentioned units. E.g.: School Learning Support program; Education and Family Program; Counselling Program, etc.

“Professional competences that guide the supervised practice programs have as a main axe solving various problems in different action levels: prevention, stimulation, solution and research. The professional competences that incorporate in the students´ training are: evaluation, planning, intervention, intervention assessment and research” [3 p. 9].

In order to benefit these competences, the thematic contents were organized around three phases of student’s actions: 1) situation or issue analysis, 2) design and implementation of intervention programs to influence the situation or issue and 3) evaluation of the intervention program.

Due to the wide range of outstanding methodologies and approaches in educational psychology, our curriculum favors three methodologies that include their own perspective on how to deal with situations or issues that emerge on supervised practice: 1) focused on student-context interaction, 2) focused on the teaching-learning process and 3) focused on educational counselling.

Our curriculum organization of the educational area is the frame of reference taken into consideration to include resources in our academic portal as well as its organization.

3.2 Essential needs reported by professors

Based on the interviews and focus group study performed to professors, we established guidelines for organizing the academic portal as well as the process to include digital resources. Our conclusion was that resources should consider four specific aspects: 1) activities performed by students on supervised practices (situation analysis, intervention program design and intervention program evaluation, 2) the human development aspects and school environment studied by educational psychology 3) professors’ programs included in supervised practice(school learning, counselling, education and family, etc.), and 4) the outstanding methodologies and approaches in educational psychology .

On the other hand, the type of resources that professors consider essential to be included on the academic portal are: 1) Educational video clips, 2) Tutorials, 3) E-presentations, 4) Infographics, 5) Text documents, 6) Podcasts and 7) Website links.
As for the difficulties detected for the academic portal, there are several reports: professors and students have called out the lack of computer technology knowledge as well as the limited Internet Access at FES Zaragoza.

### 3.3 Organizing digital resources

In order to organize the digital resources of the academic portal, we created a database where all existing and any future resources information has been added. The database includes one form of data capture with seven fields for resource details: 1) Code, 2) Name, 3) Author, 4) Format, 5) Type, 6) Key and 7) Addressee (Fig. 1).

![Figure 1. Data fields of the database](image)

In order to guarantee that the information entered is correct, we created a user manual including a description of the basic concepts of databases by defining each field included and describing the data entry and search information processes.

### 3.4 Design of academic portal

The planning and design of the academic portal used wireframing [4] and website development timeline [5] and taking into consideration the previously mentioned 2.4 and 3.1. An important part of the design process consisted of the graphic layout of the content areas in a website map (Fig. 2) including its navigation and interface.

![Figure 2. Navigation map of the academic portal prototype](image)

Based on the curriculum analysis of the psychology degree and the professional needs reported by our professors, we presented a design that considers these sections: 1) Homepage, 2) Foundation of practice, 3) Institutional context, 4) Organization and 5) Normativity of professional practice. This prototype was created with basic design tools. We used **Articulate Storyline 2** since it can insert interactions [6] and **Microsoft PowerPoint** by its easy usability (Fig. 3).
An important part of the portal is the Organization section where five content areas were established. Each content area includes a human development phase and educational level which are specified in our curriculum (Fig. 4). It should be noted that each professor’s program is located in one or several of these content areas regardless of its theoretical and methodological relation adopted by the professor.

Once these five sections were established on the first version of the portal then we performed diverse user studies to test: a) accessibility via digital media b) graphic aspect of the user interface and c) file formats for resources and compatibility to consult them online. This data was used to develop the final portal version.

3.5 Development of academic portal

Once all user testing was completed and based on the ideas from sections 2.4, 3.1 and 3.2, we used Adobe Muse to implement the final version of the portal. During the implementation of this final version, we revisited the five sections presented in our previous design and reorganized them into three: 1) Homepage, 2) Academic resources and 3) Institutional context (Fig. 5).
In *Homepage* we find general website information and relevant educational topics, in *Academic resources* we find five content areas based on educational level and human development phase (Fig. 6). Finally, in *Institutional context* we find relevant information about institutional context and professional practice normativity.

Each content area includes a description of the appropriate human development phase and educational level which is based on the theoretical elements, manuals and curriculum provided for our area. Also, each content area provides two sections: 1) problem analysis and needs detection and 2) design and application of intervention program (Fig. 7). These two sections were implemented to organize the intervention process.
The digital resources section displays technical sheets about each resource including the basic concepts located on section 3.3 and corresponding to the database registration form [7]. Each resource, regardless of its format, includes an option to add a technical sheet describing the final purpose of the resource as well as a direct link for students and professors that would like to include it on their supervised practice activities (Fig. 8).

Figure 8. Data sheet sample of a mathematic resource

4 CONCLUSIONS

The use of Internet in education has been reflected in the creation of diverse academic portals in the university field. The academic portal described in this paper is an approach aimed to favoring the teaching-learning process in a specific domain: supervised practice activity in the educational area of psychology.

Once the academic portal is completed then it will become available to professors and students via different promotion mechanisms in order to evaluate the impact on their academic activities.

It is expected to have a positive effect so its consultation contributes to improving student learning and teaching processes.

ACKNOWLEDGEMENTS

This paper is part of the project Portal Académico para la modalidad de práctica supervisada en el área de psicología educativa de la FES Zaragoza funded by the Support Program to Projects for Innovation and Improvement of the Teaching from the National Autonomous University of Mexico. Code: 304316.

REFERENCES


