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**THE DIGITAL
PORTFOLIO, AN
EFFICIENT ASSESSMENT
AND WORK TOOL
FOR LEARNING IN
THE AREA OF HUMAN
GEOGRAPHY**

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Abstract: This article presents the meaning and characteristics of the use of a digital portfolio applied in a distance learning university context. Through the *Ágora* platform created at `` Universidad Nacional de Educación a Distancia``(UNED), you can manage and share documents, create and participate in thematic communities, as well as carry out online projects. Through the creation of a portfolio carried out by the students, a series of tasks are carried out that favor the teaching-learning process through the exchange of documentation, contribution of ideas, basic orientations and even the monitoring of the evaluation processes. from start to finish.

Keywords: portfolio; teaching-learning; educational innovation; formative assessment; self appraisal; reflective learning

INTRODUCTION

The portfolio as a learning and evaluation instrument places its emphasis on monitoring student work based on the continued progress of basic (Medina, 2009) and professional (Beltrán, 2023) competencies that have been developed over the years. studies (Barragán, 2005), in this case we will focus on the field of Geography and specifically on the study and research of social spaces. It is intended that the university teaching-learning process have a practical nature (Klenowski, 2007) hence the proposal in the development of a work based on the personal elaboration of data and practical application of the knowledge acquired in the various sources consulted (Barberá, 2008).

To carry out the task, theoretical knowledge acquired through the documentary sources most used in the study of demographic processes and in the activities of the production sectors, from the primary level (agriculture, livestock, fishing and forestry) is previously required, such as secondary

(industry and construction) and tertiary (services). The acquisition of knowledge in these sectors will be related to the selected research topic and that is of most interest to the students; However, in all geographic work it will be essential to also go to the prior theoretical study of cartographic sources and geographic information systems (GIS) as sources of information, representation and support of documentary sources that allow for maximum communication in the final document. (Agra, 2003)

Progress in the acquisition of this teaching-learning process will be based on the development of competencies through the publication of evidence of achievement (rubrics) that will document the level of progress of the aforementioned competencies (De Miguel, 2005). The proposed electronic portfolio will be individual and will be supported by a support mechanism on the part of the subject teacher, through which he will provide continuous feedback to the students (Pérez and Others, 2012), which will facilitate the adjustment of their actions to the raised professional competencies (Gállego and Others, 2009).

The main objective that encourages us to propose the portfolio as an evaluation and learning procedure (Barberá, 2006), is the aspiration we have to turn our students into reflective and critical students (Hills, 1981). From this it can be deduced that, in our training program, we have prioritized, among others, competences such as the capacity for reflection and critical analysis (Jones, 2008). We believe that both play a fundamental role for our students as future professionals in the Social Sciences, and specifically Geography as a science that studies human activity and its impact on the landscape, as well as other issues derived from land use.

The evidence shows that the use of portfolios promotes the development of

these, and also allows us to obtain greater control of the work done by the students (Ciesielkiewicz, 2015), an issue that takes on special relevance within the European credit that began years ago after the in operation of the Bologna Plan. In addition to these reasons, we find many more, both theoretical and practical, that justify and advise the use of the portfolio in a variety of educational contexts and for different purposes (Carreras, 2021). From a more methodological and technical perspective, we can highlight the dissatisfaction that exists derived from the use of methodologies based on quantitative approaches that lead to the abuse of final memory tests with the mere consideration of the results (Sutherland, 2005).

The Portfolio presents interesting aspects such as the possibility of carrying out cumulative, sequenced and ordered work; it also gives students an important role that will help them in the process of reflection and improvement. Finally, learning is not merely descriptive, but reasoned in such a way that it can be maintained over time and allows a reasoned application in future learning and research processes by the students involved (Corominas, 2000).

METHODOLOGY

A mixed methodology is proposed, with the presentation of results through qualitative analysis extracted from the bibliographic consultation and quantitative data through the method of surveying the students participating in the elaboration of an electronic portfolio (table 3). We highlight the use of documentary sources through the search for data in databases such as WOS, ESCI, DOAJ, Dialnet and Google Scholar. In the final annexes, Table 4 presents specific results based on objectives, general competencies and training activities; while table 5 delves into the realization of evaluation rubrics that facilitate

and demonstrate the progress of the students in the knowledge of the subject taught.

RESEARCH RESULTS

The subjects at the university level are taught over four months (although it is called a semester), from mid-September to mid-January and from February to the end of May. In order for the distribution of the tasks to be carried out to be programmed in an orderly and gradual manner, the following temporal sequence for the case of the second semester.

The nature of the work developed, its individuality and singularity make a problem that is currently widespread in university works very difficult: plagiarism. Carrying out a forgery will be complicated since the teacher who directs this work will assist the student's progress from the beginning, correcting mistakes, improving style, and even requesting supporting documents to verify the exposed content. In the case of the Master's course that we teach, each student must choose an average city to investigate the repercussions of population aging in the urban space, studying the dynamics of aging and its impact on that space using appropriate research methodologies and sources. to the nature of this type of work.

The student must learn to select accurate and significant information, analyze it and draw the appropriate conclusions. For all these reasons, she must build pyramids of the general population and by neighborhoods or districts, analyze their profiles and draw conclusions about mortality rates, fertility and population growth. Next, it will use a series of significant indicators such as the analysis of the population over 65 years of age by sex, educational level and professions performed in each of the neighborhoods or districts; the analysis of the tenure regime of the dwellings (owned, rented or transferred); the study of the number of people who occupy

February to ½ March	½ March to ½ April	½ April to ½ May	½ April to end of May
Study of documentary and cartographic sources and determination of the subject under study, defining the methodology to be followed. Bibliographical consultation on similar works.	Selection, location, consultation and collection of data from direct sources.	Preparation of information from all sources consulted.	Organization, writing, final conclusions, fine-tuning and delivery of the research work to be evaluated.

Table 1. Planning schedule
Fountain. Own Elaboration

	2018-2019	2019-2020	2020-2021	2021-2022
Number of participants	8	12	5	7
Associated Center for the UNED	3 Madrid 1 pomegranate 1 Elche 2 Cartagena 1 Valencia	4 Madrid 2 Castellon 1 Cordoba 2 Barcelona 1 Cartagena 1 Huesca 1 Oviedo	2 Madrid 1 Caceres 1 Rhea City 1 Huelv	2 Madrid 1 Merida 1 Logrono 1 Elche 1 Albacete 1 Soria

Table 2. Population and sample.
Fountain. Own Elaboration

Questions to assess about the use of portfolios	Nothing 1	Bit 2	Normal 3	Important 4	Very important 5
1. Facilitates learning progress	1	2	13	9	5
2. Allows you to keep an orderly pace in the subject	0	1	10	11	7
3. It constitutes an effective learning tool	0	1	5	17	7
4. Promotes autonomous learning	1	2	10	12	10
5. Encourage interaction with teachers	1	3	12	7	7
6. Allows a positive evaluation	0	2	8	16	6
7. Guide content monitoring	0	2	3	9	16
8. Facilitates personalized education	2	5	14	5	3

Table 3. Assessment of the use of the portfolio by the students
Source: self made

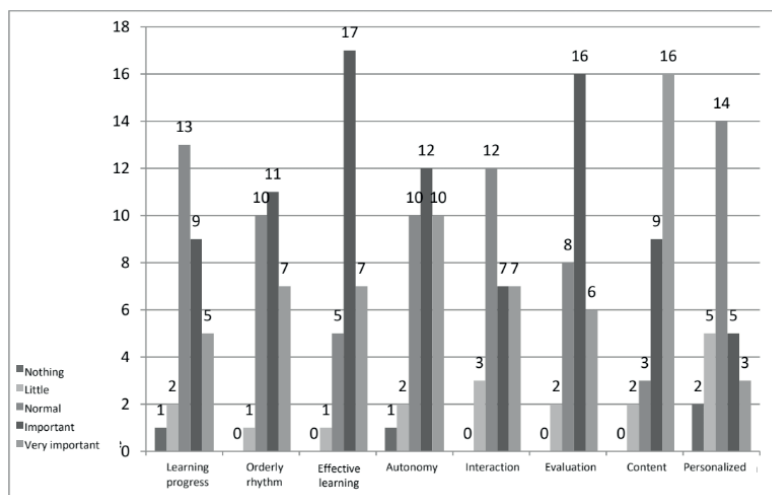


Figure 1. Assessment of the use of the portfolio by the students
Source: self made

the dwelling and their age, level of personal autonomy (total, partial or absolute) or form of resolution in case there is any dependency (public centers, public, private or subsidized centers).

Another important section of the work will consist of making a map of facilities and services as well as their accessibility in the different neighborhoods of the city where, among others, facilities such as cultural and educational centers by levels (libraries, Senior University, university and centers of popular culture, etc.); health services (outpatient clinics, clinics, hospitals with geriatric services, etc.); Leisure facilities, day centers (indicating the ownership: public, private or concerted), Commercial services (pharmacies, banks, etc.), residences for the elderly installed in the urban complex (indicating the ownership: public, private or concerted and the economic cost of the square), map of collective transport and its adaptation to the elderly, current status of the existence of architectural barriers, current status of urban furniture indicating the state of conservation of public toilets, benches in landscaped areas, or rates of provision for the over 65s in the different neighborhoods of the city.

Geography is the science of scientific analysis of the landscape, therefore a section could not be missing in this work, before reaching the conclusions and proposals for improvement, dedicated to the population footprint in the urban landscape, for this reason the degrees of renovation of buildings in the neighborhoods, rehabilitation of buildings, intervention of public administrations in the conservation of residential and urban heritage, ending with the preparation of a map of the studied neighborhood where the main urban actions for renovation and rehabilitation are reflected. of the same in the last decades, being able to carry out for the qualitative analysis a survey on the degree

of citizen satisfaction by neighborhoods and proposals for improvement for a better quality of life of the elderly.

POPULATION AND SAMPLE

The population under study has been made up of a group of students participating in the aforementioned subject over four school years (2018-2019 to 2021-2022), the procedure used to select the students was the facility that this researcher had to request collaboration due to direct contact with them, being the person responsible for the subject, they were randomly invited to fill in of a questionnaire composed of eight items (table 3) and whose results are shown below. Before that, Table 2 indicates the number of participating students each academic year and the origin of these students according to the Associated Center of `` Universidad Nacional de Educación a Distancia``.

RESEARCH RESULTS. QUESTIONNAIRE ANALYSIS

The analysis of results through the questionnaires indicates that all the questions raised, which were eight in total, are always between the intervals of 3 (normal) to 5 (Very important), in fact, four of them are in the rating of "Important" (rating 4 out of 5), three in the rating of "Normal" (rating 3 out of 5) and one obtains the rating of "Very important" (rating 5 out of 5). We highlight as the most significant results the identification of the portfolio as an effective learning instrument or guidance in monitoring the contents, as well as the help offered by the portfolio in ordering the subject, autonomous learning or obtaining better results in the evaluation. as a facilitating element to pass the subject successfully.

CONCLUSIONS

As we have commented previously, the

use of the portfolio in the subject “Research in Social Spaces”, arises from the need to implement and innovate teaching and evaluation methodologies in view of the convergence of the Spanish higher education system to the European scope. There is no doubt that the implementation of this type of experience is preceded and followed by a process of reflection and analysis on the new pedagogical models and their practical implication in the context of university classrooms. The first important reflection to take into account is that although from the new perspective of the European credit, the emphasis is placed on the student’s work, the teacher’s work does not become secondary, on the contrary, the planning and methodological knowledge as well as the pedagogical mastery of a series of didactic guidelines by the teacher will be more demanding within this new perspective, which is why the teacher must be prepared and trained pedagogically, since it is an essential point for the change to be successful.

The creation of a portfolio is an alternative to the possible limitations in terms of techniques and procedures to improve teacher and student learning. The greatest strength of the use of the portfolio is that it converts performances, analysis and proposals (improvement actions and others) into the axis of reflections. It allows learning from concrete examples the strengths and weaknesses of one’s own actions and the corresponding improvement. It is for this reason, and based on the experience of the writer, that the use of the portfolio in an integrated action: didactic-evaluation, is recommended as one of the best strategies to evaluate performances (teachers) and evidences (students). In the case of the area of Human Geography, the students have positively valued the development of the portfolio as an innovative instrument, valid for learning and its justification within

the evaluation system of the corresponding subjects.

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Goals	General competences of the subject Introduction to Research Social Spaces	Formation activities
<p>-Know the main documentary sources and their practical application that allow the student to approach the social reality in different Spanish areas.</p> <p>-Stimulate the ability to analyze the phenomena involved in the modeling of social spaces by observing, locating and comparing them.</p> <p>-Develop the critical attitude of the student through the management and elaboration of data from the sources consulted and from the specific bibliography to attend to the different resources of the analysis of the social space.</p> <p>-Acquire the essential knowledge and skills to carry out a research project on a phenomenon of social interest.</p>	<p>-Possess and understand knowledge that provides a basis or opportunity to be original in the development and/or application of ideas, often in a research context.</p> <ul style="list-style-type: none"> - That students know how to apply the knowledge acquired and their ability to solve problems in new or little-known environments within broader (or multidisciplinary) contexts related to their area of study. - That students are able to integrate knowledge and face the complexity of making judgments based on information that, being incomplete or limited, includes reflections on the social and ethical responsibilities linked to the application of their knowledge and judgments. - That students know how to communicate their conclusions and the ultimate knowledge and reasons that support them to specialized and non-specialized audiences in a clear and unambiguous way. - That students possess the learning skills that allow them to continue studying in a way that will have to be largely self-directed or autonomous. 	<ul style="list-style-type: none"> -Use of primary sources -Web searches -Management virtual campus Ágora -Writing work - Field diary

Table nº 4. Objectives and general competences of the subject: Introduction to research in Social Spaces

Source: self made

INDICATORS		ACHIEVEMENT LEVEL				Select the level			
		Level 1 (Suspense)	Level 2 (Approved)	Level 3 (Remarkable)	Level 4 (Outstanding)	Level	Punc- tua- tion		
Structu- re(30%)	Format and language: (15%; max. 1.5 point) formal/academic style	Unformatted document (different font, size, paragraphs with different indentation...); · Neglected appearance; · Continuous use of the first person to write. · Parts of the text with incomprehensible writing · Many misspellings and colloquial language. - 1 misspelling of spelling (b/v, h, y,...) subtracts 0.25 points. - 4 tildes will subtract 0.25 points - More than 10 misspellings (more than 10 spellings, 40 tildes or combinations of them) will automatically fail the work.	The work has format but some misspelling, grammar or punctuation; · The style can be improved (use the first person on some occasion or colloquial language).	· I work with format and without errors but the style or writing could be improved. · The usual form of expression in the academic field is adapted but sometimes it changes from impersonal to plural	Format and writing style elegant and without errors that facilitates reading · The usual form of expression in the academic field is adapted (always use the impersonal or the plural	Level 4	1.5	TOTAL SCORE ON STRUCTURE	3.0
	Structure/ sections(15%) · Front page; Index; Abstract · Introduction; Justification; Objectives Theoretical part Methodological/ empirical part or proposal / project / programming / educational material... Conclusions, limitations and prospective · Bibliographic references	It does not include all the sections or it is poorly structured; There is no coherence or relationship between the sections; Very extensive (>60 pages) or very little (<20 pages)	It includes all the sections, although some of them lack development. · A little extensive (>50 pages) or a little scarce (<30 pages).	It includes all the sections and they are developed, but there is a lack of cohesion or continuity between them. Adequate length (between 30-50 pages).	It includes all the sections and there is coherence and a logical and continuous development between them. Adequate length (between 30-50 pages)	Level 4	1.5		

<p>Contents(70%</p>	<p>Cover, index and summary 4%)</p>	<ul style="list-style-type: none"> · The cover does not follow the model proposed by the UNED; It does not include an index or it is poorly paginated; No summary or the summary does not reflect the content of the work. No keywords. The title does not reflect the theme of the work. 	<ul style="list-style-type: none"> · Official cover but with some errors; · Includes an index but with one or two errors in the pagination; · Very long or very short summary · Summary of correct length but missing information on two of the main aspects (objective, methodology and conclusions); · The title reflects the topic of the work but can be qualified 	<ul style="list-style-type: none"> · Official cover without misprints; · Correct index; · Summary with the correct length (approx. 150 words), although it could be improved because information is missing on one of the main aspects (objective, methodology and conclusions); · The title reflects the topic of the work. 	<ul style="list-style-type: none"> · Official cover without misprints; · Correct index; · The abstract presents the necessary information (objectives, methodology and conclusions) and has the appropriate length; It also includes an index of tables and/or figures; The title reflects the topic of the work. 	<p>Level 4</p>	<p>0.4</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">TOTAL SCORE ON CONTENT</p>	<p>7.0</p>		
	<p>Theme 4%) - One theme must not be prioritized over another. - One TFM modality must not be prioritized over another.</p>	<ul style="list-style-type: none"> · The theme is not useful for the educational field;The theme has no relation to the field of Geography · It is not related to the educational level of the scope of the Master · It tries to address an excessive number of topics without explicit relation. 	<ul style="list-style-type: none"> · The theme is useful for Geography but with reduced or unrealistic applicability; Related to the educational level of the Master 	<ul style="list-style-type: none"> · Theme useful for the Geography of Social Spaces and applicable, although it can be improved or completed; Related to the educational level of the Master 	<ul style="list-style-type: none"> · Useful and applicable topic in the field of Social Geography · All aspects necessary for its development are included; · Related to the educational level of the Master's 	<p>Level 4</p>	<p>0.4</p>				
	<p>Introduction/objective(12%)</p>	<ul style="list-style-type: none"> · There is no presentation or justification of the research problem (topic); · It does not have objectives or they are poorly formulated; yesIt only has a general objective, without specific ones; heThe objectives are not related to the TFG. · There is no coherence between the chosen topic and the proposed objectives. 	<ul style="list-style-type: none"> · Presents the topic but lacks justification; · The objectives are formulated (general and specific) but they lack more relation to the topic or are unrealistic 	<ul style="list-style-type: none"> · The topic is raised in a clear and justified way, although it can be improved (the reasons justifying the research are not sufficiently explicit) · The objectives are well formulated, achievable and realistic 	<ul style="list-style-type: none"> · Theme well formulated and justified; · The objectives are correct and coherent with the theme, they are achievable and realistic 	<p>Level 4</p>	<p>1,2</p>				

	Theoretical Framework (15%) - Detecting plagiarism in a TFG will be a reason for failing.	<ul style="list-style-type: none"> - No.or is it related to the problem (the topic)and the objectives of the TFM; There is no order in the contents; Concept definitions are missing; - Unjustified statements; - Unreliable sources or few sources consulted (<10); - There are no primary sources; - There are plagiarized texts (without citing). 	<ul style="list-style-type: none"> - Is related to the theme and objectives; - The contents are ordered but the discourse can be improved; - The main concepts are defined and most of the statements are justified; - There are no texts by other authors without citing; - Few primary sources or non-current sources 	<ul style="list-style-type: none"> - Its relatedthe topicand the objectives; - There is discursive unity within each section but not between sections; - There are no plagiarized texts; - The number of sources is adequate to achieve the objectives. - Most of the sources are relevant and most are primary. 	<ul style="list-style-type: none"> - It is related to the problem and the objectives; - All concepts are defined and all statements are justified; - The contents within and between sections are linked and follow a discursive unit; - All sources are relevant and primary. 	Level 4	1.5		
	Methodological framework or intervention proposal (15%) -	<ul style="list-style-type: none"> - It is not appropriate to achieve the formulated objectives and solve the problem; - It is not developed correctly; - Confused and inconsistent results (modality: initiation to research); - Incomplete proposal or project (proposed/project modality). 	<ul style="list-style-type: none"> - Adequate to achieve the objectives and solve the problem but needs further development; - The results are consistent with the objectives but there is a lack of description (modality: initiation to research); - The proposal or project includes all the sections but lacks development in some of them. them (proposed modality/project). 	<ul style="list-style-type: none"> - Adequate to achieve the objectives and solve the problem; - The results are coherent with the objectives, they are well described but they can be completed a little more (modality: initiation to research); - The proposal/project is complete and developed but it can be improved some section (proposed modality/project). 	<ul style="list-style-type: none"> - Adequate to achieve the objectives and solve the problem; - Coherent, appropriate results and described in detail (modality: initiation to research); - The proposal/project is complete and described in detail (proposed/project modality). 	Level 4	1.5		
	Conclusions(10%)	<ul style="list-style-type: none"> - there is no conclusionis. - The conclusions do not respond to the proposed objectives or are not a consequence of the work carried out. 	<ul style="list-style-type: none"> - There is a section of conclusions but it does not respond to all the objectives; - They are a consequence of the work carried out but they lack originality; 	<ul style="list-style-type: none"> - There is a section of conclusions that allows us to know if the objectives have been achieved; - They are a consequence of the work carried out; - They are original and are expressed with their own terminology; 	<ul style="list-style-type: none"> - There is a section of conclusions that allows us to know if the objectives have been achieved; - They are a consequence of the work carried out; - They are original and are expressed with their own terminology; - It includes limitations and prospective (if appropriate) 	Level 4	1		
	Bibliographic references(10%)	<ul style="list-style-type: none"> - Does not include bibliography; - Most of the citations in the text do not appear in the bibliographical references and vice versa; - There is no coherence in the way of citing in the text and neither in the bibliography. 	<ul style="list-style-type: none"> - It includes a bibliography but some of the references cited in the text are missing (max 3); - It does not use APA regulations but the way of citing is consistent throughout the document. 	<ul style="list-style-type: none"> - Includes bibliography and all text citations are in the reference list; - Does not use APA standards but the way of citing is consistent throughout the document. 	<ul style="list-style-type: none"> - Includes bibliography and difference between references and consulted bibliography (if appropriate); - All text citations are in the list of references; - Uses APA standards 	Level 4	1		
TOTAL SCORE ON CONTENT									

Table nº 5. Rubrics for the evaluation of the subject: Introduction to research in Social Spaces

Source: self made