



## Twitter as a methodological resource in Higher Education: an educational experience with Social Work students

### *Twitter como recurso metodológico en Educación Superior: una experiencia educativa con estudiantes de Trabajo Social*

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### Abstract

The profile of the university student is undergoing significant changes that are forcing universities to rethink new methodological strategies to favour teaching-learning processes. In this paper we analyze the main results derived from an innovation project supported by the incorporation of Twitter as a collaborative, collective and innovative methodological resource in Higher Education. The general objective of the study is to explore the educational impact of the use of Twitter as a teaching resource, and how students perceive the usefulness of this instrument integrated into a participatory methodology. The sample is composed of 137 first-year students of the Degree in Social Work of Pablo de Olavide University, Seville (Spain). It is an *ex post facto* and transversal study, which starts from a descriptive methodology, using instruments for the collection and analysis of qualitative and quantitative information. In general terms, the results obtained after the analysis of participation, of the comments made by the students and of the shared audiovisual content, address questions centred on the influence of the use of Twitter for the improvement of the natural dynamics of academic development in the subject of Introduction to Social Pedagogy, observing how it provides numerous benefits in the collective creation of learning, from collaboration, participation and group cohesion.

**Keywords:** Twitter, Higher Education, innovative methodologies, social networks, collaborative learning, participatory methodology.

### Resumen

El perfil del estudiante universitario está experimentando cambios significativos que obligan a las universidades a replantearse nuevas estrategias metodológicas para favorecer los procesos de enseñanza-aprendizaje. En este trabajo se analizan los principales resultados derivados de un proyecto de innovación apoyado en la incorporación de *Twitter* como recurso metodológico colaborativo, colectivo e innovador en Educación Superior. El objetivo general del estudio es explorar el impacto educativo del uso de *Twitter* como recurso didáctico, y cómo perciben los estudiantes la utilidad de este instrumento integrado en una metodología participativa. La muestra se compone de 137 estudiantes de primer curso del Grado en Trabajo Social de la Universidad Pablo de Olavide, de Sevilla (España). Se trata de un estudio *ex post facto* y transversal, que parte de una metodología descriptiva, utilizando instrumentos de recogida y análisis de la información de corte cualitativo y cuantitativo. En líneas generales, los resultados obtenidos tras el análisis de la participación, de los comentarios elaborados por los estudiantes y del contenido audiovisual compartido, abordan cuestiones centradas en la influencia del uso de *Twitter* para la mejora de la dinámica natural del desarrollo académico en la asignatura de Introducción a la Pedagogía Social, observando como aporta numerosos beneficios en la creación colectiva del aprendizaje, desde la colaboración, la participación y la cohesión de grupo.

**Descriptor:** Twitter, Educación Superior, redes sociales, aprendizaje colaborativo, metodología participativa.

## 1. Introduction and state-of-the-art

### 1.1. Profile of the university student in the technological time

Society nowadays could not be understood without its linkage with the latest technological developments and their applications, and is characterized by having continuously interconnected citizens, thanks to the easy access to the internet and mobile phone communication, among other things. This new form of communication and understanding relationships has significantly transformed the way humans conceive what surrounds us and the way we adapt to the new realities (Halliwell, 2020). According to Martínez and Acosta (2011) and López-Noguero and Cobos (2016), Information and Communication Technologies (ICT) make it possible to instantly access a large amount of information, which must be managed considering that the exponential growth of these new technologies is reconfiguring communication situations and teaching and learning processes.

We live in a digitized society and, therefore, we must be aware that aspects related to coexistence, such as values, emotions, relationships that we establish, but also the way we communicate and the treatment we give to the information we create and share, are totally influenced by the way in which we use the technological tools that allow us access to these digital contexts. Whether we want it or not, new technologies are means that educate and socialize (Morón et al., 2017), so it is essential to work on skills related to these issues from Higher Education.

Currently, students who study at the university are part of the first generation educated in natural coexistence with new technological advances. This circumstance forces universities to adapt to the new characteristics of a changing and constantly evolving society, transforming and developing their educational practice in these new realities (González-Hernando et al., 2020).

Therefore, methodologies should be contextualized taking into account the needs of this new student profile, considering all the characteristics of this new generation. In this sense, this novel educational context requires more participatory pedagogies in all educational stages, including Higher Education. Pedagogies that revolve around social learning, that generate spaces for teaching, learning and the evaluation of competences, with an active and motivating aspect (Noguera, 2015; Paredes et al., 2020).

According to Martínez-Rodrigo and Raya-González (2013), the new profile of university student requires a teaching process that allows to achieve competences such as the ability to work in interdisciplinary teams, create and share information and educational content in different interactive and dynamic formats, be active participants and protagonists of their Own learning.

Recent international studies demonstrate the interest of this new profile of the university student. Research with high scientific impact, which has been published in recent years, analyzes issues such as the use of smartphones in university contexts by students, with the aim of promoting the use of mobile technologies in teaching activities in Higher Education (Aguirre et al., 2019). On the other hand, Jami and Taheri (2019), develop a study in which they measure the effects of the personality traits of university students on the behavior when exchanging knowledge on social networks, while Gavilán et al. (2017) discuss how social media can become a very useful tool to empower citizens, from an active and critical perspective.

As can be seen, new trends in research consider emerging profiles of students' behavior and their new social realities, trying to approach empirical results that demonstrate the need of higher education institutions to adapt. On this issue, authors like Valeria et al. (2018) conduct a longitudinal study focused on cognitive and motivational factors that influence the risk of abandonment in university students, trying to identify which cognitive strategies can be strengthened to promote learning and minimize the abandonment of studies.



## 1.2. Methodologies for new educational realities in university classrooms

Almost twenty years after the Bologna Declaration, which initiated the creation of a new European Higher Education Area (EEES), one can see how the teaching function has undergone major changes related to the adoption of innovative methodologies, where the main protagonist of the educational process is the student. Innovative methodologies are understood as those that depart from the traditional vision of teaching and learning, and propose new ways of addressing teaching, using all kinds of resources to improve educational processes.

In this sense, the new profile of the professor of Higher Education must provide students with certain skills that transcend the scientific-academic knowledge, as well as promote the active role of people to their Own learning (García & Carmona, 2014; Garcias et al., 2020).

In this regard, García and García (2015) reflect on the innovative pedagogical principles that are given in Higher Education, and focus on the necessary transition towards conceiving a university education focused on the students and their formative processes. Because of the latter, ICT and the educational possibilities generated by internet access are key elements that directly affect current educational dynamics, improving the quality of pedagogical processes and functioning as a catalyst for active and collaborative learning (Alonso & Alonso, 2014; Juma et al., 2019; Cotán et al., 2020).

On the other hand, it is necessary to promote techniques of exchange of knowledge, experiences and feelings in the collaborative solution of problems in the classroom through a participatory methodology, promoting the active involvement of students during the development of teaching and learning processes, promoting the critical attitude to information and the acquisition of a series of specific skills related to the digital time.

In this sense, authors such as Bautista and Cipagauta (2019) have an impact on the importance of teaching innovation and the ability professors must have to generate new learning environments that promote the self-management of knowledge by students. These researchers identify collaborative learning and project-based learning as the most widely used innovative teaching methodologies in Higher Education, and warn a trend towards the use of active learning methodologies in pedagogical practices.

According to Rodríguez and Restrepo (2015), the use of ICT as a resource of education at the university has increased over the last few years, mainly due to the numerous advantages it offers to the development of the teaching and learning processes, and evaluation of knowledge and skills. Among the main benefits that ICT has in these educational contexts are that they facilitate access to the teaching content, and increase the amount and variety of educational resources in different audiovisual formats (Castro & Chirino, 2011; Sánchez-Saus & Crespo, 2018; Arango et al., 2020).

Similarly, teachers and students use the technological resources available to establish communications that improve the planning and development of training, and stimulate the critical construction of thought and autonomy from a continuing educational approach (Bidarian et al., 2011; Corujo-Vélez et al., 2020).

On the other hand, there are studies on the use of ICT in teaching that indicate the importance of educating in the correct use of new technologies, since there are a number of risks assumed, such as excessive and uncontrolled use that generates social and educational problems mainly related to addictive behaviors, dependence, insecurity and poor management of accessible information (Garrote et al., 2018; Plaza de la Hoz, 2018; Gairín & Mercader, 2018), as well as problems arising from the manipulation and control of digital networks (Machado, 2018; Da Silveira, 2017).



### 1.3. Social media as a methodological resource: the case of Twitter

Today, social networks are commonly used for the social interaction in socio-educational spaces, highlighting the social network Twitter among the university population. The incorporation of this social network in Higher Education has been the subject of many studies in specialized literature, among which are those of Grosbeck and Holotescu (2008), who point to the educational potential that this social network provides by promoting the development of information synthesis skills in a context of immediate interaction.

Other authors such as Thoms and Eryilmaz (2015) or Htay et al. (2020), indicate that this type of tools promotes the autonomous learning of students, making them true protagonists of the education, enhancing informal learning (Tess, 2013; Dommett, 2019), facilitating the social interactions of people involved because of the collaborative work (García-Suárez et al., 2015; Fernández-Ferrer & Cano, 2019; Malik et al., 2019) and encouraging the integration of new methodologies in Higher Education.

Current high-impact scientific studies collect evidence of Twitter's usefulness in Higher Education spaces. For example, Eaton and Pasquini (2020) explore how educational communities encourage the student's learning and academic development in a participatory environment, where the structure of leadership is shared by the two-way nature of online relationships.

On the other hand, Abella-García et al. (2019) deepen their research into how the social network Twitter can potentially increase reflection, learning and collaboration among university students, helping to improve the quality of teaching-learning processes. On the other hand, Hortigüela-Alcalá et al. (2019), look into the pedagogical use of social media and how Twitter significantly influences the increased motivation, learning, participation and degree of academic achievement of students. In this line of research, Gleason and Manca (2019) address the issue of

the educational use of Twitter and its impact towards the fulfillment of educational objectives such as digital literacy and professional development from a participatory paradigm.

Finally, it is interesting to mention the work of Acar et al. (2019), who explore the relationship between the use of social networks and creativity, and obtain significant data that concludes that an active profile on the social network Twitter, where the student expresses his/her ideas and opinions and reflects and creates a discursive environment on educational topics of interest, is related to a high-level creative activity.

According to Vázquez-Cano and Sevillano (2019), the social interaction of students at the university and the teaching-learning processes that occur in this environment of Higher Education, transcend physical spaces into new complementary virtual contexts, based on ubiquity and facilitated by new emerging technologies.

The current profile of students is characterized by accessing and interacting, in the same way, in physical and virtual environments. In addition, it is very common for the internet user to have an active profile on social networks, because it helps to maintain professional or relationship contacts and personal intercommunication in a participatory and proactive way. In addition, in these spaces it is possible to create and share valuable information and knowledge, understanding that all meaningful learning arises from interaction with the social environment and its relationship with the educational context of students (Van der Krogt, 1998; O'Keeffe, 2019; Al-Dheleai et al., 2020). Therefore, it is necessary to innovate in teaching methodologies that use this type of tools of content creation and information dissemination (Adams et al., 2018).

Digital social networks facilitate continuous interaction and learning, and encourage online communication (Siemens & Weller, 2011; Ruiz & Fachinetti, 2018), creating learning communities where participants generate content, interact with each other and share knowledge (Van Puijenbroek et al., 2014; Cela-Ranilla et al., 2017). In this sense,



Fernández-Ferrer and Cano (2019) indicate that the usefulness of social networks in training processes of Higher Education is justified, due to its great potential as a teaching tool at the service of students and professors, from a participatory and collaborative perspective.

This type of networks, used as a tool for higher education, provide added value to the teaching process, as they involve social attraction and motivation for students, encourage communication and the establishment of working groups, enabling common actions at the teaching level (De Haro, 2009; Saeed & Sinnappan, 2011; García & García, 2012; Domingo-Coscollola et al., 2020).

Specifically, Twitter is considered a micro-blogging tool, which makes it possible to write and query messages publicly and free of charge, known as tweets. The size of the message is restricted to 280 characters, Twitter also allows to include multimedia elements such as images, short videos or links to web pages. Authors such as Freitas (2017) consider that “Twitter is not only a social network, but a massive means of interaction” (p. 70) since, on the structure of information exchange, it is found the use of the so-called hashtags or tags, in addition to other options for the user such as the indication of mentions to user profiles of professors or the possibility of tracking other profiles of interest.

Pérez et al. (2012) describe the advantages of using this social network for the university community, including increased attention to academic activities, a significant increase in the sense of commitment and membership of the class group, and the promotion of active participation in knowledge creation. Likewise, the use of this social network allows to expand the teaching-learning processes beyond a physical space and a certain time (Peña et al., 2018; Ribeiro et al., 2020).

Likewise, it is important to note that the information created in this social network can be commented on by any user, and argument sequence of comments can be generated. This can be easily shared using the retweet option, exponentially expanding the impact of the tweets that the

community generates. In short, the accessibility and simple management of this digital social network tool, facilitates its integration as a methodological part in university teaching, promoting participatory pedagogies with a clear orientation towards the impulse of learning and collective construction of knowledge (Prestridge, 2014; Vizcaíno-Laorga et al., 2019; Rojprasert et al., 2020).

Finally, if we address the use of social networks in the educational field, we cannot overlook that there are also negative aspects that must be taken into account when designing methodological proposals. In this regard, Marín-Díaz and Cabero-Almenara (2019) reflect on the need to generate more scientific research that provides reference models for the use of these technologies in university fields. Another fundamental aspect to take into account is that, at the outset, there is a widespread negative vision on the part of professors and students to incorporate online social networks as a methodological element in higher education teachings (Andreev et al., 2020; Van Dijck, 2020), along with a concern of the user about issues related to security, privacy or lack of control over messages issued on the network (Sai et al., 2020; Miller, 2020; Ozer et al., 2020).

## 2. Material and methods

The aim of this research is to examine the educational impact of the use of Twitter as a teaching resource in Higher Education, and how students perceive the usefulness of this technology inserted into a participatory methodology.

The sample consists of a total of 137 first-year students of the Degree in Social Work of Universidad Pablo de Olavide, Seville (Spain). Specifically, 67 students from the teaching group or line 1 (L1) and 70 students from group or teaching line 2 (L2). In this sense, according to the data collected in the Academic Report 2018/2019 of Universidad Pablo de Olavide (2019), there are a total of 705 students enrolled in the Degree in Social Work, divided in four courses of this Degree. The selected sample represents 18.2% of the total population enrolled in these higher studies.



The research is part of a teaching innovation project called “Twitter as an innovative teaching tool and collective construction of knowledge in Higher Education”, carried out at Universidad Pablo de Olavide during the academic year 2019/2020. The project consists of a series of actions or teaching activities related to Twitter, which were carried out during the progress of the subject Introduction to Social Pedagogy.

The activities were carried out in groups, in order to promote collaborative learning and the cooperation of the educational community. To this end, professors encouraged the interaction of students through Twitter during different moments of the sessions. In this sense, during the sessions, students wrote tweets regarding the contents discussed in the session using hashtags (#) to identify messages on a specific topic. Hashtags that were established as methodological protocol of action were (#IPS) (#L1) (#L2), all along with the mention @Lopez\_Noguero.

During the sessions, students synthesized ideas, expanded available information, and worked preconceptions cooperatively, as they often grouped out the tweets and «retweeted», and commented or «liked» peer posts.

With these performances, the idea was to expand the educational processes developed beyond the space and time of the university classroom, promoting students to enter and interact in a wider universe, that of the web 2.0 (López-Noguero & Cruz-Díaz, 2018). At the end of some sessions, professors encouraged to share the most important content published via Twitter. This task facilitated the work of synthesis, generating a log that often helps students a lot.

Similarly, professors used the Twitter account to advertise and announce subject issues (remembering outstanding work or activities, sharing the professor guide, providing some information about the subject, etc.). In addition, it favored the formulation of questions, dissemination of links of interest and recommendations of expert accounts on specific topics, all with the aim of being dynamic and mediating learning in a didactic way.

The research methodology used to collect and analyze the data generated in this educational

experience is descriptive, using tools for the collection and analysis of qualitative and quantitative cutting information. In this sense, on the one hand, a detailed descriptive analysis of the activity of the students in this experience was carried out, considering issues such as the number of tweets and hashtags generated by the educational community involved, the linking of the content with the subject, presentation of arguments and informational contributions considered of interest to the study. For this purpose, the Twitter Analytics tool was used to assess the activity data of students involved during the teaching experience. On the other hand, a satisfaction questionnaire was designed to collect the data, which was subjected to a validation process through expert judgment and applied to the sample through the university’s virtual classroom using the Google Forms app. Likewise, the questionnaire was subjected to the Cronbach Alpha test to measure its reliability, obtaining a score of 0.887 that positions it as acceptable (Mateo, 2004).

For the statistical processing of the data collected in this satisfaction survey, the Statistical Package for the Social Sciences (SPSS V26) software was used, carrying out basic descriptive analyses (response percentages, mean, median, mode, deviation and variance) that, in general, reflect the importance that students provide to this type of experience.

In addition, information from students’ comments on the use of Twitter in the subject of Introduction to Social Pedagogy was analyzed under a qualitative approach. To do this, and trying to use Bardin’s approaches (2002), a coding system was created based on analysis categories related to the key content of the subject taught: theoretical approaches of interest, references to fundamental authors of social pedagogy, methodologies for socio-educational intervention, outstanding learnings, mentions among colleagues, raised doubts, proposals and suggestions.

### 3. Analysis and results

Below are the data collected in the research carried out with the aim of knowing the educational



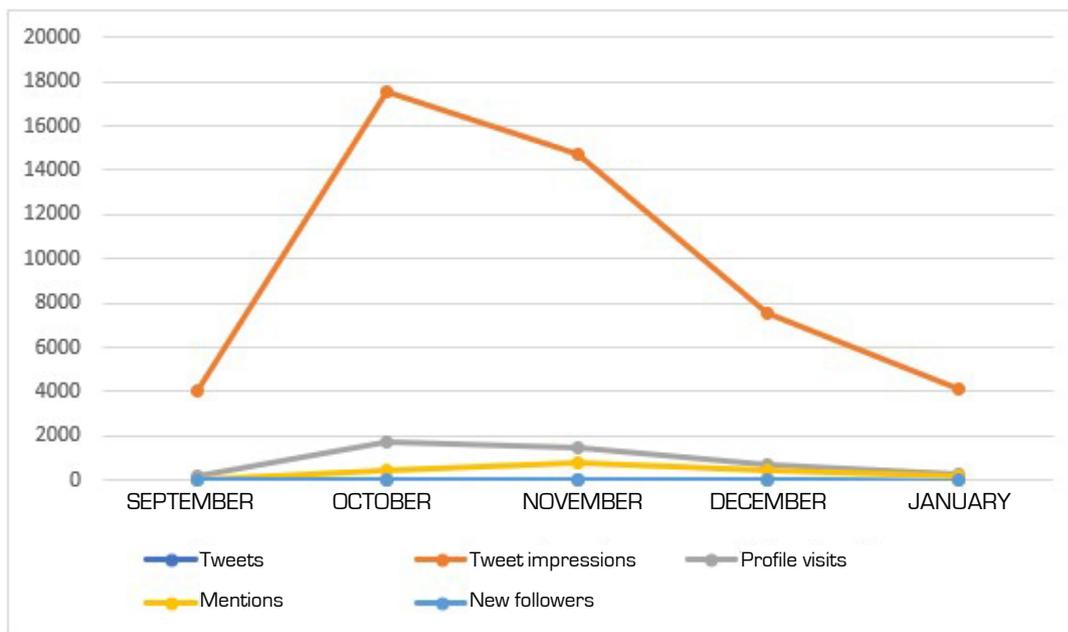
impact that the use of Twitter has had in the subject of Introduction to the Social Pedagogy of the Degree in Social Work.

experienced a significant increase in the number of tweets, tweet impressions, profile views, mentions and new followers, since the educational experience started in the classroom in October 2019 and ended in January 2020.

### 3.1. Descriptive analysis of the students' activity on Twitter

First, it can be seen that the profile of the professor responsible for the innovation project

Figure 1. Evolution of teacher profile @Lopez\_Noguero



Source: Own elaboration based on Twitter Analytics.

This data demonstrates the increase in the participation of students in this social network during the development of the subject, creating and sharing a large amount of content. As an example of this, if looking at the last 100 tweets of students categorized in the different hashtags used to identify the comments (#IPS, #L1 and #L2), it can be seen how a total of 82 contributions are in text format and using the combination #IPS #L1, these contributions received 17 comments and 1 retweet. On the other hand, taking into account the combination #IPS #L2, of the last 100 written

tweets, 52 are in text format and accumulate a total of 6 comments and 37 retweets.

Below is a compilation of some of the tweets created by students:

Pedagogy has an important value in education that has not been completed so much today as to formally integrate it into the educational field. (E1)

Social pedagogy is a theoretical and practical science. (E2)

Another function of the social worker is to prevent possible causes of conflict, both individual and collective. (E3)



I find this subject very interesting and important. I believe that through it we know the fundamental bases for the change of society and how to know how to deal with it. (E4)

Thanks to the group dynamics that we have done in class I have better known my peers and a very beautiful bond has been created. (E5)

The descriptive analysis of the information provided by students' tweets demonstrates the dissemination of knowledge and relevant aspects related to social pedagogy, and reflects the promotion of the learning community and group cohesion. At the end of the experience, students conducted an assessment of the process through the answer to an open question about the usefulness of the Twitter tool. The responses issued by the participating sample find the experience, broadly speaking, as positive and highly rewarding, as confirmed by this selection of the students' opinions:

I think twitter has been a great tool during the subject, since it has allowed me to know the different points of view of my peers and get to know the Social Pedagogy better. (E6)

From my point of view, Twitter has helped in the subject of Introduction to Social Pedagogy, because at the end of the classes two or three tweets were written summarizing in a few words what we had learned that day. In this way, the information was much clearer. (E7)

After having written the tweets, it was our turn to interact with the teammates. For me, this is one of the most useful and fun moments of the activity, since we could comment the opinions of the rest, see the common opinion, who disagree... (E8)

In my opinion, the use of Twitter as an educational tool is something innovative that I had never done before, but it has seemed to me a very positive contribution to the teaching of the subject, since it has served us to interact between the peers, in addition to learning in a more collaborative, dynamic and interactive way. (E9)

The use of Twitter seems to me truly new, dynamic and enjoyable. I think it is useful because it makes us go over the learning agenda in a fun way. (E10)

Analyzing the contributions, we appreciate how students positively value the integration of this tool into the participatory dynamics of the subject. Particularly they highlight the possibility that has offered them to connect and interact with other students and know their opinions regarding the content presented in class, appreciate the collaborative learning that has been generated, the dynamism and interactivity, and express a significant interest in their teaching use, highlighting the playful and creative aspects that social networks provide in these university contexts.

### **3.2. Analysis of twitter satisfaction questionnaire data at the university**

At the end of the course, students conducted a satisfaction survey related to the use of Twitter as a teaching tool, in which a total of 107 students participated, 16 men and 91 women. The 8 items that make up the questionnaire collect information on different dimensions of study such as: the previous knowledge of the Twitter tool by students, the ease of use during the educational experience, the convenience of the protocol established to organize the contributions and the usefulness of the social network as an integrated part of the teaching methodology, among others. The answers to the different items are in Likert format, with ratings ranging from 1 to 4, being 1 «completely disagree» and 4 «completely agree».

The question that asked whether they previously knew the social network Twitter, 80.4% of respondents answered "completely agree" with the proposed statement for this item. Thus, it is assumed that the majority of respondents had a prior knowledge of the tool, and knew how to use it fluently, although a significant 8.4% were completely unaware of this application.



Table 1. Frequencies and percentages for item 1 «I already knew the social network Twitter as a user before using it in the Social Pedagogy class»

		Frequency	Percentage	Accumulated percentage
Valid	Completely disagree	9	8,4	8,4
	Disagree	2	1,9	10,3
	Agree	10	9,3	19,6
	Completely agree	86	80,4	100
	Total	107	100	

Source: Own elaboration based on the satisfaction survey data.

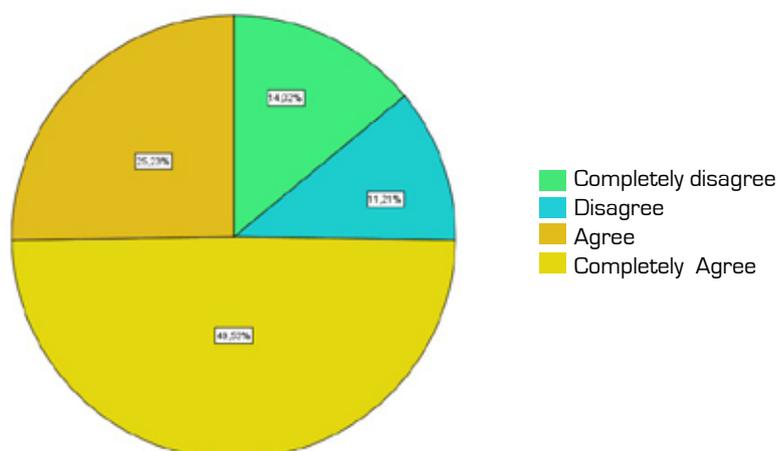
On the other hand, the data collected confirm that 86.9% of the sample found it easy to use Twitter during the course of the subject (item 2). The remaining 13.1% expressed difficulty in using the social network.

This last fact about item 2 encourages to analyze the possible causes that may have hindered the dynamics posed. In this sense, the results obtained indicate that the protocols set to establish communications on Twitter were adequate (item 3). Since 49.5% completely agree with the statement of this item, and 46.7% agree.

As for items 4 «Using Twitter as part of the subject methodology has been helpful» and item 5 «Thanks to this activity with Twitter, we have been able to strengthen and expand the knowl-

edge about the content of the subject», it can be said that the results are quite positive. Although there is a significant percentage of students who have not found useful the activities by using this social network (25.23%), or who indicate that they have not improved in strengthening and expanding knowledge on the subject (31.8%). This data requires to rethink the design of this activity within the framework of the subject for future academic courses, trying to solve the difficulties that arise and improve the teaching-learning system posed. It is essential to motivate each and every student so that they can engage in collaborative processes in a way that is useful for their learning.

Figure 2. Response percentages for item 4. «Using Twitter as part of the subject's methodology has been helpful»



Source: Own elaboration based on the satisfaction survey data



Table 2. Frequencies and percentages for item 5. «Thanks to this activity with Twitter, we have been able to strengthen and expand the knowledge about the content of the subject»

		Frequency	Percentage	Accumulated percentage
Valid	Completely disagree	15	14	14
	Disagree	19	17,8	31,8
	Agree	50	46,7	78,5
	Completely agree	23	21,5	100
	Total	107	100	

Source: Own elaboration based on the satisfaction survey data.

Regarding item 6. « Twitter tool helped us to interact with each other and to learn collaboratively», 77.5% express that they agree or completely agree to this statement. 74.7% of the total sample thinks that incorporating social networks such as Twitter into university education is cur-

rently essential (item 7), and 76.6% positively value the inclusion of the social network Twitter in the classes of Introduction to Social Pedagogy (item 8).

Below is the table of basic statistics for each of the items used:

Table 3. Basic statistics of the questionnaire items

Item	N	Mean	Median	Mode	Deviation	Variance
1. I already knew the social network Twitter as a user before using it in Social Pedagogy class	107	3,62	4	4	,886	,786
2. I found it easy to use Twitter during the subject	107	3,38	4	4	,809	,654
3. The protocols set to establish communications on the Social Network Twitter were adequate	107	3,44	3	4	,632	,400
4. Using Twitter as part of the subject methodology has been helpful	107	2,86	3	3	,956	,914
5. Thanks to this activity with Twitter, we have been able to strengthen and expand the knowledge about the content of the subject	107	2,76	3	3	,950	,903
6. Twitter has helped us to interact with each other and to learn collaboratively	107	2,96	3	3	1,009	1,017
7. I think that incorporating social networks like Twitter into university education is essential today	107	3,03	3	3	,936	,877
8. I welcome the inclusion of Twitter in the Introduction to Social Pedagogy classes	107	3,03	3	3	,936	,877

Source: Own elaboration based on the satisfaction survey data



#### 4. Discussion and conclusions

The inclusion of innovative methodologies based on new technologies in higher education contexts is an increasingly tangible reality. This type of pedagogical experiences represents a step towards the adaptation of university to the new contexts and social realities of this era of dramatic changes.

The profile of the university student has changed, the patterns of behavior towards learning are different compared to past times, and the university has a responsibility to adapt to those changes to offer a meaningful and quality education, in accordance with the new demands that society demands nowadays.

The results obtained in the research carried out, show the positive impact that has generated the inclusion of Twitter as a teaching tool in the subject of Introduction to Social Pedagogy, taught in the first course of the Degree in Social Work. In this sense, the students who have participated in this innovation project have demonstrated an active participation in the activities related to the dissemination of information on the digital social network, as well as the involvement in interaction with their fellow students.

A stable learning community has been established, increasing group cohesion and stimulating cooperation and collaborative work. Students have experienced a development of their ability to synthesize, present arguments and critical reflection, as well as to improve their digital skills.

Generally, the sample under study considers it appropriate and beneficial to incorporate Twitter into the university's academic activities, helping them to strengthen learning and expand their knowledge. The evaluation of the innovation project has been processual, continuously assessing the learnings achieved by students.

The teaching use of Twitter, as well as the competencies that students have acquired in this process can be transferred and contextualized in any subject or degree. Likewise, the domain

of Twitter as an instrument of search and dissemination of information, communication and interaction, implies a learning process that will accompany the student even outside the academic environment, delving into the professional and relational scenarios.

Similarly, we consider that this type of experience encourages an important involvement of students, with a particular influence on the motivation of students for the construction and dissemination of knowledge, and in the acquisition of their Own learning from the interaction they establish with the process.

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