# Insights from Analysing the Use of Social Networks for Academic Communication at Latin-American and Spanish Universities

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#### Abstract

In the current debate about the use of social networks for teaching, it is often insufficiently acknowledged that universities have become very active at the institutional level in several social networks, with differing levels of engagement. This article looks at the way social networks are used for official communication at the institutional level in some selected Spanish-speaking universities to discover the different approaches and organisational implications of these activities. Although the institutions selected for this study are not exclusively distance-teaching institutions, all of them either have departments focused on virtual teaching or offer complete distance-education programs. The distance-education institutions are in a position to become forerunners in the utilisation of social networks for various reasons. They are, by nature, familiar with media-design and mediaproduction, and they have a specific need for network-based communication because of the separation between the teacher and the learner. The authors have analysed the practice of using social networks by comparing institutional web presence on social networks at five universities located in Argentina, Mexico and Spain. The analysis was complemented by interviews with academics responsible for this area to obtain authentic descriptions of the actual state of development and their experiences. Furthermore, several metrics about social networking activities have been calculated for the respective universities, and their significance and validity is discussed. The academic institutions analysed use the most popular social networks to maximally reach their student population. Furthermore, information is mostly restricted to official statements about internal developments and organisational issues, which are duplicated on the university's web pages. Interaction and feedback to user comments are rare. Communication patterns are

not adjusted and differentiated accordingly to the respective social network characteristics. Finally, some suggestions are made about aspects to be considered with regard to institutional communication using social networks.

Keywords: social networks, online learning, Hispanic universities, web presence, communities of practice, academic communication, quality

## Introduction

The development of social networks dates back to 1994, when Geocities provided a web platform that allowed users with little expertise to create content on the web. Ten years later, Facebook entered the scene; at first, it was a network for exclusive use by students. Twitter followed in 2006, as a micro-blogging system. Currently, Facebook has been adopted by 1.200 M users, Twitter and Google+ approximately 500 M users and LinkedIn 238 M (Digital Insights, 2013).

The use of social networks by universities is described by Moran, Seaman and Tinti-Kane (2011) as follows: "Nearly two-thirds of all faculties have used social media during a class session, and 30% have posted content for students to view or read outside class. Over 40% of faculties have required to the students read or view social media as part of a course assignment, and 20% have assigned students to write a comment or post in social media sites". During the last few years, Facebook, Twitter or Google+ icons have come to be displayed on many home pages of universities. Reig Hernandez (2012) explains the success of social networks by its characteristic of merging the natural need for socialisation with technical opportunities, a juxtaposition that increases and multiplies our influence on users and of other users upon us.

In this context, the motivation to conduct research on the institutional use and implementation of social networks at universities resulted from discussions within an online seminar on "Educational Technology and Web 2.0" held by W. Laaser (located in Germany), on behalf of the National University of Cordoba, Argentina (Universidad Nacional de Córdoba) (Laaser, Brito and Toloza, 2012). During a preliminary inquiry about the university's use of social networks, many publications were found that related to the use of social network projects in K–12 teaching and (to some degree) at tertiary level (Piscitelli, Adalaime and Binder, 2010; Seaman and Tinti-Kane, 2013). However, very few published reflections on the communicative use of such networks at the institutional level of public and private universities (TotemGuard, 2012) could be found.

# Some Related Research Results

However, we could identify at least two relevant studies about social networks that had a related objective and applied a similar approach to ours (Hoffjann and Gusko, 2013; Kohrn, Griesbaum and Mandl, 2012). We will give a brief overview of their methodology and findings to complement and situation our own approach with respect to the literature.

Several of our observations are confirmed by the study of Hoffjann and Gusko (2013), although their target group was different from ours in terms of clientele, goals, and financing. Their study consisted of interest groups, such as trade unions, industry associations, public interest groups and professional associations. Although these groups have different objectives than universities, they have also a lot in common with them. They were described as being in danger of losing their traditional clientele and needing to strengthen the emotional relations to their members. The title of their study, "The Participation Myth", already expressed the main message of the authors.

They distinguished between three types of social media use: information, interaction and participation (Hoffjann and Gusko, 2013). Although the interest groups they selected (n = 160) claimed to be highly interested in participation and interaction, the analysed Facebook profiles showed that only one out of seven contained activating elements of communication and that the distribution of one form of information predominated (Hoffjann and Gusko, 2013). The main conclusion of this study, which was based on expert interviews, online questionnaires and analysis of Facebook sites, was that the use of social media is still underdeveloped and not used to its full potential.

The study carried out by Kohrn, Griesbaum and Mandl (2012) addressed social media marketing at universities in terms of confidence, brand building and information support. The final objective was to generate a user who is a multiplier and an advocate for the institution (Kohrn, Griesbaum and Mandl, 2012). Kohrn, Griesbaum and Mandl (2012) transcribed expert interviews and investigated activities in social networks. The sample was taken from 28 German universities located in the State of Lower Saxony. The focus was on the use of social networks for the marketing of university services towards potential students (Kohrn, Griesbaum and Mandl, 2012).

For their research, they selected the most relevant social networks. All of the universities included in the sample were using Facebook, but only 46% used Twitter. The same percentage (46%) described the institutions that had a proper YouTube channel (Kohrn, Griesbaum and Mandl, 2012). In terms of activity, the authors reported that institutions of fine arts and private universities were more active in social networks than public universities. Furthermore, they stated that, by measuring the number of "comments that talk about..." in Facebook and the number of Tweets in Twitter compared to student enrolment, a certain inverse correspondence between the size of the institution and the activity level could be shown. However, the authors admitted that the database was not completely consistent (Kohrn, Griesbaum and Mandl, 2012).

In the near future, distance-education universities as well as face-to-face universities will be confronted with increasing competition by Massive Open Online Courses [MOOCs] (among others Daniel, 2012; Sharples et al., 2013). Therefore, the need to attract and link the students to the institution cannot be limited to marketing activities such as advertisements and articles in mass media alone. Social media have an increasing reach and became an important source of information—e.g., when students choose where to study or, later, when they maintain contact with the university. German studies confirm that the internet is the main source for the decision making of young student applicants (Willich et al., 2011).

### **Objectives of the Study**

The primary aim of the exploratory work discussed in this paper is to look at the way social networks are used for official communication at the institutional level in some selected Spanish-speaking universities and to investigate the different approaches and organisational implications of their activities. We define social networks as predefined channels to connect individuals, groups or organisations and to communicate and interact via a technological web based platform.

In this article, we will tackle the following specific questions:

- 1. Which social networks are used (Facebook, Twitter, LinkedIn, etc.) and for what reasons have they been selected?
- 2. What type of information and communication is actually "broadcasted" on social networks, and what should be communicated?
- 3. Which main functions of social networks are relevant to the university (e.g., tutorials, contact with employers, administrative issues, contact to faculty, brand marketing)?
- 4. How do social networks compare to learning management systems with respect to advantages and disadvantages?
- 5. To what extent do students participate in communication with the university (active or passive, possibilities of collaboration, obstacles)?
- 6. How are staffing and organisational integration used in the service of social networking activities?
- 7. How useful are the metrics offered by social network providers to universities?
- 8. How are activities on social networks related to the strategic objectives and benchmarks of the university?

# Methodological Approach

This exploratory study aims to analyse social communication within and between the main stakeholders related to a university community. Our methodological approach is basically qualitative, with an additional presentation and discussion of some quantitative data (metrics). Furthermore, it can be considered a comparative study of different cases. When describing the methodology, we prefer to use the term "Institutional Communication Analysis" rather than the currently intensively discussed term "Learning Analytics", which is rooted more in the field of educational data mining (for a general definition of "analytics", see Bichsel, 2012), or concepts such as "Academic Analytics", defined as the analysis of data to help educational institutions monitor progress on key educational goals, such as student retention, faculty productivity and the impact of outreach and engagement (Educause, 2012). We want to emphasise that our focus is to analyse how universities actually use the existing social networks (which are neither created by them, nor for them), how they communicate information about the institution to their students and whether or how they organise a dialogue on a more general level with the students. We will also discuss whether statistical information provided by social networking sites is sufficient to inform and monitor the university's communication activities.

### **Instruments and measures**

The first step in our analysis was to study the websites of several Hispanic universities. The intention was to look at the visible and documented practices on these websites that was available to the public with respect to the incorporation of social networks (for details see Laaser, Brito and Toloza, 2012). Finally, we chose five Hispanic universities located in Argentina, Mexico and Spain to add more depth and authentic information to our study about the concepts and reflections concerning social network usage: UdG—National University of Guadalajara (Mexico), ITESM—Instituto Tecnológico de Monterrey (Mexico), UBA—Universidad Nacional de Buenos Aires (Argentina), UVQ—Universidad de Virtual de Quilmes (Argentina) and UNED—(Universidad Nacional de Educación a Distancia (Spain).

The universities were chosen to include well-known universities that had experience in distance education or in the disposition of larger virtual teaching experiences, regardless of their public or private characters and differences in size. Although the cases selected were, in a statistical sense, not necessarily representative of the entire university sector, recent studies have already confirmed several of our findings in other settings (Kohrn, Griesbaum and Mandl, 2012; Hoffjann and Gusko, 2013).

The main analysis was conducted through in-depth interviews with experts in key academic positions: officials for General Planning Coordination and Institutional Development, Universidad de Guadalajara (UdG); Content Management and Communication in social networks, Universidad Nacional de Educación a Distancia (UNED); Centre for Innovation in Technology and Pedagogy, Universidad Nacional de Buenos Aires (UBA); Coordination of the Special Service Unit for Communication Aspects of the Virtual Campus, Universidad Virtual de Quilmes (UVQ) and the Centre for Knowledge Systems, Instituto Tecnológico de Monterrey (ITESM).

The interviews were conducted in the Spanish language at a distance via web conferencing using Skype and the "iFree Skype Recorder" software. The interviews lasted between 45 and 60 minutes. Prior to the interviews, a semi-structured questionnaire was sent to each of the interviewees (Laaser, Brito and Toloza, 2012). The interviews were transcribed for further analysis. The analysis of the websites ended in August 2012 and all of the data and descriptions were valid until that date.

To complement the qualitative information gathered from the interviews, we looked at some metrics offered by social network providers to measure the frequency, content and outreach of communication via social networks. A comparison table for the five Hispanic universities with data about their social network usage is provided (see Figure 1). Furthermore the usefulness of the applied metrics is discussed.

# Results

# Web analysis

The results from the detailed web analysis of the universities that were ultimately selected show a substantial variety of content, priorities and design patterns—e.g., where and how to place information about activities in social networks, how to link information across different networks, how to organise interactive communication and how to embed activities into the existing organisational structure. However, we found that preferences with respect to the choice of social networks to be used were quite similar for all of the universities analysed. The most popular social networks being used were Facebook, Twitter, LinkedIn and, recently, Google+. YouTube (video sharing) with formal channels and Flickr (photo sharing) are also frequently mentioned; however, they can only in part be considered social networks. Furthermore, the web analysis pointed to already-existing shortfalls in the quality of institutional some communication (e.g., low response rates, inadequate design).

## Interviews

To investigate in detail whether our impression about institutional communication on social networks was correct and to look at some causes of the situation observed, we formulated more detailed research questions to be discussed with the experts responsible for institutional communication at each of the selected universities. We introduce each of the following topics addressed in the interviews using a few authentic key quotes to convey the diversity of opinions and issues raised<sup>1</sup>.

#### Why are social networks chosen for communication?

#### Selected quotes:

"We understand social networks as tools to reach out to the remote student so that he is not forced to access the rather cumbersome platform permanently." (UVQ)

"A university can use social networks to develop its capital of corporate identity, its capital of social relations and linkages and its intellectual capital." (ITESM)

"This collaborative space is based, to a large extent, on feelings and emotions." (UNED)

"I know of cases in which a student raises a question in Facebook and gets five or six responses before he gets a comment from the faculty." (UdG)

#### Short summary and discussion of interview statements

Perhaps the most referenced comment in the inquiry was the usefulness of social networking to open up discussions and to establish closer ties among students and between students and the university (viz., the administrative staff and faculty). However, to be effective, this requires "immediate feedback" and "active listening", i.e., a dialogue open to permanent revisions and adaptations with appropriate language and an attractive design that invite participation (UNED). It is claimed that social networks today respond better to the more diversified and complex communication needs of their users.

In this context, the authors wish to add that, according to Ito (Ito, 2010), social networks reflect, enlarge and extend the real world by breaking down geographical barriers and also by creating "friends" and "followers"—terms with different connotation than what is encountered in the real world. In addition to transmitting data, social networks enable the

creation of new types of feelings and emotions by sharing text, sound and images in a way that has not been previously realised and which are eventually published under different identities to an unspecified public. Furthermore, the velocity and frequency of communication as well as the integration of different social network services increases—e.g., through the integration of hashtags, known from Twitter, into Facebook.

### Institutional strategies concerning the implementation of social media

### Selected quotes:

"I don't believe that we need a strategy for social media, but we have to be aware of the fact that they have to be in line with the basic business objectives" (ITESM)

"We have not yet a common basis of understanding...We are like kids who cannot resist eating ice cream" (ITESM)

"This year, we have a plan, a qualitative plan for social media, to come into closer contact with our students" (UNED)

"There was the idea of generating a joint corporate image for all the centres that form part of the university; however, this idea's failure may be due to the characteristic of being a public university, where every unit claims some autonomy" (UdG)

#### Short summary and discussion of interview statements

In the context of the web analysis and the interviews conducted, we found that there are currently few reflections on

- 1. How to relate social networks to the goals of the university in the areas of teaching, research and administration;
- 2. How to use social networks to increase relational capital, knowledge capital, and corporate identity; and
- 3. How to incorporate activities in social networks into the knowledge management system of the university.

In fact, when we asked the interviewees about strategic documents or evaluation results, no written documents on the use of social software for institutional communication were available. In this regard, there are a dearth of studies about current use and the users' benefits from, and reactions to such information exchange. There were also no internal discussions reported to reach a consensus about institutional policy guidelines concerning the "corporate design" and appropriate "netiquette" for social networks. Furthermore, there were no official records of the different activities of faculty members in social networks.

Usually, the student's and teacher's participation in social networks is the focus of academic writing. However, it is necessary to use social networks more widely to include other stakeholders and to target and exploit specific information channels. Thus, social networks should also include institutional groups, such as administrative staff and faculty, to strengthen ties with students and to promote the development of communities of practice within and outside the university (UNED).

Establishing a common institutional profile is extremely difficult at medium-sized to large universities because it is difficult to standardise and channel the information of the decentralised institutes/colleges/schools. Furthermore, the possibility of central control is contradictory to the philosophy of liberty that forms part of social networks—it also could oppose academic freedom (UdG, UBA).

Lectures, workshops, research grants and other incentives to promote the educational use of social networks in an institutional context were widely missing at the institutions we researched.

### Problems using social networks for institutional communication

Selected quotes:

"Some students say that the university should not interfere in their private space. The university has not yet established a clearly defined position on handling this issue" (UNED)

"Among the main reasons for the use of social platforms by college students are having fun, meeting and connecting with friends, receiving current information on administrative issues, or launching and running personal political campaigns" (UVQ).

"The young students believe that they are the ones who are the owners of copyrights of everything they write and that there is no need to put references" (ITESM).

# Short summary and discussion of interview statements

Universities can exert little control over social networks because of their inherent openness. At the same time, this makes any individual university more vulnerable and exposed to unjustified criticism and mobbing. Furthermore, it is often the case that students have more confidence in the opinions of their peers, and are, therefore, more inclined to accept information about the quality of the university and its staff from peers rather than from the institution itself.

As in other areas, "parallel network accounts" are also set up, it can become difficult for students to discern which information is reliable and backed by university staff (UdG). Therefore, the active participation of the institution may be essential. A strategy to reduce the substantial cost of monitoring has been reported by several British universities employing students to monitor network activity (Swain, 2011).

In all of the interviews, the issue of the privacy of students participating in social networks emerged as important and requiring respect (see also the survey results of Pearson (2013). In this sense, some communication rules have to be set by moderators.

Another crucial point raised in several interviews was the handling of copyright issues. There is no clear distinction between private discussions and academic communication.

Kohrn, Griesbaum and Mandl (2012) also reported similar observations regarding data security and protection of privacy. The authors confirmed that there are still many unsolved issues. The legal situation is far from clear. Germany is known for its relatively strong protection of personal data. It is not surprising that the responsible staff at university administrations recommend not to use social media plug-ins as yet and not to create fan pages until all legal issues have been resolved (Kohrn, Griesbaum and Mandl, 2012).

Also remarkable in this context is the effort made by UNED to "scan" the information about the university in different networks. However, to take an active role on behalf of the institution in this manner is usually hampered by the lack of qualified staff and training. Furthermore, we were

able to observe a lack of adequate knowledge during the interviews about the interference and scope of actions, particularly with respect to the concept of "facilitation" to be applied, in contrast to the facilitation and management of the proper LMS (Learning Management Systems) environments.

### Social Media vs. Learning Platforms

#### Selected quotes of the interviewees:

"Today, I practically don't use Twitter any more for educational purposes; I use Moodle, and I have heard no student complain about the absence of social network usage" (UDG)

"Connectivity—that is one strength of social networks that is a problem at the same time, as students are permanently distracted when doing other things rather than paying attention to what is going on at the university" (UVQ)

#### Short summary and discussion of interview statements

Comparison with the existing learning management systems (LMS) was a recurring theme in all the interviews. In this regard, there are many aspects to be considered to obtain the maximum benefit from each of the communication channels. LMSs were referred to as a closed environment where students are focused solely on the content, which is the opposite of the open and interactive relationships offered on social networks. However, the technical and communicative facilities provided by both types of platforms (LMS and social networks), if properly configured (e.g., open access via free login), does not maintain the aforementioned fundamental differences. Simplistic statements about social networks compared to LMSs should be avoided.

Therefore, we consider it more appropriate to focus on developing an institutional strategy that complements the potential of LMSs (small groups with relatively homogeneous pre-knowledge, joint platform for all students of the course, easier monitoring and control by the teacher) with that of social networks.

#### Media Unit vs. Management Team for Social Networks

#### Selected quotes of interviewees:

"A substantial inconvenience results from massive responses that cannot be handled adequately because there is not enough disposable time or because of a lack of available staff." (UdG)

"At present, we have four part-time staff members who are active in institutional communication; originally, it has been just one full-time employee" (UVQ)

#### Short summary and discussion of interview statements

It is important that a specialised team take care of the social communication channels and that different actors are fully involved in the service. Although awareness of this need is growing, the issue remains that the institutes queried do not have sufficient staff for such purposes i.e., communication and design specialists. On top of the very limited capacity to monitor activities in social networks, some marked rivalries can be observed between existing units for educational media development and new employed staff responsible for social networkse.g., when defining tasks such as designing pages on Facebook or Google+, tasks that could be accomplished either in the marketing section or in the traditional media unit (UVQ). As in the previous cases, these events highlight fragmentation inside the university (traditional media service centres vs. marketing and communication units as part of the university's administration or units at departmental level), but they also underline the revisions needed in the institutional strategy with regard to the means and resources dedicated to institutional communication.

Hoffjann and Gusko stated in their study that, at an institutional level, the relevant resources for the management of social networks are usually attached to the marketing section of the university instead of creating a proper organisational unit. All in all, they conclude that universities are well aware of the relevance of social media but that their activities remain provisional and casual due to the small number of allocated resources and that many of the administrators hesitate to make a clear decision on how to address the phenomenon of social networks (similar in Hoffjann and Gusko, 2013: 26).

The university's use of indicators to measure the impact and reach of social networks

Selected quotes of interviewees:

"We don't follow any statistics or indicators, really we don't." (UBA) We have a very good source by which be informed about the student's activities through the reports provided by Facebook, Twitter and Google. By agreement with Google, we got a "landing page" that informs us every two months about how

people access our social network sites. As compensation, we allow the placement of some advertisements on our sites." (UVQ)

"We use some software to monitor activities in the networks, such as SocialPro or Hot Suite, but we observe activities in blogs as well." (UNED)

"Actually, I think there is no indicator due to the fact that there is no formal strategy and no plan for the implementation of such a strategy." (ITESM)

### Short summary and discussion of interview statements

We found that support tools and statistics were used only to a very limited degree by the universities investigated to measure the actual impact of these communication channels, although some "communication analytics" and "info graphics" were offered by website providers. Furthermore, the lack of accepted indicators or "benchmarks" to measure the success or failure of social network activities with respect to the institutional objectives was acknowledged.

### **Metrics**

To offer an overview about the relative size and frequency of communication activities on social networks of the universities selected, we have listed some indicators (metrics) in the table below, collected all at the same time as a snapshot of their social networks.

Table 1Indicators using data presented on the web pages of the<br/>universities with respect to activities in Facebook and Twitter<br/>(Data collected in December 2012).

| Indicator                   | UdG     | UNED    | Quilmes<br>(Virtual) | UBA     | ITESM   |
|-----------------------------|---------|---------|----------------------|---------|---------|
| (1) Enrolment               | 205.507 | 260.079 | 6.500                | 293.358 | 96.832  |
| (2) FB likes                | 186.763 | 39.543  | 3.416                | 30.960  | 283.416 |
| (3) People<br>talking about | 3.184   | 766     | 130                  | 645     | 6.584   |
| (4) Followers<br>in Twitter | 19.221  | 25.235  | 602                  | 27.132  | 14.844  |
| (5)Tweets sent              | 4.160   | 3.819   | 382                  | 5.993   | 377     |
| (2)/(1) as %                | 90.9    | 15.2    | 52.6                 | 10.6    | 292.69  |
| (5)/(4) as %                | 21.6    | 15.1    | 63.5                 | 22.1    | 2.5     |

The table shows that there is a substantial volume of social network communication at all the universities investigated. The figures published are, however, rather general, and there is no indication about how they have been aggregated. We also added here the number of Facebook likes divided by the enrolment figures to relate the "likes" to the size of the institution. This indicator shows huge variance in the number of likes compared to the size of the institution in terms of enrolment. This result most likely reflects the relatively early stage of development characterised by different speeds of implementation to establish social networks as channels for institutional communication.

Furthermore, we included a metric of tweets sent compared to the number of followers, to look at the level of participation of the subscribers. However, in this case, it again is debatable whether these figures can truly measure the frequency or quality of communication with the university. As a first approach, re-tweets compared to the number of followers may be used as a measure for relevance of different posts. It can be assumed that a re-tweeted comment is considered very relevant to the re-tweeter. Unfortunately, the respective data were not available.

Interestingly, the number of tweets sent divided by the number of followers as a % was highest at the smallest university, a result similar to what was found by Kohrn, Griesbaum and Mandl (2012). However, more research for longer time periods is needed to confirm these results. Practically all numbers for the metrics listed in the table above increased considerably during the following five months, according to an internal update we made. Therefore, the development of the field is still very dynamic.

Many social networking platforms provide page administrators with metrics of web account usage, such as the one plotted in Figure 1.

| UBA XXI Likes   Likes and People Talking About This                   |   |   |  |  |  |
|---|---|---|--|--|--|
| People Talking About This   |   | Total Likes   |  |  |  |
| 302   |   | 29,547  |  |  |  |
| Page Insights   |   |   |  |  |  |
| 17 March 2013<br>Most Popular Week [?]                                | 27 April 2014<br>Most Visited Week 3 people [?] | ● People Talking About This<br>● New Likes Per Week |  |  |  |
| Buenos Aires, Distrito<br>Federal<br><sup>Most Popular City</sup> [?] |   | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~             |  |  |  |
| 18-24 years old<br>Most Popular Age Group [?]                         |   |   |  |  |  |
|   |   | Apr 10, 2014 May 9, 2014                            |  |  |  |

Figure 1 Example of Facebook metrics for UBA XXI (part of UBA)

Totem Guard blogs (TotemGuard, 2012) propose the index "Comments that talk about" divided by the number of "likes". However, this does not really measure the frequency or quality of communication because comments compared to pure statements of interest or just sympathy have

different purposes. Additionally, comments often contain multipurpose messages and may be difficult to classify; moreover, the sender of the post may not be clearly identified as a student of the university.

Since Summer 2013, Facebook has redefined its concept of "page insights" (Facebook, 2013).

- 1. Page analysis now consists of likes, reach, visits, posts and people. The analysis available to administrators is more detailed and the focus is no longer on the number of likes but on the content of likes (which page element is liked, positive and negative likes added to "net likes").
- 2. The number of people who saw a post is not considered important; instead, the type of interactivity (sharing, comments etc.) is more strongly emphasised—e.g., the so-called engagement rate is the % of unique people who clicked on, liked, commented or shared a post divided by the number of people who saw that post.
- 3. Such insights are about visitors (i.e., when fans are online, where they come from and who they are).

These recently introduced metrics still have to be checked for their scientific validity, e.g., the addition of positive and negative likes (ordinal data) to "net likes" is not really in line with what scientific theory permits. An attempt to compare different ordinary levels of negative comments was made by Clement and Schreiber. They developed a five-step scale, ranging from relatively harmless negative statements to severe insults (Clement and Schreiber, 2013).

Furthermore, the metrics to support university strategies have to be linked to the objectives or benchmarks of the university, such as:

- 1. The number of posts by university staff compared to students' postings in a given time interval;
- 2. The classification of comments according to the problems mentioned and content areas covered (teaching, research, administration);
- 3. The staff employed in relation to the number of students communicating via social networks; and

4. The level of awareness and image of the university (qualitative analysis) as represented in the postings of students.

The generic indicators provided by social networking platforms can be supplemented by other services and/or monitoring-related statistical tools (all free versions), incorporating more information to adjust the results and to calculate ratios for each institution, if deemed necessary. In this sense, the tool list is large and must also provide account management services. Among these, the most referenced with regard to social networks are: Crowdbooster, Buffer, Pagelever, HootSuite and TwitStats. Tools that display statistical information are added to the monitoring tools. The new buzz word for this type of program is "infographics," and some examples of such applications are Easel.ly, Stat Planet, Wordle or Creately (Karbach, 2012).

# Conclusion

Summarising our results, we can state that all analysed universities made use of social networks to communicate their messages to the students at institutional level. They have chosen the most popular social networks, namely Facebook, Twitter, YouTube channels and Google+. However, the communication is still principally unidirectional, and students often do not received feedback or, if they do, get it with considerable delay. Furthermore, the information they receive differs little according to the character and type of network. The communication style of the messages is not adjusted sufficiently to the usual style of the network community. Furthermore, there are some obstacles on the student's side to accepting the prevailing communication format with the university. They fear for their privacy and are less concerned about copyrights.

Metrics offered by network providers to universities are either not at all or only to a limited amount used by the universities. The usefulness of the figures is hampered by their focus on general marketing perspectives and proves difficult to relate to university strategies. The coordination of different activities in social networks inside the university and its departments is actually unfocused.

There is a lack of adequate staff in view of the quickly increasing communication traffic between the institutions and the students. The type of organisational integration differs between universities. Mostly, the sections are either part of the administration and closely related to the Rector or Vice-Rector level, or these responsibilities are added as additional tasks to already-existing media units.

According to the results of our study, we conclude that the use of social networks is not just a question of "fashion". Universities cannot ignore visible changes and new communication patterns. Therefore, it is important to critically reflect on the potential of new media on the basis of research. The proper handling of social networks by institutions requires that networks be embedded into the organisational framework of the university and that the actions taken are closely related to the objectives of the university. Motivation, training and funding are also necessary to overcome deficits in the knowledge about social networks and the effects that these networks will have on all members of the university.

# Some recommendations to promote the efficient use of social networks for institutional communication

# Develop a strategic concept for social network activities

Without the design and implementation of a strategy and a path of action, universities will not be adequately prepared for an efficient use of social networks. The strategy has to link the activities on social networks to the university's objectives with respect to teaching, research and administration and will need to reflect on how its "intelligence capital", "relational capital" and "identity capital" can be increased. For this reason, the continuous monitoring and reporting of all activities on social networks carried out by members of the university is essential.

It is certainly important for the university to listen to "how much they talk about the university", what the related issues are, and what type of attitude is shown in the postings (positive, negative, neutral) to determine the proper position and to take immediate action if needed—e.g., posting a respective comment to clarify the position of the university or to make adjustments to administrative procedures or the web interfaces.

At a minimum, the plan should describe the following: how the institution is going to communicate; on which topics the university wants to position itself; what type of content should be published; and how many times a day new information should be provided. Said plan should perhaps be complemented by a contingency plan for conflict management.

# Be active in various networks, with different approaches

The university's site on social networks should at least be available on the following platforms: Facebook, Twitter, YouTube, Flickr, LinkedIn and Google+. It is also important to relate and link different social networks. Overall, we propose a functional use of the different networks to benefit from the specific characteristics of each network and not unidirectionally push information already available on the home page of the university to students that use social networks (for a similar, more general proposal, see Track Social Blog, 2013). We suggest the following functional foci.

- 1. Facebook and Google+: Publication of current information, talking to students, alumni and potential candidates, initiating games, storytelling or promoting topics for discussion
- 2. Twitter: Short content publishing; high interaction with people; information about current administrative problems; examinations; competitions, events and contact with chair professors
- 3. LinkedIn: To date this network is not exploited in an organised manner by the universities, but it has an interesting potential for offering job opportunities to graduates, training programs and business contacts or facilitating the search for potential grants.
- 4. YouTube and Flickr: These can show the university in its environment, infrastructure and teaching. Specific channels can share topics of interest, such as research achievements of teachers and students, with a broader audience.

# Support the organisation of specific interest groups

Interest groups, initiated or supported by the university, should be organised—e.g., for students, staff, faculty, alumni on the relevant social networks. In this regard, a concrete example can be obtained from an internal report by Worldide Education, Austria (Krennmair, 2012). The report of Worldwide Education (WWEDU)—a private distance-educational institution in Austria—describes the formation of a variety of student groups on Facebook.

There are, for example, groups dealing with WWEDU issues for all students as well as more specific groups for alumni, staff and stakeholders, in which news on relevant current events are published and the group moderators answer questions. Furthermore, regionally oriented groups have been established that are often used by students to organise meetings. This model can be extended to form communities of practice or business contacts (e.g., reports on internships, job development).

# Adjust the communication style to the channel characteristics

We believe that communication on social networks should use appropriate language, more colloquial than an official report, but without complete informality. They must also adapt to the habits of customers in the format of messages as imposed by the channel used.

The ability to focus on social media without specific stimulus decreases continuously, as established by Jeffrey Gitomer in his book "Social Boom", where it is claimed that a user spends an average of 9 seconds on a commercial or publication before he or she continues reading or looking for a new theme (Gitomer, 2011). Furthermore, short comments seem to receive more attention than larger ones (Track Social Blog, 2012). Thus, page design has to consider these attitudes. According to our experience at Worldwide Education, Austria, posting at least 2–3 times a day would help to maintain the interest of the target population.

# Deliver value, assess and provide feedback to the students on a permanent basis

It is important to continually assess and review communication processes on networks and to review activities that produce added value for users. Thus, the establishment and analysis of indicators is crucial for the effectiveness of the actions set through these communication channels, in addition to interpreting and understanding its evolution and contribution to the overall strategy of the institution.

### Promote collaboration and invite the creation of user content

Universities should not only invite teachers and students to address teaching content-related problems but also to discuss and comment on institutional issues. The purpose would be to show the personality of the campus and to make all stakeholders feel included in it.

However, motivating students to participate and make active contributions to a dialogue with university sections is far from an easy task. Recent research claims that, although students may contact fellow students for issues related to their studies, they are reluctant to contact instructors (Echo360, 2012). A study of 2,835 respondents from 11 institutions in the United States and Australia found that the majority of students continue to prefer to keep their academic and social lives separate. Nearly three in five stated their preference in 2011 (Dahlstrom, 2012: 25). Moreover, it has been reported that the learning outcomes of Facebook users are minor when compared to others because they study less (Terantino, 2012). On the other hand, calls for specific activities and contributions on social networks, such as in the case of proposals for the flag design at UBA or proposed controversial topics for debate, can result in massive responses and represent an often-missed opportunity in which to engage students.

# Set up a specialised team responsible for social networks

The design and management of social networks could be better supported by devoting more resources and by taking into account the different characteristics of each platform. Additionally, specific training has to be provided because Facebook page design, for example, requires skills different from the preparation of a PowerPoint lecture—e.g., for an adequate design and concept of a Facebook profile, it is useful to distinguish the design between the "groups" and "pages" in Facebook, a topic that is certainly not widely known in the university context (Pasquini, 2012).

Allowing advertising on Facebook or another platform to promote the proper institution or related organisations is entirely valid. It is recommended that appropriate, attractive pictures and messages chosen to build trust and urge people to become interested in the university and its programs be selected. In times of high competition among universities, the use of social networks for marketing and advertising can be powerful. On the other hand, we have to state that a university has no direct influence on added commercial advertising, which no doubt will appear on its website.

### **Final Remark**

Social networks are not able to remedy the deficiencies of contemporary university structures. However, when used in a thoughtful way, they can help to better relate the university and its members to the rest of society. Distance-education institutions in particular should take advantage of their infrastructure and experience to bridge communication gaps to their students and to promote identification with the institution. This would also contribute to counteract some still prevailing prejudices about distanceeducation systems as mere content providers.

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#### Note

1. Direct quotes of expert comments have been translated from Spanish to English. Summary quotes of the interview statements are indicated by the abbreviated name of the institution in brackets.

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