

TEACHING AND SOCIAL MEDIA: BEST PRACTICES

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Abstract

Social media is increasingly a part of our life. This is also the case for our students: most of them have Facebook, some of them have a Twitter account and they are more and more accustomed to these tools and others so it makes sense to try to integrate some of them in our teaching routines: the class is not only a place, but a set of resources available on-line and off-line in such a way that on-line resources enrich our interaction with teaching topics. From our experience, the use of such those tools should not be an additional work but it should be a way to provide more value with contained cost: the wide availability of tools should help us to find the ones that are adequate to us and which can be integrated in our daily routines without too much harm. We have investigated in the past in integrating several tools for a connected class [1] and in trying to expand the ways we can interact with students using these tools [2]. Social media include a host of internet-accessible applications (social networks, microblogs, LMS) and devices (desktop, mobile and sensors) which are already integrated into our daily life. The best way to incorporate them into our daily teaching routines is to make use of them in the most natural way, incorporating them into our data and workflow, and obviously also into the one of the learning subjects, the students and coworkers. In this paper, which draws from our own experience, we will describe how these social media applications and tools can be easily integrated into virtual and presencial classrooms, what tools can be used to do it more efficiently and what are the effects observed on the learning and assessment processes.

Introduction

The social media phenomenon is breaking the concept of what is communication in several ways. It is growing very fast, it is used daily by people of all ages, and its acceptance among our students (and university faculty) is undeniable. Social media has come to the classroom whatever we wanted or not. The problem is that not all teachers are equally prepared to face the challenge of using these tools in their teaching practice. Many teachers are reluctant to new technologies, while many others want to change their habits and start employing these tools but they do not know how to start.

A basic start point is to know what social media is and what is generated by its use. According to Wikipedia [3], *social media includes web-based and mobile based technologies which are used to turn communication into interactive dialogue among organizations, communities, and individuals. Is a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content.* We are referring here to well known web sites such as Facebook [4], Twitter [5], del.icio.us [6], Pinterest [7] LinkedIn [8] and many others, but clearly we also include learning communities (formal or informal) that we can create using web facilities in the line of Ning [9], Elgg [10], MediaWiki [11] or Wordpress [12]. We are

not going to describe each of the resources cited, as it is out of the scope of this paper. However, it is our intention here to emphasize that all of them are mere technological tools and having the know-how to use them does not enable you to properly employ them in the classroom. This statement would be like saying that to have fast beats as typewriter make you a good writer. In the same way, a teacher can know how to use the the tool (how to type), but he or she should also seek for examples of best practices in its use to understand what is the best way to use them when teaching. For this reason, our goal with this article is to provide a series of good practices in the use of social media in the classroom.

Motivation and state of the art

Having a set of social networking facilities and good practices for them, does not suffice as other questions may arise. What social network to choose? What social networks are best suited for education? Do I have to be on all of them? The answers depend on the profile of both students and teachers. For example, if a high percentage of your students already use Twitter [5], it makes no sense to ask them to register in a new community that they barely will follow. So as a teacher, select the tool that you have learnt or you are willing to learn, but think first what your students are already using. The more integrated the network is in the daily practice of everybody, the more communication success will be achieved.

Once we have chosen the best social network for our purposes and with our students in mind, we have to focus on what it expected by each role. It is clear that the teacher should be a catalyst for strong student interaction and online communication and it comes through a high dose of creativity. On the other side, we expect from students a response, but care should be paid to not exceed limits in the workload demanded or students will not respond properly to the activities. However, we must not forget a third role: the higher educational institution (HEI). We should employ already available tools from our institution to create a strong sense of community. For example, if the HEI has a multimedia repository of educational objects [13] it is more appropriate to use this channel, that another of similar use as could be YouTube [14].

Other fundamental thing is that a teacher should be clear why to use social media in education. It will demand great effort and if we are not able to see the big picture and the subsequent benefit to our students, we will hardly want to start taking steps in that direction. Do not forget that the ultimate goal is that our students will learn more, in a more convenient and enjoyable way. And how will be the future of education? Do we know the consequences of using a new tool in a broad way? Well, learning from history, we have a set of samples of how tools could change life. For instance, printing press came in medieval time for religious purposes and it became a total revolution even nowadays, despite the electronic substitutes to books and newspapers. So we think it is advisable to go check on the use of Information and Communication Technologies (ICT) gradually.

The answers to the questions we have raised probably involve another new set of questions, and the landscape of social networks and other tools is so broad that we hardly will find a unique teaching methodology for the correct use of social media in education. However, when something works it makes sense to copy it. That is why learning by example is suitable for inexperienced in ICT teachers,

and proves to be effective in encouraging creativity and adaptation of ideas. The following sections propose, based on our experience, best practices in the use of social tools and applications.

Even the use of the web 2.0 term is declining substituted by 'social media' it is still worth reading the JISC report [15]. There, 'web 2.0' technologies were defined as "more than a set of 'cool' and new technologies and services". Since then more and more professors and educators are using them in their day to day labour with the participation of students that are using these tools in each and every aspect of their lives and feel the attractive of them for their activities. We can talk about networked learning and, from the point of view of the students (at least, for some of them) makes sense the creation of Personal Learning Environments (PLEs) [16-17], observing a switch from the topic-oriented learning to the student-centered organization of the learning process [1]. All of this, of course, with new tools and uses as mobile phones, tablets... [18] and new environments (at least, from the point of view of educational use) as social networking sites [19].

Most of the work has been done by more or less innovative professors but, what about the use of these technologies and tools for the rest of us? The truth is that we are being introduced in the transformation of we can do with our students and the way we can do it, in our academic work [20]: *Whilst it seems inevitable that many scholars will adopt new tools and technologies as they have done in the past, it is by no means inevitable that this will transform their work practices or affect the established norms and values of academic work which have remained relatively stable of the years (or if they have changed it has been due to much bigger forces, such as the move from elite to mass participation, introduction of fees etc.)*. In the case of teaching the driving forces are outside of our control: students using the new tools and our need to engage them [2]. With the diversity of tools available [21], it seems quite difficult to find the adequate one, but it is also difficult not to find one (or more) that suit our needs and which we can adapt to our routines.

Recommendations for a successful merging of teaching and social media

As we have stated above, the most important issue in social media is to incorporate it seamlessly into our daily workflow so that it becomes painless for us (and our students) to use them to enhance the educational experience. It is easy to do so in online courses, but in-class learning must strike a balance between keeping the students focused in the topic and creating knowledge via online tools; the professor must also keep focused in monitoring and guiding the learning without making this veer too much away from its daily routines. That is why, in this paper, we will present a series of rules based on our own experience that have helped us to improve our performance in class. We will present them in temporal order, starting before the class.

- Creation of a wiki node for the current class [22,23]. This can even be done before the previous class, so that material can be added to it during the period between classes, or it can be used directly to link the class notes that the students can also take in class. These notes can be browsed at the beginning of the following class, or be used to keep track of the timing of the material. In our case we have use the wikis included in Google Code hosting projects; for instance this one <http://code.google.com/p/aap-etsiit-ugr/> has been used in a semester course for Telecommunications engineering.

- Update course materials (kept in an online learning system such as Moodle or plain vanilla web pages) by checking stale links, fact-checking for freshness time-dependent affirmations (such as the availability of software, its releases, and what is or is not fashionable at the moment). You can use online checking tools such as the one provided by the W3 consortium: <http://validator.w3.org/checklink>.
- Check wiki comments, which can be used as a class forum, along with the mailing list for more private questions and comments. The students might have decided not to go to class today due to a college-wide event, for instance. It can also go in the other direction: we have some agenda problems preventing us from going to class, so we warn the students not to take the trip using the mailing list. It is quite convenient to keep interactive forums alive by timely answering questions, greeting newcomers, and encouraging students.
- Check wiki nodes created by students, and correct them for precision (and, sometimes, typos). Comment on them, suggest merging of different nodes into a single one, encourage connections among students. Link from the wiki node of the current class (but it is much better to have the students do it by themselves).
- On the way to class, use your smartphone to check the hashtag you have created for the subject (for instance #greencomputing101) for updates, expectations by the students, and more content they might have found relevant to the current class. There might be also some reaction on the class outline you have already published on the wiki.
- Use FourSquare [24] or other check-in service (like Gowalla, or even Facebook [4]) to check into your classroom, and encourage the students to do so. This is transmitted to Twitter or other services so that students on the way will know you are already there, and if students do it systematically its presence might be rewarded too. Besides, it can be used to arouse interest on the subject from those who are not enrolled. You can incorporate some material into the check-in if needed, or a class lema, or a short URL.
- During class, encourage students to post new material on the wiki, and do so yourself as answer to questions; you can also correct your class content online if you have also posted it on that format, or create a list of errata to correct it afterwards.
- During periods of students' personal work, check the *backchannel* for class reactions. You can use the hashtag, or a Twitter list, or just Twitter searches. If there is not such period, designate somebody who can incorporate new items to the wiki, which essentially becomes the clearinghouse for real-time acquisition and broadcasting of knowledge during class. Take into account that real-time social networks such as Twitter are ephemeral, and must be *etched in stone* to settle the knowledge distilled by them.
- After class, go back to the wiki comments, Twitter and the class wiki node itself to check student's work and participation. Besides, there could be some interventions from people outside the classroom, which can be used to comment in the following classes or noted down in the wiki.
- Update class materials with corrections made by students, links to the most interesting or best assignments made in them, and whatever is worth to incorporate into the more permanent class repository.

In the above list we have talked about several tools, but you will have to adapt these tools to those that better fit our daily use and skills. For instance:

- Any user-editable document can serve as well as a wiki. These can be shared documents such as those provided by Google Docs [25], real-time collaborative editors such as Etherpad, or even plain vanilla web pages with some versioning system like those provided by Wordpress [12]. Moodle and other LMS also provide wiki functionality, but the important issue to take into account is that the wiki is the core interaction site and also the permanent store of the information and knowledge created in class.
- There are many microblogging tools, and some communities are more present in identi.ca than in Twitter. You can also install your own open-source ones using status.net, for instance. The whole point is, however, to let people keep using whatever they already use (plus the wiki, but that can be embedded in tools used in other courses).
- Other tools can complement the wiki and be used to create rich content. For instance, Storify [26] can be used to add context to Twitter streams and store them permanently; these can also be aggregated using paper.li. Multimedia content can be added via Instagram, Pinterest [7] or Youtube [14]. However, it is very easy to share content uploaded to those tools via Twitter, and include links in wikis.
- Measuring activity can be a problem, as well as measuring prestige within the (limited) class social network. That is one of the reason why wikis are chosen: activity can be easily measured using online or offline tools, and can be quantified in terms of number of lines created. Activity and prestige in social networks can also be measured using tools such as Klout [27] (but check the privacy conditions first).

This daily routine can be incremented with longer-term maintenance tasks: revision of last-year timing and content, checking for asynchronous updating by students or any other contributors or using Q&A sites such as StackOverflow [28] (or Reddit [29]) for updating content months before the beginning of the semester. New material can be tested within your social network using links posted in Facebook, for instance. However, since Facebook is, essentially, a closed garden and its use is mainly personal, it is probably *not* a good idea to use it as class support; students, besides, are mainly reluctant to connect to professors online [30]. Other vertical or professional social networks such as LinkedIn might be of use, but only if they really are used by all students in class. Eventually, the objective of this initiative is to make the students create their own Personal Learning Environment (PLE), which begs for tools they already use, whenever possible. Of course, using them in class can make them learn (or teach them) to use them better, and put them to use in learning. That would be a positive, although unintended, side effect.

Conclusions

This paper describes several practices used in our daily routine as university professors that can be used to incorporate the use of social media in the classroom via aggregation of applications they already use nucleated around a wiki and the course material which is accessible online.

References

- [1] Juan Julián Merelo, Carmel Hassan, Juan Luis Jiménez, Fernando Tricas. "SWECAI: Sistema web centrado en el alumno inteligente." In Actas de las XIII Jornadas de Enseñanza Universitaria de Informática (JENUI), pp. 153-159, julio 2007. Teruel. Spain.
- [2] Fernando Tricas, Juan Julián Merelo y Carmen Hassan-Montero. "Bitácoras: ampliando los canales de comunicación con los estudiantes". In Jornadas sobre Innovación docente, tecnologías de la información y la comunicación e investigación educativa en la Universidad de Zaragoza.
- [3] Wikipedia – The Free Encyclopedia <http://en.wikipedia.org>
- [4] facebook <http://www.facebook.com>
- [5] Twitter <https://Twitter.com/>
- [6] del.icio.us <http://delicious.com/>
- [7] Pinterest <http://pinterest.com/>
- [8] LinkedIn <https://www.linkedin.com/>
- [9] Ning <http://www.ning.com>
- [10] Elgg - Open Source Social Networking Engine <http://elgg.org/>
- [11] MediaWiki <http://www.mediawiki.org/>
- [12] Wordpress <http://wordpress.org>
- [13] iTunes U platform of University of Valladolid <http://itunes.uva.es/>
- [14] YouTube- Broadcast Yourself <http://www.youtube.com/>
- [15] Paul Anderson, "What is Web 2.0? Ideas, technologies and implications for education". JISC Technology & Standards Watch, Feb 2007. Accesed June 30, 2012.
- [16] Bauerová, D. (2009): Elearning 2.0 - How Can Higher Education Benefit from Web 2.0? Proceedings of EDULEARN'09, Barcelona. ISBN 978-84-612-9802-0, International Association of Technology, Education and Development, Barcelona, ES. Pgs. 99-10.
- [17] Bauerová, D. and Sein-Echaluce, M. L. (2007): Herramientas y metodologías para el trabajo cooperativo en red en la Universidad. Revista Interuniversitaria de Formación del Profesorado. N.º 58, Volume 21(1), ISSN: 0213- 8464. Pgs. 69-83.
- [18] Lewis, S., Pea, R. "Beyond participation to co-creation of meaning: mobile social media in generative learning communities" in Social Science Information. September 2010 vol. 49 no. 3 351-369.

- [19] Caroline Lego Muñoz, Terri Towner, "Back to the "wall": How to use Facebook in the college classroom". In First Monday, Volume 16, Number 12 - 5 December 2011
- [20] Nick Pearce, Martin Weller, Eileen Scanlon, Sam Kinsley, "Digital scholarship considered: how new technologies could transform academic work". In education, 16 (1).
- [21] Martin Ebner, Conrad Lienhardt, Matthias Rohs, Iris Meyer. "Microblogs in Higher Education – A chance to facilitate informal and process-oriented learning?". In Microblogs in Higher Education – A chance to facilitate informal and process-oriented learning?
- [22] Hemmi, A., Bayne, S., Land, R. The appropriation and repurposing of social technologies in higher education (2009) Journal of Computer Assisted Learning, 25 (1), pp. 19-30. Cited 30 times.
- [23] Yalvac, B., Ayar, M.C., Soylu, F. Teaching engineering with wikis (2012) International Journal of Engineering Education, 28 (3), pp. 701-712.
- [24] FourSquare <https://es.foursquare.com>
- [25] Google Docs <https://docs.google.com/>
- [26] Storify - Find the best of social media <http://storify.com/>
- [27] Klout - The Standard for Influence <http://klout.com/>
- [28] StackOverflow <http://stackoverflow.com/>
- [29] Reddit - The front page of the internet <http://www.reddit.com/>
- [30] Katherine a. Karl and Joy V. Peluchette, "Friending" professors, parents and bosses: a Facebook connection conundrum, Journal of Education for Business, vol. 86 (4), 2011, p 214-222.