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University Students and Social Media: Reflections from an Empirical Research

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Abstract: The current debate on the potential for change that the development of social media can bring to education seems to be based more on general and theoretical considerations than on systematic data. In order to contribute to the development of a more informed perspective, in this paper we present empirical evidence gathered from a 2008 and 2009 survey on undergraduate students at the University of Milan-Bicocca, concerning students' attitudes toward traditional and new media. In particular, we focus here on data concerning the diffusion of some specific tools and services that are commonly meant to represent the most important features of the "collaborative web". The comparison of the results obtained in the two surveys allows us to make some reflections on the path of diffusion of social media among young university students and to critically review their actual significance in an educational perspective.

Keywords: Social networks, web 2.0, digital natives, personal learning environments
Categories: A.0, A.1, L.3.5, L.3.6

1 The debate on the educational relevance of social media

The development of social media surely represents one of the major innovations that is characterizing the present phase of technological and cultural development. Among the many consequences that this can determine on the way in which we live and work, special emphasis is usually given to the educational significance of social media [Alexander 2006; BECTA 2007; Thompson 2007; cfr. Selwyn 2010, for a critical point of view]. With blogs, wikis, podcasts, social sites and services such as Twitter, Delicious, Diigo, Flickr, Slideshare and many others, the web is undergoing a profound transformation: the "Read Web" is leaving room to the "Read-Write Web"; in other words, the web is no longer a platform to distribute information only, but is becoming a platform to create, remix and share new contents [Downes 2005].

All this is meant to represent a huge potential for a radical change in education, allowing people to create and develop their own "personal learning environments" [Attwell 2007; García-Peñalvo et al 2011] and "personal learning networks" [Ivanova 2009]. More than this, all these new tools "support learning as a process, not an

outcome, and encompass a more diverse range of learning and behavioural styles than perhaps any previous generation of technology" [BECTA 2007]; they can also stimulate the creativity of subjects, as they significantly simplify the process of creating and sharing new contents [Jenkins 2006a].

As some critical remarks underline, however, all the debate on the educational significance of social media seems to be characterized by a sort of paradox. On one hand, we are surrounded by a large number of theoretical contributions that go at length to show how the use of social media can sustain a whole new set of innovative educational practices. On the other hand, there is a substantial empirical problem due to the fact that data concerning the actual diffusion of these tools in educational settings seems to be lacking to say the least; as Selwyn [Selwyn 2010] says, "it is astonishing how much of the recent debate around social media and education appears to be driven by belief, speculation, anecdote and personal experience rather than recourse to actual evidence".

Given the relevance of the theme, it's not surprising, however, that in the last few years a number of research progress have begun to address this point. Even if comprehensive surveys of the phenomena are still somehow lacking, some specific evidence is becoming available. In this paper we try to contribute to this debate by presenting some results from a survey we performed in 2008 and 2009 on undergraduate students at the University of Milan-Bicocca. The comparison of the results obtained in the two surveys allows us to make some reflections on the path of diffusion of some specific social networks and tools among young university students. Before presenting our research, in the next paragraph we provide a broad overview of some results that can be found in the international literature, concerning the use of social media in higher education.

2 A review of some available evidence at the international level

The debate on the educational relevance of social media seems to be somehow based on the implicit assumption that, since the new generations of students enrolling in formal educational institutions should be accustomed to using the computer and the web in their personal lives [Prensky 2001a, 2001b; Gasser and Palfrey 2008], they should enthusiastically embrace the diffusion of these technologies in an educational context. As already said, this assumption is somehow taken for granted, but recently some research has started to investigate its actual empirical relevance more in depth. This holds in particular for some specific countries, such as the US, Australia and the UK, while in other national contexts there seems to be still a sort of shortage of available data.

A very important source of data to analyse the use of technology by university students in the US is represented by the surveys conducted on a regular basis by the EDUCAUSE Center for Applied Research (ECAR, http://www.educause.edu/ecar). The 2009 report [Smith et al 2009] contains data from a survey conducted on a total sample of 30616 students from 115 colleges and universities. The results show that the computer has now become a widespread tool, as 98.8% of the respondents have their own pc; laptops are far more common than desktop computers, and more than a third of the students claims to have both a laptop and a desktop computer.

Looking more in depth at how the computer is used, the most common activities are the creation of presentations with software such as Powerpoint and Keynote (93.8% of the sample), the connection to social sites network (90.3%) and instant messaging (89.8%). Percentages of use go substantially down, however, if we take into considerations activities that are more geared towards the creation of new content, or in general the active involvement in the "participative web": 44.8% of the sample uploads content on video sharing sites like YouTube, 41.9% contributes to wikis (including Wikipedia), 37.3% is involved in blogging, 35% makes use of podcasts and 17.4% uses social bookmarking and tagging services (such as Delicious). As evidence of the fact that not always the everyday use of technology perfectly matches its use in education, it must be said that only 38% of students are inclined to consider blogs and wikis as learning tools, and the percentage drops to 31.7% in the case of podcasts and webcasts. As far as the actual use of these tools for learning purposes is concerned, the percentages are reduced even further: 27.8% of the students reported to have somehow used some kind of social networks for their study in the last semester, and 5.8% had made use of podcasts. Overall, 59.6% of the students claim to be supportive of a "moderate" use of technology in education.

Similar results arise from a survey carried out on a sample of 2588 students within the project Educating the Net Generation (http://www.netgen.unimelb.edu.au/), launched in 2006 by the University of Melbourne, the University of Wollongong and the Charles Sturt University: "Most students were very infrequent users of emerging technologies, such as Web 2.0 tools (...). For example more than 80% of students surveyed had never produced a podcast and had never contributed to a wiki. More than 70% had never kept their own blog. More than 50% had never used a social networking site, read someone else's blog or downloaded a podcast" [Kennedy et al 2009, 17]. Lack of confidence in the use of some specific technologies may be also one of the reasons for the low level of support in favour of the use of blogs and wikis for educational purposes. As the authors recognise, these data must be taken with caution, as their survey may predate the actual boom of some social networking sites that has taken place from 2007 onwards [cfr. McCarthy 2008].

Further evidence on the Australian context is provided by two surveys, conducted between 2005 and 2007 at the Curtin University of Technology in Western Australia, on a sample of 412 and 290 students [Oliver and Goerke 2007]. Among the most significant results, a substantial increase in the propensity of students to use blogs (from 20.7% in 2005 to 29.8% in 2007) and podcasts (from 6.6% in 2005 to 21.5% in 2007) was reported; however, a considerable proportion of subjects used these tools for personal, and not for educational, reasons.

As far as the UK is concerned, Margaryan and Littlejohn [Margaryan and Littlejohn 2009] report data from a survey conducted between January and May 2007 in Glasgow, at the University of Strathclyde and at the Glasgow Caledonian University, on a sample of 160 students. Overall, students seem to master a fairly narrow set of "traditional" applications and tools, while the use of more advanced features of Web 2.0 is more limited; moreover, these tools are used more in the context of personal life and entertainment than in a learning context. Jones and Cross [Jones and Cross 2009] report the results of a survey conducted on 596 students from five universities, selected to be representative of different types of universities in the UK. Data from this study confirm that the possession of a mobile phone and a

computer is now evenly spread. Most students use the computer for at least four hours a day and connect to the Internet for at least three hours a day. Analyzing more in depth the kind of activities students performs online, we see that the web is mainly used to gain access to information on courses and teaching materials, and the use of innovative technologies is limited: "Students were asked specifically about their use of particular technologies that have received significant attention in recent educational technology literature, blogs, wikis and virtual worlds. Perhaps surprisingly there is no evidence of a significant uptake of any of these technologies amongst the first year students and of virtual worlds in particular" [Jones and Cross 2009, 15]. More specifically, 78.2% of students said they have never contributed to a blog, 87.9% had never contributed to a wiki, and 98% had never used a virtual world.

3 The research carried out at the University of Milan-Bicocca

3.1 Method

The research on the media diet of university students at the University of Milano-Bicocca was performed in 2008 and 2009. The survey was carried out by the research group of the Observatory on New Media NuMediaBiOs (www.numediabios.eu) and was based on an integration of quantitative and qualitative methodologies. The quantitative survey was based on a questionnaire that was submitted to a random sample of undergraduate students at the University of Milano-Bicocca. Data were collected in different rounds, between the months of March and April 2008 and April and July 2009. To avoid selection sample biases, we chose to administrate the questionnaire when students accessed the University laboratories in order to complete their test on informatics and on language skills, compulsory examinations that all students need to pass if they want to go on in the course of their study. The filling-in of the form was compulsory and the questionnaire was compiled anonymously, even if the students' registration number was recorded, in order to avoid the possibility of double answers. We eliminated questionnaires with incomplete answers and we also controlled that all eight faculties of the University of Milan-Bicocca (Economics, Law, Medicine and Surgery, Psychology, Educational Sciences, Statistical Sciences, Sociology, Mathematics, Physics and Natural Sciences) were represented in the final sample. Overall, we obtained a total of 1088 valid answers in 2008 and 1123 valid answers in 2009 (the total number of students enrolled at the University of Milan-Bicocca is around 21000).

The questionnaire consisted of 30 questions, divided in four parts; in the first part, we asked a series of general questions concerning the relationship with technology and the rates of diffusion of some specific devices (not only personal computer and mobile phone, but also digital camera, mp3 player, satellite navigator and so on). The second part focused on the attitude towards traditional, "analogical" media such as printed press, radio, and television. In the third part we analysed the propensity to use the personal computer and the level of involvement with the Internet, while the last part of the questionnaire was specifically addressed to the use of Web 2.0 platforms and services. It is specifically on this last part of our data that we will now focus, as the results we have obtained can be used as a starting point in order to reflect on the actual educational significance of social media. Given the present limitations of

available evidence at a national level concerning the relation between university students and new media in Italy, the data we have collected represent indeed a valuable source of information, as they allow us to gain a deeper insight on the behaviour of a quite consistent sample of students in one of the biggest Italian universities.

3.2 Results

Almost all our sample reported to have a computer. Although we did not specifically asked which type of computer students possess, we registered a sharp increase in the percentage of subjects who declare to use the computer outside their own house between 2008 and 2009. The Internet was widely used, with a student out of four connecting to the web for more than 20 hours a week and more than 10% of the sample connecting between 15 and 20 hours a week; only a negligible proportion reported to never use the Internet (Figure 1). Overall, around 70% of our sample connects to the web for more than 5 hours a week. The use of the mobile phone as a tool to surf the Internet or to check e-mail does not appear to be widespread in our sample, with less than one student out of ten declaring to do so. Students were also asked to assess their level of expertise in the use of the computer and all the related technologies: 63% of the sample defines itself as a "basic level user", 14% as a "beginner" and 20% as an "expert user".

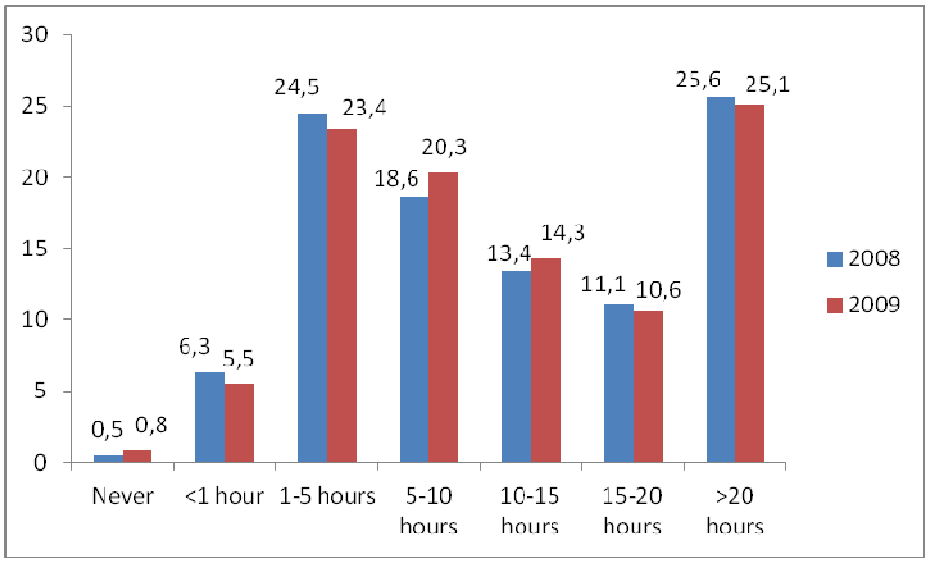

Figure 1: "How many hours do you spend on the Internet weekly?"

Data on the diffusion of blogs seem to provide a kind of mixed evidence, and overall the phenomenon surely deserves additional investigation. First of all, there is a strong decrease in the percentage of subjects who positively answer "Do you have your own blog?", that goes from 43.2% of the sample in 2008 to 36.3% in 2009. On the other side, it is interesting to look specifically at the intensity of substantial involvement in

blogging that could be assessed by considering the frequency with which the blog itself is updated; the percentage of respondents who say they never update their blog goes down, from 28.2% in 2008 to 16.3% in 2009, while at the same time there is a slight increase in the percentage of regular bloggers, who update their blog every day (from 5.2% to 7.5%, cfr. Figure 2). Obviously, we cannot extrapolate any tendencies as we had only two observations, but we can postulate that a number of subjects are shifting from the use of blogs to the use of some kind of social networks (in particular, in the case of our sample, to Facebook, as we will see); this might contribute to explain why the number of bloggers is diminishing, while at the same time the number of regular bloggers is rising.

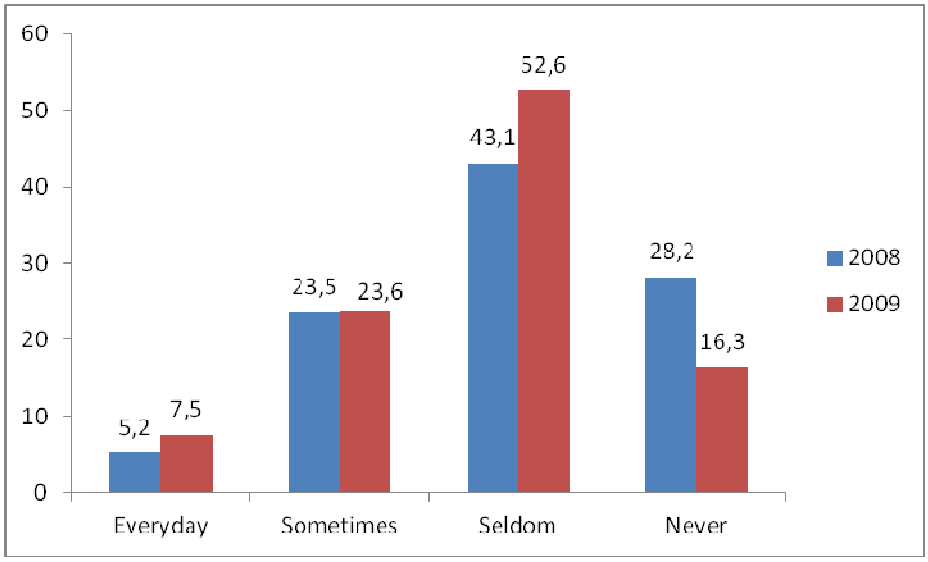

Figure 2: "How often do you update your blog?"

The activity of reading other people's blogs seem to be declining as well: in 2008, students who reported reading others' blogs were in fact almost 8 out of 10, while in 2009 this number drops down to less than two out of three. The percentage of those who read other people's blogs every day remains substantially unchanged, while there is an increase in the number of those who read the blog "a few times a month" and a corresponding decrease in the number of those who read the blog "a few times a week". The majority of our sample (55.1%) does not post comment on others' blogs, and there is only a small percentage of subjects who declare to post comments on a regular basis.

One of the most significant trends that clearly comes out of our data concerns, in any case, what we can label as a real "Facebook phenomenon". It is worth remembering that the boom of popularity of Facebook in Italy substantially started in the summer of 2008. According to data provided by ComScore, in the month of August 2008 there were over one million and three hundred thousand visits to this site, with an annual increase of 961%, while the third quarter of 2008 saw Italy

heading the list of countries with the largest increase in the number of users (+135%). The evolution of the phenomenon can be followed thanks also to the Facebook Observatory (http://www.vincos.it/osservatorio-facebook/), according to which the Italian members of Facebook were 216.000 in January 2008, 622.000 in August, 1 million and 294 thousand in September and up to 5.587.000 in December 2008. Our data clearly confirm a radical increase in the number of subjects who often use Facebook, that goes from 8.5% in 2008 to 62.7% in 2009; at the same time, the percentage of those who even do not know about Facebook at all drops down from 54.5% to 2.3% (Figure 3). It seems that Facebook is mostly used in order to meet new friends, as 37.2% of our sample reports this as the main motivation; 15.8% of our sample uses this site for general entertainment purposes, while 9.5% uses it mainly as an instant messaging tool.

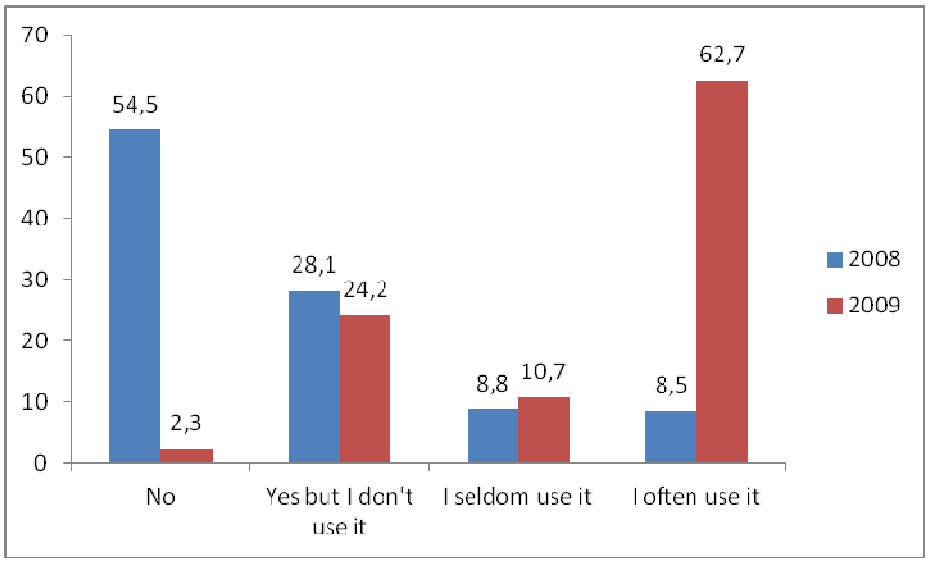

Figure 3: "Do you know Facebook?"

It is interesting to compare Facebook with other sites that are usually considered among the most prominent features of the Web 2.0; this analysis shows that only a minority of our sample actually makes use of this type of tools, in particular if we look to services that support activities such as social bookmarking, sharing and microblogging. YouTube (Figure 4) remains by far one of the most popular site: only 2% of the sample does not know about it, while 57.5% of the sample "often uses it" (with a substantial increase from the data of the 2008 survey, which was at 42.4%) and the 29.4% "seldom uses it". Wikipedia too is quite a popular site, with 51.6% of our sample who declares to often use this online encyclopaedia, and only 3.7% not knowing about it at all.

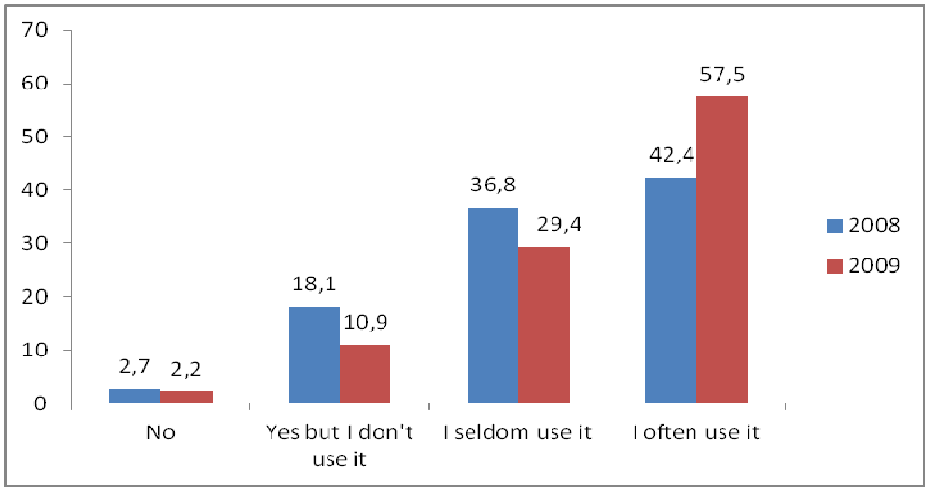

Figure 4: "Do you know YouTube?"

Data concerning MySpace are interesting because this is the only site whose popularity actually seems to be decreasing between 2008 and 2009 (Figure 5): even if still well known (only one student out of ten does not know about it), the percentage of subjects who does not use it goes up from 47.5% in 2008 to 56.7% in 2009, while the percentage of subjects who "often uses it" goes down from 16.1% to 10.3%. It is likely that this decrease has to be somehow connected with the explosive growth of Facebook, as we can postulate a sort of competition between these two sites, in analogy to what has already happened in other countries (see for example the analysis made by boyd, 2008, for what concerns the US).

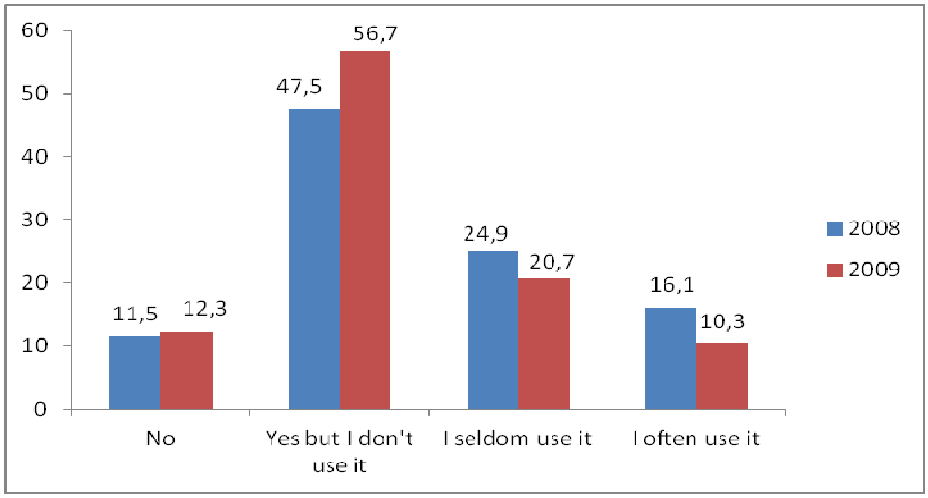

Figure 5: "Do you know MySpace?"

Other sites, that often are considered in recent literature as the most advanced innovation of the social web, still are not so popular among our sample, even if we can find modest increases from 2008 to 2009. In particular, the great majority of our sample still does not know, in 2009, about the existence of sites such as Twitter (72.8%), Friendfeed (81.5%), LinkedIn (77.3%), SlideShare (77.3%), Delicious (82.3%) and Flickr (70.2%). Data relating to the active creation of content do not show significant changes in the two surveys, too. The percentage of active and creative users always remains substantially low, ranging from 29.7% for what concerns the creation of content on YouTube (Figure 6), to a negligible 1.9% if we look at the number of subjects who upload their presentations on SlideShare and 4% of subjects sharing their photos on Flickr. It is interesting to consider, among other things, that while Wikipedia is "often used" by more than the half of our sample, with another 32.8% declaring to use it only rarely, only 13.4% is actively involved in the contribution of new content to this site. All things considered, it does not seem that our sample is particularly involved in the process of creating and sharing content in the Web 2.0; with the exception of Facebook, also the use of social networking sites seems to be somehow lower than might be expected, given the current emphasis on the strong digitalisation and social connectedness that should characterize the new generation of digital natives students [Prensky 2001a, 2001b; Gasser and Palfrey 2008].

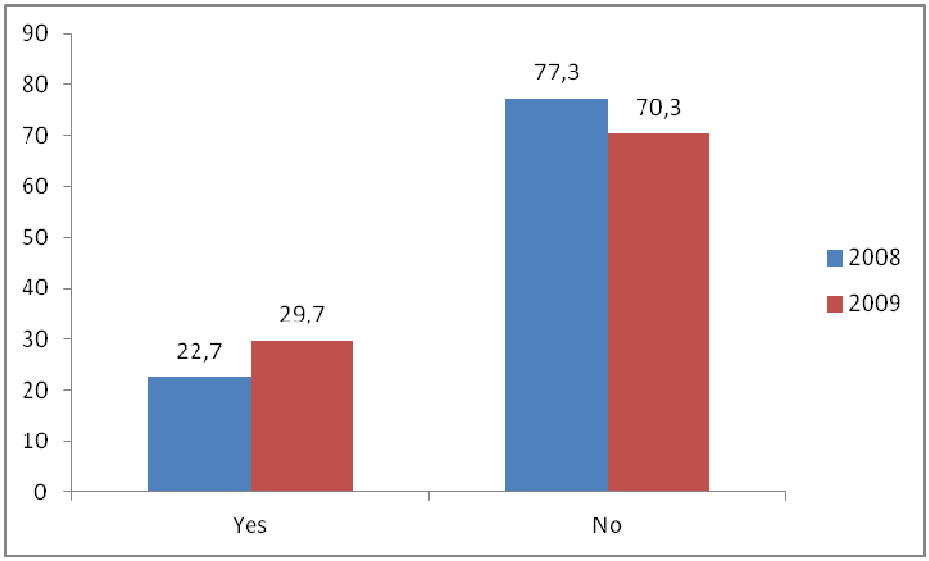

Figure 6: "Do you upload original content to YouTube?"

4 Discussion

The results we have presented are obviously limited and must be interpreted with caution. However, if considered in comparison with other similar research reported in

the international literature [beyond the already cited contributions, cfr. also Bullen et al. 2009; Nagler and Ebner 2009; Hargittai 2010; Rapetti and Marshall 2010; Schulmeister 2010], they seem to point in a common direction, as far as the relationships between university students and social media is concerned. The new generation of students shows very high rates of use of the computer and of connection to the Internet; on the other side, we cannot infer that this use is automatically related to high levels of technological expertise and digital literacy. In particular, what are usually considered as the more advanced features of Web 2.0, are known and commonly used only by a very limited minority of subjects. Another point that needs further analysis is related to the possibility that, even in the case where young students showed a significant rate of use of some specific tools (this holds in particular for some social networks), this would not automatically mean that they want these tools to be used and applied in education.

The relationship between living and learning technologies [Kennedy et al. 2008], seems indeed to be much more problematic than one might think at first sight. "Present-day students are not, it seems, pressing for HE to change its practices. Rather, they are looking for traditional approaches – face-to-face contact – in a modern setting – web supported. Social life and study life, while they may be assisted by the same ICT, nevertheless exist in separate domains in their minds, occasionally meeting at the borders for, for example, a question and answer session with peers on a study topic. This, however, is not perceived as using ICT for learning" [CLEX 2009, 35]. Indeed, what seems to come out of some studies that have tried to analyse more in depth students' expectations towards the use of technology in education, is that the majority of students still maintains a fairly traditional image of university altogether: "Students do not fully understand how ICT and learning can work together. They imagine and like the idea of the traditional, Socratic, or "chalk and talk" methods with face to face learning" [IPSOS Mori 2007, 31].

This is not meant to represent a confutation of the potential that new technologies can have for education. On the contrary, these tools can surely represent an invaluable instrument for the development of innovative learning approaches [Kuswara and Richards 2011]. This holds in particular for the possibility of empowering subjects with the possibility of developing their own personal learning environments [Attwell 2007], and of supporting informal learning processes that can take place also outside the boundaries of traditional educational institutions; in particular, these tools can sustain processes of lifelong learning that can play a relevant role in professional life [Ivanova 2009]. What is at stake here is the fact that the application of these tools in higher education contexts may result somehow as a spontaneous process, guided by pressures and requests coming from students.

As far as institutions of higher education are concerned, the situation is much more complex, for many different reasons that we cannot consider at length here. We therefore limit ourselves to a few general remarks. First of all, we must somehow revise the traditional assumptions that consider the new generation of students as natural experts in the use of the most advanced features and applications of the social and participative web. This statement, as we have seen, does not seem to be empirically supported. In social psychology it is well known that people may incur in the tendency to overestimate the commonness of their habits and attitudes. In a certain way the debate on the educational relevance of social media may be influenced by the

presence of such a "false-consensus effect" [Ross 1977], as educators who are used to appreciating the potentiality of Web 2.0 tools for their own profession could be inclined to think that their use is more widespread among their students than it actually is.

As our data seem to show, with the only exception of Facebook, rates of usage of popular web 2.0 tools, that are commonly meant to represent useful aid for educators [cfr. for example Wheeler 2010] are very low, if not almost negligible, among our sample of students. On the other side, we all know that the debate on digital natives has surely contributed to stimulating a certain image of the Net generation; it is also well known that recently, some voices have been raised arguing for the need to submit the same concept of digital native to a more accurate and critical scrutiny [Bennet et al. 2008].

All things considered, it seems that the present situation still has not changed so much from 2004, when Kvavik and his colleagues commented on the results of the annual EDUCAUSE surveys in this way: "Student and faculty use of instructional technology is more limited than is often portrayed. Students seem to be slower than expected in developing adequate problem-solving skills for using IT to support academic learning, and this impairs technology's current value to the institution. (…) Some complacency may have set in because of the belief that millennial students require less additional training with technology. As any number of individuals have said, "The experts are coming to school". And few metrics are in place to monitor improvement and overall usage. In all likelihood, some students – perhaps many – are leaving college and university with technology skills inadequate for the challenges they might find in the workplace or in graduate school" [Kvavik et al. 2004, 75].

Another related problem is that we could all be prone to overestimate how easily some specific tools can be used and applied in the educational context. One of the most salient evidence coming out of our research was related to what we labelled as the "Facebook phenomenon"; there was an abrupt increase, between 2008 and 2009, in the number of subjects making use of Facebook, which also corresponds to a more general trend at the national level. The fact that, anyway, other applications still remain largely unknown to a great majority of our sample, and that among the least known we find sites for social bookmarking and sharing content such as Delicious and SlideShare, or for microblogging as Twitter, may lead us to reflect more accurately on the actual impact of the Web 2.0 in our sample. It could be that the characteristics that may be at the basis of the success of Facebook are, at the same time, those that make this specific tool quite unfit for educational purposes; on the other end, applications that could represent useful working tools might be, also due to their more professional stance, much less popular.

As Selwyn says: "We should (...) consider the possibility that the activities, processes and practices that social media may be best at supporting are activities, processes and practices that are not actually directly related to 'education'. Much of the social significance of social media applications and tools stem from the seemingly routine and mundane things that they support users in doing. In particular, social media support and facilitate the 'nuts and bolts' of social life - social interaction, presentation of self, social grooming - what Mimi Ito terms 'hanging out' and 'messing around'. (...)Yet while undoubtedly of personal significance for individuals and their social networks, such activities and content remain "the ordinary stuff of

life" rather than anything more powerful in terms of knowledge creation, learning or education. Although these activities and processes are all essential aspects of social life it would be a mistake to consider them as of direct 'educational' significance. It is trite to argue that 'everything is education' or 'everything is learning'. Informal learning is not simply 'incidental' learning that takes place as a matter of course throughout our daily lives. The informal learning that educators are most concerned with relates to learning with intent and purpose – processes that lie beyond simply hanging out and messing around online" [Selwyn 2010].

Like all general labels, talking of "social media" or of "Web 2.0" may be useful as it allows us to refer to a broad set of phenomena that present similar characteristics. On the other end, this generalization can also mask the presence of some specific differences between applications. Talking about the educational relevance of social media, these differences can, however, assume specific importance. Future research should perhaps further investigate these issues, looking more in depth at the different activities that each specific application can support, and how this can be linked to its diffusion. Interesting suggestions in this sense can be found in the already mentioned research by Kennedy et al. [Kennedy et al. 2009], who have classified the type of activities subjects can perform on the Internet in five broad categories:

- Traditional web use: searching the web to find information or for other general purposes, sending and receiving email;
- Creating and using media: managing and modifying digital images, creating presentations, creating and editing audio and video files;
- Web 2.0 publishing: creating or commenting blogs, contributing to wikis, using social networking sites;
- Media sharing: downloading or sharing mp3 and podcasts, sharing content on the Internet, using social bookmarking;
- Advanced mobile use: browsing the Internet with mobile phones in order to access audio and video files, to search for information, to send and to receive email;

Activities falling in the first category (traditional web use) are by far the most common, while other kinds of uses are still not so common; it would be an interesting topic for further research in this field to find ways to further refine the analysis, in particular by looking more in depth into the broad category of "web 2.0 publishing", that can put together many different types of behaviours and attitudes (what is the relationship, for example, between activities as different as updating a content on Wikipedia or contributing to a blog on one side, or pushing the "I like" button of Facebook on the other?).

Finally, the enthusiasm towards the potentiality that (certain kinds of) social media can surely have in sustaining innovative learning practices should not lead us to forget that the acquisition of media literacy is a process that cannot be taken for granted, or completely left to spontaneous initiatives. As Jenkins [Jenkins 2006] clearly reminds us, there are at least three main problems that still need to be addressed, and whose relevance should not be underestimated. The first problem is "the participation gap": this theme is not new, as issues linked in one way or another to the digital divide have been among the most debated problems since the early days

of Internet. This problem should not be addressed by looking only at the mere availability of a certain technology (even if significant gaps are still present in this regard); the possibility of access must also be accompanied by the development of appropriate skills in the use of new technologies. The inability to find information on the Internet could even become a factor of social exclusion in a near future [Castells 2001].

The second problem is "the transparency problem": media content can influence the way in which we see reality, and can therefore be vulnerable to manipulation by those who have an interest in promoting certain messages or to impose certain attitudes and behaviours [Castells 2009]; even if media conditioning is something that the culture of modernity has long been accustomed to live with, it must be said that the network society, also because of its considerable complexity, presents characters of strong opacity. The ability to properly assess the information, discriminating between reliable and unreliable sources, will increasingly represent a fundamental skill for citizens all over the world; the present situation does not seem to encourage a particular optimism regarding the growth of a widespread social awareness of this issue (see also the interesting results reported in a recent research concerning the way in which young adults trust the information they find on the net [Hargittai et al. 2010]).

The third problem is the ethics challenge: the open and participatory nature of the Internet tends to encourage individuals to share a variety of information, without discriminating between data that can be shared without major concern and those "sensible data" that should be carefully protected from intrusion by outsiders. The development of social networks has helped to sharpen the relevance of this problem, as these sites present the hybrid characteristic of creating a sort of private space into a wider networked place [boyd 2008]. The tendency to blur the traditional lines between public and private spaces, which already characterized electronic media (television in particular, cfr. [Meyrowitz 1985]), is particularly relevant in the case of social networks. This means that people must learn new ways to renegotiate their practice of sharing personal information.

The available evidence seems to cast some doubts concerning the possibility that the younger generations are naturally endowed with the skills to adequately cope with similar issues. For this reason, educators face a complex and important task, given also that the development of a critical awareness concerning how to correctly use the tools that technology makes available will become a key dimension to live, work and participate in the society of the future.

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