

SOCIAL MEDIA FOR LEARNING BY MEANS OF ICT

CONTENTS:

Scope of Social Media

Connectivity and Social Presence

Social Media in Curricula and Instruction

What do Social Media Contribute to Classroom Practice?

Society and Communicative Evolution

Pragmatic Perspectives

Policy Recommendations

References

SCOPE OF SOCIAL MEDIA

Media for Social Interaction

Social media enable human relationships through technology. In other words, *social media are the media for social interaction*. The two most visible applications of social media are the building and consolidation of friendships among youngsters, and the building of networks for career development. The two “hottest” applications of social media are marketing and advertising for political/ideological purposes. In social media, just as occurs with the Web2.0, users have become producers and co-creators. In the U.S., social networking represents about 22% of the total time people spend online. Twitter processed more than one billion tweets in December 2009 and averages almost 40 million tweets per day. Over 25% of U.S. visits to internet pages were visits to one of the top social networking sites in December 2009, while it was only 13.8% a year before. This trend has continued and even intensified in 2010.

Networked Communities

Social media allow for a better, faster and more constant social interaction among web users — learners, gamers, professionals or simply citizens who share a common concern. A unique contribution of social media is that they help web users find each other: they are reconnected to old friends, neighbours, colleagues or schoolmates. Its underlying technology, Web2.0, registers users who join networks and tracks relationships among users. The term friend, in this context, needs to be revisited: traditionally, “friend” was a person who would do for you things that require time and effort, with no expectation of getting something back. In addition to such conventional network of friends, the new social media allow participants to expand their networks by including friends of their friends as members of their own community. For instance, Facebook users can explore their own social networks to find ways to link different communities together, while in LinkedIn users’ networks can be expanded by their friends, who can introduce users to people they would otherwise not meet.

Intercrossing Relationships

In many parts of the world there is a tendency towards the decline in formal education; hence the growing importance of social media. In particular, there is an increase in privatized, elitist, high-quality education that inevitably leads to a decline in regular public education, as upper-class parents tend to prefer escaping from tax loads and paying for the private education of their own children only. The socialization role of education is in danger. In this context, social media provide an opportunity to enable youngsters to start and maintain intercrossing relationships based on common interests such as sports and artistic talents.

CONNECTIVITY AND SOCIAL PRESENCE

Building Identity

Because youngsters build their identity by social comparison, social media provide more than just an outlet for social connection. According to Festinger (Festinger, 1954) people evaluate their opinions and abilities by comparing themselves to peers they feel affinity to. People examine the images portrayed by others and, subsequently, make comparisons between themselves, others and the idealized images. An underlying hypothesis is that a person tends to increase his/her comparison to peers with whom they feel more similarities. Additionally, according to the theory on cognitive dissonance, people who are similar are good at evaluating each other (Suls, Martin, & Wheeler, 2002). This is the main mechanism that leads individuals to articulate their position in relation to other people and even among groups.

The Networked Society

Social media have arisen quickly as a result of the availability of systems that allow virtual- and para-social presence. Virtual presence refers to the interaction of people through mediated channels instead of face-to-face, such as in video conferencing and, more recently, through platforms like Twitter and Facebook. The para-social presence is the phenomenon that a particular person or group “penetrates” through a medium as if there were no distance or asynchrony, providing people who access their information with a sense of personal involvement, understanding, attachment and subsequent interaction. In this context, the Web2.0 provides a platform for new social phenomena such as social clustering, cloud computing and a “networked society”, even if we do not precisely know its final form (Castells, 2000).

New Descriptive Frameworks

In conclusion, the basic underpinning of social affinity and social distance still holds in the era of mediated, para-social presence. Social media have vitalized the peripheral effects of social networks, as they have made them more extensive, more dynamic and more affecting. These are the trends that make the potential educational effects of social media serious and inevitable, even when institutionalized education has tended to ban them from the classroom. The reason for the perceived incompatibility is clear: youngsters feel an urgent attraction to the social reality *about* learning, rather than concentrating their attention and efforts *in* the intricate learning process itself. The notions of collaborative learning (Dillenbourg, et.al., 2007) and social constructivism (Glaserfeld, 1995) have provided new conceptual frameworks, but so far they have not been operationalized as tools for managing classroom-based teaching and learning. In the following pages, this policy brief will identify steps in this direction, but without providing a complete blueprint of how social media need to be implemented.

SOCIAL MEDIA IN CURRICULA AND INSTRUCTION

The most popular way for new media to enter education is by bringing the skills most associated with them — attitude and competence — into the curricular repertoire of skills. The label *Media Education* has already been coined for the set of minimum skills that students require before getting full access to the media landscape. Media Education includes Netiquette (the ability to behave properly on the web, being polite to peer users) and safety (in terms of privacy, security, and avoiding being scammed or hacked). Another topic for Media Education is prevention against addiction to games. Media Education has been identified as a proper curricular host for introducing social media in schools. Two rationales that challenge this approach are:

1. Social media – blogging, Wikis, Facebook, Twitter, MSN, LinkedIn, Flickr, etc. — have been sufficiently explored by students in their private time. Additional instruction in the school is probably not needed at this point.
2. Social media are often used in a very inflexible way: students develop one-sided manners to communicate on the web, and are not effective or efficient in the long run. In other words: systematic instruction is needed to make youngsters more sophisticated in their use of social media.

The balance between these two rationales needs to be made by teachers who are not very skilled users of social media yet. The best way to make progress in the future is to have experts and teachers identify a set of notions and sub skills that would allow teachers to roughly estimate their learners' mastery level and develop compensation programmes for them. This policy brief sketches a roadmap for the process of embracing social media in regular education. A practical recommendation for educators is to make a comprehensive list of rough estimations of students' mastery level and, based on it, suggest the elements that a programme for teachers should contain.

WHAT DO SOCIAL MEDIA CONTRIBUTE TO CLASSROOM PRACTICE?

Entering the Classroom

Learning in a classroom is still the dominant practice for primary and secondary education. How can social media penetrate this paradigmatic situation? Social media typically deal with the personal situation and lifestyle of the student. Very few social media have been configured to address the group of students as a class. Typically, this function has been claimed by the classical “learning support systems” such as Blackboard, Moodle and Sakai. The teacher or the school control the membership, scheduling and organization of these platforms, and use them to advertise course contents and to announce special events like tests and final presentations. Social media work on the level of the individual students, engaging their attention to immediate and contextual concerns, such as current events, social activities and prospective employment. Where cooperative learning in the classroom conquered its status during the eighties, we expect that social media will prove their value in the coming decade. Today, the dominant belief is still that learning and social networking are antithetical. Serious learning is seen as centripetal process where contemplation, memorization and refraining from the surrounding reality play a major role. Social media, on the other hand, distract students from this process by increasing their awareness of peripheral phenomena (social contexts, current events, etc.) and spiking their curiosity in what is happening on their social networks (“Who’s doing what?”). However, the relationship between classroom-based learning and social media is not necessarily antithetical, as the new needs for regular education make evident.

Schools in the Local Community and Economy

Traditionally, schools were the places where the consolidated knowledge of experts far away in time and place was transferred to local students. Today there is an increasing need to make schools part of the local community and the local economy. Schools have become catalytic spaces where the young generation is confronted with the opportunities and threats of their society. In primary and secondary schools in developing countries, this confrontation takes a shape that is hard not to interpret as post-colonialism, since schools tend to emulate the western curricula as close as possible and, tragically enough, once students graduate, they leave their local communities for the larger cities. A radically different approach consists in centring the education in rural schools and arranging their curricula around urgent community topics, so that youngsters are prepared to make the local village more sustainable. We can find illustrative examples in schools that focus their curricula in having students use the web to learn how to expand or diversify the agricultural businesses of their parents, and thus stay in their village and turn it into a commercial success. All subject areas are actively geared toward this goal, from mathematics to marketing and product advertising. In this context, social media have a vital role, since they can allow students to find relevant commercial networks, individual customers, etc. In short, social media can help schools allow the real world into their classrooms, and hence prepare students for a real, better future in their communities. Educators and curricula designers should ask themselves how social media could play a role in their specific local communities and local economies.

SOCIETY AND COMMUNICATIVE EVOLUTION

Understanding New Theories

Before exploring the current landscape of social media, it is necessary to understand new theories on societal evolution that have been developed since 2005. The latest book by Manuel Castells, *Communication Power* (Castells, 2009), asserts that communication technologies, such as web-based media, influence essential aspects of humanity like thinking, imagination and sense of reality. Castells asserts that only those who understand this transformation have the chance to survive. It is a matter of “controlling via understanding.” The more convincing examples Castells presents are related to modern marketing as well as the roles of narrowcasting and mass media in political campaigns and ideological wars between major world powers.

Narrowcasting Media

In the new network society of instant messaging, social networking and blogging — “mass self-communication” — politics has become fundamentally media politics, while at the same time there is a worldwide crisis of political legitimacy that challenges the meaning of democracy in much of the world. The influential role that social media play in the swivel of institutions brings the expectation that social media will cause a pervasive change in education. Social media raise our awareness that human intellect is not only an individual asset, and they highlight the importance of crowd-sourcing and distributed cognition. As a consequence, it is inevitable to connect education in real-time to real-world issues – it is no longer sufficient to let students learn what others already mastered before. Theories that have tried to explain the societal and communications evolution have acknowledged that the power of mass media has come down to the hands of much smaller groups. The degree to which this power has been distributed to smaller groups was recently demonstrated with Wiki Leaks and the tumultuous reactions of both diplomats and public opinion. It means that Castells’ theory on the chaotic nature of new-media effects of communication has proved to make sense. The influence of narrowcasting media should be studied in each society to identify their risk and opportunities.

Social Authority

If we ask ourselves what underlies the power of social media, then we arrive at the concept of “social authority”: people with a certain expertise reputation get the authority to value certain phenomena and their opinions are used for reviewing and counselling. How do these people evolve from being a novice to having this level of expertise? Typically, people start by witnessing others talk about a certain subject. There is a high degree of subjectivity in this witnessing – actors in social media know that messages are rarely taken literally. Even if the sender has a high degree of credibility, it is ultimately the receiver who attaches meaning and impact to a certain message. For marketers, this uncertainty makes commercialization via social media risky. A message claiming the quality of a certain product may fire back if users have totally different experiences. However, signs indicating that a new product or service is good or has unexpected positive side effects can also propagate quite swiftly. A similar two-sidedness can be discerned for social media for education: the “objective” attributes of a certain topic may get blurred if the learners misunderstand it; however, if the topic still needs to be developed further through societal or industrial experimentation, then social media allow learners to look critically and contribute with an original, authentic view to the premature topic. Good examples are topics like ecology, sustainability, cultural tolerance, and moral or political issues. Their introduction through social media enables learners to add their own perspectives to the understanding of the phenomenon. As a result, the next generation of citizens will conquer a much deeper understanding of a certain topic and learners will develop a higher sense of ownership over it.

PRAGMATIC PERSPECTIVES

Community of Practice

A special kind of learning community is the Community of Practice, (Wenger, 2002) where practitioners share their understanding and expertise on a particular issue. Its basis is social constructivism. Knowledge and knowledge ability are seen as cultural phenomena. It presupposes an altruistic mentality. In terms of school education, the community of practice is an excellent framework to study the learning process among teachers. We can reasonably expect that the new learning practices based on social media will evolve better than computer-based learning (CBL) did, since teachers then were simply confronted with new ways of learning that they had not previously experienced.

Once educational practices become sensitive to social media, it is inevitable to make teachers and students aware of the structure of their social networks. Traditionally, the sociogram has been a method used to analyze friendship structures among students. However, at the level of web-based social networks, the complexity of the structure is much larger, since we must consider not only the first-degree incoming and outgoing relationships, but also the higher-order structural contributions. Two important notions for dealing with sociometric patterns:

1. Any structural representation is an abstraction from real human relationships. Before proceeding to formally represent them in a graph, it must be understood that the type and strength of each relationship is an essential parameter that should also be taken into account.
2. The use of recursive methods to define structural centrality (via adjacency), clustering (clique analysis), density and similarity in structures that inherently contain cycles can generate the problem of relaxed recursion. When exploring social structures, one should diminish the contribution of each successive recursion step, or alternatively reduce the formalism of its semantics, e.g., by avoiding coding unilateral relationships.

To promote experiential learning, teachers should be confronted with social network analysis software that allows them to acquire the basic intuition for graph computation and to understand the implications of recursiveness (NP-completeness).

Articulate your Identity

Social media have entered education because of students' need to keep in contact with their peer group, and not necessarily only with their classmates. As shown in Figure 2, there is a steep trend towards considering a larger number of societal and cultural trends into our analysis. One important such trend is to increasingly articulate one's identity. Youngsters deal with this trend even before they have concrete models to identify with. The challenge for the future is to open the didactic arena and see how this stage of transformation for students can be used for intellectual learning. Secondary education attempts to train youngsters in erudition in a period when the shaping of their identity and their early sexual feelings start to dominate their mental space. This conflict between teaching priorities and students' mental focus is unfortunate. It is worth reconceiving the school pedagogy for teenagers and adolescents so that our intellectual training efforts align with the social and emotional stages of that age group. Social media are good venues to implement our hypotheses regarding this matter.

Be a Team Player

So far we have seen that collaborative learning in itself is not sufficient to make students learn better. The reason is that, even though learners are trained as team players, individual assessment is still the dominant practice. Learners have a sharp sense for efficiency. We encourage them to be reality seekers. However collaboration in the school is not the final reward: it is not sufficient to introduce collaborative learning just for the sake of making students feel that peer cooperation is important. We need to find the real reasons why and the ways in which social intelligence and strategic networking will pay-off during secondary school. Up till now, chatting and blogging is for students simply a way to relax, just like gaming is. The crucial reason why social media and social networking grow in importance lay in the dynamics that define the peer group: Who is my best learning partner? Who is my best partner for leisure time? Who is my best partner for public status? It is clear that students do not automatically learn how to answer these questions in an optimal way. We should ask ourselves if we need a stronger curricular programme for that, just like we did for the core courses in an era when societal urgency asked for it. We recommend formulating a vision for a curricular programme on Social Media.

Opportunities and Risks

Social media have emerged from technological features (Web2.0) that have allowed youngsters to establish their “presence” and have helped with their identity-building processes. We see age groups migrating from MSN (6-10) to Facebook (10-16) to LinkedIn (16-25). The risks of exhibiting personal biographies have been previously pointed out. Privacy and Security will become a larger concern, since “social hacking” can have potentially dramatic social and economic effects. In order to limit such risks, it is necessary to incorporate Media Education in regular schooling as a curricular domain, both at the primary and the secondary level.

Regular education struggles with adopting the full potential of ICT tools and methods for learning. The constructivist paradigm, for instance, has brought forward that besides instruction there is a need for “extrusion”: provoking learners to express the intuitive and even the counterintuitive views before, during and after acquiring formal training. The test-oriented curricula inhibit the adoption of constructionist learning methods: Why learn centrifugal notions around the topic to be tested when there is already a shortage of time for covering the entire subject area? Social media start and end at the criterion of learners’ existential needs: Who do I want to be? How can I sharpen my identity through informal interaction with my peers? Educators should form their vision of the risks and opportunities of social media and then decide what initiatives they can promote from their position.

Trends and Recommendations

The goal of this Policy Brief is to explore the role social media can play in education via social networking among students and teachers. Because anyone can register in social media networks, and because these are growing in popularity, UNESCO’s objective should be to raise awareness of their educational relevance and to find ways to integrate them into the teaching process. Networking systems like Facebook and LinkedIn; micro blogging like Twitter; Wikis, MSN and Flickr — all of them are free to subscribe to. Similarly to the ICT applications that penetrated education the last four decades, the best recommendation is to allow social media in the classroom to explore the benefits and limits of the new level of social networking that they offer. Recent projects, such as web-based communities for teachers (e.g., Mirandanet in Great Britain), show that social media can be used not only for the exchange of didactic methods and ideas. They also allow sharing more subtle personal concerns, such as legal conflicts and emotional states related to career development, which can be discussed with colleagues from other institutions and even other countries in order to avoid affecting hierarchic relationships within the school.

POLICY RECOMMENDATIONS

1. Social media in the school are not yet a sustainable solution for the traditional problems of education. However, they provide opportunities that are changing the way we learn. For example, in the realm of life-long learning during one's professional career, they facilitate the sharing of practical solutions and make colleagues aware of new trends and topics.
2. The first step needed is to let teachers explore the potentials of social media and gradually test-drive some of their benefits in classroom exercises. This will illustrate for teachers the effects of social media on learning, rather than illustrate for students how they may benefit from them. Inherent to social media is the tendency to improve the learning atmosphere rather than the direct instruction.
3. The current trend towards integrating social media with ("serious") gaming is not encouraged in the scope of social media. Complex issues like growing social awareness are not easily covered by direct instruction. They need a curious mind and experimentation by the learner, as well as an evidence-based analysis by the teacher.
4. Ethical issues like intertwining recent experiences with social media need to be rubricated and enlisted in "Best Practices of Social Media for Education." As school reports are coming out now, we see social media as bridges between individual education and mass education.
5. The implications for teacher education need to be clearly defined. Freshly trained teachers forget their ICT specialties as soon as they start working in an actual school. The reason is that pupils under a high-pressure regime in demanding courses tend to "escape" and "chill" in learning conditions that allow more freedom. Young teachers immediately feel this threat, especially compatible with the test-driven regime, and they forget about the more subtle advantages of learning with cognitive tools like simulations and social media.
6. The prospects of social media for Gender and Cultural Fairness, as well as the advantages they present for disabled learners, are still unexplored. Before attempting to consolidate the new practices with social media in institutional policies, at least two more years of co-evolution between social media and contemporary school innovation are necessary. The future trend is to privatize schools and let other stakeholders like parents and enterprises enter this process.

Categories like lower vocational training, grammar schools and gymnasium are being introduced again. How far this trend continues will depend on socio-political factors. In this context, social media present a platform for educators and parents to express their opinions and priorities in this regard.

REFERENCES

- Castells, Manuel (1996, second edition, 2000). *The Rise of the Network Society, The Information Age: Economy, Society and Culture Vol. I*. Cambridge, MA. Oxford, UK: Blackwell. ISBN 978-0631221401.
- Castells, Manuel (2009,). *Communication power*. Oxford/New York: Oxford University Press. ISBN 9780199567041.
- Dillenbourg, P., & Tchounikine, P. (2007). Flexibility in Macro-Scripts for Computer-Supported Collaborative Learning. *Journal of Computer Assisted Learning*, 23(1), 1-13.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7(2) 117-140.
- Glasersfeld, Ernst von (1995), *Radical Constructivism: A Way of Knowing and Learning*, London: RoutledgeFalmer.
- Palincsar, A.S. (1998). Social constructivist perspectives on teaching and learning. *Annual Review of Psychology*, 49, 345-375.
- Suls, J., & Wheeler, L. (2000). A Selective history of classic and neo-social comparison theory. *Handbook of Social Comparison*. New York: Kluwer Academic/Plenum Publishers.

The key goal of this Policy Brief is to bring social media into the attention of educational leaders – both architects and practitioners. In contrast to the scope of traditional fields like “ICT in Education” and “Mobile Learning”, social media have a very wide horizon. They spur the need of the younger generation to have a social presence on the web parallel to their face-to-face relationships, and they can serve more sophisticated purposes than simply those of “being connected” and “being informed,” as it has been studied by a long tradition that started with Manuel Castells’ *The Rise of the Network Society* (1996).

An important difference between today’s social media and previous media innovations is that they can make learners the owners of their learning processes. This Policy Brief explores the role of social media as a centrifugal factor, allowing the learner to explore social networking instead of concentrating on the regular school curriculum.

Author: Piet Kommers

Published by the UNESCO Institute
for Information Technologies in Education
8 Kedrova St., Bldg. 3
Moscow, 117292
Russian Federation
Tel: +7 (499) 129 29 90
Fax: +7 (499) 129 12 25
E-mail: iite@unesco.org
<http://www.iite.unesco.org>

© UNESCO Institute for Information Technologies in Education, 2011
Printed in the Russian Federation