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Informal Learning through Facebook among Slovenian Pupils

Aprendizaje informal a través de Facebook entre alumnos eslovenos

ABSTRACT

Since existing research has failed to consider how primary school pupils use Facebook for informal learning and to enhancing social capital, we attempted to fill this research gap by conducting 60 in-depth interviews and think-aloud sessions with Slovenian primary school pupils. Furthermore, we used content analysis to evaluate their Facebook profiles. The results of the study show that Slovenian pupils regularly use Facebook for informal learning. Pupils are aware that they use Facebook for learning and they use it primarily as social support, which is seen as exchanging practical information, learning about technology, evaluation of their own and other people's work, emotional support, organising group work and communicating with teachers. In using Facebook, pupils acquire bridging and bonding social capital; they maintain an extensive network of weak ties that are a source of bridging capital, and deeper relationships that provide them with emotional support and a source of bonding capital. Key differences between the participants were found in the expression of emotional support. Female participants are more likely to use Facebook for this purpose, and more explicitly express their emotions. This study also showed that our participants saw a connection between the use of Facebook and the knowledge and skills they believed their teachers valued in school.

RESUMEN

Teniendo en cuenta que la investigación ha descuidado el estudio de cómo los alumnos de primaria hacen uso de Facebook para el aprendizaje informal y cómo potencia el capital social, el presente trabajo intenta llenar dicho vacío con sesenta entrevistas en profundidad y el protocolo de pensamientos en voz alta con alumnos de escuelas primarias eslovenas. Para analizar el perfil de Facebook también incluimos un análisis de contenido. Los resultados del estudio demuestran que los alumnos eslovenos con frecuencia utilizan Facebook para el aprendizaje informal. El estudio no solo muestra que los estudiantes son conscientes del uso de Facebook para el aprendizaje y lo utilizan en primer lugar como apoyo social, sino también ofrece muestras de intercambio práctico de información, aprendizaje de tecnología, (auto)evaluación, apoyo emocional, organización de grupo de trabajo y comunicación con los profesores. Con el uso de Facebook, los estudiantes adquieren competencias relacionales y vinculación de capital social, pues mantienen una amplia red de lazos débiles, capaz de generar relaciones más profundas con apoyo emocional y fuentes de unión. Las principales diferencias entre los participantes se refieren a la expresión del apoyo emocional. Las participantes femeninas prefieren Facebook para dichos fines y expresan con más habilidad sus emociones. El estudio muestra además que nuestros participantes perciben una conexión entre el uso de Facebook y el conocimiento y destrezas que ellos pensaban que sus profesores valoraban en la escuela.

KEYWORDS / PALABRAS CLAVE

Facebook, Internet, social network sites, informal learning, social capital, media education, pupils.
Facebook, Internet, sitios de redes sociales, aprendizaje informal, capital social, educación mediática, estudiantes.

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1. Introduction

Today, learners can learn and be taught in a variety of physical and online spaces. In this learning context, there is an increasing role for online social network sites (Valenzuela & al., 2009; Greenhow, 2011). Many pupils have created their own profile on at least one of the many online social network sites. For example, more than half of Slovenian learners (13-24 years) have created their own profile on social network sites (Slovenia Facebook Statistics, 2012). This is not a Slovenian specificity, as a number of international studies have shown (Bosch, 2009; Rideout & al., 2010) that the use of social network sites is the most common extra-curricular activity of young people. The most visited social network is Facebook (Slovenia Facebook Statistics, 2012).

Online social network sites allow individuals to: a) create a public and semi-public profile within a coherent system; b) develop a list of users they are linked to and; c) review one's own list of users and lists of other users within the system (Boyd & Ellison, 2008). Existing studies emphasise the advantages of using social network sites (Boase & al., 2011; Ellison & al., 2007; Searce & al., 2010) such as: an easier, faster and cheaper form of communication and networking between individuals and groups that are geographically remote; easier communication for those young people who have difficulty in establishing and maintaining relationships; providing an overview of the individual's social network; providing social support in distress; and building communities and mobilising people. On the other hand, other studies stress the disadvantages and risks of their use (Boyd, 2007; Ule, 2009; Searce & al., 2010) such as: impersonality, which can lead to alienation and lack of personal contact; the social isolation of adolescents; a false sense of anonymity; false identity; lower level of grammar, articulation and writing skills; exposure to online offenders and criminals; problems with processing large amounts of information; and the posting of inappropriate information, which could harm school children. The impact assessments of online social network sites on learning and school success are divided. On the one hand, the popular media predominantly label the use of such sites as extracurricular activities that have a negative impact on academic performance (Hamilton, 2009; Karpinski, 2009), and which are responsible for the drop in literacy standards (Thurlow, 2006; Carr, 2008; Bauerlein, 2009) and a threat to social values (Herring, 2007). On the other hand, the number of experts who argue that the use of online social network sites promotes cognitive development is growing

(Gladwell, 2005; Shirky, 2010). Recent studies suggest that many learners are increasingly turning to information and communication technologies as learning tools outside of school. Livingstone and Bober (2004) reported that the majority of learners (9-19 years old) regarded the internet as an information gathering tool that could be useful in school work, but appeared «far more excited» by its communication and participation possibilities (Livingstone & Bober, 2004), which they seemed to employ largely outside of school, despite half of students having received little or no formal instruction on how to use the internet (ibid.). Greenhow and Robelia (2009b) studied high school students' from urban low-income families in the USA and their use of MySpace for identity formation and informal learning. They found that social network sites used outside of school allowed students to formulate and explore various dimensions of their identity; however, students did not perceive a connection between their online activities and learning in classrooms. Students used various socio-technical features, such as photo-sharing, graphic design and multiple communication channels within MySpace to convey who they were at a given moment and to learn about the changing lives of others in the network. While engaging in identity work, students were also gaining technological fluency and beginning to consider their roles and responsibilities as digital citizens. Their study was focused on informal learning, known as occasional learning, which is a spontaneous, experimental, unplanned, disorganised and unpredictable form of learning without set standards, and its results are implicit (Hager, 2001; Jefkins, 2006). No previous studies have focused on the use of Facebook for informal learning among high school students.

Existing studies have examined the available use of online social network sites for learning among undergraduate students or high school students, and have neglected analysis of the use of online social network sites for learning among primary school pupils. Furthermore, existing research into the use of online social network sites for learning (e.g. Schwarzer & Knoll, 2007; Madge & al., 2008, Greenhow & Robelia, 2009a, 2009b; Greenhow, 2011; Teclehaimanot & Hickman, 2011) shows that students use such sites for direct or indirect educational assistance, especially for peer support, maintaining relationships, self-representation and self-expression. Greenhow and Robelia (2009b) emphasised the use of social network sites to deal with learning stresses and the importance of «social capital» as a set of horizontal relationships between people, including social network sites and the

associated norms, which have an impact on the productivity and welfare of the community (Putnam, 2000). Research in the field of education and social capital focuses on two types of social capital among young people: bridging capital, which is based on weak alliances, enabling diverse perspectives and new information, and bonding capital, which is based on strong alliances of close friends and family who provide comfort (Putnam, 2000). The presence of social capital in social network sites is associated with numerous educational and psychosocial outcomes (Dike & Singh, 2002). In other words, learners tend to do better and persist in educational settings when they feel a strong sense of social belonging and connectedness. In studying predominantly white, middle-class, college students' use of Facebook, Ellison & al. (2007) found that intensive use of the site was associated with higher levels of bridging capital and, to a lesser extent, bonding capital and maintained social capital, a concept the researchers developed to describe the ability to mobilise resources from a previously inhabited network, such as one's high school (Ellison & al., 2007). Using online social network sites can help deepen the relationships that would otherwise remain short and encourages users to enhance latent ties and maintain relationships with old friends. Therefore, using these sites enables people to stay connected even when in the physical world they move from one community to another, for example moving from high school to college (ibid.). Steinfield and colleagues (2008) found that the use of online social network sites allowed students with low self-esteem to gain more bridging capital than students with higher levels of self-esteem. Facebook provides stigmatised learners with low self-esteem more control over their (self-) presentation than direct interpersonal communications (Elison & al., 2007). Since existing studies failed to research how primary school pupils use Facebook for informal learning, we attempted to fill this research gap and answer the research questions of how Slovenian primary school pupils use Facebook for informal learning and what kind of social capital they enhance.

2. Methods

The objective of this study was to establish how pupils use Facebook for informal learning and enhancing bridging and bonding social capital. We published an invitation to participate in the study on all Slovenian primary school (450) internet pages, and 246 pupils responded. We selected the first 60 pupils who meet our requirements in terms of demographic data (age, grades, location, income, use of Facebook and gender). The respondents were aged between 13 and 14 years (i.e. in the last two classes of primary school) and approximately equally distributed based

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on gender, low and middle income families, rural and urban locations, low and good grades and «active» users of Facebook (use it every day for at least 30 minutes) and «less active» users (use it at least twice a week for at least 30 minutes). All participants had a home computer connected to the internet and had used Facebook for at least a year.

Attempting to understand the nature of pupils' use of Facebook for informal learning merited a qualitative research design that focused on the data collection process, maintained design flexibility to allow inductive hypothesis generation and considered the validity of the young people's experiences and narratives (Maxwell, 1996). We triangulated multiple data sources including: 1) semi-structured interviews (Walker, 1998); 2) think-alouds (Clark, 1997); 3) content analyses of informants' Facebook profiles (Jones & al.,

2008). First, we used a very simple form of content analysis, adapted from Jonese & al. (2008). We tried to establish what messages the participants posted on their Facebook profiles and how their messages differed by grades, location, income, use of Facebook and gender. The participants temporarily placed us on their list of friends, but we tried to minimise our impact on informants' behaviour by never posting, commenting or otherwise indicating our presence as observers.

Second, we used in-depth interviews, which were appropriate for our purposes because they allowed us

you do?); 3) Individual questions based on the previously conducted content analysis.

Third, participants engaged in a think-aloud, a technique that involves asking them to report thoughts related to performing a task as it is unfolding (Clark, 1997). We asked our participants to talk-aloud as they engaged with their Facebook profile, prompting them with questions about what they were doing, why, how and what next in relation to learning, in an attempt to understand their experiences.

We conducted the study in the first half of 2012 using locations chosen by the participants, most often coffee-houses. The interviews and think-aloud sessions together lasted between 90 and 120 minutes, during which we recorded the information to transcribe later. To check the accuracy of the published data, we compared the results of the content analysis with the in-depth interviews and think-alouds. Finally, because the participants only spoke to us on the condition of their anonymity, their names were changed, and words that could identify them were replaced by X.

3. Results

3.1. Connection between Facebook and school

The majority of participants saw a connection between their use of Facebook and the knowledge and skills they believed their teachers valued in school. They expressed

that at first sight there is no connection, since the use of Facebook is related to entertainment and school to work, but the connection exists, it is «supportive» and carried out on a daily basis, such as the use of Facebook to support school learning, especially in completing school assignments. This is a typical example: «At a glance Facebook is the opposite of what we are doing in school... from what teachers want from us. It's true; it's like night and day. See... Facebook is fun, school is so intense... I have to be serious. However, the connection between the school and Facebook use is that through Facebook use I'm better at school. Of

We used in-depth interviews, which were appropriate for our purposes because they allowed us access to clear and accurate opinions based on personal experiences. We tried to discover how pupils use Facebook for informal learning by asking: General questions about Facebook use (e.g. On a typical day, when you login to your Facebook profile, what do you usually do there? Why? Can you give me an example of some of the ways you get your ideas, interests or emotions across on these sites, if at all? Do you see any problems or difficulties with using Facebook? Any benefits to using Facebook?); Questions focusing on learning (e.g. What do you think you are learning, if anything, in using this site as you do?); Individual questions based on the previously conducted content analysis.

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course, I do not use it only for school, but ALSO for school-related issues. And now the answer to your question about how I see the relationship between the school and Facebook: I can say that it is supportive. Facebook basically helps me to do things for the school better. Yes, it helps me every day» (Rok). The participants identified several ways in which they used Facebook to vent about, or get help on, school-related issues or assignments.

3.2. Exchange of practical information

All participants mentioned that the most common support they received from their Facebook «friends» was an exchange of practical information on school-related issues or assignments. This practical support included help in acquiring learning materials such as textbooks, books, notes and other learning materials. The participants regularly share information about these materials and provide learning materials such as notes. This is a typical example: «I have to admit something. Because I'm lazy, but also when I'm sick and I don't have the text written in school, then I ask classmates for this material... or I ask them where to get the books that we have to read» (Zoki).

The participants are aware of embedded resources in their social structure, i.e. «friends» can be helpful, and they use these resources in purposeful action. In doing so, they also learn solidarity and reciprocity; they help their «friends» because they will help them. This is a typical example: «Sometimes I really do not feel like to scanning my workbooks for my friends, but I am aware that I will also need help. Because of my frequent musical performances I'm often absent from school. And then I always get a copy of what they did in school» (Mira).

Content analysis showed that male participants mainly ask for learning materials and rarely help others in terms of providing materials, while female participants do both. This analysis also showed that at least half of the practical information included information about the work and personal characteristics of individual teachers. Most of the pupils had failed to disclose this information, and they spoke about it after we asked them. Some justified the suppression of this information with emphasizing that this practice rarely used, while others admitted that they did not tell us because they were afraid that we could tell their teachers and cause them problems. This is a typical example:

- Interviewer: You also wrote some information about the teacher?
- Jernej: What do you think? I don't understand?

- Interviewer: Look, most of you wrote about the teacher—if I understand well—of mathematics? TeacherX?

- Jernej: Yes, indeed, we have written about X, because he is... strange.

- Interviewer: Do you have problems speaking about this?

- Jernej: Well... to tell you the truth, for me it is a little risky, because... you could tell this X.

- Interviewer: We give you anonymity and I will not give your information to X. So, what's the problem?

- Jernej: Well... I think it's fair to warn friends of what was happening in mathematics and about X's crazy mood today and not to go to his class.

The participants do not exchange practical information only by request, but also based on concern for friends' school assignments. These «friends» are not only classmates as described above, but also other acquaintances and family members. This is a typical example:

- Mateja: I feel very good when my friend sends me some advice or even a solution to my school problem. Because I have a feeling that someone is thinking of me.

- Interviewer: What do you mean?

- Mateja: Let me tell you the last example. I had homework about genetically modified plants and I had not found literature on the cultivation of genetically modified maize in Slovenia. And then Nataša, my distant relative, I think she is my mother's cousin, sent me a link to the article, in which it is written that Slovenia doesn't cultivate genetically modified maize. Do you see, I didn't find the information because it doesn't exist. She saved me. And so I solved the problem, but I felt... how I can tell you... I felt nice and connected with her and others... I realised that I'm not alone with my problems.

3.3. Learning about technology

Analysis of content and participants' answers shows that pupils use Facebook to learn about the technology with which they support formal learning. With the help of «friends» they have learned to use programs to complete specific assignments, e.g. create posters, use multimedia programs to design photos and videos, design photos using Photoshop and present their school work using Prezi. This is a typical answer: «My friends taught me about Prezi, which is the best program for presentation work at school. Without this knowledge my presentations would be boring. I would still use traditional PowerPoint» (Ana).

Content analysis showed that the participants use

legally purchased programs, but also, and mainly, use illegally distributed programs. Since they argue that all internet programs should be free, because multinational corporations only maximise profits at their expense, the participants do not see the illegal distribution of programs as a problem. This is a typical answer:

- Interviewer: I saw that you all distributed programs illegally.
- Urban: Yeah, so what?
- Interviewer: You do not find it problematic?
- Urban: No, I think everything on the Internet should be free. Now they just make profit at our expense.
- Interviewer: But the use of Facebook is also based on profit.
- Urban: Yes, but this is different, because we do not have to pay.

3.4. Obtaining validation and appreciation of creative work

The participants use Facebook to obtain validation and appreciation of creative work through feedback on their profiles and assess other profiles with commentaries. In doing that, they also learn the social skills of empathy and behaving respectfully towards each other. This is a typical example: «Yes, yesterday my friend Sašo put up a new photo, we criticised it... My opinion is that it is horrible... for me... Of course, I can't write that, because then he can get to me when I post some new photo... And I think that sucks, if someone is ruined in such a way, because it hurts. And, sooner or later I will need Sašo. So, I tried to explain to him why it is a bad photo» (Urban).

They also obtain validation regarding school assignments. More than half of the participants said that they published their work at least occasionally and asked their friends for their assessment and suggestions regarding continuation and improvement.

- Maša: Sometimes when you do not know, or I'm not sure if I've written well, I put something up and ask for comment.
- Interviewer: Please, tell me in detail.
- Maša: Last week I put up an essay for history.
- Interviewer: And what happened?
- Maša: I got three comments, but only one was useful. It was from my school friend, but this has really helped me, because Nina showed me what was missing in my essay.

3.5. Emotional support

Facebook also provides emotional peer support. This is the only form of analysed support where a dif-

ference exists between the participants. Namely, only female participants openly described their negative emotional state, such as frustration, anger, helplessness or disappointment, associated with their school assignments. Peers, especially female classmates, responded with supportive messages, which helped improve their emotional state. For example, in the following statement Sarah explains how Facebook use provides her emotional support: «When I'm down then I usually whine a little on Facebook... You know, to decrease my frustration... then I'm better. And sometimes when I get a low score in school, my classmates write to me on Facebook, Sara don't worry, you're not alone in your suffering, sustain a just a little bit more and it's over... Yes, I'm better. Of course, I do the same for my best school friends».

For male participants, emotional support is interaction with «friends» in a various ways. This is a typical example: «When I'm angry, I mean when I'm in a bad mood, for example, when I can no longer learn or do my homework, it helps me that I go on Facebook. Then it depends on who's up and what's new. After such a break I feel much better» (Igor).

3.6. Organisation of team work

A third of the participants said that they used Facebook to contact other pupils with the intention of organising group meetings for project work. This is a typical example: «I and my friends often do group project work. Well... in the courses where we can do project work. So far it's three courses. Usually I ask classmates on Facebook who wants to take part in this project with me or also with others. Then we work with each other on Facebook or at school... I once responded to such call» (Simona).

On Facebook, the participants also assign tasks to individual team members, checking progress and explaining work instructions. This is a typical example: «I find it a good practice when we are on Facebook to coordinate our school work. We can be on Facebook and promptly see how our work is progressing, how my friends are doing and I can comment on ongoing work» (Ariana).

Content analysis revealed that the participants generally coordinate their collective school assignment, before individual participants write their part of it alone and then post it on Facebook. Members of the working groups validate each other's work. It is at this stage that conflicts usually occur. According to informants, the advantage of organising the work on Facebook compared to face-to-face communication is that rules are written and conflicts are quickly resolved.

- Interviewer: I read about your fight with Niko. What was that?

- Jan: I was angry, because Niko had not fulfilled his obligations. We did all done what had agreed; only Niko didn't. And I was right, because it was all written on Niko's profile. And this is nice because everything was written. So, Niko now has to do the assignment again, as we agreed. I was just pissed off because we lost a week because of Niko (Klemen).

3.7. Better knowledge of teachers

Only quarter of participants responded positively to the question of whether their high school teachers created a profile on Facebook and whether they interacted with them. The majority of them emphasised that teachers can only be asked questions related to school activities. A typical statement came from Sabina: «Only a few teachers have created their own profile on Facebook. Our teacher for computers has her own profile and she allows us to ask her anything about her course». The participants also stated similar arguments already revealed by other researchers (Hewitt & Forte, 2006; Tclehaimanot & Hickman, 2011): pupils would get the opportunity to get to know their teachers better if teachers used Facebook. This is a typical example: «Teachers who have a profile that we can see... I find different and more progressive... I do not know how to tell you. However, I find this good» (Karmina).

Content analysis revealed that among 15 participants who have access to teachers' profiles only two communicate with them. In both cases, the participants ask the teachers about their assignments. However, not to lose their good image among friends, the participants communicate with teachers only when they get no useful information from their classmates.

- Interviewer: I saw that you wrote a message to your history teacher. Why?

- Peter: Last week I was sick, but no one could tell me what I had to do until Monday, when it was my turn to present a school project. So I didn't have any other option. I had to ask this teacher.

- Interviewer: And how did the teacher respond to your question?

- Peter: OK. He wrote back to tell me what I needed to do on the same day.

- Interviewer: What do your friends think about your communication with the teacher?

- Peter: Nothing, because they know that I had no other options. A different situation would be if I hadn't asked them before.

More than half of the participants said that their teachers have created a Facebook profile, but that they do not have access to them. Some participants (11)

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emphasised that they have access to some teachers' profiles; they regularly visit them, but do not interact with them because of social pressure from classmates and fear of a negative reaction from teachers. They have a better opinion about those teachers who on their Facebook profile include details of their different leisure activities, especially in the fields of sports, technology and art. For some participants, those teachers are also a role model. This is a typical example: «Look, I visit the profiles of some teachers because I found that they are in fact quite different than in school. For example, the English teacher, who presents herself in the school as very strict, in her leisure time plays the guitar. And she plays it very well as I've seen in her video. Yes, she is good and I also try to be good. She inspires me in some way» (Rebeka).

Eleven pupils did not even state whether their teachers have a profile because this does not interest them and they do not want to communicate with them in their spare time.

4. Discussion and conclusion

The results of the study show that Slovenian pupils regularly use Facebook for complementary and supplement to classroom learning, i.e. informal learning. Thus, the use of Facebook serves as support for learning, such as providing emotional support for school-related stress, validation of creative work, peer-alumni support for school-life transitions, and help with school-related tasks. Facebook offers an informal context as support for formal education. Facebook is also part of the «social glue» (Madge & al., 2008) that allows learners to be part of a community that helps them overcome learning difficulties. However, pupils do not use

and appreciation of creative work through feedback on their profile pages and learning about technology, resulting in the creation of bridging capital. Thus, bonding social capital serves to create a lens through which group members (in our case classmates) affiliate with group members (classmates) inside the group (class) by using Facebook. On the other hand, the bridging social capital serves to create bridges or links by using Facebook that allow pupils to share information regarding school and other resources.

These findings do not support the popular view that Facebook users are isolated and not connected. The study shows that the opposite holds true, a finding that concurs with the

recent literature on the effects of informational, social interaction and identity-construction uses of social network sites (Greenhow & Robelia, 2009a, 2009b; Greenhow 2011; Valenzuela & al., 2009). Overall, the findings of the study should ease the concerns of those who fear that Facebook has mostly negative effects on primary school pupils' social capital. However, the participants reported communication with their «weak ties» (Granovetter, 1973) or maintain bridging social capital. This is confirmed by other studies (Stein-

field & al., 2008; Stefanone & al., 2012), which discovered that people are using Facebook to maintain large, diffuse networks of friends, with a positive impact on their accumulation of bridging social capital. Facebook networks appear to be a collection of weak ties well-suited to providing new information, and also useful for learning.

Key differences between the participants were found in the expression of emotional support. Female participants are more likely to use Facebook for this purpose, and more explicitly express their emotions. This can be explained by socialisation patterns, in which girls are still raised in a way that means in public they can more freely express emotions in public more than boys (Ule, 2009).

This study also showed that in contrast to the previous study on the use of social network sites for informal learning (Greenhow & Robelia, 2009b), our participants saw a connection between the use of Facebook and the knowledge and skills they believed

The study also showed that in Slovenian formal education Facebook is not used for education. As pupils regularly and actively use Facebook, schools must help them to use it ethically, responsibly, safely and to take advantage of its benefits. It is therefore necessary to implement media education within the curriculum (Slovenian language, Ethics and society), but this depends on the willingness of individual teachers.

Facebook intentionally for learning, they just try to accomplish their school assignments or/and reduce emotional tension.

By using Facebook, pupils enhance social capital by stimulating resources embedded in their social structure and mobilizing them in purposeful actions. Thus, this study shows that pupils benefit from investment in class network and cultivation of trust, reciprocity and social cohesion (Putnam, 2000). We found out that social capital serves as pupils' support structures in different ways. By using Facebook, pupils maintain an extensive network of weak ties that are a source of bridging capital, and deeper relationships that provide them with emotional support and a source of bonding capital. All the participants emphasised the importance of the emotional support they receive from friends on Facebook, resulting in the creation of bonding capital. All the participants also stressed the importance of providing pupils with practical information regarding school assignments, obtaining validation

their teachers valued in school. This can be explained by the prolonged use of Facebook, which also penetrates into the area of learning.

Since this is the first study in this area, it is limited both in qualitative and quantitative terms. Since our research was limited to six months and we were unable to identify changes in the use of Facebook, in the future a longitudinal study should be carried out. Further study would be necessary to carry out quantitative research to generalise the findings. Since we analysed only Slovenian participants, in the future it would be necessary to carry out international comparative research. The study also shows the need for additional research to reveal how Facebook and other social network sites support learning objectives and, in terms of substance, encourages the development of new forms of learning. Studies in education and the media should encourage the exploration of personal social network sites and pupils to determine the link between online and offline activities.

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References

- BAUERLEIN, M. (2009). *The Dumbest Generation: How the Digital Age Stupefies Young Americans in Jeopardizes Our Future*. New York: Tarcher.
- BOASE, J., HERRIGAN, B.J., WHELLMAN, B. & RAINIE, L. (2011). *The Strength of Internet Ties*. (www.pewinternet.org/media/Files/Report/2006/PIP_internet.pdf) (20-10-2012).
- BOSCH, T.E. (2009). Using Online Social Networking for Teaching and Learning: Facebook Use at the University of Cape Town. *Communicatio*, 35, 2, 185-200. (DOI: 10.1080/02500160903250648).
- BOYD, D. (2007). Why Youth Social Network Sites: The Role of Networked Publics in Teenage Social Life. In D. BUCKINGHAM, J.D. MAC ARTHUR & C.T. MAC ARTHUR (Eds.), *Foundation Series on Digital Media and Learning: Youth, Identity and Digital Media*. (pp. 119-142). Cambridge: MIT Press.
- BOYD, D.M. & ELLISON, N.B. (2008). Social Network Sites: Definition, History, in Scholarship. *Journal of Computer-Mediated Communication*, 13, 1, 4-22.
- CARR, N. (2008). *Is Google Making us Stupid? What the Internet is Doing to our Brains*. *The Atlantic Monthly*. (www.theatlantic.com/magazine/archive/2008/07/is-google-making-us-stupid/6868) (20-10-2012).
- CLARK, D.A. (1997). Twenty Years of Cognitive Assessment: Current status and future directions. *Journal of Consulting and Clinical Psychology*, 65, 4, 996-1000. (DOI: 10.1037/0022-006X.65.4.996).
- ELLISON, N.B., STEINFELD, C. & LAMPE, C. (2007). The Benefits of Facebook «friends»: Social Capital in College Students' Use of Online Social Network Sites. *Journal of Computer-Mediated Communication*, 12, 4, 1143-1168. (DOI: 10.1111/j.1083-6101-2007.00367.x).
- ERJAVEC, K. (2010). Media Literacy of Schoolgirls and Schoolboys in an Information Society. *Sodobna Pedagogika*, 61, 1, 156-191.
- GLADWELL, M. (2005). *Brain City: Is Pop Culture Dumping Us Down or Smartening Us Up?* *The New Yorker*, (www.newyorker.com/archive/2005/05/16/050516crbo_books) (20-10-2012).
- GRANOVETTER, M.S. (1973). The Strength of Weak Ties. *American Economic Review*, 78, 6, 1.360-1.480.
- GREENHOW, C. (2011). Online Social Network Sites and Learning. *On The Horizon*, 19, 1, 4-12. (DOI: 10.1108/10748121111107663).
- GREENHOW, C. & ROBELIA, E. (2009a). Old Communication, New Illiteracies: Social Network Sites as Social Learning Resources. *Journal of Computer-Mediated Communication*, 14, 4, 1.130-1.161. (DOI: 10.1111/j.1083-6101.2009.01484.x).
- GREENHOW, C. & ROBELIA, E. (2009b). Informal Learning in Identity Formation in Online Social Network Sites. *Learning, Media in Technology*, 34, 2, 119-140. (DOI: 10.1080/17439880902923580).
- HAGER, P. (2001). Lifelong Learning and the Contribution of Informal Learning. In D. ASPIN, J. CHAPMAN, M. HATTON & Y. SAWANO (Eds.), *The International Handbook of Lifelong Learning*. (pp. 24-37). London: Kluwer Academic Publisher. (DOI: 10.1007/978-94-010-0916-4_5).
- HAMILTON, A. (2009). What Facebook Users Share: Lower Grades. *Time Magazine*. (www.time.com/time/business/article/0,8599,1891111,00.html). (20-10-2012).
- HERRING, S.C. (2007). Questioning the Generational Divide: Technological Exoticism in Adult Construction of online youth identity. In D. BUCKINGHAM (Ed.), *Youth, Identity, and Digital Media*. (pp. 70-92). Cambridge: MIT Press.
- HEWITT, A. & FORTE, A. (2006). *Crossing Boundaries: Identity Management and Student/faculty Relationships on the Facebook*. (www.cc.gatech.edu/~aforte/HewittForteCSCWPoster2006.pdf). (20-10-2012).
- JENKINS, H. (2006). *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century*. (www.digitallearning) (20-10-2012).
- JONES, S., MILLERMAIER, S., GOYA-MARTINEZ, M. & SCHULER, J. (2008). Whose Space is MySpace? A Content Analysis of MySpace profiles. *First Monday* 13, (9) (www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2202/2024) (20-10-2012). (DOI: 10.5210/fm.v13i9.2202).
- KARPINSKI, A.C. (2009). A Description of Facebook Use in Academic Performance Among Undergraduate in Graduate Students, Annual Meeting of the American Educational Research Association, San Diego, CA, 5-10 May 2009.
- LIVINGSTONE, S., & BOBER, M. (2004). Taking up Online Opportunities? Children's Uses of the Internet for Education. *Communication and Participation. e-Learning 1(3)*. (www.wwwwords.co.uk/pdf/validate.asp?j=elea&vol=1&issue=3&year=2004&article=5_Livingstone_ELEA_1_3_web) (20-10-2012). (DOI: 10.2304/elea.2004.1.3.5).
- MADGE, C., MEEK, J., WELLENS, J. & HOOLEY, T. (2008). Facebook, Social Integration and Informal Learning at University. *Learning, Media and Technology*, 34, 2, 141-155. (DOI: 10.1080/17439880902923606).
- MAXWELL, J.A. (1996). *Qualitative Research Design: An Interactive Approach*. Thousand Oaks, CA: Sage.

- PUTNAM, R. (2000). *Bowling Alone: The Collapse in Revival of the American Community*. New York: Simon & Schuster.
- RIDEOUT, V.J., FOEHR, U.G. & ROBERTS, D.F. (2010). *Generation M2: Media in the Lives of 8- to 18-year-olds*. (pp. 44-53). Menlo Park, CA.: Kaiser Family Foundation.
- SCEARCE, D., KASPER, G. & GRANT, H.M. (2011). Working Wikily. *Stanford Social Innovation Review*. (www.ssireview.org/articles/entry/working_wikily) (20-10-2012).
- SCHWARZER, R. & KNOLL, N. (2007). Functional Roles of Social Support within the Stress in Coping Process: A Theoretical in Empirical Overview. *International Journal of Psychology*, 42, 4, 243-52. (DOI: 10.1080/00207590701396641).
- SHIRKY, C. (2010). *Cognitive Surplus: Creativity in Generosity in a Connected Age*. New York: Penguin Press.
- SLOVENIA FACEBOOK STATISTICS (www.socialbakers.com/facebook-statistics/slovenia/last-week) (20-10-2012).
- STEFANONE, M.A., KWN, K.H. & LACKAFF, D. (2012). Exploring the Relationship between Perception of Social Capital and Enacted Support Online. *Journal of Computer-Mediated Communication*, 17, 2, 451-466. (DOI: 10.1111/j.1083-6101.2012.01585.x).
- STEINFELD, C., ELLISON, N. & LAMPE, C. (2008). Social Capital, Self Esteem, in Use of Online Social Network Sites: A Longitudinal Analysis. *Journal of Applied Developmental Psychology*, 29, 4, 434-45. (DOI: 10.1016/j.appdev.2008.07.002).
- TECLEHAIMANOT, B. & HICKMAN, T. (2011). What Students Find Appropriate. *TechTrends*, 55, 3, 19-30. (DOI: 10.1007/s11528-011-0494-8).
- THURLOW, C. (2006). From Statistical Panic to Moral Panic: The Metadiscursive Construction in Popular Exaggeration of New Media Language in the Print Media. *Journal of Computer-Mediated Communication*, 11, 3, 667-701. (DOI: 10.1111/j.1083-6101.2006.00031.x).
- ULE, M. (2008). *Za vedno mladi? Socialna psihologija odrasla anja*. Ljubljana: Fakulteta za družbene vede.
- VALENZUELA, S., PARK, N. & KEE, K.F. (2009). Is there Social Capital in a Social Network Site? *Journal of Computer-Mediated Communication*, 14, 4, 875-901. (DOI: 10.1111/j.1083-6101.2009.01474.x).
- WALKER, R. (1988). *Applied Qualitative Research*. Vermont: Gowen.

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Ethos, Pathos and Logos in Facebook. User Networking: New «Rhetor» of the 21st Century

Ethos, pathos y logos en Facebook. El usuario de redes: nuevo «rétor» del siglo XXI

ABSTRACT

One of the «black holes» of academic research in Communication is the shallowness of reflections on the classic origins of Communication, its aims and points of entry. In this respect, the study of communicative processes on the Internet becomes particularly relevant (specifically the social networks processes) when observed from the classic rhetorical perspective. We focus on the use of persuasion strategies (ethos, pathos, logos) as well as the abundant use of rhetorical figures. Such parameters, along with the resources that emergent technologies offer, unleash creativity and afford humanist aspects to network communication. These give on-line platforms an extremely persuasive strength. Thus, we may speak of the network user of the 21st century as the new «Rhetorician». Our research on Facebook addresses the presence of rhetoric in online social network communication: the user of these platforms applies communicative strategies described by the Rhetoricians dating back to Greco-Roman antiquity. The methodology in this work (the study of three typified cases and the content analysis of conversations generated on Facebook walls) allows us to intertwine rhetoric and communication today, mediated by the emergence of online networks. We propose the retrieval of certain parameters of deep, critical thought to the benefit of a more human communication.

RESUMEN

Uno de los «agujeros negros» de la investigación en comunicación tiene que ver con una carencia de profundización en los orígenes clásicos de nuestros estudios, de sus objetos y de los acercamientos a estos. En este sentido, cobraría especial relevancia el estudio de los procesos comunicativos en Internet (en concreto a través de las redes sociales) bajo el prisma de la Retórica clásica. Especialmente, nos referimos al uso de las estrategias de persuasión (ethos, pathos, logos) así como al abundante uso de figuras retóricas. Tales parámetros unidos a los recursos que ofertan las tecnologías emergentes otorgan una enorme creatividad y aportan aspectos humanistas a la comunicación en red, claves de la fuerza persuasiva que caracteriza a estas plataformas on-line. De esta forma podemos hablar del usuario de redes como el nuevo «rétor» del siglo XXI. Nuestra investigación sobre Facebook aborda la presencia de la ciencia retórica en la comunicación generada en las redes sociales on-line: el usuario de estas plataformas utiliza las estrategias comunicativas descritas por la disciplina retórica desde sus comienzos en la antigüedad grecolatina. La metodología empleada (el estudio de tres casos tipificados y el análisis de contenidos de las conversaciones generadas en los muros de Facebook) nos permite entrelazar la Retórica y nuestro presente comunicativo mediado por la emergencia de las redes. Proponemos así recuperar unos parámetros que devuelvan el pensamiento profundo y crítico en favor de una comunicación más humana.

KEYWORDS / PALABRAS CLAVE

Social networks, rhetoric, communication, Internet, Facebook, user, interface, persuasion, interdisciplinarity.
 Redes sociales, retórica, comunicación, Internet, Facebook, usuario, interfaz, persuasión, interdisciplinariedad.

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