

SOCIAL NETWORKING IN PHYSICAL EDUCATION: Undergraduate Students' Views on Ning

Dr. Gülfem SEZEN BALCIKANLI
Gazi Üniversitesi,
Beden Eğitimi ve Spor Yüksekokulu,
Abant Sok. Gazi Mahallesi, Ankara, TURKEY

ABSTRACT

It was the aim of this study to investigate physical education undergraduate students' views on the use of social networking, one of the most typical representations of Web 2.0 technologies. In order to do so, the researcher, who was the instructor of the class, entitled "Fair Play Education in Sport", introduced Ning and its educational aspects to her students with a 50-minute presentation prior to the study. Following this, the students were encouraged to use this networking for 15 weeks in parallel with their class. During this application, the researcher helped the students to make the best use of Ning in educational settings. Upon the implementation, the researcher interviewed the students (n=19) in five groups on the basis of the questions prepared and piloted earlier. The interviews demonstrated that the students enjoyed using social networking in educational settings.

The findings of the study were the following: Increasing student-student and teacher-student interaction, enhancing student motivation and classroom climate, sharing materials with the instructor and students, making use of students' interests and needs, and making learning process more interesting and permanent. The research concluded that social networking could be used in PE classes effectively.

Keywords: Web 2.0, social networking, PE students.

INTRODUCTION

Web 2.0 has been in use since Q'Reilly (2005) described it as "web-based technology that facilitates and promotes communication and sharing among others worldwide". This two-way interaction Web 2.0 technologies provide is of great significance in education due to their open nature, ease of use and support for effective collaboration and communication (Coutinho, 2008; Gura and Percy, 2005).

The new version of Web, which differs from Web 1.0, can be very useful in contributing to the effectiveness of learning processes as long as 21st century educators employ them effectively. Richardson (2008) offers four benefits of using these technologies in educational settings;

- new opportunities for learners to take more control of their learning and access their own customized information, resources, tools and services,
- an array of expressive capability,
- more collaborative of working, community creation, dialogue and sharing knowledge, d) a setting for learner achievements to attract an authentic audience.

In order to address 21st century kids, known as “digital natives” (Prensky, 2001), “Generation N” (Caldwell et al., 2006) “Net Generation” (Toman et al., 2005) “Grasshopper Mind” (Raines, 2005), it is more than a requirement that web 2.0 technologies be utilized in educational settings. As McLoughlin and Lee (2010) claim, digital-age students want an active learning experience that is social, participatory and supported by rich media. Along those lines, situated learning theory shifts the view of learning from a cognitive process to a process of participation in an emotional sense in the social world (Lave and Wenger, 1990, cited in Lave and Wenger, 1998).

This shift leads to a growing interest in the need to support and encourage learners control over the whole learning process (Dron, 2007). Siemens (2007) believes that the world is changing and schools and universities play a key role in accommodating this change by transforming learners and preparing them to function in the world that is unfolding. Several researchers (Conole and Creanor, 2007; Windham, 2005a, 2005b) report that many students today juggle work and study, expect Internet connectivity and web based services and more importantly view social networking tools as being central to their lives. Thus, teachers of these digital students need to be equipped with digital literacy to creatively integrate ICT (Information and Communication Technologies) into their courses (Silverman, 1997). Otherwise, an unfilled gap is likely to occur between teachers and their students, which may hinder the learning process.

As far as physical education is concerned, it is believed that web tools can be used by PE (Physical Education) teachers to develop their own performances and to foster students’ learning processes. Several studies looked at issues such as office applications (Güclü, 2010; Silverman, 1997; Yaman, 2007a; 2007b; 2009) multimedia software and its impact on motor skills (Mohnsen, 2008), instructional video analysis software to improve pupils’ understandings on underlying concepts and techniques (Ladda et al., 2004), effects of web technologies on students’ satisfaction (Vernadakis et al., 2012), and web developers as physical educators (Papastergiou, 2010). In a similar fashion, multimedia educational software, in Mohnsen’s research (2008), constituted an important tool which;

- helped students understand PE-related concepts,
- introduced students to motor skill techniques,
- provided simulations and practice experiences,
- supported self-paced learning and unlimited practice,
- provided immediate and constructive feedback, and
- accommodated various learning styles.

Specifically designed for primary and secondary school students, such software programmes played a key role in teaching cognitive concepts such as fitness concepts and motor skills including basketball skills (Siskos, Antoniou, Papaioannou, and Laparidis, 2005; Vernadakis et al., 2012). The results of the aforementioned two studies indicated that the software offered very promising results concerning the concepts namely fitness and motor skills.

Another area of research in the context of PE in terms of web technologies is that Internet offers numerous opportunities to remain professionally current by providing various information sources and facilities for communication with colleagues (Lazerte and Lathrop, 2006; Pennington et al., 2004; Thornburg and Hill, 2004). In line with modern learning approaches, web technologies are designed to offer constructivist-learning experiences for students.

The trend that students are encouraged to design individual projects combining various digital media and text images is existent in 21st century school environments. According to a research study conducted in the USA, PE teachers are aware of the importance of web technologies at the service of education and pupils better understand the concepts and skills under study and critically reflect on their progress through these technologies (Mohnsen, 2008). In other words, such technologies are likely to help students evaluate the learning process, which ultimately leads them to be aware of their competencies more effectively. Despite the popularity of online technologies at the service of education, surprisingly not many studies are available in the field of physical education except a few (Ladda et al., 2004; Lazerte and Lathrop, 2006; Mohnsen, 2008; Özsoy, 2011; Pennington et al., 2004; Sezen, 2009; Silverman, 1997; Siskos et al., 2005; Papastergiou, 2010; Thornburg and Hill, 2004; Vernadakis et. al., 2012).

More specifically, the importance of social networking, one of the most striking realizations of Web 2.0 technologies, is not mostly pronounced in the studies of physical education. Web 2.0 technologies can be effectively used for PE students who receive both theoretical and applied classes. For instance, web technologies can be employed in theoretical classes like fair play education, sports philosophy and olympism where topics such as ethics, sports personship, match-fixing and aggressive behaviors are interactively discussed. These theoretical classes are very important especially in terms of increasing the quality of learning and teaching processes, and making use of recent technological innovations to capture students' attention. In a similar vein, in online environments, current sports events can be integrated into classroom environments so as to increase the effectiveness and dynamics of the class.

This way students are encouraged to research about the topics, which is mostly related to personalized learning experiences. Thus, the use of social networking is an important component of educational processes for students. In this regard, this study aims at investigating undergraduate students' views on the use of social networking in educational settings with a specific emphasis on Ning.

EDUCATIONAL THEORIES AND SOCIAL NETWORKING

Boyd and Ellison (2007, p. 1) describe social networking sites as "web-based services that allow individuals to construct a public or semi-public profile within a bounded system, to articulate a list of other users with whom they share a connection, and to view and traverse their list of connections and those made by others within the system". Abbitt (2007) states that there has been "tremendous growth in the popularity of websites focusing on social activities and collaboration. Since SixDegrees was introduced as the first social networking site, sites such as MySpace, Facebook, Cyworld, Bebo and Ning have attracted the attention of millions of users, many of whom have integrated these sites into their daily practices (Boyd and Ellison, 2007).

Several researchers (Albion, 2007; Barlett-Brag, 2006; Pettenati and Ranieri, 2006; Selwyn, 2007a, 2007b) maintain that social networking is the best place for several learning theories and approaches namely a) informal learning, b) cooperative learning, c) communities of practice (CoP). The concept of informal learning is all that is learned throughout life in day-to-day processes at home, work and leisure (Mason and Rennie, 2007). Informal learning refers to all kinds of learning that occurs outside the curriculum of formal or informal institutions. Employing two main categories namely intentionality and consciousness, Schugurensky (2000) offers three various forms of informal learning:

Self-directed learning, incidental learning and socialization. Once the characteristics of informal learning are considered, it is evident that new technologies, more specifically social networks, create great opportunities for learners to experience this kind of learning. Mazman and Usluel (2010) examine the potential of social networking, namely Facebook in educational settings. 606 participants of the study who use social learning in their educational contexts confirm that they experienced social learning due to the possibilities social networking offers.

New technologies facilitate the design of online communication and information exchanges to empower the learners and create an enriched social learning landscape (Bartlett-Bragg, 2006). Likewise, the use of social networking supports the development of informal learning in that it keeps learners busy doing variety of things on their own raises their awareness and shapes their thinking frames (Gillet et al., 2008).

Finally, Selwyn (2007a) pinpoints that there is a need for educators to be wary of simply importing informal Web 2.0 application into classrooms on the presumption of transforming formal education into informal learning processes. Additionally, Web 2.0 applications receive much enthusiasm in educational settings because they reflect daily life, contain spontaneous relationship, and trigger the knowledge creation and sharing very properly.

Another educational theory behind social networking, cooperative learning can be described as "a set of processes which help people interact together in order to accomplish a specific goal or develop an end product which is usually content specific" (Panitz, 1996). Along those lines, teachers tend to share the authority with their own learners, which foster the development of collaboration and cooperation between learners and the teacher.

In this connection, the use of web technologies at the service of education allows learners to access any kind of information, ideas, documents, and experiences regardless of the border and the time.

This, without a doubt, triggers collaborative learning among learners. The second-generation net tools like blogs, wikis, podcasts, RSS and social networking sites have a great contribution to collaborative learning environments where learners co-work on different kinds of projects (Selwyn, 2007a). The term, communities of practice, was first used by Lave and Wenger (1991, cited in Lave and Wenger, 1998, p. 22) to refer to "the process of social learning that occurs when people who have a common interest in some subject or problem collaborate over an extended period to share ideas, find solutions and build innovations". According to Wenger (2006), communities develop their own practice through a variety of activities including problem solving, requests for information, and seeking experience. Learning is no longer seen as "the acquisition of knowledge within the mind of an individual, but as the movement from peripheral to full participation in a community of practice" (Wubbels, 2007). As seen above, several learning theories and approaches are much related to the concept of social networking mainly because of the overlapping characteristics.

NING

Ning (<http://www.ning.com>), a typical social networking site, is a web-based social platform launched in 2005. As of June 2011, Ning has 65 million monthly unique visitors globally on its platform (Frommer, 2011). Ning has 90,000 customers with social websites on the Ning Platform (Geron, 2011).

Its current venue is US\$30.0 million (2011 est.) Like other social networking sites, it is a fast growing one with similar features that others offer. This site offers possibilities for its users to create their own social networks depending on their interests and favorite activities. Ning allows users to do the following actions: a) text searching, media sharing (e.g. photos, music, and videos), interaction (e.g. forum, chat, comments, blog), and content delivery (e.g. RSS feeds). One of the most crucial features of Ning is that it offers the users to customize their sites and to design the site's appearance in light of their own purposes. The reason why Ning was chosen for this study was because it was associated with educational settings in the relevant literature.

MATERIAL AND METHODS

Participants

In order to answer this research question, this study was carried out with a group of physical education undergraduate students (N= 19; F=12, M=7) in a state university in Turkey. The participating students were enrolled in the class "Fair Play Education in Sports" conducted by the researcher. The researcher opened a group in Ning, an online platform for people to create their own social networking. Before the semester began, the researcher gave a 50 minute-interactive presentation to introduce Ning to students so that they could be familiar with this social networking. During the presentation, she also focused on the educational benefits of Ning giving some specific examples from the literature.

Measures

Upon the implementation, the researcher interviewed them by asking the questions prepared and piloted earlier. The interview questions went through different processes before they were used to collect the data of the study. First, fourteen questions were formulated on the basis of the learners' experiences online. Dörnyei (2003) believes that in the process of writing questions some external feedback is indispensable especially when an initial item pool is prepared.

With this in mind, these questions were sent off to two experts on the use of web technologies in physical education to get their suggestions for content/construct validity. In light of the suggestions made by these experts, it was decided that ten questions would be enough to use in the first place. Field-testing, which is an integral part of questions writing is "piloting the questions at various stages of their development on a sample of people who are similar to the target sample for which the questions have been asked" (Dörnyei, 2007, p. 112).

These ten questions were piloted with five students who were familiar with social networking. Fourth, after the implementation of the questions, it turned out that some interview questions were not clear enough for participants to respond properly. The questions that could be considered to be vague were removed from the list of interview questions. Fifth, there were five questions left to collect students' views on the use of social networking in educational settings.

Finally, the researcher conducted a semi-structured interview with the participating students. After the participants were informed about the content and objectives of the study, the interviews were conducted with one participant at a time, between 40 minutes and 50 minutes. All interviews were audio taped and transcribed verbatim. The interview sessions were completed in Turkish and in three weeks during April 2011.

Procedures

As time continued, the researcher uploaded everything related to the class she was teaching. The syllabus, class notes, exam dates, discussion questions, course content, relevant links and assignments were uploaded regularly on the website. Furthermore, the students were asked to open a personal account where they were also encouraged to upload class materials, videos, pictures, links, assignments they prepared and to comment on these materials in an interactive way. The researcher helped them whenever necessary to overcome technical difficulties.

Analysis

The analysis of qualitative data was mostly based on categorizing the data collected immediately. The qualitative data were analyzed by the researcher. The constant comparative method, which is derived from the grounded theory (Strauss and Corbin, 1990), was used in analyzing the data. Strauss and Corbin (1990) state that the constant comparison method has four distinct stages: comparing incidents applicable to each category, integrating categories and their properties, delimiting the theory, and writing the theory. In the process, the data were read until some underlying themes were discovered. These themes were transformed into the aspects, the findings of the study. The procedure was completed after validating all the data with the participants. The final step was to translate the processed and categorized data into English.

RESULTS AND DISCUSSION

This study explored physical education undergraduate students' views about social networking namely Ning in educational settings. Overall, it found that students mostly considered Ning as an effective educational tool. The findings of the study indicated that students' experiences in Ning focused on two main aspects, namely;

- increasing student-student and teacher-student interaction on several topics like class assignments, group projects, relevant course content and examinations, and
- enhancing student motivation, affective learning, and classroom climate (see Table: 1 for a detailed review).

Table: 1
Students' Views on the use of Ning

Aspects	Participants (n=19)	
Increasing student-student and teacher-student interaction	Improving the communication between student-student and teacher-student	19
	Sharing materials with the instructor and students	15
	Cooperation	18
	Accessing to the lecturer	11
	Providing feedback with students easily	16
Enhancing student motivation, and classroom climate	Increasing motivation	17
	Enabling students to transfer the content into daily lives	17
	Making use of students' interests and needs	16
	Making the learning process more interesting and permanent	15

Increasing Student-Student and Teacher-Student Interaction

One of the most valuable findings of this research was that students regarded the use of social networking in educational settings as increasing student-student and teacher-student interaction.

Even though there were aspects related to this specific finding, we put related dimensions under the category of "increasing student-student and teacher-student interaction" mainly because the dimensions are more or less related to each other.

"Ning has enabled us to communicate more with the instructor at any time. I sometimes fail to understand the concepts discussed in the class. I was asking about them online. The instructor was helping me out right away" (Student B).

As easily seen in the remarks above, the use of Ning helped improve the communication between student-student and teacher-student, which is an important aspect of effective learning. In other words, the fast communication increases interaction in the form of web-based communication, which is in tune with the study of Fischman (2008). In a similar fashion, Keleş and Demirel (2011) came up with similar results in their research in that Facebook assisted course facilitated the aspects like sharing and cooperation, accessing to the lecturer, and also visualizing the course content for some students. Another important finding emanating from the research was that the use of Ning created unique opportunities for participating students to exercise situated learning as learning was viewed mostly as a process of participation in the social world. As Lave and Wenger (1991, cited in Lave and Wenger, 1998) argued, learning emerges from engagement in social interaction.

"It is possible that we continue learning more about the concepts outside the class. Thanks to Ning, specifically videos and posts, we were given a chance at interacting with each other to take a deeper understanding of the related concepts" (Student A).

The concepts such as community of learners, community of inquiry, learning community and community knowledge were very related to students' comments. As is seen above, the participating students were involved in a social interaction surrounding them in a constructive sense. Furthermore, the social networking served as a platform where students could easily exchange their ideas, assignments or projects at ease. As Selwyn (2007a, 2007b) puts it, social networking provides meaningful contexts for learning to take place.

That is to say, Ning helped the instructor connect with her students about assignment, upcoming events, useful links and samples of work outside the classroom.

"It was pretty feasible to exchange documents online. More importantly, when I found something I thought useful and interesting for my classmates, I posted it online so that they could view it. Later on, we exchanged our ideas about the issue" (StudentC).

This statement is highly related to the concept of social interaction (Vygotsky, 1978). The concept of social web is commonly linked to and supported by applications of social media that are designed for social interaction and information exchange. In this particular regard, the success of social networking rests on how well students are socially connected to each other. Yet another crucial aspect of social networking in educational settings is that it has the capacity to enable peer-feedback as expressed by Mason and Rennie (2007).

More specifically, the students were giving feedback to each other's work very effectively through Ning. When a student posts on any assignment, his/her classmates comment on the work in question. This obviously triggers the collaboration among peers, which is in line with the principles of cooperative learning.

This finding is related to the assumption that social networking is being considered as an educational tool because of its beneficial qualities such as peer-feedback, goodness of fit and interaction.

"I was able to reach the class notes very easily. In the other classes, I have a difficult in reaching class notes. I have to photocopy them, which takes a lot longer than I think. Ning, however, allows me to reach the class materials at ease (Student D)."

Ning, in this study, helped students reach any kind class materials very easily, which could also be considered to be a motivating factor. That is to say, the students reported that like all social networking sites, Ning was very influential in offering great opportunities for students to get the materials related to specific class. This is a very important finding because 21st century kids should be allowed to exchange the information easily and fast (Gross and Acquisti, 2005; Hewitt and Forte, 2006). Likewise, Russo, Watkins, and Groundwater-Smith (2009) also related social networking in CoPs (Community of Practices) to informal learning. They posited that social media played a central role in creating knowledge-sharing experiences in informal settings.

Enhancing Student Motivation, And Classroom Climate

In the 21st century, the understanding of learning has gone through several alterations in line with the changing landscapes of educational actions. Situated learning theory which shifts the view of learning from a cognitive process to a process of participation in the social world recommends that students be involved in a learning environment where they are motivated to take actions to learn. As Campbell (2006) puts it, learning ecologies created great opportunities for students to increase their motivation. In this regard, the 21st century students can be more motivated to learn specifically when their interests and learning go hand in hand. In other words, if students' daily activities are reflected in their learning processes, it is likely that the learning process will be actualized at the very best level. Educators are under obligation to know what is going on in their own lives so that they can create learning ecologies accordingly. The participating students had the following views regarding the motivation Ning offered/provided.

"It is a great thing to use Ning in educational settings. It is not what we used to do in the past. Paper documents! Ning is easier and more interesting, I think. More importantly, I have a Facebook account. I use something like Facebook (Ning) for educational purposes" (Student G).

The students were of the opinion that using social networking played a key role in motivating them to learn more about the content itself. This is mainly because they really enjoyed being online in Ning discussing several issues related to the course. As Prensky (2001) claims, students' interests should be reflected in learning processes, which will pave the way for the development of learning skills. Ajjan and Harsthone (2008) presented very similar benefits of social networking sites in educational settings.

First, it increases students' learning to a great extent.

Second, it facilitates interaction between the teacher-students, and students-students.

Third, it makes students more motivated for the classes.

Fourth, it develops students' writing skills. Finally, it makes easier for students to get involved in the learning process.

As is easily seen, the findings of the current research are very in tune with those of several studies (Norris, 2002; Resnick, 2001; Wellman, Hasse, Witte, and Hampton, 2001). Thus, using social networks in an academic context is attractive for undergraduate students. Students will be given a chance to acquire new knowledge through subliminal, effective and smooth learning processes while taking part in enjoyable interactive situations mediated through interesting and motivating tools and content (Gillet, El Helou, Yu, and Salzmann, 2008).

CONCLUSIONS AND SUGGESTIONS

This study set out to investigate the physical education undergraduate students' experiences with and views on the integration of social networking sites in the examined courses. The interview results indicate that participating students find the use of social networking namely Ning very useful specifically in terms of two dimensions: a) increasing student-student and teacher-student interaction on several topics like class assignments, group projects, relevant course content and examinations, and 2) enhancing student motivation, and classroom climate. The findings are in tune with those of relevant studies in the literature (Ajjan and Harsthone, 2008; Rebecca et al., Selwyn, 2007a).

The findings are highly critical mainly because there are not many studies available in the area of physical education and PE teachers' or student teachers' perspectives on the use of social networking in educational settings. On the whole, student teachers seemed to feel that Ning should be employed in educational settings due to following reasons. First, Ning offer great opportunities for students and teacher to interact with each other in a social manner. Second, it allows students to reach the class content and materials posted very easily online. Third, it encourages students to share their assignments and projects with each other.

Fourth, it offers a platform where students and teacher can discuss the relevant topics and give feedback to each other's work.

Fifth, it enables students to focus on the class materials outside the classroom, which is closely linked to independent learning.

Finally, it increases students' motivation to do more research about the topics in question. Therefore, social networking plays a salient role in reaching students and developing student teachers' experiences with web technologies by offering more opportunities for greater motivation, negotiation and decision-making. In light of the findings gathered from the students, it turned out that they did not have any negative opinions about the use of social networking. Rather, they believed that social networking could contribute to the effectiveness of learning/teaching processes. A social networking account for a specific class is believed to offer great opportunities in the following way:

- It keeps students motivated for the class
- It serves a platform where students are encouraged to discuss the relevant issues
- It keeps the content updated at any time
- It enables students to pose questions about the class content and to receive responses at once.

These opportunities are so striking that teachers and students are under pressure to make use of social networking in educational settings. On the basis of the findings of this research study, the following points should be considered seriously in educational settings.

- In order to attract the attention of PE students, sports events may be posted online so that a discussion forum can be created to keep the topic updated, which fosters the acquisition of relevant topics.
- These social networking sites can also be used for practice classes. For instance, social networking can be used while teaching how to teach volleyball and basketball.

More specifically, students can be recorded when they are teaching these skills and these recordings can be shared on these social networking sites in order for them to give feedback to each other's performances.

BIODATA and CONTACT ADDRESSES of AUTHOR



Dr. Gülfem SEZEN BALÇIKANLI works as a lecturer in the Department of Physical Education and of Teaching in Sports, in the School of Physical Education and Sports at Gazi University. Her research interest include sports ethics, fair play in sports education and empathy. She has presented papers at several conferences and has published in academic journals.

Dr. Gülfem SEZEN BALÇIKANLI
 Gazi Üniversitesi,
 Beden Eğitimi ve Spor Yüksekokulu,
 Abant Sok. No:12 Gazi Mahallesi, Ankara, TURKEY
 Phone: + 90 312 202 35 59
 Fax: + 90 312 212 22 74
<http://websitem.gazi.edu.tr/gsezen>
<http://websitem.gazi.edu.tr/balcikanli>
 Email: gulfemsezen@gmail.com, gsezen@gazi.edu.tr

REFERENCES

- Abbitt, J. (2007). Exploring the educational possibilities for a user-driven social content system in an undergraduate course. *MERLOT J Online Learning and Teaching*. 3(4), 437-447.
- Ajjan, H, & Harsthone, R. (2008). Investigating faculty decisions to adopt Web 2.0 technologies: Theory and empirical tests. *Internet and Higher Education*. 11: 71–80.
- Albion, P.R. (2007). Web 2. 0 in teacher education: Two imperatives for action; Retrieved from <http://www.haworthpress.com/store/find.asp>

Bartlett-Bragg, A. (2006). Reflections on pedagogy: Reframing practice to foster informal learning with social software. Retrieved from <http://matchsz.inf.elte.hu/TT/docs/Anne20Bartlett-Bragg.pdf>

Boyd D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *J Computer-Mediated Community*, 13(1), 276-297.

Caldwell, J., Toman, N. & Leahy, J. (2006). Diversity and difference in the learning experience of students in contemporary mass Higher Education. Paper presented at NUI Galway 4th Annual Conference on Teaching and Learning 8–9 June.

Campbell, A. (2006). Language Learning Ecologies. <http://dekita.org/weblog/language-learning-ecologies>

Conole, G, & Creanor, L. (2007). In their own words: Exploring the learner's perspective on e-learning. Retrieved from <http://www.jisc.ac.uk/media/documents/programmes/elearningpedagogy/iowfinal.pdf>

Coutinho, C.P., & Bottentuit Junior, JB. (2008). Web 2.0 in Portuguese academic community: an exploratory survey. In K. McFerrin, R Weber, R Carslen and A Willis (Eds), *Proceedings of the 19th International Conference of the Society for Information Technology and Teacher Education*. 1992-1999.

Dörnyei, Z. (2003). *Questionnaires in second language research: Construction, administration, and processing*. New Jersey: Lawrence Erlbaum Associates, Publishers.

Dörnyei, Z. (2003). *Research methods in applied linguistics: quantitative, qualitative and mixed methodologies*. Oxford: Oxford University Press. 2007.

Dron, J. (2007). Designing the undesignable: Social software and control. *Educational Technology and Society*, 10(3), 60-71.

Fischman, J. (2008). Dear professor, students want to chat with you. *The Chronicle of Higher Education*. Retrieved from <http://chronicle.com/wiredcampus/article/3384/dear-professor-students-want-to-chat-with-you>

Frommer, D. (2011). Ning's Second Coming Is Chugging Along, On Its Way To A \$30 Million Revenue Run Rate, Dan. Business Insider. Retrieved from http://articles.businessinsider.com/2011-02-03/tech/29973776_1_social-networks-ad-revenue-subscribers

Geron, T. (2011). [With Revenue Up 400%, Ning Adds Paid Access Service](http://www.forbes.com/sites/tomioqeron/2011/06/15/with-revenue-up-400-ning-adds-paid-access-service). Forbes. Retrieved from <http://www.forbes.com/sites/tomioqeron/2011/06/15/with-revenue-up-400-ning-adds-paid-access-service>

Gillet, D. El, Helou, S., Chiu Man, Y., & Salzmann, C. (2008). Turning web 2.0 social software into versatile collaborative learning solutions. Paper presented at the Advances in Computer-Human Interaction on the First International Conference. Retrieved from http://infoscience.epfl.ch/record/111941/files/AHCI_08_submitted.pdf?version=1

Gross, R. & Acquisti, A. (2005). Privacy and information revelation in online social networks. In Proceedings of the ACM CCS Workshop on Privacy in the Electronic Society.

Gura, M., & Percy, B. (2005). *Recapturing technology for education: keeping tomorrow in today's Classrooms*. Lanham, MD: Rowman and Littlefield

Güclü, M. (2010). University Students' Computer Skills: A Comparative Analysis. *TOJET*, 9(2), 264-269.

Hewitt, A., & Forte A. (2006). *Crossing boundaries: Identity management and student/faculty relationships on the Facebook*. Paper presented at CSCW, Banff, Alberta. Retrieved from <http://www.andreaforte.net/HewittForteCSCWPoster2006.pdf>

Keleş, E., & Demirel, P. (2011). Using Facebook In Formal Education As A Social Network. 5th International Computer and Instructional Technologies Symposium, 22-24 September, Fırat University, Elazığ-Turkey.

Ladda, S., Keating, T., Adams, D., & Toscano, L. (2004). Including technology in instructional programs. *Journal of Physical Education, Recreation and Dance*, 75(4).

Lave, J., & Wenger, E. (1998). *Situated learning: Legitimate peripheral participation*. New York: Cambridge University Press. 1998.

Lazerte, D. K. S., & Lathrop, AH. (2006). Hot links to cool stuff: Website technology in the elementary school physical education classroom, 14-20.

Mason, R., & Rennie, F. (2007). Using web 2. 0 for learning in the community. *The Internet and Higher Education*, 10(3), 196-203.

Mazman, S.G., & Usluel, Y.K. (2010). Modeling educational usage of Facebook. *Computers and Education*, 55(2), 444-453.

McLoughlin, C., & Lee, M. J. (2010). Personalised and self regulated learning in the Web 2.0 era: International exemplars of innovative pedagogy using social software. *Australasian Journal of Educational Technology*, 26(1), 28-43.

Mohnsen, B. (2008). *Using technology in physical education* (6th ed.). Cerritos, CA, Bonnies's Fitware Inc.

Norris, P. (2002). The bridging and bonding role of online communities. *Press/Politics*, 7(3), 3-13.

Ozsoy, S. (2011). Use of Media by Turkish Fans in Sport Communication: Facebook and Twitter. *Journal of Human Kinetics*. 28, 165-176.

Panitz, T. (1996). Collaborative versus cooperative learning- A comparison of the two concepts which will help us understand the underlying nature of interactive learning. Retrieved from <http://home.capecod.net/~tpanitz/tedsarticles/coopdefinition.html>

Papastergiou, M. (2011). Physical Education and Sport Science Undergraduate Students as Multimedia and Web Developers: Moving From The User's To The Creator's Perspective. *Educational and Information Technologies*. 16(3), 281-299.

Pennington, T., Wilkinson, C., & Vance, J. (2004). Physical educators online: what is on the minds of teachers in the trenches? *The Physical Educator*, 61(1), 45-56.

Pettenati, M. C., & Ranieri, M. (2006). Informal learning theories and tools to support knowledge management. In distributed CoPs. TEL-CoPs'06: 1st International Workshop on Building Technology Enhanced Learning Solutions for Communities of Practice

Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon*, 9(5), 1-4.

Q'Reilly, T. (2005). What Is Web 2.0? Design Patterns and Business Models for the Next Generation of Software. Retrieved from <http://oreilly.com/web2/archive/what-is-web-20.html>

Raines, C. (2005). Meet the generations. Retrieved from <http://www.generationsatwork.com/prereading.html>

Rebecca, M, Duncan-Howell, & Jennifer, A. (2008). Facebook© goes to college: using social networking tools to support students undertaking teaching practicum. *Journal of Online Learning and Teaching*. 4(4), 596-601.

Resnick, P. (2001). Beyond bowling together: Socio technical capital. In J. Carroll (Ed.), *HCI in the New Millennium* (pp. 647-672). New York: Addison-Wesley.

Richardson, T. (2008). How web 2. 0 has changed the face of education. Retrieved from <http://www.ncc.co.uk/article/?articleid=13295>

Russo, A., Watkins, J., & Groundwater-Smith, S. (2009). The impact of social media on informal learning in museums. *Educational Media International*. 46 (2): 153-166.

Schugurensky, D. (2000). The forms of informal learning: Towards a conceptualization of the field. Retrieved from <http://tspace.library.utoronto.ca/bitstream/1807/2733/2/19formsofinformal.pdf>

Selwyn, N. (2007a). Screw Blackboard, do it on Facebook! An Investigation of Student's Educational use of Facebook. Retrieved from <http://www.scribd.com/doc/513958/Facebook-seminar-paper-Selwyn>

Selwyn, N. (2007b) Screw blackboard... Do it on Facebook! An investigation of students' educational use of Facebook. Retrieved from <http://www.scribd.com/doc/513958/Facebookseminarpaper-Selwyn>

Sezen-Balçıklı, G. (2009). Use of Visual Media in Fair Play Instruction in Sports: A YouTube Case. European Conference for Academic Disciplines. Baden-Württemberg, Germany.

Siemens, G. (2007). Digital natives and immigrants: A concept beyond its best before date. http://connectivism.ca/blog/2007/10/digital_natives_and_immigrants.html

Silverman, S. (1997). Technology and physical education: present, possibilities, and potential problems. *Quest*, 49, 306–314.

Siskos, A., Antoniou, A., Papaioannou, A., & Laparidis, K. (2005). Effects of multimedia computerassisted instruction (MCAI) on academic achievement in physical education of Greek primary students. *Interactive Educational Multimedia*, 10, 61–77.

Strauss, A., & Corbin, J. (1990). [*Basics of qualitative research: Grounded theory procedures and techniques*](#). Newbury Park: Sage Publications.

Thornburg, R., & Hill, K. (2004). Using Internet assessment tools for health and physical education instruction. *Technology Trends*, 48(6), 53–70.

Toman, N., Leahy, J., & Caldwell, J. (2005). The Learning Culture of Students in Contemporary Mass Higher Education. Proceedings of 3rd International Conference-What a Difference a Pedagogy Makes.

Vernadakis, N., Giannousi, M., Tsitskari, E., Antoniou, P., & Kioumourtzoglou, E. A (2012). Comparison of Student Satisfaction between Traditional and Blended Technology Course Offerings in Physical Education. *TOJDE*, 13(1).

Vygotsky, L. S. (1978). *Mind and society*. Cambridge, MA: Harvard University Press. 1978.

Wellman, B., Haase, A.Q., Witte, J., & Hampton, K. (2010). Does the internet increase, decrease, or supplement social capital? Social networks, participation and community commitment. *American Behavioral Scientist*, 45(3), 436-455.

Wenger, E. (2006). Communities of practice: A brief introduction. Retrieved from <http://www.vpit.ualberta.ca/cop/doc/wenger.doc> on June 21, 2009.

Windham, C. (2005). Father Google and Mother IM: Confessions of a Net Gen Learner. *Educause Review*, 40(5), 43-58.

Windham, C. (2005). The student's perspective. In D. G. Oblinger and J. L. Oblinger (Eds), *Educating the Net generation*. Retrieved from <http://www.educause.edu/TheStudent%27sPerspective/6061>

Wubbels, T. (2007). Do we know a community of practice when we see one? *Technology, Pedagogy and Education*, 16(2), 225-233.

Yaman, M. (2007a) The Attitudes of Physical Education Students Towards Internet. *TOJET*, 6(3).

Yaman, M. (2007b). The Competence of Physical Education Teachers in Computer Use. *TOJET*, 6(4).

Yaman, M. (2009). Perceptions of Students on the Application of Distance Education in Physical Education Lessons. *TOJET*, 8(1), 65-74.