Ondřej Šimik[*]

THE USE OF SOCIAL NETWORKING WEBSITE CONTAINING VISUAL MATERIALS IN EDUCATION

Introduction

The society of the 21st century is called the information society (see, for example, Zlatuška 1998) and, unlike other societies, it is characterized by the rapid development of information and communication technology. This trend is also visible in schools and in education (see: Zounek 2006). Extensive research on teachers' opinions regarding the need for changes in school education also presents a frequent opinion of teachers stating that, "*In the information technology age, it is not possible to educate children without using modern technology*". (Straková, Spilková, Simonová, Friedleandaerová, Hanzák 2013, p. 83). It is necessary to find new teaching methods relying on modern information and communication technology, especially, since tablets have become an insperable part of classes in recent years (cf. Neumajer, Rohlíková, Zounek 2015). Computers and the Internet are now de facto a part of every school. In the Czech Republic, there are about 15 desktop computers per 100 pupils, i.e., about 7 pupils per computer (Czech Statistics Bureau, 2015). For today's young generation, owning a smart phone with Wi-Fi connection is a matter of course. This fact already applies to children. Cyber culture (Lévy 2000) is now a part of school (cf. Zounek, Šeďová 2008). The teacher's key role and attitude towards ICT technology, ICT competence, and ability to work with this technology is obvious (cf. Neumajer 2007). One of the general objectives of education is to prepare the pupil for life in the best possible way. It is obvious that the knowledge of cyberspace and the ability to use it correctly is one of the key skills of people living in the 21st century. By principle, children learn how to use computers, tablets, and smart phones naturally and very quickly. As presented by Paliskiewicz (2016), the role of the Internet in the lives of young people is growing. The Internet is becoming a source of inter-personal contacts

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and information. Therefore, students request for bigger ICT integration into classes. Various forms of social networks are very popular. Especially the so called Web 2.0 (e.g. O´Reilly, 2007) is getting to the forefront. This web is characterized as a space for joint creation and sharing of content, which has become a rule for all social networks. First and foremost, Web 2.0 does not contain statistic content but dynamic content which is created by individual visitors to the web themselves, not only by the website designers. A teacher (especially an elder one) can have problems in accepting the new technology (including the Web 2.0 platform) in classes (Balanskat 2008). There are numerous reasons for this but the main reason is unfamiliarity with the technology or the unwillingness to change traditional teaching methods. However, if school is not to be perceived as a museum, but as a part of the modern world, it is impossible to avoid new technology. ICT literacy is one of the major objectives of education (Růžičková 2010). It is clear that cyberculture has its pitfalls and hazards (for example: Fantová 2014), but it can also be used meaningfully when the teacher knows how to do this and which applications, programs, and web pages can be used in classes. In the Czech Republic, Google EDU group (www.gegcr.cz) deals with the popularization of ICT technology and its integration into classes. Integrating modern information technology into classes can not only develop ICT literate pupils, thereby bringing school learning closer to everyday life, but it can also save a significant amount of time, increase motivation in classes, and stimulate the pupil. Given the space limitations in this article, in its next part, the possibilities of using the social networking website Pinterest (`www.pinterest.com`) are only briefly introduced. Instructional videos and detailed descriptions on how to work with Pinterest can be found, for example, on the youtube.com server in numerous languages. All one needs to do is enter, for example, "Pinterest, Use, Instructions" in the browser in a chosen language.

Pinterest – Brief Characteristics

Pinterest is an on-line tool which enables the creation of picture files, the so-called boards. It is one of the social networking websites with a rapidly increasing number of visitors (see, for example, Gilbert, Bakhshi, Chang, Terveen 2013 or Duggan, Ellison, Lampe, Lenhart, Madden 2015). It currently has around 100 million registered users (leading social networks worldwide, as of November 2015). Pinterest helps develop information literacy (Dudenhoffer 2012) because it develops the pupil's ability to work with web tools (searching for and sorting information) and supports critical thinking. It works as a website and is free of charge: using it is not limited by fees as is

the case in a number of other applications or services. The only limitation is the necessity of an Internet connection. However, nowadays, the Internet is a common standard in schools. One can use Pinterest both passively and actively. A passive user can only watch the pictures shared by other users, but, in this case, the teaching potential of pinterest is not fully used. Therefore, the possibility of using Pinterest as an active user is preferable. The only condition for an active user is to sign up for free. All one needs to do in order to sign up is enter an email address and password. It is also possible to sign up via accounts on social networks (for example, via Facebook or Google). However, it is better to have an independent account to prevent pupils from being distracted in classes.

Simply said, the main function of Pinterest is to collect pictures on the user's account (the so called bookmarking), sort them out, and create the so called boards, i.e., groups of pictures with a similar/the same topic. It is possible to share or upload pictures (in Pinterest terminology, pins) directly from the Internet (using special keys, which one can easily click and install); upload one's own pictures directly from the computer; or copy another user's picture from their board. Figure 1 illustrates what the main page looks like once the visitor has signed up to Pinterest. The letter p (1 icon) takes the user to the home website. It is next possible to write the name of the picture into the command box (2). On the right side of the bar, there are three icons in a row. The first one (3) refers to various categories of pictures, for example, sport, nature, traveling. The user can hereby simply find what he is looking for, if he does not know the exact name of the sought for picture. One can also click through to the user's personal profile (4) – also see Fig. 2 below. Finally, there is the bubble icon (5), which refers to news or to the user's or his friends' latest activities in the application and displays messages.

Figure 1. Main menu / bar in Pinterest.
Source: `www.pinterest.com` and own modification.

After signing up, it is immediately possible to create a board, which is a condition for being able to upload specific pictures. After clicking the related, same-named icon, a dialogue window will open with instructions on how to create boards. First, the user enters the name of the board (for example, Deciduous Trees[1]). It is next possible to add a description of the board (using several sentences, the user describes what the collection of pictures will include). It is possible to categorise the board into a more general file of categories, which are offered by the rolling bar (in my case, that would be the nature section). The user can choose whether to make the board public, (thereby, allowing any Internet user (Pinterest user) to see it), or he can choose to make it private (thereby making it visible only to the creator or to a group of selected people via email or via his saved contacts). The last step is to click the "create" icon and the board is created. Next, it is possible to upload the so called "pin" (selected pictures can be uploaded by using the above mentioned methods). When adding a picture, one first has to choose the related board. Then it is possible to add a description to the picture (for example, the name of a deciduous tree). Users do not need to worry about copyrights because once a picture is pinned to a board, its source automatically appears next to the picture. As a result, there is no violation of copyright laws (also see Hansen, Nowlan, Winter, 2012).

For illustration purposes, the picture of the author's personal profile is presented in Figure 2. In the profile the user can create new boards or look through the pictures in the already existing ones. The profile simultaneously shows the total number of boards, the number of pictures, and the number of "likes", fans, and users, who observe the profile.
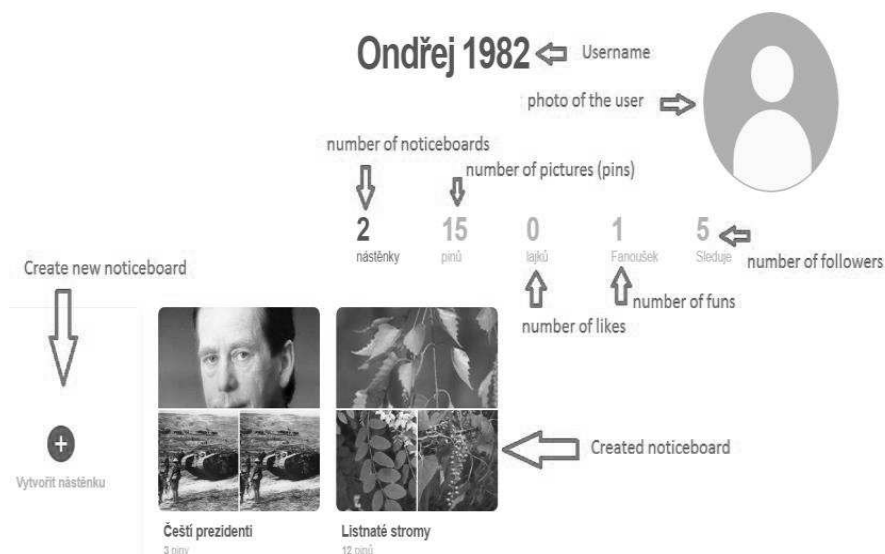
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[1]Specific   link   here: https://cz.pinterest.com/ondejimik/listnat\%C3\%A9-stromy/

Figure 2. User's Profile in Pinterest.
Source: `www.pinterest.com` and own modification.

Social dimension is a very important spehere of Pinterest (for example, Blair, Serafini, 2014). Social contacts via cyberspace are increasingly useful and popular among the young generation. This aspect can also be used in schools to support social learning. Users (pupils) can share their boards amongst one another. They can look at, comment, or like boards. It is also possible for users to edit boards of other users. During classes, pupils can check and evaluate, for example, whether a picture is described correctly (for example, whether a picture actually shows a beech tree, etc.) Pinterest can therefore be perceived as a specific social network website based primarily on sharing pictures.

The Contribution of Pinterest to the Education Process

Using Pinterest can help develop the pupil's key competencies and support the pupil in achieving educational objectives. Accordingly, the importance of the Pinterest on-line tool in classes is next presented in relation to the pupil's key competencies, which can also be perceived as general educational objectives. In the Czech educational environment, competencies are one of the key elements of the national curriculum program – the framework of the educational program for elementary education (Tupý, Jeřábek et al. 2016). The following table illustrates how selected key competencies can be developed by means of Pinterest.

Table 1

Possibility of Developing Key Competencies by Means of Pinterest

Key competencies stemming from the national curriculum	Activities performed and key competencies developed by means of Pinterest
For teaching – the pupil searches for and sorts information; the pupil develops a positive relationship to learning; the pupil selects and uses adequate methods for learning effectively	Searching for pictures on the web according to the assigned criteria; creating boards, categorising pictures into groups, using a simple key effectively (not time demanding), creating a collection of pictures. Working with applications is motivational (pupils like working with ICT technologies) and supports creativity in classes.
For solving problems – the pupil thinks critically; the pupil uses his own opinion and experience	Thinking about how to name and sort groups of pictures. Most frequently, the pupil works with the application alone (even at home), he must, therefore, use his own opinion.
Communicative – the pupil formulates and expresses thoughts and opinions in a logical sequence; the pupil understands various types of picture material; the pupil uses information and communication means and technology for high quality and effective communication	Arranging pictures logically and, brief but factual, formulations of important descriptions to individual pictures. Using Pinterest, the pupil is working with photographs as well as drawings, he hereby learns to differentiate between different types of graphics. The web application alone is an ICT means. The pupil uses it to communicate the educational content.
Social and personal – the pupil is able to cooperate within a group; the pupil contributes to discussion and appreciates other spoken activities.	Pinterest enables communication among pupils via commenting, evaluating (likes), editing, correcting descriptions, and sharing boards. This creates room for discussions, sharing opinions, all within a technically simple environment.

Source: own.

Pinterest also supports individual didactic principles (for example, Malach, 2013). Accordingly, a brief description of the importance of Pinterest in the context of didactic principles follows. Pinterest activates the pupil in an understandable way (principles of consciousness and activity); develops various skills (see Table 1) (principle of comprehensiveness). The pupil can form correct scientific projections and understanding based on the analysis

of individual pictures of the world in which he lives (principle of science). Uploading own pictures and then naming them leads to interconnecting theory with practice. In addition, the pupil exercises a number of practical ICT skills, useful in life. Since Pinterest is very simple and intuitive to use, it is suitable for elementary school children, who can already read and write. It also supports the child's (pupil's) individual development (for example, in the number of pictures boards, in the complexity of descriptions of a given picture, etc.). Working with the application is also motivational and "habit-forming", which is congruent with the principle of emotional involvement in educational process. Pinterest allows users to save the work they have been working on for a long time. It also allows a continuous expansion of the content, which also supports the principle of permanency (the pupil can repeat the material at any time). The main advantage of Pinterest consists in enabling the pupil to focus on a picture presentation and single-handedly support his opinion. The pupil can simply broaden his visual imagination, as opposed to pictures available, for example, only in a textbook. The pupil creates his board gradually and logically, which supports the principle of consistency and system. The pupil's digital portfolio or individual pictures are arranged systematically. The child learns to understand system. Finally, when using Pinterest, there is also room for feedback: either by means of direct communication via the Internet, when the teacher or other pupils comment on pictures, or directly in the classroom, when the webpage can be projected, for example, by means of a data projector.

Ideas for Using Pinterest in Classes

In this part, an outline of the practical possibilities of using Pinterest in teaching an integrated subject about nature and society is presented. (in the context of the Czech educational system, the subject Human and his World (Tupý, Jeřábek et al. 2016), which is intended for the first level of elementary school). The subject includes eight topic units, which are also preparatory for follow-up teaching subjects at the second level of elementary school. It deals with the preparatory teaching of geography (place, where we live), science, physics, chemistry (diversity of science), history (people and time), basics of social sciences (people around us), and the topic unit concerning humans and health (which is a combination of several subjects). Individual ideas indicate, which behavioral – educational content pupils could put together in the Pinterest application. For better understanding, individual ideas have been ascribed to one of five educational areas, based on their characteristics. The list is not final because the final version of the list depends on the teacher, pupils' needs, and conditions of in a given

school.

Table 2

Ideas for creating boards in the Pinterest Application

Topic Unit	Topic Ideas for the Picture Gallery
Place, where we live (geographical part)	Pictures of cities (national and European); pictures of points of interest (for example, geographical records, like the highest mountain); cultural monuments (buildings), natural monuments (rocks, etc.); pictures of the pupil's own travels; pictures mapping the pupil's residence (city, town).
People around us (social part)	Pictures from social life; pictures of people (different races, nationalities); pictures of currencies; pictures of professions; pictures of industrial companies, businesses, companies; pictures of diverse cultures and sub-cultures documenting human impact on nature, global issues, and social characteristics (famine, war, terrorism, poverty, etc.)
People and time (historical part)	Pictures of historical figures, historical monuments, architectural styles and their typical features; pictures of historical subjects and important historical events; pictures from the lives of people throughout centuries; pictures of historic and modern means of transportation.
Diversity of nature (scientific part)	Pictures of the local countryside taken by pupils throughout the year; pictures of different areas on Earth (the topic of climatic zones); electronic journal of plants (trees, bushes); pictures of animal species; pictures of mushrooms (edible, non-edible and poisonous); pictures of collections of rocks and minerals or of different kinds of soil types; pictures of natural phenomena and unusual events (for example, storms, earthquakes, etc.); pictures of planets and the Solar System; picture documentation of nature-friendly human conduct (for example, building bird feeders).
Human and health	Creation of boards related to different kinds of diseases, parts of the human body; pictures of healthy / unhealthy food; pictures of traffic signs (traffic safety).

Source: own.

When creating individual boards, the teacher together with pupils uses the educational content of a given educational program (be it framework or classroom curriculum). Using pictures, the pupil can create a more accurate understanding of the discussed phenomenon, thereby, creating his own world in pictures. In the past, this approach to learning was emphasized by Jan Amos Komenský (Komenský 1956). The principle of creating a picture is especially important at the first level of elementary school and the web site, Pinterest, supports this.

Conclusion

One of the most important tasks at school is to prepare the pupil for life, provide him with key competencies and skills for life. The 21st century is defined as the age of information and the digital society. Pupils growing up in this society learn how to work with modern equipment (such as, computers, tablets, or smart phones) very quickly and, frequently, intuitively. They spend a relatively large amount of their day in cyberspace, on the Internet, and on social networks. Although people are aware of the dangers of using the Internet, one cannot help noticing the educational potential that lies in using information and communication technology in education. This technology helps "bring life" to schools, making school a place where time does not stand still. However, this also requires training teachers and expanding their knowledge of using ICT in classes. Lately, social networks, which do not only have to be a source of entertainment but also a source of education, are especially popular. Pinterest is one such example. It enables pupils to search for pictures on the Internet, sort them out according to their significance; and, thereby, helps them arrive at a proper understanding of the world, develop competencies in working with information. Learning by means of Pinterest also has a social dimension because it enables pupils to communicate, evaluate their creations, and transfer learning outside school as well. The technical equipment of schools is continuously improving (Wi-Fi coverage, tablets), allowing Pinterest to be used in classes to a wider extent. Pinterest activates pupils thanks to the fact that it is based on working with pictures, it is also suitable for younger pupils, and it, for example, helps to elaborate on the graphical of a textbook. The dynamic character of Pinterest, which helps bring school closer to dynamic, ever-changing and developing life, is also important. Using Pinterest in teaching subjects about nature and society will make learning more interesting, dynamic, and effective. It will help the pupil achieve the competencies required in today's information and social society.

Bibliography

BALANSKAT A. (2008), ICT na školách: trendy, inovace a problémy ve školním roce 2006-2007. Metodický portál RVP, Praha.

BLAIR R., SERAFINI T. M. (2014), Integration of Education: Using Social Media Networks to Engage Students. Systemics. Cybernetics, and Informatics, 6(12).

ČESKÝ statistický úřad (2015), Informační technologie ve školách v České republice.

DUGGAN M., ELLISON N. B., LAMPE C., LENHART A., MADDEN M. (2015), Social media update 2014. Pew Research Center, 9.

DUDENHOFFER C. (2012), Pin it! Pinterest as a library marketing and information literacy tool, College & Research Libraries News, 73(6), pp. 328-332.

FANTOVÁ D. (2014), Význam kyberbezpečnosti v éře nových médií. Diplomová práce, Masaryková univerzita, Brno.

GILBERT E., BAKHSHI S., CHANG S., TERVEEN L. (2013), I need to try this?: a statistical overview of pinterest, [in:] Proceedings of the SIGCHI conference on human factors in computing systems (pp. 2427-2436). ACM.

HANSEN K., NOWLAN G., WINTER C. (2012), Pinterest as a tool: Applications in academic libraries and higher education. Partnership: The Canadian Journal of Library and Information Practice and Research, 7(2).

KOMENSKÝ J. A. (1956), Orbis sensualium pictus, Státní pedagogické nakladatelství, Začátek formuláře, Praha.

LÉVY P. (2000), Kyberkultura, Karolinum, Praha.

MALACH J. (2013), Základy didaktiky. Ostravská univerzita v Ostravě. Kapitola Zásady procesu vyučování – učení se, Ostravská univerzita, Ostrava.

NEUMAJER O. (2007), ICT kompetence učitelů. Disertační práce, UK, Praha.

NEUMAJER O., ROHLÍKOVÁ L., ZOUNEK J. (2015), Učíme se s tabletem: využití mobilních technologií ve vzdělávání, Wolters Kluwer, Praha.

PALISZKIEWICZ J. (2016), Rola mediów społecznościowych w innowacyjnym kształceniu, [in:] Innowacje w zarządzaniu i inżynierii produkcji – cześć XIII, ed. R. Knosali, Polskie Towarzystwo Zarządzania Produkcją, Opole.

RŮŽIČKOVÁ D. (2010), ICT gramotnost, Metodický portál RVP, Praha.

STRAKOVÁ J., SPILKOVÁ V., SIMONOVÁ J., FRIEDLEANDAEROVÁ H., HANZÁK T. (2013), Názory učitelů základních škol na potřebu změn ve školním vzdělávání. Orbis scholae, 7(1), pp. 79-100.

THE STATISTICS Portal, Leading social networks worldwide as of November 2015, ranked by number of active users.

TUPÝ J., JEŘÁBEK, J. ET AL. (2016), Rámcový vzdělávací program pro základní vzdělávání, Výzkumný ústav pedagogický, Praha.

ZLATUŠKA J. (1998), Informační společnost, [in:] Zpravodaj ÚVT MU, vol.VIII, 4, pp. 1-6. Brno 1998.

ZOUNEK J. (2006), ICT v životě základních škol, Triton, Praha.

ZOUNEK J., ŠEĎOVÁ K. (2008), Jak zkoumat ICT v každodenní práci učitele aneb videostudie jako kvalitativní metoda. Orbis scholae, vol. 2(1), pp. 137-148.

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Keywords: Pinterest, education, information and communication technologies, integrated education, primary school.

The article describes possibilities of using the networking website Pinterest (designed for collecting visual content) in education. Pinterest is a collection of virtual boards with photos shared by its users. The shared pictures ("pins") can be grouped and categorized along different criteria. The collected resources can be catalogues of inspiration and ideas also in education. The article presents the possible ways of using the website in teaching integrated subjects in primary schools. It also shows pupils' competences which can be developed with the use of the website and the educational aims which are realised in this process.

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WYKORZYSTANIE SPOŁECZNOŚCIOWEGO SERWISU MATERIAŁÓW WIZUALNYCH W EDUKACJI

Słowa kluczowe: Pinterest, edukacja, technologie informacyjne i komunikacyjne, kształcenie zintegrowane, szkola podstawowa.

W artykule opisane zostały możliwości wykorzystania w edukacji internetowego serwisu społecznościowego Pinterest, przeznaczonego do kolekcjonowania treści wizualnych. Pinterest jest zbiorem wirtualnych tablic ze zdjęciami udostępnianymi przez użytkowników serwisu. Publikowane obrazy („piny") można grupować i kategoryzować według różnych kryteriów. Zgromadzone w ten sposób zasoby stanowić mogą katalog inspiracji i pomysłów również dla edukacji. W artykule pokazane zostały sposoby wykorzystania serwisu w nauczaniu przedmiotów kształcenia zintegrowanego w szkole podstawowej. Wskazane zostały kompetencje uczniów, które można rozwijać za pomocą tego narzędzia i cele kształcenia, które w tym procesie są realizowane.