Педагогіка вищої школи : Навч. посіб. – К. : «Академвидав», 2006. – 352 с. (Альма-матер). 14. Царенко В. І. Формування правосвідомості особистості військовослужбовців-прикордонників України : автореф. дис. на здобуття наук. ступеня канд. юрид. наук : спец. 12.00.01 «Теорія та історія держави і права; історія політичних та правових учень» / В. І. Царенко. – К., 2003. – 18 с.

С. М. Сова

МІЖНАРОДНА ПРАВОВА КУЛЬТУРА: ПРОБЛЕМИ ЇЇ ФОРМУВАННЯ У КУРСАНТІВ ВИЩОГО ВІЙСЬКОВОГО НАВЧАЛЬНОГО ЗАКЛАДУ

У статті здійснено аналіз педагогічної теорії та практики з проблеми формування міжнародної правової культури майбутніх офіцерів-прикордонників, в результаті чого визначено сутність та зміст цього поняття.

С. Н. Сова

МЕЖДУНАРОДНАЯ ПРАВОВАЯ КУЛЬТУРА: ПРОБЛЕМЫ ЕЕ ФОРМИРОВАНИЯ У КУРСАНТОВ ВЫСШЕГО ВОЕННОГО УЧЕБНОГО ЗАВЕДЕНИЯ

В статье осуществлен анализ педагогической теории и практики по проблеме формирования международной правовой культуры будущих офицеров-пограничников, в результате чего определены сущность и содержание этого понятия.

S. M. Sovva

INTERNATIONAL LEGAL CULTURE: PROBLEMS OF FORMATION OF CADETS OF THE MILITARY INSTITUTION

The article made an analysis of educational theory and practice on the formation of an international legal culture of the future officers, border guards, resulting in The essence and content of the concept.

Стаття надійшла до редакції 17.09.2010

UDC 378

Maria Kopsztejn

Akademia Humanistyczno-Ekonomiczna – Łódź,

APPLICATION OF MEDIA IN EARLY EDUCATION A WAY FROM KOMEŃSKI TOWARDS EDUCTIONAL GAMES AND TEACHING PLATFORMS

Dynamic development of teleinformatics and multimedia-based communication tools marks a serious turn in functioning of the modern man. Naturally, the change applies also to the educational sphere.

The computer and the internet became an inseparable part of the everyday life, and their influence on "(...) our intellectual and emotional experiences considers both the professional and personal aspects of our lives (...)." This boosts the development of abilities associated with

¹Siemieniecki B., *Pedagogika medialna. Podręcznik akademicki*. Vol. I., PWN, Warsaw 2008, p. 52.

knowledge and skills acquisition, as well as shapes the attitude formation process. The term *knowledge-based society*, more and more often, appears in the pedagogical, sociological and psychological literature. Such society is characterized by openedness and intellectual bravery, and also a conviction of grand opportunities which it uses in numerous innovative ways², in the process of life-long learning. We can therefore say that contemporary civilization exists and develops, in a large extend, thanks to education which in turn is an indicator of progress³.

Such state of affairs makes it necessary to engage in the process of media-based education, which "(...) aims at bringing knowledge and new skills to allow for comprehensive use of the media (or multimedia), to enhance ability to use them as a developmental factor in the life-long process of learning"⁴. Special attention should be drawn to the principle of the visual aid, which is the basis for application of the media in the educational process. This principle, introduced by J.A. Komensky, (1592-1670) "appreciates the importance of the visualization in the teaching process"⁵.

The principle of the visual aid, also known as the principle of immediacy, comprises one of the earliest and least controversial rules posed for didactics. "It points to the necessity of acquiring knowledge about the world through direct contact, direct cognition of objects and phenomena, events and processes, or through contact with their substitutes - educational aids, such as: pictures, models, words, diagrams or charts". This requires of the teacher to link words with demonstrations through involvement of sensual experience.

According to Komensky, effectiveness of the teaching process is strictly dependent on the application of the principle of the visual aid: "the mind is a starting point for the knowledge, therefore through the imagined leads the way towards memory; next, the general cognition appears; finally, based on the sufficient comprehension of things, the judgment is formed establishing the certainty of cognition". Additionally, Komensky points out that the child experiences the world in the most sensual way: "The senses (the main guide of the child whose mind does not comprehend abstraction) constantly seek new objects, if they do not find them they dull and dissipate. While, if they find the right object, they sharpen, become alive and concentrate on it until they investigate it fully". Therefore, the correct educational process must consist of teaching with the application of visual and aural aids, aiming at boosting sensual knowledge acquisition, only later followed by cognitive comprehension. Komensky affirms: "The picture is not only to illustrate, but to cause the development of the cognitive skills which in turn help in creation of the critical judgment, abilities to compare, contrast and evaluate a given phenomenon. After all, the pupil needs to be able to verbalize and apply what (s)he has learned.

_

²Pawłowski K., W stronę społeczeństwa wiedzy [in:] "Forum akademickie" no. 12/2004.

³Lewowicki T., *Pedagogika i reformy oświatowe – wyzwania, inspiracje, rozczarowania i nadzieje*, [in:] Miłkowska-Olejniczak G., Uździcki K. (eds), *Pedagogika wobec przemian i reform oświatowych*, Publication of Wyższa Szkoła Pedagogiczna w Zielonej Górze, Zielona Góra 2000, p. 63.

⁴Berezowski O., *Rozwój mediów – od technicznych środków dydaktycznych do zintegrowanej edukacji medialnej* [in:] "Komputer w edukacji", 15 Ogólnopolskie Sympozjum Naukowe, retrieved from www.up.krakow.pl. at 11-10-2010.

⁵Siemieniecki B., 2008, p. 127.

⁶Półturzycki J., *Dydaktyka dla nauczycieli*. Wyd. A. Marszałek. Toruń 1999, p. 108.

⁷Komensky J. A., *Wielka dydaktyka*. Ossolineum, Wrocław 1956, p. 145.

⁸Preface to Orbis Pictus of Jan Amos Komensky, quoted in: Quick R. H., *Reformatorzy wychowania. Zasady wychowania nowoczesnego.*, Published by Przegląd Pedagogiczny, Warsaw 1895, p. 126 (in author's own translation from Polish).

⁹Bandura L., *Pedagogika medialna* [in:] "Ruch Pedagogiczny" no. 3-4/1983.

The early education process which would use an aural input supported by the visual materials was also the field of interest for John Locke (1632-1704) and Henry Pestalozzi (1746-1827).

According to Locke, child's mind can be compared to a plain, empty sheet of paper - tabula rasa, which can be filled with knowledge and experience only through sensation. The teaching process, therefore, should not be only based on the verbal instruction but must be aided by visual materials. This rule is being applied in contemporary schooling, where the media-based - visual and audiovisual - tools are more and more often used. These tools are said to provide "(...) sensual stimuli that affect the sight and hearing (...) enhancing direct and indirect cognition of the reality".

A similar, also based on the principle of the visual aid but enriched, version of education, proposed by Pestalozzi comprises areas of developmental and cognitive psychology. He postulates that teaching should be based on the sensual experience, which comprises the fundamental base for all knowledge "(...)leading through precise sensual observations towards clear perceptions, and through clear perceptions to clear definitions. What is the three elements of cognition: the form, the number and the word; should be the three pillars of the elementary teaching. (...) Teaching of speech and teaching of perception should precede book-based education. Only a child experienced in perceiving and speaking can begin the elementary learning proper - the learning from books"¹¹.

Concept of teaching as contained in Pestalozzi, assumes, as Locke's one does, the use of visual aids. Interestingly, however, this process should not be "(...) spontaneous and lively, but systematic and level-based". Otherwise the child may find it problematic to code all the observations: to associate proper observations with proper perceptions, forming knowledge.

Nowadays, the principle of the visual aid corresponds to multimedia-based education, specifically with the application of media in the early teaching process. This is not an easy task, since contemporarily, children grow up in the global-information society and computer or internet are an inseparable element of their everyday life, and therefore they tend to treat working with computer as fun, and not as learning. The tasks of teachers, here, are to show their pupils all the opportunities that the media offer, and to direct them towards discovery of knowledge. It is a crucial task, since children are unable, in the informational jungle, to recognize proper, credible and current information and put it in use¹³. This may cause problems with distinguishing good from evil, therefore leading to a situation where the child identifies with negative behavioral patterns.

Modern media create substantial educational opportunities for the development of higher levels of knowledge and new skills in children, as information transmitted through them is much more digestible than ever before. As researches show, the memorization process, when applied to fresh content, depends on the form of transmission. Significantly, "visual information (transmitted through the computer screen) requires approximately 50% less time to be assimilated, and also it stays in the memory for about 60% longer than verbal information. This may be due to the fact that visual information directly accesses stored memory and it is transferred faster, which facilitates its processing and allows for a more detailed analysis. On the other hand, sound information favours memory formation through better functioning of the neural

¹¹Osterloff W., *Prorok pedagogiki nowoczesnej - Henryk Pestalozzi*, Wyd. im. Staszica, Warsaw 1910, p. 95. (in author's own translation from Polish).

¹³Torlinska B., *Analfabetyzm społeczeństwa wiedzy a kompetencje informacyjne* [in:] Strykowski W., Skrzydlewski W. (eds.), *Media a edukacja. Kompetencje medialne społeczeństwa wiedzy*, eMPi 2, Poznań 2004, p. 68.

¹⁰Więckowski R., *Pedagogika wczesnoszkolna*, WSiP, Warsaw 1998, p. 290.

¹²Możdżeń S. I., *Historia wychowania 1795-1918.*, Wyd. Stachurski, Kielce 2000, p. 22.

systems, their mutual operations and the development of imagination"¹⁴. In effect, it can be stated that the most effective way to learn is learning with help of the computer and the internet. Such learning may make use of teaching platforms or interactive educational games.

A teaching platform is a professional didactic tool (applied in e-learning/e-teaching), which aims at aiding the learning process, by making use of the modern information and communication technologies, all in the light of research in psychology and multimedia-based pedagogy. It is a web-based computer system which enables teaching via internet, also known as Learning Management System (LMS). Main task of the specialists working with this system is gathering, organizing, management and publishing of the didactic materials, so that they can be accessed by the school principals, teachers, parents and students via internet. An example scheme of teaching platform strategy is presented in the Figure 1.

Educational/teaching services enable exchange of information between the author and the recipients utilizing "(...) didactic materials (texts, pictures, multimedia presentations, multimedia-based lectures, websites)" ¹⁵. The information contained within those services is most often systematized into sets of tasks which consider a given subject (e.g. mathematics, language, biology, music, etc.). Such platforms comprise complex helping tools for the pupils who want to acquire new knowledge or check/enhance the skills that they already posses.

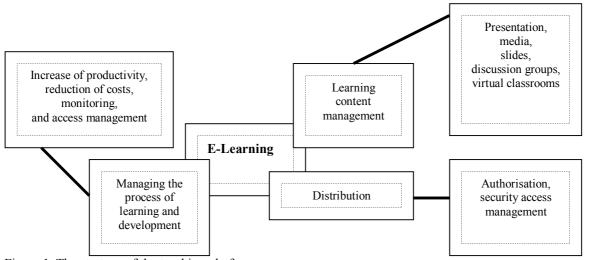


Figure 1. The strategy of the teaching platform

Source: Woźniak D. et.al. E- learning w nauczaniu jako technologia postępu edukacyjnego. Wyd. Uczelniane Politechniki Koszalińskiej, Koszalin 2006.

The platform can be used during the classes as a didactic tool for carrying out interactive lessons (using computers, a projector, an interactive whiteboard), or to widen the pupils horizons at any place or time after school. This is an extremely important solution for educating disabled or ill children, who cannot attend the regular classes for longer periods of time. In such situation any pupil may "(...) have an interactive and current access to topics which were covered in school, as this information can be sent to him/her via the electronic school register. The interactive teaching platform is able show on the computer screen the same materials and tasks which are being shown in the classroom by the teacher simultaneously. In the afternoon, after the pupil does his/her homework, the platform will mark the work (in accordance with the teacher's criteria), while the mark, will be immediately transferred into the electronic school register".

¹⁴retrieved from http://www.platforma.librus.pl at 12-10-2010.

¹⁵Siemieniecki B. (ed.), 2008, Vol. II., p. 112.

¹⁶The opinion was quoted in the current news at 11-01-2010 r. entitled *W całej Polsce ruszyły wdrożenia Szkolnej Platformy Edukacyjnej*, retrieved from http://www.platforma.librus.pl/index aktualnosci, at 12-10-2010.

Unlimited access to the platforms is also a great convenience for the teachers, as they can publish necessary materials or check pupils' progress at any time. Materials published at the website are linked to the register (Figure 2.), which is a tool for controlling the attendance (or website visits) and educational progress. This tool also gives parents access to the mentioned information.



Figure 2. The system of attendance and academic progress control. Source: http://www.platforma.librus.pl/index demo, retrieved at 12-10-2010.

To illustrate, for the children between 7 and 10 years old (levels 1-3), the tutorials and tasks take shape mostly of: selection of a proper picture, assigning the item to a proper category, drawing of the correct solution on a scheme or a diagram. Examples of early schooling materials accessible in the SPE Librus system are presented by figures 3 a and b:



"We learn the letters - find an animal in the zoo whose names starts with..." (locations/maps)

"Safety on the roads - road signs categories" (categories)

Figures 3a and 3b. Example of educational materials

Source: http://www.platforma.librus.pl/index demo, retrieved at 12-10-2010.

Educational games have a function similar to teaching platforms. They stimulate thinking through affecting the senses (sight and hearing), as well as enhancement of reaction time or visual-motor coordination (sensor-motoric games). Generally, such games also stimulate

intellectual processing, enabling faster intellectual development, making the necessary learning time shorter. All this is made possible by the attractive form of such games, which makes them toys children willingly reach for.

Educational game is "(...) the one of the newest forms of problem-based learning. It requires form a pupil to become alert to the problem and to independently solve it in a situation when (s)he does not possess knowledge necessary for an instant solution ¹⁷. Such game is prepared with a particular didactic purpose, which makes it a teaching tool. Its educational value depends on the selected tasks, and more specifically, in what way the tasks are built-in into the play, which rules regulate it and what are the possible game results. Above all, however, it is important whether the game is of a zero-sum type or not 18. Main goal of a game is teaching of compliance with the rules, but also skillful experiencing of joy (from a win) and ability of accepting a defeat.

According to J. Bednarek, computer games applied in teaching may be divided into¹⁹:

- problem based strategic games and simulations,
- role-playing games (RPG),
- adventure games,
- sport games,
- arcade games,
- logic games,
- text games.

Different games shape different personality traits, all the games, nonetheless, force intellectual effort on the child, including: logical deduction (logic games), calculation and prediction (strategic games), critical thinking and meaning construing (problem-based games).

J. Laszkowska reports that educational games not only aim at knowledge transfer, but also, more and more often, they posses problem-based modules. "Often, does the player need to use their abilities and skills to solve the problem, to achieve the goal. Such a challenge not only simulates creative thinking, but brings about the feeling of high self-esteem, too. Moreover, computer games (...) fascinate, trigger creative energy, and usually provide information which is not delivered by the school"²⁰.

Examples of Polish educational games targeted at children at 7 (Figure 5.) and 8 years of age are: Królik Bystrzak dla Pierwszaka and Królik Bystrzak dla Drugoklasisty (roughly translated into Smart Bunny for a First- and Second-grader).

¹⁹Bednarek J., *Multimedia w kształceniu*. PWN, Warsaw 2006, p.113-148.

¹⁷Ouoted after: Górczyńska M., Komputerowa gra dydaktyczna w procesie nauczania [in:] "Komputer w edukacji", 17 Ogólnopolskie Sympozjum Naukowe, retrieved from www.up.krakow.pl at 11-10-2010.

¹⁸Okoń W. (ed.), Nowy słownik pedagogiczny. Żak, Warsaw 2007, p. 124.

²⁰Laszkowska J., *Oddziaływanie gier komputerowych na młodzież* [in:] "Problemy opiekuńczo-wychowawcze" no 7/2000.

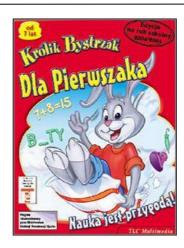


Figure 4. Example of an educational game Source: http://www.interklasa.pl/bmi/view.php?id=162 retrieved at 12-10-2010.

The first mentioned game uses animation, pictures and music to enable working on reading skills, mathematics and knowledge about nature. Game consists of various tasks, including mainly: open tasks which allow for self expression; tasks aimed at improving logical thinking; tasks developing everyday-life skills; tasks stressing sensor-motor coordination. At the same time they bring entertainment. The other program is an interactive adventure game which combines learning with fun, consolidating and expanding knowledge that the pupil already possesses in the fields of mathematics, languages and natural science (at the stage of the second grade). In each game every task can be approached at three different difficulty levels, which gives the players possibility to move from less to more difficult tasks at their own personal pace.²¹

To summarize, we must acknowledge that the use of multimedia in education in the twenty-first century is becoming a necessary element, on every level of schooling. The application of games and educational programs, interactive whiteboards and educational websites, with more and more popular teaching platforms, is a continuation of the education reformers thought, which begun with J.A. Komensky. His principle of the visual aid became a fundament for application of the newest developments of teleinformatics to education, on which the modern teaching systems are being built, all of this being done to support the development of the youngest participants of the knowledge-based society.

Bibliography: 1.Bandura L., *Pedagogika medialna* [in:] "Ruch Pedagogiczny" no. 3-4/1983. 2. Bednarek J., *Multimedia w kształceniu*. PWN, Warsaw 2006. 3. Komensky J. A., *Wielka dydaktyka*. Ossolineum, Wrocław 1956. 3.Laszkowska j., *Oddziaływanie gier komputerowych na młodzież* [in:] "Problemy opiekuńczo-wychowawcze" no 7/2000. 4.Lewowicki T., *Pedagogika i reformy oświatowe – wyzwania, inspiracje, rozczarowania i nadzieje*, [in:] Miłkowska-Olejniczak G., Uździcki K. (eds), *Pedagogika wobec przemian i reform oświatowych*, Publication of Wyższa Szkoła Pedagogiczna w Zielonej Górze, Zielona Góra 2000. 5.Możdżeń S. I., *Historia wychowania 1795-1918*., Wyd. Stachurski, Kielce 2000. 6.Okoń W. (ed.), *Nowy słownik pedagogiczny*. Żak, Warsaw 2007. 7.Osterloff W., *Prorok pedagogiki nowoczesnej - Henryk Pestalozzi*, Wyd. im. Staszica, Warsaw 1910. 8.Pawłowski K., *W stronę społeczeństwa wiedzy* [in:] "Forum akademickie" no. 12/2004. 9.Półturzycki J., *Dydaktyka dla nauczycieli*. Wyd. A. Marszałek. Toruń 1999. 10.Quick R. H., *Reformatorzy*

_

²¹Information considering educational games can be found at http://www.interklasa.pl/bmi/view.php?id=162 retrieved at 12-10-2010.

wychowania. Zasady wychowania nowoczesnego., Wyd. Przeglądu Pedagogicznego, Warsaw 1895. 11.Siemieniecki B., Pedagogika medialna. Podręcznik akademicki. Vol. I., PWN, Warsaw 2008. 12.Siemieniecki B., Pedagogika medialna. Podręcznik akademicki. Vol. II., PWN, Warsaw 2008. 13.Torlinska B., Analfabetyzm społeczeństwa wiedzy a kompetencje informacyjne [in:] Strykowski W., Skrzydlewski W. (eds.), Media a edukacja. Kompetencje medialne społeczeństwa wiedzy, eMPi 2, Poznań 2004. 14.Więckowski r., Pedagogika wczesnoszkolna, WSiP, Warsaw 1998. 15.Woźniak D. et.al. E- learning w nauczaniu jako technologia postępu edukacyjnego. Wyd. Uczelniane Politechniki Koszalińskiej, Koszalin 2006.

Internet sources: 1.Górczyńska m., Komputerowa gra dydaktyczna w procesie nauczania [in:] "Komputer w edukacji", 17 Ogólnopolskie Sympozjum Naukowe, retrieved from www.up.krakow.pl. at 11-10-2010. 2.Berezowski O., Rozwój mediów – od technicznych środków dydaktycznych do zintegrowanej edukacji medialnej [in:] "Komputer w edukacji", 15 Ogólnopolskie Sympozjum Naukowe, retrievfromwww.up.krakow.pl.at11102010.3.http://www.platforma.librus.pl/index_aktualnosci, retrieved at 11-10-2010.4.http://www.platforma.librus.pl, retrieved at 12-10-2010.5.http://www.interklasa.pl/bmi/view.php?id=162 retrieved at 12-10-2010.

Мария Копсзтейн

ПРИЛОЖЕНИЕ СМИ В РАННЕМ ОБРАЗОВАНИИ ПУТЬ ОТ КОМЕНСКИ ПО НАПРАВЛЕНИЮ К ИГРАМ EDUCTIONAL И ПРЕПОДАВАТЕЛЬСКИМ ПЛАТФОРМАМ

Раннее школьное образование основано на принципе наглядного пособия, впервые представленного Коменски. Его теория говорит, что объединение устного вклада с иллюстрированными и слуховыми стимулами влияет на смыслы и развивает воображение, vвеличивает преподавательский процесс. Развитие современной которое телеинформатики, с его безграничными возможностями глобального набора сетей интернет, открыло поле для новых образовательных методов. Использование СМИ и мультимедиа в повседневной жизни, для общества часто под названием интеллектуальный или даже СМИ-базировал, вызвало потребность представления мультимедийнооснованного образования. Его цель - познакомить студентов с функционированием СМИ.. Среди современных преподавательских инструментов, больше всего заслуживают образовательные компьютерные программы, в том числе образовательные игры и преподавая платформам. Благодаря им, стало возможно преподавать не только в школе.

Maria Kopsztejn

APPLICATION OF MEDIA IN EARLY EDUCATION A WAY FROM KOMEŃSKI TOWARDS EDUCTIONAL GAMES AND TEACHING PLATFORMS

Early school education is based on the principle of the visual aid, first introduced by J.A. Komensky, perceived to be the precursor of the medial education. His theory says that combining verbal input with pictorial and aural stimuli influences the senses and develops imagination, which enhances the teaching process. The development of modern teleinformatics, with its unlimited possibilities of the global networks set - the internet, opened a field for new

educational methods. The use of media and multimedia in everyday life, for the society often called knowledge-based or even media-based, has caused the necessity of introducing multimedia-based education. Its aim is to familiarize students with functioning of the media, its abilities and related risks. Among modern teaching tools, most attention deserve educational computer programs, including educational games and teaching platforms. Thanks to them it is possible to teach not only at school but in any setting.

Стаття надійшла до редакції 5.11.2010