

Advantages and disadvantages of digital education

Paweł Mąkosa

Digital education is essentially a product of the past several years, although in different forms it already existed slightly earlier. It is evident, however, that modern devices and means of information transfer are necessary for its development. This type of education would not be therefore possible without rapid development of computers and the Internet. In fact, it can be concluded that they were primary in relation to digital education and somehow they forced its emergence¹ because the prevalence of computers and broadband Internet has given a very strong impulse to use them also in the educational activity. As a consequence, today 'virtual lectures, modern e-learning courses, educational games, electronic tests, portals with educational resources' as well as digital school registers and monitoring systems of the learning process² have entered everyday reality. This article aims to show the specificity of digital education, the current state of its implementation, the expected results and concerns in this respect. The presentation of the perspectives for digital course books will be the culmination of the reflection undertaken here.

1. The real need or merely a fashion?

At the beginning of this reflection it is worth answering the basic question concerning the motivation for the introduction of digital education to schools. This is a fundamental issue because one must first determine why and whether it is worth taking such an action or not. Is this merely a kind of fashion or does it result from real needs? There is no doubt that today's people, especially the young, belong to a different era. They are very often referred to as *digital human*³ or even *digital*

¹ Cf. W. Kołodziejczyk, M. Polak. *Jak będzie zmieniać się edukacja? Wyzwania dla polskiej szkoły i ucznia*. Warsaw 2011p. 48.

² Ibidem, p. 49.

³ A. Andrzejczak. *Cyfrowy człowiek – homo sapiens digital*. [online] [access on: 21.09.2013]. Available on: <<http://www.edunews.pl/nowoczesna-edukacja/innowacje-w-edukacji/623-cyfrowy-czlowiek-homo-sapiens-digital>>.

natives⁴. Without a doubt in this generation there is a fashion for electronic devices⁵, the desire to possess the latest smartphones, tablets, computers and obviously the most advanced software for these devices. It seems that this results more from a fashion, a desire to impress their peers rather than from real needs. Most young people do not need the most advanced devices and software, which work only slightly better and faster than their previous editions. Meanwhile, each premiere of a new device, an operating system or an application generates an immediate and large group of customers.

The quest for the digitization of education may therefore be to a large extent a matter of certain fashion and the fascination with electronics, which, only for this reason alone, is attractive to children and young people. However, the statement made by J. Morbitzer is worth mentioning in this context, which words as follows: ‘Modern school is greatly under the influence, or even dictatorship, of the Internet. Interestingly, not only students but also teachers are affected (...). For many years, basically since the onset of computers and later on the Internet, education has continually been adjusting to the world of technology. But, after all, the core of the destructive power of technology lies precisely in the monopolization of mental space, in the imposition of technical thinking! Thus, it is necessary to reverse this relation: it is not the Internet that should shape the face of school; it is the school’s duty to pinpoint the goals and identify rational areas and optimal methods for the use of this undoubtedly very useful medium’⁶. The fashion prevailing among young people and the fascination with all that is electronic and digital may and should be used in a positive way, because, already at the starting point, education using electronics is undoubtedly attractive for pupils and influences their interest in the teaching process.

2. Access to computers and the Internet

Analyzing pros and cons of digital education in Poland, it is worth presenting the current condition of its development, because basically not many of the pompous political announcements translate into reality. The very access to computers and the Internet in Poland is indeed on a relatively high level. Nearly 80-90% of the young

⁴ M. Prensky. *Digital Natives, Digital Immigrants*. “On the Horizon” 9:2001 no. 5 [online] [access on: 21.09.2013]. Available on: <<http://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf>>. ; Zob. V. Armstrong. *Technology and Gendering of Music Education*. Ashgate Publishing Ltd. 2011 p. 24.

⁵ Cf. W. Gogołek. *Wpływ e-podręczników na rozwój psychosomatyczny uczniów*. Warsaw 2013 p. 10.

⁶ J. Morbitzer. *Szkoła w pułapce Internetu*. In: *Człowiek – Media – Edukacja*. Ed. Idem. Cracow 2010 [online] [access on: 21.09.2013]. Available on: <<http://www.up.krakow.pl/ktime/ref2010/morbitz.pdf>> p. 9.

and middle-aged population use this medium. The sharp decline in the availability applies only to people over 50 years old. However, there remain many more problematic issues that are connected with the competence regarding the use of IT facilities and, above all, the critical reception of the contents promoted by contemporary media⁷.

The digitization of education planned by the Ministry of Education is developing rather dynamically. In the school year 2012-13 a pilot project was carried out in nearly 400 schools in Poland and in these units children and young people used computers and electronic educational materials in the classroom. Since 1 September 2013 a provision saying that one pupil is supposed to work at one computer at IT lessons has entered into force.

However, the reality is often different from the theoretical assumptions. According to the Centre for Education Development currently approximately 83% of teachers use the Internet at school, 52% of them use the projector and 27% use the interactive board⁸. According to the own research that the author of this article has undertaken, it can be concluded, however, that only about 20% of religious education teachers have access to an interactive board for each lesson and 22% of them still have no opportunity to use any multimedia. The remaining group of teachers may use such interactive aids sporadically⁹. Nonetheless, according to the report of the Ministry of Education, until 31 May 2013 approximately 7 thousand teachers held about 50 thousand lessons with the use of Information and Communication Technology (ICT), in which approximately 70 thousand pupils participated. Moreover, over two thousand outlines were drawn for this type of lessons¹⁰.

3. E-course books in Polish schools

Free and widely available e-course books are one of the flagship projects of the Ministry of Education. In its resolution of 3 April 2012, the Council of Ministers stated that computers will take over the role of a course book, encyclopedia and will be applicable to all subjects¹¹. According to the assumptions, the premiere of the free e-course books for mathematics, the first e-course book in Poland, will take place on 30 September 2013¹². According to the schedule announced by the Ministry of Education, first e-course books will be available in September 2014 and in June 2015

⁷ *Cyfrowa przyszłość. Edukacja medialna i informacyjna w Polsce – raport otwarcia*. J. Lipszyc (Ed.). Warsaw 2012 p 19.

⁸ Ośrodek Rozwoju Edukacji. *Podręczniki multimedialne w polskich szkołach. Raport z badania*. Warsaw 2013 p. 23.

⁹ The survey was conducted on www.kulkat.pl (as for 20.09.2013).

¹⁰ Taken from the website <http://www.cyfrowaszkola.men.gov.pl/>

¹¹ Annex to the resolution no. 40/2012, of the Council of Ministers of 3 April 2012

¹² Electronic coursebooks will be placed on <http://www.epodreczniki.pl/>

all pupils in Poland will be able to use free e-coursebooks for 14 school subjects.

It should be noted, however, that already today e-course books are available in commercial publishing houses. According to studies performed by the Centre for Education Development, it appears, however, that the majority of them cannot yet give the possibility to fully use this kind of teaching aids. The report authors claim that 90% of e-course books contain multimedia elements such as films, animations, simulations, etc; however, they only serve to present the teaching contents whereas they should be also used for consolidation and knowledge assessment. In addition, '80% of e-course books include multimedia which are not diverse enough, randomly placed, not on every page and not to every topic. According to the specificity of a school subject, e-course books include films, animations and experiences. None of them contains recordings with experts in the field, which could provide more gifted and more interested pupils with additional knowledge. [...] None of them contains interactive teaching elements, either. Only exercises constitute the interactive element'¹³. At the same time, none of the evaluated e-course books 'gives the opportunity to work in a virtual learning space, e.g. work with the class in a so-called *cloud*. None of them offers the possibility to interact with e-learning platforms, an educational portal or any educational environment enabling the evaluation of results'¹⁴.

According to the teachers surveyed by the Ministry of Education, e-course books should include, among others, interactive exercises, audio-visual materials, interactive simulations of experiments, educational games, etc. Parents included in the studies also postulate that e-course books enable tracking the child's progress as well as joint learning of parents and children¹⁵.

Despite many shortcomings of the existing e-course books and the expected delays in the implementation of this type of tools prepared by the Ministry of Education, it is almost certain that they will be improved and within several years they will become a common reality. This is confirmed with the previous rate of change in this field. It is also worth taking note of other initiatives aiming to produce free electronic course books. One of them is the proposal related to Wikipedia; however, it is still in the beginning phase of its development¹⁶.

So-called 'Open Educational Resources' are a very important element of the emerging e-course books, especially those free ones. These are various kinds of materials publicly available in the Internet, 'published together with copyrights

¹³ Ośrodek Rozwoju Edukacji. *Podręczniki multimedialne w polskich szkołach* p. 14.

¹⁴ *Ibidem*, p. 15.

¹⁵ A. Satel. *Men wprowadza bezpłatny e-podręcznik*. [online] [access: 21.09.2013]. Available on: <<http://www.oswiata.abc.com.pl/dyrektor-szkoly/czytaj/-/artykul/men-wprowadza-bezplatny-e-podrecznik-anna-satel>>.

¹⁶ The project is being implemented on: <http://wiki.wolnepodreczniki.pl> Strona_g%C5%82%C3%B3wna

(for this purpose it is recommended to use the so-called ‘open content’ / creative commons) and most frequently developed in an open manner.’ These resources may be freely used without the necessity to ask anyone for permission. This is an essential condition for e-course books to be created and subsequently constantly updated, which would guarantee their relevance. Among ‘Open Educational Resources’ currently available one can pinpoint the following websites:

<http://www.edukacja.przyszlosci.pl/>

<http://bc.ore.edu.pl/dlibra>

<http://otwartezasoby.pl>

<http://wlpolske.pl>

The current state of the digitization of education in Polish schools is not very impressive yet. Still the majority of Polish teachers and pupils have no opportunity to use e-course books and interactive boards, but also to use any multimedia at all. The difficult financial situation of the implementation entities also does not fill with optimism. However, one needs to believe that the situation will be rapidly improving.

4. Qualities of modern educational technologies

Having shown the core of the digital education and the state of its implementation in the Polish context, this type of education must be critically analysed in terms of advantages and risks with reference to contemporary pupils and the effectiveness of the teaching – learning process, in which they participate. Therefore, the attempt to present the pros and cons of digital education, in particular e-course books, will be made in this part of the reflection.

There is no doubt that digital education is more interesting for today’s pupils than education in the classic form. This results, on the one hand, from the fascination with electronics and the Internet, which for young people is the favourite environment of existence. On the other hand, methods practised at lessons with the use of multimedia are more involving for pupils and, as a consequence, they result in their greater commitment¹⁷. The increase of the effectiveness of education and the equalisation of educational opportunities are the most frequently enumerated advantages of digital education¹⁸.

Many studies confirm that education using multimedia is more effective¹⁹. According to Dorota Budzoń, when using this type of education, its effectiveness increases by as much as 56%. It increases the pupil’s activity by 40-80%. As a consequence, this leads to savings in time of approximately 38-70%.

¹⁷ W. Kołodziejczyk, M. Polak. *Jak będzie zmieniać się edukacja?* p. 49.

¹⁸ W. Gogołek. *Wpływ e-podręczników na rozwój psychosomatyczny uczniów* p. 7.

¹⁹ Cf. *Ibidem*, p. 4.

Teachers participating in the survey conducted by the Ministry of Education in 2012 most often enumerated ‘creative use of available sources of knowledge, the change of the market of traditional educational publishers, the development of creativity and skills as well as equalization of educational opportunities among the effects of the introduction of e-course books. Similar responses were given also by the pupils’²⁰. The above data, although there is a need to verify them, constitute a very strong argument in favour of digital education and e-course books. The implementation of education objectives is, after all, the primary criterion for its evaluation. If the use of multimedia (which the digitization assumes) led to a considerable increase of its effectiveness, then the question concerning the legitimacy of its implementation should strongly be answered affirmatively. However, it turns out that not everyone shares such a view, as it will be presented below.

Not without significance is also the fact that e-course books will make pupils’ schoolbags much lighter. There will be no need to carry schoolbags that weigh several or even a dozen kilograms to school any more. They will be replaced with a laptop or a tablet with loaded files²¹. Economic efficiency is an equally important advantage of the digitization of education. According to the announcements made by the Ministry of Education, course books prepared by it will be available for free and will be issued under licenses allowing free use of them. It is evident that the remaining publishers will not make their course books available for free, but it may be expected that their prices will drop significantly. If they were at an average price of applications available in Appstore or Android Market (several or dozen of Polish zlotys), the budget of an average Polish family would gain a lot of savings.

5. Risks arising from digital education

Making this reflection objective, apart from the advantages of digital education presented above, one needs to indicate the threats which it carries (with its implementation). Firstly, it should be mentioned that some people disagree with the theses presented above and treated as advantages of digital education. J. Morbitzer even claims that the fact that the computer reduces the teacher’s workload and increases the level of education and that computers and the Internet are great tools for the equalization of educational opportunities for young people should be treated as a myth²².

²⁰ A. Satel. *Men wprowadza bezpłatny e-podręcznik*, as above.

²¹ *Wydawnictwa cyfrowe zawsze tam, gdzie Ty*. [online] [access on: 21.09.2013]. Available on: <<https://sites.google.com/site/epodreczniki4m/>>.

²² J. Morbitzer. *O niektórych mitach komputerowej edukacji*. [online] [access on: 21.09.2013]. Available on: <<http://www.tuo.agh.edu.pl/Mity.pdf>>.

Among the concerns on the quality of education it is noted that the only free e-course book which is being prepared by the government will lead to a state monopoly on educational contents²³. It is a real threat and it may lead to the fact that children and young people will be indoctrinated by the state, because one cannot delude oneself that any government can afford to be politically and therefore ideologically neutral. Of course, this risk is smaller in case of science subjects, but with relation to the humanities the risk seems very high. One may provide the interpretation of the events of recent history as an example.

Some of the studies commissioned by the Ministry of Education, which seems interesting, also contradict the idea that electronics helps in more effective learning. On the contrary, one talks about the so-called 'book effect', which means that paper books allow for better reading comprehension. The fact that 90% of students choose a printed version of course books also supports this thesis²⁴. The same studies prove that too intensive use of multimedia leads to distractions and limits pupil's ability to concentrate (87%)²⁵. What is more, experts point out that the use of e-course books substantially reduces the imagination of young people, making them 'a reproductive recipient of an extremely attractive flow of information'²⁶.

A very important, though expected, risk stemming from the use of electronic books is their negative influence on health²⁷. Quoting American experts²⁸, Professor Włodzimierz Gogołek indicates 'the growing risk of health loss caused by the use of electronic devices, especially by children'²⁹. This mainly concerns the eyesight and the risk of myopia, because the use of e-course books leads to the fact that children intensely stare at a computer screen for 'at least 9 hours of lessons' a week. The time spent in front of the computer at home, which is difficult to estimate, adds to the above problem. If Professor Gogołek is right, children will have 'a seven-hour eye contact with a computer screen a day'.³⁰ According to American studies, even 'over two hours a day is harmful for children. It increases the risk of psychological

²³ *Rządowy projekt e-podręczniki może obniżyć poziom kształcenia w polskich szkołach*. [online] [access on 21.09.2013]. Available on: <<http://hoga.pl/lifestyle/rzadowy-projekt-e-podrecznik-moze-obnizyc-poziom-ksztalcenia-w-polskich-szkolach/>>.

²⁴ W. Gogołek. *Wpływ e-podręczników na rozwój psychosomatyczny uczniów* o. 26.

²⁵ K. Purcell et al. *How Teens Do Research in the Digital World*. "The Pew Research Center's Internet & American Life Project Online Survey of Teachers". November 1, 2012. In: W. Gogołek, as above.

²⁶ W. Gogołek. *Wpływ e-podręczników na rozwój psychosomatyczny uczniów* s. 22; Por. Tenże. *Komunikacja Sieciowa Uwarunkowania, kategorie i paradoksy*. Warsaw 2010 p. 266.

²⁷ W. Gogołek p. 4.

²⁸ *Environmental Working Group*. www.ewg.org

²⁹ W. Gogołek, p. 12.

³⁰ *Ibidem*, p. 21.

problems³¹. These can include anxiety, depression, insomnia, dizziness, memory loss, etc. The negative influence of the light emitted by computer screens on the ability to fall asleep has also been proven. This is due to the decrease in the level of melatonin, which regulates the biological rhythm of human life³². Also spine defects arising from the faulty posture in front of the computer and from spending many hours in a sitting position are a serious condition stimulated by digital education. This problem already applies to 90% of young people today³³.

Some experts examining the attempts to introduce e-course books to the education system in different countries demonstrate the failure of such kind of programmes. They also indicate that ‘mere transfer from the traditional paper version into the electronic one was the primary cause of failure of all course book digitization programmes. However, digitization of knowledge requires a separate original programme, and most of all long-term studies’³⁴.

6. Prospects for e-course books

The issue of the creation and implementation of e-course books to school education is virtually already decided. Obviously, this process will probably take several years and is dependent primarily on the financial capacity of the government, entities running schools and parents themselves. It seems, however, necessary to minimise the potential negative effects of the application of this technology and the use of all its assets.

Media education, which will primarily provide the knowledge of all advantages and disadvantages of a frequent use of computers and the Internet, becomes the basic and urgent task to do. It should refer to the criteria applicable to the use of multimedia materials, in particular to the use of the materials placed in the Internet and effectively shape skills in this area³⁵. This applies both to pupils as well as teachers and parents³⁶. In this context, it would be necessary to amend the Core

³¹ Page AS, Cooper AR, Griew P, Jago R., *Children's screen viewing is related to psychological difficulties irrespective of physical activity*. “Pediatrics” November 126(5) 2010. In: W. Gogołek. Wpływ e-podręczników na rozwój psychosomatyczny uczniów. p. 23.

³² A. Moore. *Warning to Teens: Gadgets Can Disturb Your Sleep*. [online] [dostęp: 21.09.2013]. Available on: <<http://www.medicaldaily.com/warning-teens-gadgets-can-disturb-your-sleep-242294>>.

³³ Ibidem, p. 27.

³⁴ T. Teluk. *Pokolenie elektronicznych idiotów*. „Uważam Rze” (8 September 2013). [online] [access on: 21.09.2013]. Available on: <<http://www.uwazamrze.pl/artukul/1045851-Pokolenie-elektronicznych-idiotow.html>>.

³⁵ Such postulates are made among others by W. Kołodziejczyk, M. Polak. *Jak będzie zmieniać się edukacja? Wyzwania dla polskiej szkoły i ucznia* p. 50.

³⁶ This fact is pinpointed by United Nations Educational, Scientific and Cultural Organization. *Media and Information Literacy. Curriculum for Teachers. Part 1: Curriculum and Competency Framework. Part 2: Core and Non-Core Modules*. Paris 2011.

Curriculum for General Education and introduce media education adequate to contemporary reality to schools³⁷. These are, in fact, the recommendations given by the European Parliament and the Council of the European Union as well as by the Resolution of the European Parliament on the formation of media competence³⁸.

Katarzyna Fenik formulates interesting postulates with regard to electronic course books. She points out the necessity to ensure the attractiveness of an e-course book and thus the development of adequacy and the diversity of contents and methods. Moreover, she postulates that this type of tools contain additional materials, allowing for the expansion of curriculum assumptions, and in this way these tools should also be available outside school lessons. She emphasises the need to stimulate creativity and critical reception of contents. The postulate to encourage pupils to cooperate should be regarded as an important suggestion aimed at the authors of modern educational tools, because there is a growing risk of social exclusion and escape into the virtual world. Furthermore, K. Fenik proposes that e-course books should also encourage parents to participate in the education of their children³⁹.

With regard to the prevention of adverse health effects, it is worth considering the postulate not of the use of laptops or tablets but the use of passive devices for reading texts which do not emit their own light, but only the reflected light (e-ink). They are substantially much safer for eyesight than LCD screens. Of course, this type of technology does not give the option to watch video materials, but in such cases it is advisable to use the projector or interactive board instead. It is, indeed, necessary, because - as experts say - children until the age of 12 should not be exposed to the screen for more than 1,5 hours in a single day⁴⁰.

The entities responsible for the implementation of digital education should be well familiar with all the risks that are associated with it. In some cases, it may be more beneficial to confine to the conventional teaching methods and techniques. In all other contexts, it will be necessary to educate teachers, parents and pupils to use the new technologies in a safe and effective manner.

Conclusions

The digitization of education in Poland is spreading into more and more areas. Therefore, it becomes necessary to analyse all its aspects, both advantages and disadvantages. In the performed reflection, an attempt to present the current state of the access to computers, the Internet and e-course books in Polish schools has been made. On the basis of the secondary analysis of various recent studies as well as own

³⁷ *Cyfrowa przyszłość. Edukacja medialna i informacyjna w Polsce – raport otwarcia* p. 71.

³⁸ *Ibidem*, p. 83.

³⁹ K. Fenik. *Przewodnik dla autorów e-podręczników Rekomendacje w sprawie tworzenia multimedialnych treści edukacyjnych*. Warsaw 2013 pp. 13-15.

⁴⁰ W. Gogołek. *Wpływ e-podręczników na rozwój psychosomatyczny uczniów* p. 38.

research performed, it has been determined that the level of digitization of education in Poland is still not satisfactorily high. At the same time the author points to the announcement of its dynamic development within the next several years. Advantages and disadvantages of the use of Information and Communication Technology, in particular e-course books, in the education of children and young people were the axis for the reflection undertaken. Many arguments in favour of teaching based on modern methods and techniques have been presented; however, at the same time, a number of risks which this technology carries have been identified. It is hard to clearly be 'in favour' or 'against' this type of proposals. However, it seems that digital education will become a common reality in the next several years. Therefore, it is necessary to develop it so that it could bring the most benefits with the minimum of side effects. Only practice will probably show whether such a solution is possible.

Bibliography

Andrzejczak A, *Cyfrowy człowiek – homo sapiens digital*. [online] [access on: 21.09.2013]. Available on: <<http://www.edunews.pl/nowoczesna-edukacja/innowacje-w-edukacji/623-cyfrowy-czlowiek-homo-sapiens-digital>>.

Armstrong V., *Technology and Gendering of Music Education*. Ashgate Publishing Ltd. 2011.

Cyfrowa przyszłość. Edukacja medialna i informacyjna w Polsce – raport otwarcia. J. Lipszyc (Ed.). Warsaw 2012.

Fenik K., *Przewodnik dla autorów e-podręczników Rekomendacje w sprawie tworzenia multimedialnych treści edukacyjnych*. Warsaw 2013.

Gogolek W, *Wpływ e-podręczników na rozwój psychosomatyczny uczniów*. Warsaw 2013.

Kołodziejczyk W., Polak M., *Jak będzie zmieniać się edukacja? Wyzwania dla polskiej szkoły i ucznia*. Warsaw 2011.

Moore A., *Warning to Teens: Gadgets Can Disturb Your Sleep*. [online] [access: 21.09.2013]. Available on: <<http://www.medicaldaily.com/warning-teens-gadgets-can-disturb-your-sleep-242294>>.

Morbitzer J., *Szkoła w pułapce Internetu*. In: *Człowiek – Media – Edukacja*. Ed. Idem. Cracow 2010 [online] [access on: 21.09.2013]. Available on: <<http://www.up.krakow.pl/ktime/ref2010/morbitz.pdf>>

Ośrodek Rozwoju Edukacji. Podręczniki multimedialne w polskich szkołach. Raport z badania. Warsaw 2013.

Page AS, Cooper AR, Griew P, Jago R., *Children's screen viewing is related to psychological difficulties irrespective of physical activity*. "Pediatrics" November 126(5) 2010.

Prensky M., Digital Natives, Digital Immigrants. "On the Horizon" 9:2001 no. 5 [online] [access on: 21.09.2013]. Available on: <<http://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf>>.

Purcell K. et al., How Teens Do Research in the Digital World. "The Pew Research Center's Internet & American Life Project Online Survey of Teachers". November 1, 2012.

Satel A., Men wprowadza bezpłatny e-podręcznik. [online] [access: 21.09.2013]. Available on: <<http://www.oswiata.abc.com.pl/dyktor-szkoly/czytaj/-/artykul/men-wprowadza-bezplatny-e-podrecznik-anna-satel>>.

United Nations Educational, Scientific and Cultural Organization. Media and Information Literacy. Curriculum for Teachers. Part 1: Curriculum and Competency Framework. Part 2: Core and Non-Core Modules. Paris 2011.

Słowa klucze:

edukacja cyfrowa, e-podręczniki, Technologie Informacyjno-Komunikacyjne

Key words:

digital education, e-course books, Information and Communication Technology

Summary

The digitization of education in Poland is spreading into more and more areas. Therefore, it becomes necessary to analyse all its aspects, both advantages and disadvantages. In the performed reflection, an attempt to present the current state of the access to computers, the Internet and e-course books in Polish schools has been made. On the basis of the secondary analysis of various recent studies as well as own research performed, it has been determined that the level of digitization of education in Poland is still not satisfactorily high. At the same time the author points to the announcement of its dynamic development within the next several years. Advantages and disadvantages of the use of Information and Communication Technology, in particular e-course books, in the education of children and young people were the axis for the reflection undertaken. Many arguments in favour of teaching based on modern methods and techniques have been presented; however, at the same time, a number of risks which this technology carries have been identified. It is hard to clearly be 'in favour' or 'against' this type of proposals. However, it seems that digital education will become a common reality in the next several years. Therefore, it is necessary to develop it so that it could bring the most benefits with the minimum of side effects. Only practice will probably show whether such a solution is possible.