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ELECTRONIC CLASS REGISTER IN THE PROCESS OF TEACHING AND UPBRINGING

Abstract: The objective of this article is to discuss the results of a pilot study concerning the acceptance of electronic class registers, as well as the ways and the extent of usage of tools in the process of early school education.

Keywords: electronic class register, e-register, modern technologies, teaching, discipline issues, early school education.

Introduction

Electronic class registers were introduced in schools on the basis of *The Ordinance of the Minister of Education on the method of keeping documentation of the course of teaching, educational and upbringing activity by public nursery schools, schools and institutions as well as types of such documentation* (<http://isap.sejm.gov.pl/DetailsServlet?id=WDU20140001170>). On the basis of the above materials, public nursery schools, schools and institutions mentioned in the title of the ordinance are allowed to keep class registers in the following form:

1. **traditional** – paper,
2. **electronic** – which is possible with the consent of the governing authority (after prior resignation from documentation in the paper form) (<http://edukacja.warszawa.pl/dla-nauczyciela-i-dyrektora/cyfryzacja-oswiaty/dziennik-elektroniczny/5781-3-prowadzenie-wylacznie>),

3. *mixed* (electronic and paper simultaneously) – this form does not require the consent of the governing authority (<http://edukacja.um.warszawa.pl/dla-nauczyciela-i-dyrektora/cyfryzacja-oswiaty/dziennik-elektroniczny/5734-2-prowadzenie-dziennikow>).

According to the regulations contained in the ordinance of MEN (Minister of Education), the electronic class register is considered to be a tool:

- Allowing to provide selective access to information, only authorised individuals have access to the information.
- Protecting the information from access by unauthorised individuals, e.g. with a password.
- Protecting information from being destroyed, damaged or lost, which requires frequent saving of information.
- Recording the history of made changes, modifications made to the e-register should be saved, it is also necessary to have a function allowing for verification of changes and information related to the changes made.

Additionally, the system used for keeping electronic registers should:

- Allow to export data to the XML format.
- Allow to prepare documentation in the paper form (<http://isap.sejm.gov.pl/DetailsServlet?id=WDU20140001170>).

Pursuant to currently prevailing regulations (<http://www.sejm.gov.pl/prawo/konst/polski/2.htm>) legal guardians of children – students of a school have the right to access information related to the process of teaching and upbringing of their child at the premises of the institution. Therefore, they can analyse marks, attendance in classes and any comments recorded by teachers. Depending on the provisions in the contract with the provider of the register, parents are given free or paid access to the mobile application – as added value. *This results from an assumption that, since a Student's Parent always has free access to the electronic register at the premises of the school, then providing them with remote access (e.g. through the Internet, SMS channel, mobile application) remains an additional service which can be charged* (<https://www.librus.pl/doradca-dyrektora/pytania-i-odpowiedzi/oplaty-za-dostep-do-dzi->

ennika/). Currently, on account of market needs, a lot of companies offer additional services related to the necessity of buying a subscription. One of the options is an SMS information on all the changes made in the system, which allows for receiving a short message concerning: student's absence, getting a mark, teacher's comments etc.

Methodology of the pilot study – description

In the school year 2014/2015 there were pilot studies conducted concerning the use of the e-register in the teaching and upbringing process at the early school education level. Calculations and statistical inference were conducted on the basis of data of a quantity-quality character. In the research participated 38 teachers from the early school education level, selected randomly from schools located in the Kujawsko-Pomorskie voivodeship. In order to better understand the discussed area, early school teachers were given a survey and interviews were conducted concerning the extent of acceptance of working with the tool, the form and way of using it, as well as problems occurring when using the electronic class register. As a consequence two main research objectives were established:

1. An analysis and assessment of the level of acceptance of the e-register by early school education teachers.
2. An analysis and assessment of the form, and the extent of use of the e-register in the process of students' upbringing.

The following issues and detailed questions were to help solve the above problems:

1. Do early school education teachers accept working with the e-register?

- 1.1. *What percentage of early school education teachers accept the changes related to introduction of the e-register, if any?*
- 1.2. *Is there a relation between the age of early school teachers and the level of acceptance of the e-register?*
- 1.3. *What percentage of early school education teachers have problems related to working with the e-register, if any?*

2. In what way do early school education teachers use the e-register in the upbringing process, if at all?

- 2.1. *For what purposes do early school education teachers use the e-register in educational practice?*
- 2.2. *How often do early school education teachers use the e-register to inform children's legal guardians about the students' educational and upbringing situation, if at all?*
- 2.3. *Is information given to the students' legal guardians through the e-register of general or detailed character?*
- 2.4. *Does the e-register facilitate the flow of information between the teacher and the child's legal guardian?*
- 2.5. *Does the e-register contribute to decreasing the amount of educational and upbringing problems?*

The data for calculations was collected from surveys and interviews conducted with teachers within the frame of a diagnostic survey. Statistical significance and the direction of relations were checked using the Chi-square independence test, appropriately selected statistics were also used.

Conclusions from the research

On the basis of the surveys conducted among early school education teachers we can conclude that about 74% of them accept working with the electronic register. In numerous posts on thematic forums teachers admit that working with the e-tool is exceedingly convenient.

Since 1 September 2010 we have kept the register exclusively in the electronic version.

I am very happy about this (teachers, parents, as well as students), it is tremendously convenient.

Accessibility of data 24 hours a day, ready statistics, contact with teachers, students and parents through the register...

I cannot imagine returning to the paper register :)))

Luccy 21-03-2011 (<http://oskko.edu.pl/forum/watek.php?w=45153>)

Often it is enough just to click and our work is done by the register.

By that I mean every possible semester summaries, statistics.

I think that such a register is not a facilitation only for the form teacher.

Iwona 23-03-2013 (<http://blogiceo.nq.pl/mamtikam/2013/03/22/dziennik-elektroniczny-tak-ale-jaki/>)

The above comments coincide with conclusions drawn after interviews conducted during the pilot studies. The results of the survey show that what contributes to the positive reception of this e-tool are numerous functions of the software, allowing among others: to make attendance summaries, immediate calculation of students' grade point averages, contact with student's parents is easier than through traditional student record book etc. People who stated that they accept working with the electronic register named the following main factors favouring that decision:

- easy to use – about 68% of the surveyed;
- it is not necessary to carry the register with you – about 68% of respondents;
- unlimited access to documentation, possibility to enter data also from home – about 71% of the surveyed;
- easier contact with most parents – about 71% teachers;
- possibility to faster prepare for parent-teacher meetings and teachers meetings thanks to the option of automatic calculation of grade point averages, attendance summaries etc. – about 76% of respondents.

The main reason for not accepting working with the e-register was:

- undermining the purpose and the need for using the tool – about 16% teachers;
- not having enough knowledge and skills for operating it, and as a consequence high level of stress related to using the electronic register – about 26% of the surveyed.

One in four teachers on average admits to having problems related to using the e-register and thus they do not accept the tool. They are mainly people over fifty years of age who usually do not participate in additional trainings related to IT in the teaching process. However, correct operation of this e-tool requires learning the basics of working with a computer as well as the Internet. The conducted surveys showed that some people from the mentioned 50+ group, that is about 5%, solve all

the problems related to the use of the tool on their own when such arise. Administrators of the e-register play an especially important role in analysing the arising problems. Usually, they are IT teachers or people cooperating with the creator of the software, who know the entire procedure of its operation and all the functions possible to use. Their knowledge and advice related to using the e-register sometimes turn out essential.

The answer to the question: *For what purposes do early school education teachers use the e-register in educational practice?* reveals three basic areas, namely:

- **The first – related to the process of teaching**
 - the e-register makes it possible to plan lesson subjects to be taught for the entire school year,
 - the possibility for sending quick information to the children's parents concerning: the need to give consent for a school trip, materials necessary for conducting a planned lesson e.g. art class etc.,
 - efficient procedure of verifying attendance,
 - possibility to enter marks, coding them with colours, possibility to assign weight to individual marks etc..
- **The second – related to the process of students' upbringing**
 - the tool allows to contact students' parents quickly,
 - the software makes it easier to contact other teachers, thanks to which the flow of information and comments concerning students is of a more natural, immediate and fluid character.
- **The third – related to the necessity to prepare school documentation**
 - possibility to quickly calculate students' grade point averages,
 - possibility to easily prepare summaries related to students' attendance, or being late etc.,
 - the e-register highlights names of students being at risk of failing a subject,
 - helpful with filling out end year diplomas.¹

¹ Summary prepared on the basis of teachers' comments, who used different types of e-registers.

The factors conditioning the purpose of using the electronic register named by early school education teachers coincide with the results of analyses conducted by M. Wróbel. Data collected by the author shows that teachers working with the electronic register appreciate the possibility to *have more complete supervision over the students' progress in education* (Wróbel, 2009), which is possible thanks to the option of preparing summaries, calculating grade point averages of whole classes etc. From the teachers' comments it can be concluded that this e-tool is also used for keeping correspondence connected with the current educational and upbringing situation, including the use for discussing children's progress and problems (https://dziennik.librus.pl/pliki/gazeta_szkolna_2009_11_24_jak_rodzice_oceniaja_dzienniki_elektroniczne_wyniki_ankiety_wsrod_rodzicow.pdf). The use of the electronic register to a large extent for contact with parents is declared on average by about 87% of teachers. The above aspect of working with the e-register is inordinately valuable, unfortunately it is used to a little extent. Why? Teachers' reports show that some parents (despite young age) do not have or do not regularly use an email account. The above phenomenon concerns especially people from impoverished families who have limited access to the Internet or do not have a well operating computer (http://analizy.mpips.gov.pl/images/stories/publ_i_raporty/DS2013/Raport_glowny_Diagnoza_Spoleczna_2013.pdf). The second factor is the lack of a habit of checking the email account connected with the e-tool regularly.

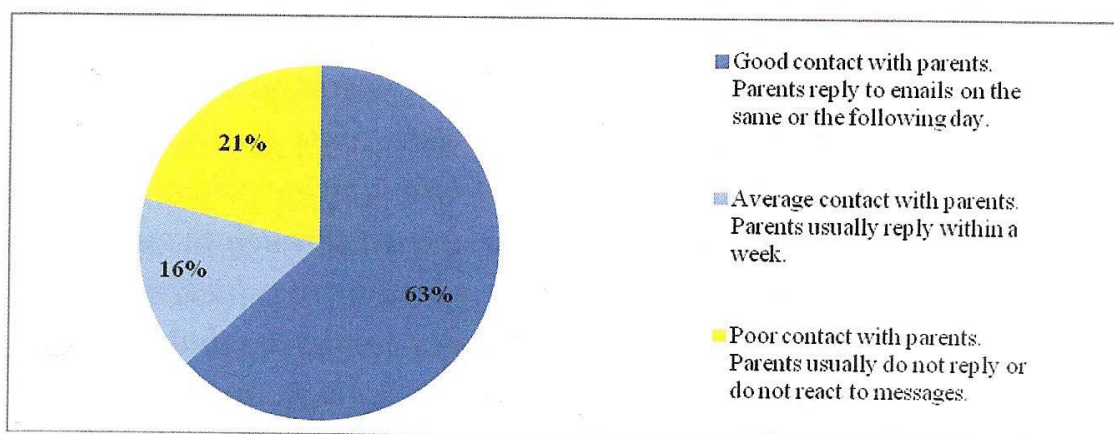


Chart 1. Teachers' contact with students' parents through the electronic register

Source: Own study.

The e-register replaced the traditional student record books or so called notebooks for correspondence that were used before. Through the function of sending messages teachers can inform students' legal guardians about any situations that took place during their time at school. Entries are made both for negative and positive behaviour of children. Correspondence is of a two-way character and is carried out more efficiently than it used to be with traditional paper notebooks.

Data collected during the pilot study shows that teachers inform parents about the behaviour, marks and additional tasks given to students at least once a week. Of course, if the situation requires it, correspondence is more frequent. The information given to parents is detailed and exhaustive, which is possible thanks to keeping the correspondence confidential. Student record books or notebooks for correspondence used for this purpose before used to be given to parents by students, so it was possible to access it and read the content written there. As a consequence teachers avoided certain topics and left discussing them until the parent-teacher meetings. Introduction of the e-register, protected with a password, gives the possibility for a dialogue and allows to keep it completely confidential, which according to the surveyed is very important.

From teachers' comments we can conclude that better virtual contact (between the school and student's home) initially caused anxiety related to possibly increased parents' absences at the parent-teacher meetings at school. Other researchers also report *while introducing the e-register there were some worries that if parents could view the register at any time they would stop coming to school. And that is not the case. It happens that some parents come to school less often, but on the other hand those parents started appearing who had never come to school before, through the e-register those parents start to communicate, whom teachers really want to get in touch with the most – at least through the messages module to communicate with teachers. It is a significant achievement and it makes teachers happy. Whereas, parents often emphasise that thanks to the e-register they have information about their children immediately and they precisely know what is happening in the school* (<http://gimmanowo.szkolnastrona.pl/strona-starowa-gimnazjum-w-manowie,m,mg,1,92>).

html). For a large group of teachers and parents the exchange of information, as well as initiating conversation, works both ways.

The abovementioned activity makes it possible to work out a common educational front. As a consequence the e-register should facilitate eliminating negative events which make the process of upbringing more difficult. In fact, as the collected data shows, upbringing problems still occur. They especially concern families, where the parents do not cooperate with the school. However, this does not mean that the introduction of the electronic register did not influence educational processes at all. In the case of children whose legal guardians have good or average contact with teachers we notice: reduction of truancy and being late to class (<http://gimmanowo.szkolnastrona.pl/strona-starowa-gimnazjum-w-manowie,m,mg,1,92.html>), what is emphasised by about 71% of teachers; a lower number of children not prepared for classes – about 68%, less frequent occurrences of inappropriate behaviour at school – about 63%.

Summary

Nowadays we are witnessing an initial phase of introducing the electronic register in Polish educational facilities. In a lot of schools teachers still use traditional documentation. In places where new solutions were introduced we can observe ongoing changes. Teachers are gradually getting used to e-tools, accepting work with them. In one of her articles B. Basińska noticed that *the electronic register is a very convenient tool. Only teachers who work in those schools still in the “transitory” period have more work, i.e. both traditional and electronic registers still function. However, everyone, including those who have to work with two registers, admit that after getting used to the e-register they would not change it back to the paper register* (<http://www.edunews.pl/badania-i-debaty/wywiady/2974-e-dziennik-pomoc-czy-udreka>). Therefore, it can be expected that with time and with further development of information technologies and as a consequence its larger contribution to the process of education, the number of people who accept working with the e-register will increase. I believe that it is a matter of time that there

will be a change in the area of using e-registers in the process of communication between parents and teachers. In this case we can expect that increased awareness of parents as well as development of appropriate attitudes will positively influence the frequency of using this e-tool.

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