

Insights on the Use of Facebook in Educational Context - a Systematic Review (2015-2018)

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Despite its overwhelming popularity as the leading social network site in the past few years, the educational value that Facebook provides has not been fully determined, and results are still contradictory. Moreover, systematic reviews about the educational usage of Facebook are still lacking some aspects. This article provides a critical overview of the international studies focusing on Facebook as educational environment, carried out in order to examine if and how this popular social network may contribute to teaching and learning within formal education. The authors conducted a comprehensive search that identified 43 relevant articles, subsequently analysed according to a list of guidelines created especially for this study. Thus, only empirical studies published between 2015 and 2018 in peer reviewed journals have been considered for this review. The studies included present the ways in which Facebook can be used in education, and focuses on the perception of pupils, students and teachers in this respect. Overall, our study found that Facebook is partially implemented in education, depending on the subject taught. Finally we provide suggestions and indications for future research .

Keywords: Facebook; education; social network sites; students' perception; teachers' perception

1. Introduction

In recent years many researchers directed their attention towards the implications of Web 2.0 technologies, including the social network sites (SNS), on socialization, psychology, health and the results of learning in different categories of people (McHaney 2011, O'Keeffe&Clarke-Pearson 2011, Valenzuela et al. 2012, Loader et al. 2014). The relationship between education and the use of social networks sites (SNS) showed great interest for researchers in the past 10 years; some of them suggest that SNS became an inadequate distraction for students, because they affect in a negative manner their educational performance (Ivala&Gachago 2012, Jacobsen&Forste 2011); others consider that Facebook, the most popular social network, has received a lot of attention from teachers and researchers, and its popularity made it the number one choice for the teachers interested in using SNS in teaching; it also changed the way in which students are experiencing education (Shaltry et al. 2013). Other research has shown that the use of Facebook has its limitations. Despite the identified assets, Facebook remains a controversial social network especially in terms of privacy and personal data (Chugh&Ruhi 2018). Moreover, students have labelled it as an asocial tool because of the ambiguity that the online communication creates in interpreting certain information. This may lead to conflicts among colleagues (Hope 2016), and, at the same time, some have labelled it as an anti-social tool (Chugh&Ruhi 2018) because students do not socialize, do not relate in the real world, but only in the virtual one.

There have been identified a series of harmful effects, amongst which we can mention the facilitation of writing and grammatical errors, sharing of misrepresented information perceived as facts, fake-news, exposure to cyber bullying (Aydin 2012), decrease in productivity due to the fact that employees check their Facebook account during work, or even the provision of information that might lead to identity theft.

Despite these negative effects, teachers seem interested in learning how this change in the communication between students and teachers might represent an opportunity for them to create new, innovative methods to enhance learning. The efforts for the integration of SNS in the teaching-learning process and the struggle to understand students' desire to be involved in this process have significantly increased.

Some researchers attest that the online learning tools, give access to educational experiences that are more flexible in time and space than the classroom experience. Moreover, in order to successfully use the online learning tools, teachers must take advantage not only of the increased ability to share content, but they should emphasize the role of interaction (student-student, student-teacher, student-content, teacher-teacher, teacher-content and content-content) (Anderson 2008).

The process of teaching infers more and more the informal learning and the new technologies reorganize the way of thinking. Traditional learning theories become limited in the capacity to explain activities such as online learning or the use multimedia in this process. Alternative theories, such as connectivism (Siemens 2005) try to diminish the differences. This new learning theory explains how Internet technologies have created new opportunities for learning and sharing information across WWW. These technologies include email, wikis, online forums, web browsers, social networks and any other tools, which enable the users to learn and share information with other people. The ability to create connexions between the sources of information is necessary in the personal knowledge development. Learning is a process that is not entirely under the individuals' control; it takes place in different environments in which the main elements are continuously changing.

A positive aspect identified by the studies is the one related to the increased autonomy of students in the process of learning, Facebook giving them a greater control over the profound communication related to learning. Some educational researchers have stressed the need not only to increasingly use Facebook in the classroom, but also the need of a good understanding of the way in which social media could be integrated in teaching in order to ensure both the teachers' and students' comfort (Fewkes&McCabe 2012).

Our study is centred on the identification of research articles, written between 2015 and 2018, in which Facebook is used in educational context. We will focus mainly on the studies that present students', high school students' and teachers' perception on the ways in which Facebook is used in this environment. Another focal point of our research was to explore the reasons for which it is used and the tools preferred (Facebook groups, pages and other tools). The articles identified were also analysed from the point of view of the level of education (secondary, higher education), design and research methods, main research lines developed and findings of these studies. Finally, we will draw some future lines for research.

2. Research methodology

In this section we will present in detail the methodology used in searching the relevant studies about the use of Facebook in educational context. We included studies related to the perception of students and teachers on this type of use. The keywords, search strategy, databases, selection criteria and extraction of data are explained below.

2.1. Eligibility criteria

Taking into consideration the fact that a simple search of the term “Facebook” in Google Scholar produced over 6 million results or that the association of the terms “Facebook” and “education” produces over 3,250,000 results, we considered very useful the elaboration of specific eligibility criteria in order to clearly locate the studies that will be included in our systematic review.

Another aspect is the fact that in the past 8 years we found systematic reviews on the use of Facebook in education, showing a great deal of variety of variables, such as the educational potential of Facebook, educational communication on SNS or Facebook as learning technology enhanced environment. Thus, the search for relevant literature in the area has been limited to studies published between 2015 and 2018, in peer-reviewed journals, written in English, including open access articles.

The articles have been chosen depending on selection criteria previously established. In order to be included in our systematic review, the studies had to be about the use of Facebook in educational context, to include information on the perception of pupils, students and/or teachers regarding the use of Facebook and to contain empirical research.

The studies which refer to other types of social networks, did not present results of empirical studies, didn't contain statistical information, had different types of target audience (adults, children, managers and other), or were not conducted in the mentioned period, have been excluded. Although the papers published in volumes of conferences, abstracts, dissertations and other type of papers could offer information from well documented research, with sustained results, and can present theories and empirical proofs, specialized peer-reviewed journals ensure a better quality of the publications. Moreover, bearing in mind the fact that our study has as main interest the analysis of the state of empirical studies in this field, the articles which had a more theoretical approach or the ones which were not sustained with proofs, have also been excluded. Finally, only articles which presented in a clear manner the research questions, statements and interpretations based upon evidence and theory and also comprised a thorough documentation of all the procedures, have been included in our study.

2.2. Search strategy

The databases in which we conducted the search of the peer-reviewed published articles have been some of the most popular in the academic environment, such as: Science Direct - Freedom Collection Journals, Sage, Eric, Web of Science, Taylor and Francis Journals, and Wiley Online Library. The initial search was done using the following keywords: Facebook, students' perception, teachers' perception, education*; than we used the advance search which allowed us to combine several terms and introduce search criteria, using the Boolean operators (AND - and, OR - or, AND NOT - and not, etc.). We adopted mainly the AND operator which allowed us to find documents comprising the two terms linked in the same paragraph (250 words). The final keywords resulted by narrowing the search based upon the objectives proposed in our review.

For the collection of the corpus of our study we conducted, in the period March-April 2018 an extended search, using the keywords “Facebook AND education*. We limited our search results to articles published between 2015 and 2018, in peer-reviewed journals, in English, including open access articles. In order to receive updates for our search we activated email alerts in the Google Scholar and Science Direct databases. Some of the studies included in our article have been selected using this method.

In order to have a more precise search, in some databases that allow this, we used the possibility to specify the field where we wanted the terms to be searched. Thus, we searched for one or more terms in the fields *Abstract, Title of publication, Subject and Keywords*.

In the databases which allow the search by field, we limited the results to the field Social Sciences,

subject Education. The keywords used were “Facebook”, “educational context”.

Table 1 comprises information from the initial search: the names of the online databases and the number of articles found in each of these databases.

Table 1. *Databases and number of articles found (initial search)*

Online database	Number of articles
ELSEVIER Science Direct - Science Direct Freedom Collection Journals	4827
SAGE - SAGE Journals - Humanities and Social Science	5898
ERIC	394
Web of Science	8824
Taylor and Francis Journals	16590
Wiley Online Library	9722
Total number of articles found	46255

Figure 1, below, comprises the flowchart for the studies included in our systematic review.

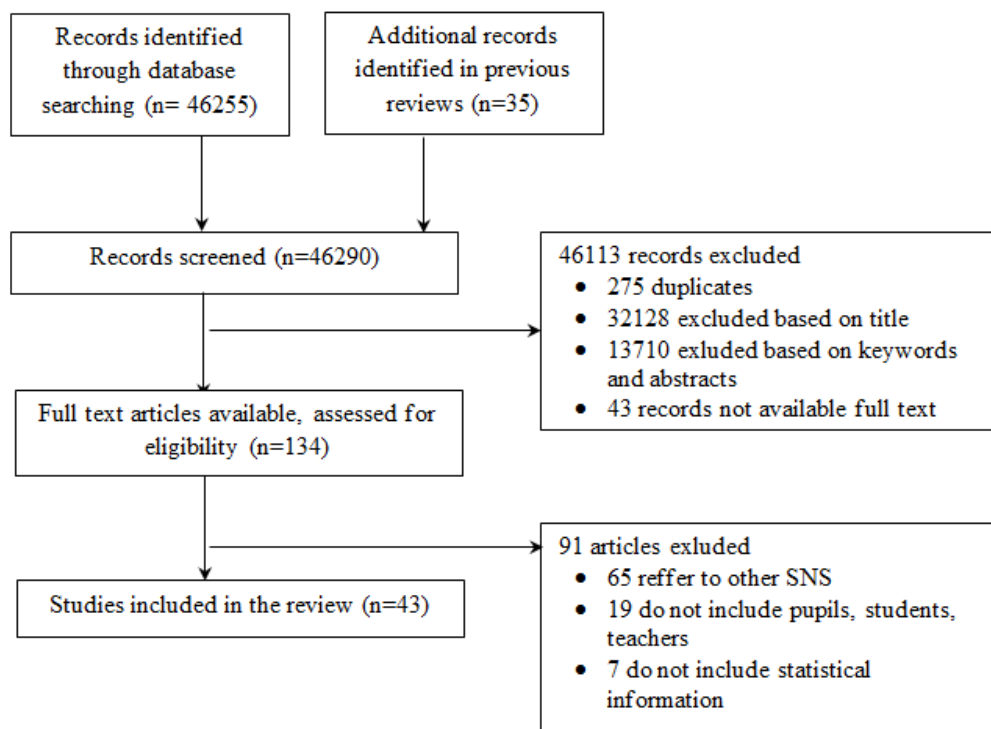


Fig. 1. *Flowchart for the studies included in the systematic review*

In order to ensure the integrity and to avoid the possibility of systematic errors, we repeated the search and then evaluated the data considered adequate for the aim of our study. After critical assessment, some of the articles found were excluded. The number of articles identified in the academic databases was 46,255, as presented in the flowchart above. We added the other 35 found in other reviews and bibliographic lists. After the exclusion of 32,128 articles rejected based upon the title we also eliminated 13,710 articles because the keywords and the abstracts were not

consonant with our aims; 275 were duplicates and 43 articles have not been found available in full text. A total of 134 articles have been assessed for eligibility and the articles which fulfilled the criteria and have been analysed full text, was of 43, being included in our review.

The entire circuit of methods used to search the articles included in our review is presented in the diagram below.

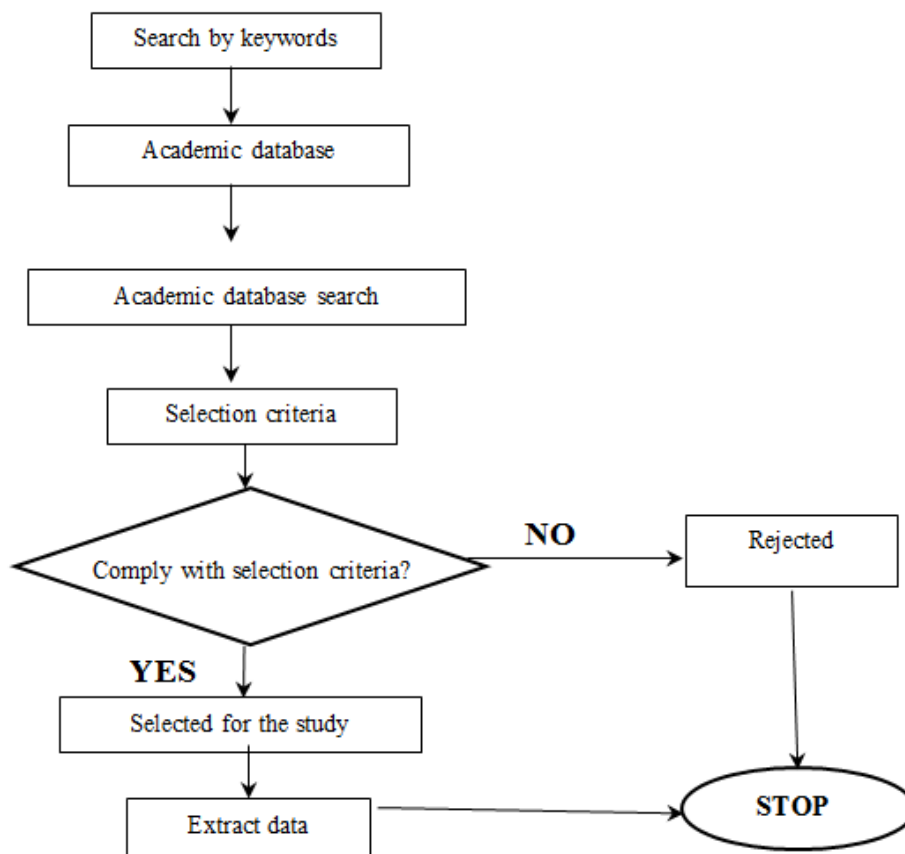


Fig. 2. Diagram for the methods used for the literature search and selection of relevant articles for the review

2.3. Types of studies

Our research presents the results of the 43 articles examined, published between January 2015 and April 2018, which refer to the perception of pupils, students and teachers on the use of Facebook in educational context, but also articles which studied the perception, opinions, insights and attitudes expressed by the target audience regarding the use of Facebook in educational context. We also analysed the articles from the point of view of the aim, used methodology, research design and methods, reasons for using Facebook in educational context and why it is mainly used for (sharing of educational content; formal/informal learning environment; group to enhance communication between students and teachers etc.), what affordances are used (groups, pages, other), level of education (secondary or higher education, continuous training). We also took into consideration the distribution of the studies included on each level of education and what properties have been used.

3. Results

From the point of view of the research methods we noticed the prepotency of the quantitative studies (53.5%); also the mixed methodology has been used by researchers in 44.2% of the studies. The majority of quantitative studies collected data through surveys or online questionnaires.

When considering the level of education on which the studies have been conducted on, we can see the largest percentage is the one of the higher education studies (74.5%), followed by the secondary education (20.9%) and the Facebook affordances mainly used in the studies included in our review are the Facebook groups (48.8%).

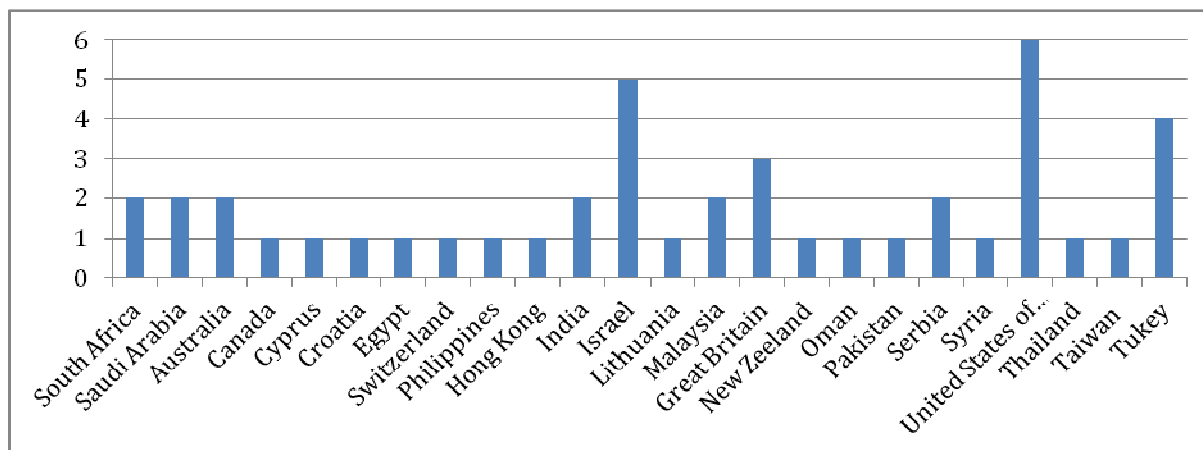


Fig. 3. *Distribution of studies by country*

Figure 3 shows that research on the perception of pupils, students and teachers on the use of Facebook in educational context has drawn the attention of researchers all over the world, as we found studies reported on every continent involving participants from Africa (e.g. South Africa), America (e.g. USA), Asia (e.g. Taiwan, Hong Kong, Thailand), Europe (e.g. Croatia, Switzerland, Lithuania, Great Britain) to Oceania (e.g. Australia).

The largest number of studies involved participants in the United States, according to the results of research conducted by Hew (2011). Israel is on the second position and Turkey on the third, despite the trends mentioned by Hew, who reported Great Britain on the second position after the United States. This indicates that the researchers in Israel became more and more interested on the perception of the actors involved in education (pupils, students and teachers) on the use of Facebook in educational context. The increase in the number of studies conducted in Israel is vindicated by the educational policies adopted by the Israeli Ministry of Education in 2011 regarding the interdiction of student - teacher communication via social networks sites. Although initially it was mentioned that “the usage of SNS for interaction between teachers and students is forbidden” (Israeli Ministry of Education 2011), after approximately one year and a half the regulation was revised, emphasizing the benefits of SNS and allowing a restricted communication via SNS. Many countries all over the world have debates on the interdiction of teacher-students SNS mediated communication. Even some regions in the United States and Australia have restricted this type of communication between students and teachers (Queensland Department of Education, Training and Employment 2016). On the other hand, other countries, like Ireland, preferred to warn about the potential damage of student-teacher relationship via SNS. The Teaching Council, the institution that regulates the profession, has published an updated version of the Code of Professional Conduct for Teachers, according to which teachers are required to “ensure that any communication with the pupils/students, colleagues, parents, school management and other is appropriate, including communication via electronic media, such as e-mail, texting and social networking sites” (The Teaching Council 2012). The fact that communication via SNS

is being discussed by policymakers and regulators reflects the tremendous impact of this issue.

In time, intriguing questions regarding the teacher-student communication via SNS and of its effects on the real life relationship have come up (Manca&Ranieri 2017). Even the term used by many SNS to describe the connection between users “friends”, can challenge the normal student-teacher hierarchy, because, traditionally the teachers have a certain degree of influence over the students even when their relationship evolves. With all these changes in the informational era, the role of teachers is in a permanent transmutation. The communication via SNS plays a major role in this mutation, extending the aim and the locations in which the teachers and students/ pupils communicate, even more than the online platforms such as the well-known learning management systems.

Table 2. *Studies on the perception of pupils, students and teachers about the use of Facebook in educational contexts*

Perception of	No. of studies	Percentage
Pupils	6	13.6%
Students	36	83.7%
Teachers	8	18.2%

3.1. Pupils’ perception

The manner in which pupils react to the use of Facebook as a tool in education has been explored by six of the studies included in our review. Four of these studies have been conducted in Israel, 1 in Turkey and 1 in India.

The studies conducted by Forkosh-Baruch and Hershkovitz in 2015 and in 2017 respectively, in Israel reflect their preoccupation with the relationship and communication between pupils and teachers via Facebook. In 2013 the two researchers have conducted an exploratory qualitative study on eleven pupils aged between 13 and 18, from Israeli schools. In the first study selected by us the researchers included pupils (N=587) as well as teachers (N=160) in order to extract the differences between the ones *willing to connect* with their students/teachers via Facebook and those who *do not wish to connect*; in the second study the authors examine the associations between the students-teachers relationship and the student-teachers communication mediated by Facebook.

Both studies have been conducted on a school population aged between 12 and 19 years old and focus on the attitudes regarding the policies which forbid the teacher-student communication via SNS and the attitudes regarding Facebook in the learning process. The authors identified significant differences between three groups of students: the ones willing to connect with their teachers on Facebook, the ones already connected to one of the teachers on Facebook, and the group of students not connected to the teachers, but willing to do it. The most popular mean of communication between students and teachers is within the Facebook groups. The students, as well as the teachers consider the groups an appropriate mean of communication because they offer an easy way to communicate with more people at the same time, having also a high degree of privacy and a good separation between the discussions on learning and personal activities. Another result of these studies shows a better degree of closeness to the teachers of the students *willing to connect*, in comparison to the ones *not willing to connect*. Both studies can give a support for the policymakers to regulate student- teacher communication via SNS.

In the following study Rap and Blonder (2017) evaluated the degree in which students use the SNS in general and their attitudes towards the presence of an environment/ group on a SNS for teaching

chemistry. The results show that the active Facebook group for teaching chemistry has been perceived in general as an experience which contributes to the learning process. The study results present a positive correlation between the activities for learning chemistry in groups and the students' attitudes towards the use of Facebook groups for teaching and learning chemistry.

Amandeep Dhir (2016) shows in his study that Facebook adolescent users consider it a good tool for discussions, materials sharing and exchange of ideas and other educational interests with their friends, but also with the teachers, and these functions lead to an intensive Facebook use.

Foreign languages learning moved out of the classroom walls long time ago; in fact, for the most part, learning foreign languages happens outside, in informal activities. The informal learning, through ICT represents an important alternative to practise and use the languages; that is why it shouldn't be neglected. Any informal learning experience is perceived as a link or a bridge between social media and educational content. They offer many opportunities for pupils and students to connect with educational content in formal learning locations. Some teachers are too rigid and limited regarding the idea of learning outside of the classroom. Certainly, learning will always need a formal location for the dissemination of information. Nevertheless, learning processed outside the classroom through the use of technologies, the negotiation of the sense, the construction of knowledge and social and interpersonal interaction, the creation of relationships - are equally important. Selwyn confirms that the IT technologies, the computer and other ICT elements allow children and young people to have access to a greater variety of activities and experiences that can sustain learning, many of these not happening in a traditional educational framework. In fact, many of these could be considered "educational" according to the conventional meaning of the term.

A very recent study done by Levent Çetinkaya (2018) evaluates the effects of Facebook and WhatsApp on the success of learning English vocabulary and analyses the opinions of pupils on the implementation process. The research proved that WhatsApp was more efficient than Facebook in this experiment, and the pupils wish to continue using it in their courses and also to use it in other subjects taught in school.

3.2. Students' perception

This category of studies includes 32 articles, representing the most extensive part of our study.

Some of the benefits of Facebook used in educational context can be found in the recent studies analysed. Milosevic et al. (2015) and Sobaih et al. (2016) observed in their studies that the students perceive the use of SNS as beneficial in terms of involvement, improvement of abilities and expertise on the content of courses. Akcaoglu (2016) emphasises the intercommunion of the students and teachers and their colleagues, through the use of Facebook. On the other hand, other studies identified reluctance to the idea of becoming "friend" with the faculty members for more than half of the participants in the study (Alkhateeb 2015).

In his research about the perception of students on the educational use of a Facebook group, Chen (2012) showed that students consider the Facebook group a mean to improve communication between teachers and students; it also provides a rich multimedia content to enhance the educational experience. Students showed openness to the possibility to extend the Facebook group to other courses too, like several other studies mention; they prefer a voluntary participation, not imposed by the teachers. The authors emphasize the fact that probably when they indicated positive reactions to the introduction of SNS in the courses, the students did not take into consideration the time, effort and privacy issues associated to that. Another question raised was about giving grades or marks which could motivate the students to be more involved in the activity of the Facebook group.

In studying the advantages and challenges of the use of Facebook for sharing students' homework

and projects, Cheng (2016) ascertains that they are more reluctant to the invasion of their private socialising space by the teachers. Most of the students involved in this study didn't embrace the idea of being contacted by the teachers or faculty members on the Facebook with the purpose of teaching or promoting different matters and administrative issues.

A number of studies refer to the benefits and qualities or particularities offered by Facebook including collaboration, sharing of resources, knowledge and ideas, increase in the level of communication with the colleagues and teachers (Ciampa et al. 2016, Connolly et al. 2018, Dickie&Meier 2015, Dhir et al. 2016). Dickie and Meier (2015) in their study *The Facebook Tutor: Networking Education*, make remarks on the fact that Facebook and other SNS should not be considered an alternative but they should rather represent an additional channel of communication between students and teachers. The administration of the pages or groups should be done by a member of the faculty in order to warrant the maintenance and application of standards and to avoid their faulty use. The authors also make remarks on the education of students on the importance of protection of personal data and privacy. This experimental study points out how teachers in the act of teaching can use the SNS technology without losing the traditional student- teacher relationship. The use of communication via Facebook increases the contact and provides an environment to discuss problems with the entire group in a more rapid, productive and interactive manner, in any class, at any time. In this era of mass education, the higher education institutions should take advantage of the new technologies. This is applicable especially now, when students expect to get in touch with the teachers very quickly. The Facebook tutor, used in a structured and safe manner, could lead toward the meeting of these expectations. A new educational environment to answer the students' needs is the best way to equip them for the technology lead future and it can also have a positive influence on the individual and collective learning.

The study Gettman and Cortijo carried out in 2015 unveils negative attitudes towards the use of Facebook initiated by teachers with academic aim. The participants' comments reflect a resistance towards the use of Facebook in the classroom, in the quantitative appreciation of the level of "comfort", the answers have not been above "neutral". The qualitative results indicate a resistance because of the idea that Facebook was created for social interaction and not educational interaction. There are also some concerns about the fact that the interaction on Facebook with the teachers might surpass some barriers, giving space to discussions about privacy and possible issues in the teacher-student relationship. One of the limitations identified in this study is the fact that the participants in the study were not directly involved in an experiment, but their answers came from the previous experiences or from speculations regarding the experiences that they might have. These issues might lead to irrelevant results, which do not reflect real experiences. The authors suggest for future research to be conducted during the period in which the pupils or students use those technologies.

In India, despite the extensive use of SNS for communication and entertainment, the use in the educational environment seems to be reduced (Bharucha 2018). SNS in the Indian educational system evolve as a communication method and seem to gain some territory in respect of acceptance. The interviewed students said that they want to be connected in a flexible manner and want to attend personalised learning based upon experiences. Students have created study groups on Facebook and sustained that they are extremely useful in sharing information, addressing questions and receiving learning tips. The Indian students expect changes in education in terms of emerging technologies. It is clear that the SNS will never completely replace the traditional Indian education, but they are boost in education and improve the process of learning.

O'Neil and Wels (2016) structured their study on three directions: (i) the manner in which students perceive the use of Facebook, (ii) the manner in which the students feel about certain Facebook elements and (iii) if the different elements have optimized the teaching and learning from their point of view. From the students comments it is clear that they actively initiated the participation

on the Facebook page, but they preferred to be involved in a post-hoc manner, after the others (probably the course coordinators) posted materials on the page. The survey and interviews illustrated a general positive attitude regarding the implementation of Facebook as educational tool. The study confirmed that institutions and teachers should not ignore the evolution of the educational need of the Net Generation any longer; and if those needs will not be met, they could lead to the emergence of irrelevant institutions in this perpetually changing environment.

Pickering (2016) suggests that Facebook can play an important role in sustaining students for their exam preparation or evaluation. Ramadan (2017) pleads for Facebook as a promising pedagogical tool which needs all the attention in the Arab countries. The researcher recommends the integration of Facebook as a learning resource in the Arab universities. The most important functions of Facebook, identified by Pribeanu (2015) in his study on Lithuanian students are communication, learning, information exchange and writing of text messages. Sharma (2015) states that sharing of materials and collaboration are the dominant variables regarding the future use of Facebook in the higher education. The authors suggest the inclusion of Facebook as eLearning tool in the higher education institutions.

3.3. Teachers' perception

Previous studies have shown that the Facebook groups or pages can be more useful in teaching specific subjects. The use of Facebook for certain areas, such as foreign languages, sciences and business has been demonstrated before. Blonder and Rap (2015) showed in their study that the initial opinions of the teachers involved in the study (which were not based upon a real knowledge of Facebook) have been replaced by more realistic ideas when the teachers started to use the Facebook groups for teaching and learning chemistry. The technologic support given to each teacher lead to the development of a greater self-efficiency regarding the use of the group.

The contact between teachers and students takes place in different shapes and manners, and for more than one purpose. Asterhan and Rosenberg (2015) divided them into three categories: academic-educational, psycho-pedagogical and socio-relational.

The groups created on Facebook are considered the most popular mean of communication between students and teachers, the teachers consider that it is an appropriate way to communicate, because it offers an easy communication with more than one person at the same time, with a relatively high level of privacy. At the same time, the Facebook groups where the teachers and students discuss offer a better way of separating the discussions about school from the personal activities (Hershkovitz&Forkosh-Baruch 2017). In the case of group discussions, one of the accountabilities identified by Blonder and Rap (2017) is represented by the availability during the day. The role of the teacher is to help students access important information in a very accessible way, an also, to correct their mistakes done during group discussions.

Summarising the comparison between the teachers *willing to connect* to the ones *not willing to connect*, Forkosh-Baruch et al. (2015) draw a sketch portrait of the teachers *willing to connect* who are younger, have less teaching experience and have more experience in using Facebook than the ones *not willing to connect*. Besides, a great number of teachers in the *willing to connect* category tend to think that Facebook could be used in teaching and that the teacher-student communication on SNS shouldn't be forbidden.

4. Contribution of the study and limitations

Our study brings a contribution to the literature through an analysis and synthesis of studies published from 2015 to March 2018, including observation on the level of education, countries, aims of studies, research methods, Facebook tools used, main results and conclusions of the analysed articles. The main purpose was to identify studies in which authors present the

perceptions of pupils, students and teachers on the use of Facebook in educational context.

The first limitation identified is the fact that most of the studies have been done on cohorts of pupils, students or teachers in only one institution (Alkhateeb 2015, Alm 2017, Amasha 2017, Forkosh-Baruch et al. 2017, Hershkovitz et al. 2015, Balcikanli 2015, Blonder 2015, Liu 2016, Skendžić&Devčić 2017). Larger cohorts with differences in the type of perception have been used only in some of the studies presented in our study (Ali 2017, Anwar et al. 2017, Dhir et al. 2016, Bharucha 2018, Nkhoma et al. 2015, Ramadan 2017). The results would be more extensive and conclusive if they were done on larger cohorts of students and teachers from multiple institutions.

Most of the studies have used quantitative or mixed methodology and included self-reported surveys or online questionnaires, fact that might cause errors or confusions. To conclude we can state that Facebook is used and has a great potential of being used in the classroom as a learning tool. Yet, in order to capitalize Facebook advantages it is necessary to understand the way Net Generation interacts with technology and how they perceive it. Finally, we should not forget that the information and communication technology should be used only if the goals would be met and better results would be achieved.

5. Conclusions and future directions

Our review represents a radiogram and a synopsis of the present research in the area of Facebook used in educational contexts. The articles included show that the perception on the use of Facebook in educational context has drawn the attention of many researchers all over the world. Facebook can be used to improve the teaching and learning processes, especially for certain subjects such as foreign languages or sciences. On the other hand some studies show that Facebook can affect in a negative manner the performances of the pupils/ students.

The SNS, especially Facebook, rapidly replace the traditional ways of communication, such as letters, faxes, e-mail messages and even phone calls. Today, the SNS are used for publicity, votes, promotions and sales, as a news platform and especially for social interaction.

Nevertheless, the potential shown by Facebook as a learning support is acknowledged by many researchers and this justifies future research and investigations. Our research will continue with a quantitative and a qualitative study on the perception of students and teachers regarding the educational use of Facebook. The studies will be conducted in Iasi, on a group of approximately 1000 high school students and teachers.

The role of teachers has changed dramatically and positively in the last decades. There has been a shift from the teacher centred model of education to the student centred model or from the teaching focused model to the learning focused model. The teachers switched the role from one day to the other, changing from the “sage on the stage” into the “guide on the side”.

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ERRATUM

In the article *Information Literacy of Library Science Students at the Faculty of Philosophy, University of Sarajevo* by Lejla Hajdarpašić and Džejla Khattab, published in iss. 1, 2019 of our journal (pp. 8-15, <http://www.rrbsi.ro/index.php/rrbsi/article/view/71/29>), the authors erroneously referred to the Permeation Components Model (PCM) as *Permutation* Components Model.