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THE PREDICATIVE USE OF ADJECTIVES IN THE GERMAN LANGUAGE: INSIGHTS FROM THE NEWSPAPER 'WESTDEUTSCHE ZEITUNG' FOR LANGUAGE LEARNERS IN EDUCATIONAL SETTINGS

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Abstract
This paper provides an in-depth analysis of the syntactic function and usage of adjectives in the German language with a focus on their predicative use. For the prupose of the study, we utilized a corpus of adjectives from the newspaper 'Westdeutsche Zeitung' from 2009 to 2021. The procedure involved the analysis of sentence examples from the electronic corpus of the archive of the written German language at the German Language Institute in Mannheim (IdS). Building upon the theoretical approaches of Helbig & Busha (1991) and Hentschel & Weydt (2013), this article presents our own analysis and approaches of the syntactic function of adjectives in the German language. The purpose of this paper is to examine the role of adjectives in the German language as a corpus-based study for language learners in higher educational settings. The results of the study give some new insights and information for both teachers and students about the use of adjectives while learning German language.
Keywords: adjectives, syntactic function, predicative use, exceptions.

1. Introduction

Adjectives are a part of speech in the German language and play a significant role in sentence construction. They are used to describe or modify nouns and pronouns and can be placed either before or after the noun they modify. There are many different rules that should be taken into consideration when using adjectives in German, including word order, inflection, and agreement with the noun they modify. It is important to study and understand these rules in order to correctly and effectively use adjectives, both grammatically and semantically.

In German linguistics and in traditional grammars (Helbig & Buscha 1988, 1991, 2011; Hentschel & Weydt 2013; Zifonun 1997; Duden 2009; Eisenberg 2006; Engel 1996, 2009; Erben 1996), much has been written about adjectives as a special and flexible word group in the language system.

In German terminology, an adjective (from the Latin word *adiectum*, "the added", translated into Greek as *epitheton*) is also known as an "Artwort", "Eigenschaftswort", or "Beiwort". These terms all capture the essential characteristics of adjectives, which express specific characteristics, notes, or attributes, primarily with nouns but also with other word groups. In their semantic content, they all convey this idea. The semantic function of adjectives is to express a specific characteristic of objects, substances, or events. According to the semantic classification of Hentschel and Weydt (2013), adjectives are divided into three groups: relative

adjectives (which express a certain quality), absolute adjectives (whose ability for comparison is not based on the relation to other objects, but on membership in a certain class to which they belong), and dimensional adjectives (also called polar, because they express a specific scale of dimension).

According to the syntactic function, which is of one of main focuses of this paper, adjectives are divided according to their attributive, predicative, and adverbial use. In this paper, we focus on the predicative use of adjectives and present their function through examples from the daily newspaper "Westdeutsche Zeitung" (published in the period from 2009 to 2021). This is also the most circulated newspaper in North Rhine-Westphalia and is a very popular daily newspaper all over Germany.

2. Adjectives and their predicative use

Adjectives are an important part of the German language, and understanding their proper usage is essential for language learners in educational settings. Adjectives can be used to describe nouns and pronouns, and they can be placed either before or after the noun or pronoun that they are modifying. For example:
-"Der kleine Hund bellt laut." In this sentence, "kleine" and "laut" are adjectives that are used to describe the noun "Hund".
-"Ich habe ein neues Buch gekauft." In this sentence, "neues" is an adjective that is used to describe the noun "Buch".

In educational settings, it is important for language learners to understand how to use adjectives correctly in order to effectively communicate in the German language. This includes understanding the proper position of adjectives in a sentence and knowing which adjective endings to use depending on the gender, case, and number of the noun or pronoun being modified.
Predicativly used adjectives form the predicate in the sentence and are most often found in combination with the copula verb (*sein*), but also with other verbs such as: *werden, bleiben, scheinen, wirken*, etc. Predicativly used adjectives in the German language in combination with the aforementioned (copula) verbs are not inflected / do not change their form (examples 1, 2 and 3).
In comparison to other languages (for example, English, where, if a comparison is made, there is no change in the attributivly and predicativly used adjectives), such a change exists in the German language. Therefore, there are examples of this type in the German language, such as: *Ich lese ein interessantes Buch., Das Buch ist interessant.* These examples can be found in German and involve changes to the adjective that do not correspond to the English sentence, such as the given examples: *I am reading an interesting book. The book is very interesting.*

According to Helbig and Buscha (2011: 60,280), "predicates formed from *sein* and an adjective are called stative predicates (stative Prädikate) and are distinguished from what are known as processual predicates, which are formed with the auxiliary verb *werden"*. In addition to a few idiomatic phrases like *inne/gewahr* (examples 4 and 5), all predicatively used adjectives can form stative predicates, in contrast to processual predicates, which are not possible with some adjectives (**Er wird tot*). However, predicatively used adjectives can be declined. In this case, they must be used with an article (definite or indefinite). The use of the indefinite article is archaic and expresses archaism or a high style of expression. *Der Schatten dieser Esche ist wohl ein sparsamer (Stifter).* / Hentschel & Weydt, 2013: 189/. In our analyzed corpus, we

were unable to find an adjective used in this way, and so as an example to support this, we cite one from Hentschel & Weydt (2013).

Predicativly used adjectives can be used with the definite article in a colloquial style. They can be considered in this context as substantivized (nominalized) adjectives (examples: 6, 7, 8). The given examples show that the predicative comparative and superlative can appear in the inflected form with the definite article (9, 10, 11, 12). In generative grammar, adjectives are described with the characteristics/notations [+N, +V][1]. This would be explained by the fact that adjectives, according to their syntactic features, show characteristics of nouns and verbs. "Like nouns, they express characteristics of case, gender and number, and on the other hand, they express elements of agreement as the grammatical features of verbs that indicate the case" (Uriagareka, 1998: 147). In languages such as Russian, where there are no copula verbs, adjectives can only form the predicate in the sentence on their own (russ. *ja bol'na / ich krank*). In German, on the other hand, the adjective can be accompanied by a copula verb, which results in a predicative adjective construction (*Ich bin ein großer Mann*).

In this group of predicative uses of adjectives, we also find the use of predicative attributes, which refer to the subject in the sentence (example 13) or to the object in the sentence (examples 14 and 15).

(1) **WEZ13/JAN.03444 Westdeutsche Zeitung, 08.01.2013; Die Vision vom Zukunftspark**
Im Einzelnen gehört dazu etwa eine Sonnenwarte auf der bereits versiegelten Deponie Lüntenbeck. In einem Holzkreis sollen nach historischen Vorbildern wie Stonehenge der Lauf der Sonne und des Monds gemessen werden. "Nach Gesprächen mit Sponsoren sind wir optimistisch, dass dies in nächster Zeit in die Tat umgesetzt werden kann", erklärt Klaus Danielzig.

(2) WEZ13/JAN.07590 Westdeutsche Zeitung, 16.01.2013; Nach dem Großbrand: Neustart aus Ruinen
Aber er bleibt optimistisch. "Mitte Februar kommen Dachstuhl und die Dachhaut drauf. Das wird etwa sechs Wochen dauern." Danach gehe es weiter mit Innenausbau, Trockenbau, Sanitär- und Elektroanlagen sowie Heizungen, zählt van der Kooi auf. Ein Richtfest werde es nicht geben, sagt er lächelnd, "dafür aber ein richtig schönes Fest im Juni."

(3) **WEZ13/FEB.02637 Westdeutsche Zeitung, 05.02.2013; Der Skandal und die Doppelzüngigkeit**
Die Korruption in den Griff zu bekommen, ist ein ehrgeiziges Ziel. Und ein unrealistisches. Die Fußball-Verbände Fifa und Uefa gelten als korrupt, die Vergabe milliardenschwerer Weltmeisterschaften ist ebenso latent vom Vorwurf der Korruption begleitet wie die Vergabe Olympischer Spiele. Dass Sportverbände in der Lage sind, das Problem zu lösen, ist nicht zu erwarten. Dass die Justiz dazu in der Lage ist, scheint optimistisch.

(4) **WEZ16/JAN.03179 Westdeutsche Zeitung, 11.01.2016; Federleicht und doch stahlschwer**

[1] N-noun
V-verb

Zwei "Meister": Links im Bild der Bezirksbundesmeister Uli Loyen, rechts Tönisvorsts Bürgermeister Thomas Goßen. In einer Rede hatte Loyen kurz Goßens Amt inne.

(5) WEZ16/JUN.01598 Westdeutsche Zeitung, 04.06.2016; Gutes Handwerk, aber wenig Emotion im Spiel

Nun kam Lars Vogt zur letzten Veranstaltung des Klavierzyklus der Bayer-Werke dieser Spielzeit, um seine Haltung zu dieser epochalen Tonschöpfung mitzuteilen. Sein erstklassiger Ruf eilte ihm voraus, sodass der Mendelssohn Saal sehr gut besucht war. Und den Ohren wurde gewahr, dass er Bachs Werküberschrift "Clavier Übung" wörtlich nahm.

(6) WEZ15/JUL.08977 Westdeutsche Zeitung, 25.07.2015; ohne Titel

Fräulein Schmalzbrot und Billie Ballonfahrer sind Schwestern. Fräulein Schmalzbrot ist die große Schwester, Billie Ballonfahrer die kleine. Die beiden sind sehr verschieden und können sich oft gar nicht leiden. Doch meistens sind sie unzertrennlich. Sie können zum Beispiel gemeinsam im Garten zelten, Zaubergetränke brauen oder das Zimmer in eine Einhorn-Krankenstation verwandeln. An manchen Tagen kann eine Schwester aber auch ziemlich nerven. Zum Beispiel, wenn Billie der großen Schwester alles nachmacht.

(7) WEZ15/MAR.05764 Westdeutsche Zeitung, 16.03.2015; Das Ungereimte der Fotokunst

Im Folkwang-Museum tauschte man eine kleine "Universität Bochum" von Gursky gegen eine große. Florian Ebner: "War das richtig? Die kleine, alte Edition wird vermutlich am Ende mehr wert sein als die große. Nur muss man aufpassen, dass sie nicht ausbleicht." Soll das heißen, dass ein frühes Foto von Gursky qualitativ schlechter ist als der Inkjet-Ausdruck? Grieger-Chef Hoffmann sagt: "Das Inkjet-Verfahren hält heute 70 bis 100 Jahre. Aber diese Zahlen sind hochgerechnet. Ich kenne Bilder aus den 80er Jahren, die sehen topfit aus, weil sie richtig gelagert wurden."

(8) WEZ15/AUG.04689 Westdeutsche Zeitung, 14.08.2015; KFC holt Idrissou

Die medizinische Abteilung ist die alte. Die Mannschaftsärzte und Physiotherapeuten haben Boris eine einsatzfähige Mannschaft hingestellt

(9)WEZ14/MAI.03313 Westdeutsche Zeitung, 08.05.2014; An der Röhrenorgel lernen Kinder die Gesetze der Akustik

Bildung Die Miniphänomenta macht Station in der Parkschule. Wülfrath. Für Luca ist die Sache klar: "Diese Murmelbahn ist am schnellsten. Hier hat die Kugel Schwung", ist sich der Zehnjährige sicher. Obs stimmt? Die Kugelrallye muss es beweisen. Auf Kommando legen Luca, Silas (9) und Nike (6) ihre Murmeln auf die Schienen aus Metall - und das Rennen beginnt.

(10) WEZ20/MAR.07840 Westdeutsche Zeitung, 31.03.2020, S. 16; KFC Uerdingen: 13 Spielerverträge laufen im Sommer aus

Den 30-Jährigen begleitet eine beispiellose Verletzungsgeschichte seit seiner Ankunft in Krefeld im Sommer 2018. Khalil Mohamad durfte schon im Winter den Verein verlassen, blieb dann aber doch. Er war bereits ein Streichkandidat. Selim Gündüz, im Sommer hierher gewechselt, kam bisher nicht über eine Reservistenrolle hinaus - beklagte diese auch schon über die sozialen Netzwerke. In der Abwehr laufen die Verträge von Assani Lukimya, Christian Dorda und Alexander Bittroff aus. Alle

bringen viel Erfahrung mit. Dorda ist als linker Verteidiger unangetastet, Bittroff verdrängte Kevin Großkreutz auf rechts. Lukimya verteidigte bisher seinen Platz in der Innenverteidigung gegen Jan Kirchhoff oder Dominic Maroh. Die Abwehr ist sehr routiniert, aber auch nicht mehr die schnellste. In der Offensive endet das Leihgeschäft mit Franck Evina, der vom FC Bayern München im Sommer gekommen war, um in der 3.Liga Spielpraxis zu sammeln. Boubacar Barry ist ebenfalls nur auf Zeit beim KFC. Im Sommer müsste er laut Vertrag zum SV Werder Bremen zurück, wenn er nicht verpflichtet wird. In den ersten Wochen des Jahres 2020 konnte der 23-Jährige durchaus gefallen und ließ eine Entwicklung auf der rechten Außenbahn erkennen. Zudem ist er einer der Jüngeren im Kader, die das Kapitel Spitzenfußball noch vor sich wähnen, die nach oben wollen. Tom Boere kam als Notlösung für den Sturm im September aus Enschede.

(11) WEZ11/OKT.04269 Westdeutsche Zeitung, 10.10.2011; Die Besoldung der Professoren

Neu Die W-Besoldung, über die die Bundesverfassungsrichter (Foto) verhandeln, gilt seit 2005 für neu eingestellte Professoren. Das W steht für Wissenschaft. Es gibt drei Stufen, W3 ist die höchste. Es gibt ein festes Grundgehalt sowie variable Leistungsbezüge, die in dieser Form bisher nicht möglich waren. Dafür sind die Grundgehälter niedriger. Je nach Bundesland liegt das Grundgehalt bei einer W3-Professur zwischen 4700 und 5100 Euro, bei einer W2-Professur zwischen 3900 und 4100 Euro. Für besondere Leistungen in Forschung, Lehre und Selbstverwaltung gibt es Zulagen; gefragte oder verhandlungsstarke Forscher können durchaus Jahresgehälter von 100 000 Euro oder mehr aushandeln. Vor allem Nachwuchswissenschaftler müssen sich bisher oft mit dem Grundgehalt begnügen. Alt Ein Großteil der mehr als 35 000 Professoren in Deutschland wird derzeit noch nach dem alten Besoldungsrecht bezahlt, bei dem C4 die höchste Stufe ist.

(12)WEZ21/SEP.05405 Westdeutsche Zeitung, 22.09.2021, S. 1; Nebenkosten sind in NRW am höchsten *Nebenkosten sind in NRW am höchsten.*

(13)WEZ17/JAN.07171 Westdeutsche Zeitung, 25.01.2017; Die Gnade einer späten Geburt

Unbeschwert ist eine späte Schwangerschaft nicht immer. Die Befürchtung, dass es schwer sein könnte, erneut schwanger zu werden, hat sich bei Miriam S. nicht bewahrheitet. Dann ergab ein Test eine erhöhte Wahrscheinlichkeit für eine Behinderung. Die Tochter kam gesund zu Welt, aber die Ungewissheit war quälend. "Das ist definitiv ein Nachteil, weil man die ersten Monate in permanenter Angst verbringt."

(14)WEZ21/FEB.01644 Westdeutsche Zeitung, 06.02.2021, S. 35; Warum schlafen wir?

Wir alle verbringen unglaublich viel Zeit in unserem Leben mit Schlafen. Wenn du zwölf Jahre alt bist, hast du gut vier Jahre deines Lebens verschlafen. Das ist auch gut so, denn Schlaf ist für Kinder aus drei Gründen besonders wichtig. Er macht dich groß, es macht dich schlau und gesund. Im Schlaf kann sich der Körper um die Dinge kümmern, für die er keine Zeit hat, wenn du wach bist. Deine Muskeln müssen tagsüber arbeiten. Im Schlaf ruhen sie und erholen sich. Während du schläfst, produzierst du viel von einem Wachstumshormon. Bei Erwachsenen wird dieses Hormon zwar auch immer noch ausgeschüttet, aber hier wird es nur noch für das Wachsen der Haare

beispielsweise oder Fingernägel benötigt. Am Tag steht das Gehirn unter Strom. Alles, was du siehst, hörst, lernst und erlebst, musst du erst mal aufnehmen. All diese Informationen kommen in eine Art Zwischenlager, dem Hippocampus. Jede Nacht nutzt das Gehirn dann zum Aufräumen und sortiert diese Informationen.

(15) WEZ21/JUN.03247 Westdeutsche Zeitung, 14.06.2021, S. 28; Lachen trainiert den Körper

*Manche Leute lachen sehr laut, andere kichern leise.
Durch das schnelle Atmen kommt beim Lachen mehr Sauerstoff aus der Luft in unsere Lunge als sonst. Der Sauerstoff gelangt in unser Blut. Das Herz schlägt schneller und pumpt das Blut durch unseren Körper.
Lachen trainiert auch viele Muskeln, zum Beispiel im Bauch oder im Gesicht. Das kann sogar ähnliche Auswirkungen haben wie Leistungssport. Möglicherweise hattest du schon mal Muskelkater im Bauch, weil du viel gelacht hast. Manchmal ist das Lachen auch so stark, dass die Tränendrüsen angeregt werden. Vor lauter Lachen fängt man an zu weinen.
Lachen bringt aber nicht nur deinen Körper in Schwung, sondern macht dich auch glücklich. Denn beim Lachen werden im Gehirn Stoffe hergestellt, die glücklich machen. Diese sogenannten Glückshormone heißen in der Fachsprache Endorphine. Hormone sind Botenstoffe, die an sehr vielen Vorgängen in unserem Körper beteiligt sind.
Gleichzeitig werden weniger Stresshormone produziert, die sonst Sorgen und Unruhe bei uns auslösen können. "Es gibt ja das Sprichwort ‚Lachen befreit' Genau so ist es. Lachen befreit uns aus stressigen Situationen", erklärt Alexander Lerchl. Lachen ist also gesund. Es aktiviert deinen Körper und macht froh. Das ist wissenschaftlich bewiesen. Viel lachen und glücklich sein kann dabei helfen, gesünder und länger zu leben, sagt der Experte.*

3. Conclusion

This paper shed light on the use of adjectives in both written and spoken German and there is no doubt that adjectives as a variable word group play an important role in the language system. Today, despite numerous scientific works and grammars in this field, there are still many open questions about these words that need to be researched and further analyzed. From the examples, it can be concluded that predicatively used adjectives are often used in daily papers and magazines in combination with the copula verb (*sein*), but also with other verbs, such as: *werden, bleiben, scheinen*, etc. and, in principle, they are most often not changed. At the same time, there is a change in the form of adjectives when they are used attributively or predicatively (*ein interessantes Buch* vs. *das Buch ist interessant*). However, the examples show that predicatively used adjectives can be declined and can be used with the articles (a definite article in the colloquial style or briefly with an indefinite article expressing archaism). Some of the given examples also show that predicatively used adjectives can be used with both a definite and an indefinite article, which can be seen as a deviation from the standard language norms. Using adjectives predicatively can add detail and description to a sentence, and can help to clarify the meaning of the subject. It is an important part of constructing well-written and descriptive sentences in the German language.

Additionally, an attempt was made to explain the adjectives, particularly their syntactic function related to their predicative use and to connect the theory of this group of words with their specific sentence usage, directly taken from the German language electronic corpus (COSMAS). It is particularly interesting to analyze the syntactic characteristics that this group

of words performs. It is useful to conduct research on these lexemes and their influence on the process of learning German as a foreign language. Teachers in their daily instruction should pay more attention to the acquisition of adjectives, among other topics, from a linguistic perspective, in all their syntactic functions (attributive, predicative, and adverbial use).
In an educational setting, it is important for language learners to understand the proper usage of adjectives in this way, as it is a common construction in the German language. Understanding the predicative use of adjectives is essential for language learners in educational settings, as it helps them to correctly form sentences and communicate effectively in the German language. In the teaching process, adjectives can be an important part of vocabulary instruction. It can be helpful for students to learn about the different types of adjectives and how they are used in sentences. This can include learning about comparative and superlative adjectives, as well as irregular adjectives. Additionally, teaching students about the order of adjectives in a series can be helpful in improving their writing skills. By focusing on adjectives, teachers can help students expand their vocabulary and improve their language skills.

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THE ENTREPRENEURIAL LEARNING IN NORTH MACEDONIA

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Abstract

The information and communication technology is the fastest growing sector of the Macedonian education, and it plays an important role in the education and economy as a provider of jobs and generator of exports. The Republic of North Macedonia is implementing a series of measures to encourage employment and entrepreneurship, however, there are still many obstacles in practice, as well as missed opportunities.
One of the main constraints that have been identified is Entrepreneurial ability described as education levels, experience, knowledge or the human capital one possesses to spot different opportunities or to run a business.
Introduction of the subject of entrepreneurship in schools means that today all students, in both primary and secondary schools, are involved in entrepreneurship education. Previously, only those that attended special economic schools were included. Entrepreneurship as a subject is included in six regular courses in the ninth grade – where subjects such as physics, chemistry, biology, informatics, art and mathematics were revised to include topics in entrepreneurship.
Key words: *entrepreneurship education, entrepreneurship, education*

Introduction

Communication and information technologies - the IT sector, is the part of modern life that is experiencing rapid growth in the Republic of North Macedonia, as well as in the world.
According to this IT development, the need of the labor market should be taken, correlation of contents of formal education and synchronization of them.
There is a need to profile an entrepreneurial way of thinking and learning among young people. The set of skills that young people need to acquire through their education is becoming broader and moving away from classical subjects and classical teaching methods. In the future, this approach would make it easier for young people to decide professionally, prepare them to take initiatives and develop their own ideas.
The research conduct by the Institute of Sociological, Legal and Political Research, confirm the need and wish of the young population for entrepreneurial education, that will enable young population to assessed what is the deeper meaning of entrepreneurial behavior, action and capacity.[2]
This type of education could be incorporated in all levels of educational process, starting from primary education, till higher education, whit inclusion of entrepreneurial content in primary

[2] Institute of Sociological, Legal and Political Research, https://www.isppi.ukim.edu.mk

education. The education system should be continuously adapted so it can stimulate the creative entrepreneurial potential. Also, additional informal programs should be organized and implemented, such as leadership development, entrepreneurship development, in order to further stimulate young people to be open to the modern world and to be able to act.
At the end of 2012 year Ministry for Education and Science, initiated collaboration with European foundation for training, with goal drafting of the first Strategy for entrepreneurial learning in our count. [3]
The crucial points in this strategy are:

1. Creating a flexible curriculum, especially in areas related to entrepreneurial learning related to other subjects in formal and non-formal education. This challenge is a significant, because the main goal of the curriculum would be to succeed in preparing students for jobs that do not yet exist in the market. A flexible curriculum would avoid the high level of current generalization of the educational system, creating knowledge for everything and everyone, and would contribute to the creation of qualified persons who will be prepared for future jobs that do not exist today.
2. Developing high level of awareness in scholars and students, parents, teachers and all involved in the process of entrepreneurial learning. Scholars, students and teachers have important role in the process of entrepreneurial learning, but they have effect in the process of the implementation of the strategy. Because that, one of the challenges of this strategy to develop expected level of awareness, that will have supportive role in the process of entrepreneurial learning.
3. Creation programs for education of teachers which will reflect the real needs of today's and future markets. Teacher development is one of the most important pillars and therefore creating a teacher training program that will ensure successful implementation.

Entrepreneurial learning implies the creation and implementation of specific objectives for all levels of formal education, which would support a better integration of entrepreneurial learning in the curriculum itself, focused development of teachers and providing them with tools and materials that will enable the sharing of best practices related to entrepreneurship learning. The collaboration on institution level implies the creation and implementation of specific objectives for all levels of formal education, which would support a better integration of entrepreneurial learning in the curriculum itself, focused development of teachers and providing them with tools and materials that will enable the sharing of best practices related to entrepreneurship learning.
The development and promotion of entrepreneurship education are one of main goals of the policy of EU institutions and member states over the years. In the context of high unemployment of young people, economic crisis and the rapid changes associated with modern and complex knowledge-based societies and economies, transversal skills such as entrepreneurship are essential not only to shape the mindset of young people but also to acquire skills, knowledge and attitudes that are essential for developing consumer culture in Europe.
Some of the countries have been dedicated to encouraging entrepreneurship education for more than a decade, other countries have just started to apply it.[4]
In the Republic of North Macedonia in recent years, significant progress has been achieved in terms of entrepreneurial education in the three stages of education - primary, secondary and higher. This is also due to the several donor projects realized through the programs of USAID,

[3] МОН, (2014). Стратегија за претприемачко учење во Република Македонија. Скопје
[4] Entrepreneurship Education at School in Europe (Eurydice, 2012)
https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Publications:Entrepreneurship

GTZ, ADA, through which many trainings of the teaching staff for entrepreneurial learning were realized.[5]

Entrepreneurial learning in primary school

The primary education as beginning of formal education, especially in mandatory courses is one of priorities, because this manner develops higher awareness at students, since their early ages. These elements integrated in primary education will contribute to the creation of an entrepreneurial spirit among the country's youngest population. We can freely say that children in the beginning have innately that entrepreneurial spirit that is perceived through creativity at an early age, but further in formal education that spirit is lost as it moves to the next stages of learning. At the earliest age, students are not afraid of new things, they freely experiment and try. Therefore, primary education can play a crucial role in helping to develop these personal characteristics. Primary education provides many opportunities through the various teaching subjects in which the entrepreneurial learning process would be integrated.
The students easily can be stimulated to learn for local community, the needs of community and practical problems which should be solved. The children through game can be included in the world of adults, where they work and create. The primary school is ideal place where children can meet and talk with professionals from different fields. Beginning with subject oriented education, students can learn skills which they will need in future, as process of generation of ideas, bringing solutions and solving problems. One of the purposes of primary education is with moral-ethic aspect, students should become familiar with their own obligations towards the community and they will be competent to start activities that can lead to the improvement of different parts of life around the school itself, which will be directly initiated by the students and will be very useful not only for them, but also for the community in general.
This is finding of Lawrence Kohlberg, where as factors of moral development he justified empathy, support of logical thinking and rational argumentation, responsibility to the environment, which gives personal moral solution, cognitive-moral conflict (expressing one's own opinions about moral decisions) and participation in the environment. [6]
The entrepreneur learning in primary school should develop confidence, creativity, team work, responsibility, persistence and flexibility, exploratory and experimental activity, basic decision-making and problem-solving skills, social skills, cooperation and communication, awareness of the local community, skills in using different types of technology.

The so-called reflective practice, clearly setts the goals of one's own learning through different prisms, leads to open and flexible learning.[7] The teaching of classes and the interaction between teachers and students should be directed more and more towards the development of entrepreneurial ideas and the creation of future values. [8]

[5] Серафимова, М.-Стојчевска-Ѓорѓиоска, М. (2020). *Влијанието на едукацијата за претприемачи врз бизнисот и претприемништвото во Македонија*. Штип: 2ри Август

[6] Kohlberg, L. (1981). *Essays on Moral Development*, Vol. I: The Philosophy of Moral Development. San Francisco CA: Harper & Row.

[7] Englewood Cliffs, N.J., Prentice-Hall; Schön, D. A. (1987). *Едукација на лекар за размислување: Кон нов дизајн за настава и учење во професиите.* San Francisko: CA: Harper & Row.

[8] Jossey-Bass; Dewey, J. (1910). *Како ние мислиме*. Boston: D.C. Heath & Co

High school

The high school as second phase of educational process is one more field of strategy for entrepreneur education in Republic North Macedonia. In this part of educational development, students have need to continue to develop their entrepreneur skills and in this phase, expectation for project activity grows from the ideas, till implementation of entrepreneurial processes.
They can realize their entrepreneurial projects with the help of their schools or existing relevant associations and non-governmental organizations. Therefore mentioned activities can be realized alternatively, through direct engagement with the local community, in which the school will be involved. The goal of secondary education is for students to gain practical, immediate experience. Entrepreneurial skills can be promoted through all areas of the curriculum and subjects, as well as through special subjects related to entrepreneurship and innovation.
With entrepreneur learning in high school, students can acquire skills related to the development of concepts, problem solving, decision making, building networks and networking, discovering opportunities, practical work and simulating the innovation process or real working conditions, acquiring basic knowledge of economics, financial literacy, knowledge of marketing and sales, planning and making a plan, flexibility in action.

High education

The universities have primary role in the field of research. The high education can perform the role of the biggest supporter of the students' first entrepreneurial attempts through various opportunities for acquiring entrepreneurial skills, which correspond to their studies.
Acquiring entrepreneurial skills will enable practical transformation of the most innovative ideas. It is desirable to create supportive conditions for students (potential entrepreneurs) at universities by creating and supporting startup/business accelerators and incubators that will provide a high level of "know-how" to students (future new entrepreneurs), preparing them for securing of investments and helping them access financial grants and start-up/entrepreneurial capital.
Additionally, universities should work on building of student’s organizations with purpose development of entrepreneur culture and skills there, as base for the overall ecosystem of entrepreneurial learning in the country.
The entrepreneurial learing in this phase should be built on acquired skills and abilities and address the following: knowledge of national and global changes, following world trends, acquiring industry knowledge, skill in applying resources, productivity, identification and evaluation of business opportunities, developing and testing business models, as well as preparation of business plans, implementation of a prepared business plan and starting a business.[9]

Informal education

Informal education covers different types of education which are out of formal education. The formal education is always organized and structured with clear defined purposes. Informal learning doesn’t have goals as results of learning. Informal learning is practical learning and create knowledge through experience. The advantage is that this type of learning usually occurs on the initiative of the individual, but it is also the result of more organized activities, regardless

[9] Knapp, J. (2016). Sprint: *Solve big problems and test new ideas in just 5 days*. Simon & Schuster

of whether the activities themselves have learning goals or not. In some countries, the entire adult education sector falls under non-formal learning, while in others, adult education is formal. Non-formal learning gives some flexibility, this education is the best way to build opportunities for adults and to join them in the process of entrepreneurial learning.

It also includes people who want to expand their knowledge by learning on their own, for example during work or in their free time. Non-formal education should support the development of a number of competences that will allow individuals to increase their lifelong learning capacities, networking opportunities, utilization of resources, acquisition of knowledge about new technology, creation of new career opportunities, proactive approach to self-employment and economic independence.[10]

Methodology of the conducted research

The subject and purpose of the research conducted in 2021 was to perceive, conduct and analyze the needs, thoughts and knowledge of young people in the field of entrepreneurial learning. For this purpose, a standardized questionnaire was administered to a sample of the young population aged 15 to 30 (OOU Vlado Tasevski, Skopje, students from several secondary schools in Skopje, Ohrid and Bitola and students from the University of Information Science and Technology "St. Paul the Apostle", Ohrid).
99 responses were received from the conducted research.
The questionnaire included next segments:

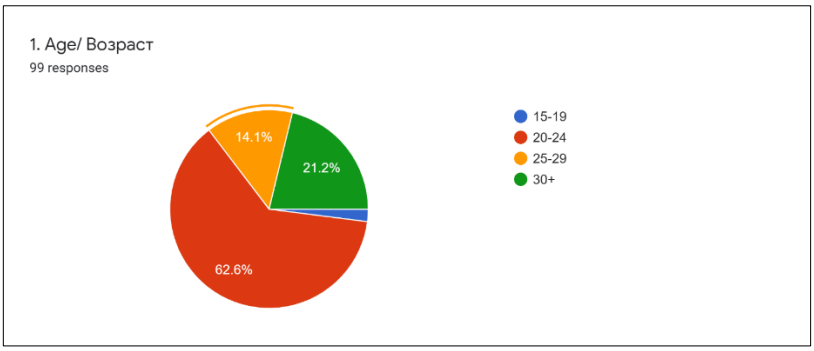
1. Age
2. Gender
3. Formal education
4. Work experience (for adult surveyed)
5. Training and courses
6. Would you be interested in participating in trainings and trainings for young people on innovative learning and entrepreneurship
7. What is their opinion and their suggestions for strengthening entrepreneurship among young people and innovation

The results and analyze

Answers from 99 respondents:

1. Age

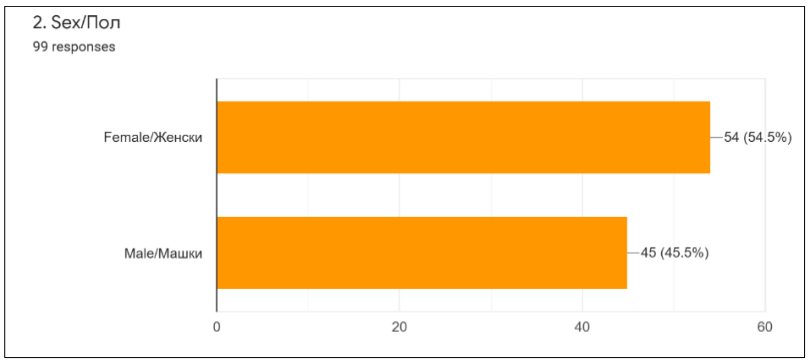
Young people from 15 to 30 years of age were interviewed.



[10] Blank, S., Dorf, B. (2012). *The Startup owner's manual: The Step by-Step guide for building a great company*. K & S RANCH

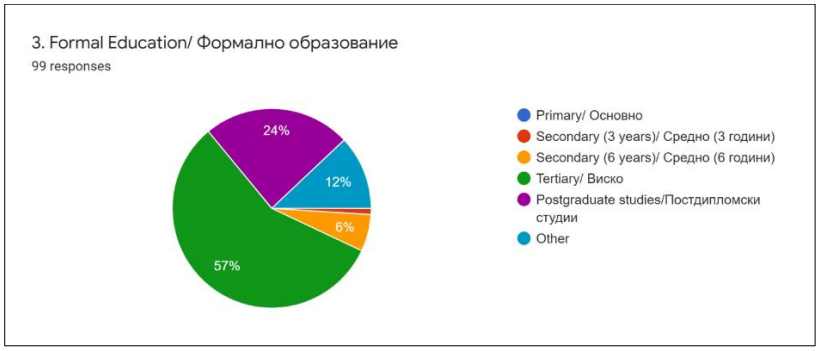
2. Gender

54, 5% women and 45,5 % men



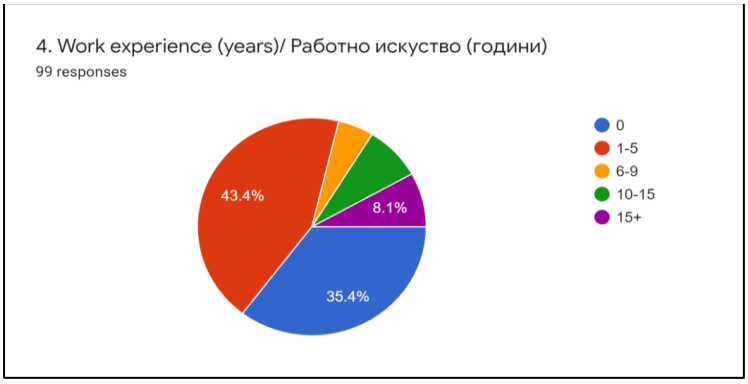
3. Formal education

The biggest part of the respondents is with high education or in the process of studding.



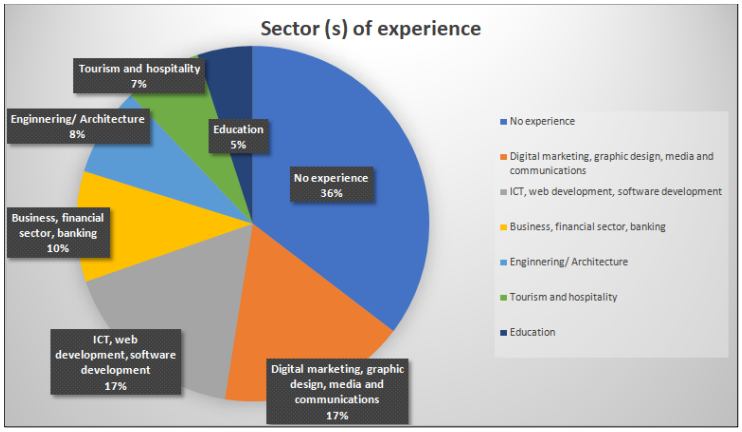
4. Work experience

On question for the work experience dedicated to adult respondents, about 80% declared that they have no or little work experience. This is a negative factor, which means that these young people did not have practical teaching or any kind of educational training during their studies. There should be more opportunities in formal and non-formal education, which will make it easier for young people to experiment with innovative ideas and employability at a younger age.



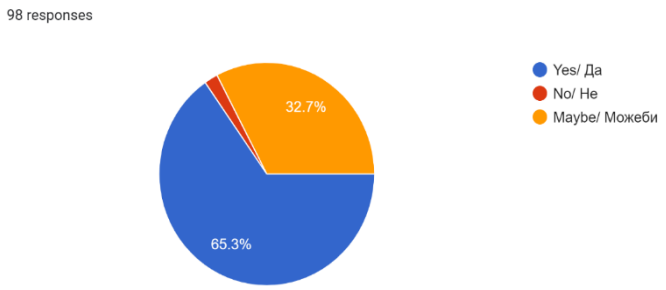
5. Trainings and courses

Respondents that have experience with passed educational trainings, pointed out that trainings from ICT, web design, software development and areas such as graphic design, digital marketing, media and communications dominate. This is followed by tourism, engineering and finance.



6. Would you be interested in participating in trainings and trainings for young people on innovative learning and entrepreneurship?

On questionaire 65% declared that they would like to participate in various activities related to this type of learning.



7. Would you be interested in participating in trainings and trainings for young people on innovative learning and entrepreneurship?

The summarized answers related to the respondents' contribution and suggestions on what activities can be implemented to stimulate entrepreneurship are as follows:

- Entrepreneurial trainings, courses, seminars;
- Mentorship by experienced business leaders;
- Sharing of knowledge from successful entrepreneurs in the form of inspirational speeches, lectures and workshops;
- Networking events where young people can meet established leaders;

- Greater visibility of entrepreneurial activities through more aggressive PR activities to create awareness.

In short, the following things can be seen from the survey:

- ICT activities and skills prevail;
- It is necessary to further develop entrepreneurial skills considering the lack of content and subjects in formal education;
- Most of the young people would like to follow trainings that will help them improve their entrepreneurial skills;
- Also, a significant number of ICT graduates would like to start their own business. However, ICT-focused universities do not offer, in a more organized form, a business and entrepreneurship program.
- More entrepreneurial skills training, workshops, seminars, mentoring and networking are needed. [11]

Conclusion

The entrepreneurial learning is field that cover many different subjects and disciplines, there exist wide range of stakeholders. All of them have, and will have, important role in the implementation of the strategy. For the successful implementation of this goal, it is important to have a stable framework for coordination and cooperation of all parties involved in the Entrepreneurial Learning Strategy and they are the ones that will enable adequate and appropriate follow-up activities.

According to the rapid global social changes, the urgency of adapting, harmonizing and creating contents and goals in education that will correspond to these changes has been imposed. Entrepreneurial learning is not just about learning business skills. This type of learning should be understood in a broader sense, which implies empowering young people and building certain managerial competencies that will give them a solid preparation for the future.

Entrepreneurial learning develops individual abilities and capabilities to turn ideas into action. It includes creativity, innovation and risk-taking, but at the same time include the ability to plan and manage projects in the direction of achieving the set goals. The role of the teacher is crucial in stimulating enthusiasm among students.

Local government have important role in connection of educational institutions with local organziations and companies, with goal organization of practical projects for their students. Parents whose task it is to educate and encourage their children in the spirit of entrepreneurship. Let's hope that the new content and skills will enable teachers to transfer knowledge about entrepreneurship in a way that builds and strengthens their entrepreneurial abilities. The goal will be achieved if young people see ways to realize their own interests, ideas and goals. The entrepreneurial spirit builds the future, and education and teachers are the ones who should encourage and enable the development of entrepreneurial abilities among young people.

[11] Avnimelech, J. (2019). *Mentorship Processes within Startup Accelerators*. Article in SSRN Electronic Journal

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DIGITALIZATION OF HIGHER EDUCATION IN REPUBLIC OF NORTH MACEDONIA

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Abstract

As digitization becomes more prevalent in the field of education, it is transforming the way we approach traditional teaching methods and redefining the role of educators. Electronic and online learning resources facilitate educational processes, enable time savings and contribute to the sustainability of knowledge. In this sense, with digitization in education, students are expected to be active participants in the educational process. Depending on the development of technology and technological capabilities, the application of e-learning is being strengthened in all countries worldwide, which means that online teaching is being implemented in the educational system at all levels.

To effectively implement digitization in the educational process, it is crucial to develop digital skills among students and educators. These skills include competencies for coding and software creation, as well as the ability to effectively use digital devices, computers and the internet. By acquiring these digital skills, individuals can fully utilize the benefits of digitization in education and contribute to a more efficient and effective learning experience.

Recognizing this, the purpose of this paper is to emphasize the importance of digital transformation in education at all levels, with a focus on digital transformation in higher education, as it can enable more efficient use of resources and help the RN Macedonia keep up with technological advancements, ultimately leading to a global competitive advantage. The paper analyzes the process of digital transformation in higher education in Macedonia, highlighting the importance of digital transformation through positive examples from several leading countries in this process. Additionally, the paper addresses concerns that have arisen as a result of the digital transformation of higher education, including digital learning models, digital teaching, and the digital university model and provides suggestions for more effective digital transformation in higher education.

Key words: Higher Education, Digitalization, Digital transformation

1. Introduction

The most important characteristic that makes the 21st century different from previous ones is the significant development of technology and the rapid transformations it brings. In the past, transformations were slow, cumulative and arithmetic. However, in this century, technology is

advancing at a dizzying pace. One of the dimensions of the transformation that is happening in this time is digitization.

If we examine the transformation of technology at a sectoral level, we will see that innovations are mostly transferred in the education sector. The Organization for Economic Cooperation and Development (OECD) regularly reports on the use of innovation in education and training. With digitization, resources in educational institutions (schools, universities, training centers, educational publishers, etc.) are changing, e-learning opportunities are increasing, and different approaches are being developed in postgraduate education. The OECD's Innovation Measurement Report is very important in terms of showing changes in the classroom and educational institutions, how teachers are developing pedagogical resources in the digital age, and the effects of innovations on educational outcomes.

Therefore, special attention will be paid to the development of digital skills as one of the main factors for accelerating economic growth. Thus, the country will continue to focus on developing and implementing new technologies, encouraging innovation in relation to digital transformation in education, and accelerating the development of digital skills during the period 2023-2027. The overall assessment in all areas of digital skills according to the ITU15 report (Image 1) shows that the majority of respondents have a basic level of digital skills (55.4%), followed by 38.6% who have above-basic level of digital skills. Only 6.0% of respondents have a lower level of digital skills, specifically low (4.5%) or no skills (1.5%) in the digital domain.

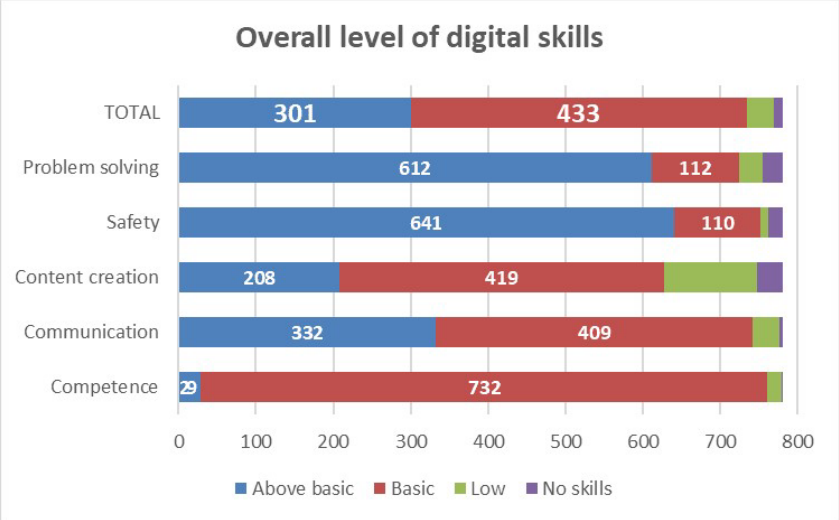


Image 1.Overll level of digital skills in RN Macedonia

2. Literature review

The digital transformation of education in the United States of America (USA), within the framework of the National Education Technology Plan (NETP), with the development of 21st-century technology, led to a change in the model of lifelong learning, which previously involved strict adherence to the learning process through schools. Gradually, a new educational approach began to be applied, which does not place the teacher at the center as the primary source of knowledge.

In that sense, in order to achieve digital transformation in education, it is necessary to accept the fact that learning is a lifelong process that is not limited to the time spent in school or in the classroom, and the application of technology provides a much wider and more flexible tool for

learning than what is offered in classrooms, connecting all actors in education (teachers, parents, experts, mentors). In this sense, personalized, simulated educational programs will help students solve complex problems. Additionally, experts point out that lectures on history and natural sciences that are delivered with the help of virtual methods will make the learning processes of students more lasting. Hence, some of the goals for digital transformation of the US Department of Education, which offer a broader educational framework fueled by technology, are:

- Development and use of learning resources and sources that utilize the flexibility and power of technology to reach all students anywhere and at any time;
- Simulations, environments, and virtual games that can be used to capture students' attention and enable their greater motivation for learning and solving complex problems in the learning process;
- Use of technologies and social networking platforms to create communities within the school, among the teaching staff, students, and enable exchange of knowledge and experiences, as well as career development;
- Each student and teacher should have at least one device for accessing the internet and appropriate software, resources for research, communication, and creating multimedia content for use inside and outside the classroom.

The countries that have successfully implemented digital transformation in education have climbed to the top of global educational performance assessments such as PISA. For example, in India, one of the countries that has successfully achieved digital transformation in education, more than 80 million hours of content have been created for informal, formal, undergraduate, and postgraduate education, and this educational content is provided free of charge. Furthermore, in Singapore, which is renowned for its impressive results in PISA, information and communication technology infrastructures for teachers and schools are continuously being developed. As part of the digital transformation in education, e-learning platforms for learning Malay, Mandarin, and Tamil, the country's mother tongues, have been established. Access to digital educational content is facilitated by providing free internet throughout the country in Taiwan. In this sense, according to projections for global education transformation from 2015 to 2035, the following digital innovations are expected in educational systems by 2035: Globalization in education: the development of global learning platforms; Personalization: collective transition to lifelong individual learning; Collective learning: the rise of communities as the dominant form of education; Playful learning: learning through games as the dominant form of education and work; and NeuroWeb: Communication from neural devices to connected brains (Luksha & Peskov, 2015).

2.1. The development of digital transformation in higher education

The global world is now digitizing. Digitization can also be considered a continuation of the globalization process. With Industry 4.0, interaction with technology has increased and the reflection of this interaction in the field of education/training was inevitable. The role of education began to be defined as providing a flexible and qualified workforce needed for the economy. It is argued that the qualified human resources that Industry 4.0 requires can only be provided by universities that have completed their digital transformation.

Computer science emerged as a scientific discipline in the 1960s. During these years, efforts to digitize education and higher education began in Japan. The Japanese government first started the transformation by establishing a network system on campuses. In 1986, Japanese

private companies began using the internet. By the 1990s, the internet was being used in Japanese universities. The transfer of printed resources to the virtual environment in the process of digital transformation was one of the first achievements. The Japanese government made an important step in digital transformation by making printed articles and educational resources available to the scientific community in digital form. By the 2000s, it was noted that more than 30% of Japanese citizens had acquired their own computer (Funamori, 2016).

PLATO, which is a computer educational application at the University of Illinois in the 1960s, was accepted as the beginning of the use of information technology in scientific studies. This program is also considered as the basis of online learning platforms. With the widespread use of computers in the 1980s, it became common to conduct educational activities through the use of these technological innovations. The introduction of modern computers in the 1970s and their use in the 1980s was one of the events that accelerated the process of digitization in education. However, until not too long ago, only a limited number of universities and scientific centers had access to computers. With the sale of computers at more affordable prices, higher education institutions were able to access computers. The first benefits of digital transformation in higher education were that it allowed academic staff to write their papers more easily and quickly, and to communicate with each other through email. Over time, the transfer of academic publications to the virtual environment was also a factor that facilitated access to information and expanded knowledge. In this context, electronic academic journals can be considered as one of the first fruits of the digital transformation of higher education. Electronic academic publications have enabled the sharing of information on a global level. The higher education system in the world underwent radical reforms after the 1990s. One of the most important steps for harmonizing the higher education system is the Bologna Process (Funamori, 2016).

One of the important phases of digital transformation in higher education on a global scale is the definition of the impact factor by Eugene Garfield (2005) and the ranking of articles in academic journals based on the number of citations. The inclusion of academic journals in indexes also facilitated access to scientific information. The digital transformation of universities has made it easier for them to adapt to innovations. Universities began to have standardized content and equivalent curricula. Equivalency enabled comparison between universities and increased competition. Increased competition among universities has forced universities to use all types of technological innovations that can provide them with a competitive advantage.

The steps that universities need to take in order for digital transformation to be successful are (PwC, 2018 annual report):

- Raising awareness of digital transformation in all units within higher education institutions;
- Linking digital transformation with the vision and strategies of the university;
- Allocating resources and funds to encourage talented digital innovators;
- Developing a design approach based on the needs of the university and the surrounding environment it addresses.

The goal of digital transformation in higher education is to redefine education/teaching services and to redevelop operational processes (Sandkuhl & Lehmann, 2017). Three different transformations have been defined to achieve this goal:

- Service-focused transformation: The focus is on changing and redefining the services offered;
- Operations-focused transformation: Targeting new and improved digital processes to redefine the services provided;

- Combination of services and operations: Aiming for an integrated transformation in terms of both services and operations.

Although the US and Japan completed their digital transformation in education and higher education very early, there are still many developed and developing countries that have not yet completed their digital transformation. One of these countries is China. The Chinese Ministry of Education set the goal of achieving digital transformation in education for the period 2010-2020. In accordance with this goal, objectives were established such as the expansion of broadband internet applications, increasing internet speed, establishing broadband internet infrastructure in every school, providing online study rooms for everyone, and establishing an educational resource platform for public services. These objectives aim to achieve digital transformation in 530 thousand educational institutions and a total of 270 million students in China. The progress of China's digital transformation in education and higher education has brought this country to a respectable position in software and e-commerce platforms. The fruits of the digital transformation in China bore fruit in a very short time. Online education companies and online education platforms became quite common in China, and since then an average of 2.6 online education companies have been established on a daily basis. Additionally, since 2015, nine online training programs have been published daily (Huang, 2015). In order to ensure digital transformation in higher education in China, many online educational portals have been launched, and online courses in undergraduate and graduate subjects, especially in Chinese, have been prepared and shared for free.

99.4% of students who attend schools in Germany have computers at home and spend an average of 144 minutes on educational/training activities using technology on weekdays. The time spent learning with technological tools at school is 14 minutes. It has been found that more than 99% of students in higher education in Germany have access to the internet and are well-equipped with digital devices at home (Bond et al., 2018).

Russia initiated a movement for digital transformation in education during the period of 2013-2020 (Rozhkova et al., 2019). Within this transformation project, goals were established such as the modernization of the education system and the transformation of educational programs into digital needs. Additionally, the goal is to implement digital transformation in the economy within the framework of the "Development of the Strategy for an Information Society in the Russian Federation 2017-2030." Different models for digital transformation of higher education institutions in Russia were developed in 2019, and special resources were allocated for this purpose. In accordance with the goal of a digital university, objectives such as establishing information systems for managing the university in Russia, providing online support during the educational process, preparing courses online and in accordance with augmented reality, and providing personalized educational experiences through the use of established artificial intelligence were set. The digital transformation of universities in Russia is planned to be realized by 2024 (Rozhkova et al., 2019).

2.2. The university reforms and the era of University 4.0

The reforms implemented at universities cannot be evaluated independently of technological innovations. The function, purpose, and role of universities have changed from the Middle Ages to the present day. Today's universities are referred to as University 4.0. The mission of University 4.0 is to train employees according to the needs of the era in which we live.

This includes, University 1.0 - Corporate University; University 2.0 - Research University; University 3.0 - Innovative University; and University 4.0 - Digital University.

2.2.1. University 4.0 (Digital University)

The latest stage in the evolution of universities is the subject of this seminar, that is, the concept of the digital university, also known as University 4.0. Essentially, the process of the digital university is still considered a blueprint process. This concept is related to digital platforms and the development of analytical applications and the new industrial revolution. University 4.0 should not be evaluated independently of Industry 4.0. In this time when universities began to digitize, educational centers, teaching programs, and educational resources are changing. The huge changes and development in technology have made it necessary for universities to adapt to this era. In the era of University 4.0, the physical space disappears, educational resources become more accessible, and virtual classrooms begin to take shape. In University 4.0, the old methods of storing, processing, and finding information are changing. Even the physical existence of libraries has become debatable.

The University 4.0 is based on interaction in physical, digital, and biological fields (Schwab, 2017). Higher education is moving towards cloud, personalized, and distance learning. Periodic education and training are being replaced by the concept of lifelong learning.

The University 4.0 model contributes to raising the quality of higher education institutions, producing skilled professionals according to the needs of the labor market, and influencing the economic and social development of society.

The University 4.0 model includes (Bilyalova et al., 2019):

- Development of a new business model (matrix structure, working with new markets);
- Formation of new values and attitudes;
- International cooperation;
- Promotion of entrepreneurship;
- Establishment of e-learning infrastructure and information technology.

The University 4.0 represents a new university structure. In the process of University 4.0, continuous opportunities for education are offered through various channels, whether traditional, multiple or online, short-term educational programs for acquiring various professional qualifications, development of skills for managing student careers, and continuous communication between industry and students (Dewar, 2017).

3. The model of a digital university

The concept of a digital university refers to the use of modern digital technologies and the restructuring of previous educational processes. There are many models in the world for realizing the digital transformation of universities. The common goal of these models is to design universities as part of an integrated global academic network. The first phase of digitization of higher education institutions involves involving internal and external stakeholders of the university and developing the curriculum according to the needs of these affected parties. Applications for wireless networks within universities, the establishment of online libraries, and access to international databases are some of the necessary steps for the digital transformation of universities.

The concept of a digital university is also considered a tool for strategic development. For digital universities, "literacy" is considered information literacy. There are many models and

approaches being discussed in the world on how digital universities should be. One of these approaches and models, and the "most reasonable" one, is that of McNell et al. (2013).

Digital participation refers to digitization that contributes to the teaching processes at universities. Information literacy is one of the outcomes of digital participation. It is also important to organize learning environments in a way that enables the development of information literacy. It is accepted that these elements have an impact on the design of curricula and models.

Employability, creativity, degree of digital literacy, and digital skills of graduates from universities and postgraduates are of great importance in the era of University 4.0. The development of these skills and competencies will be possible not only through updating learning environments but also through developing curricula and pedagogical approaches suitable for this era.

The transfer of knowledge resources into the virtual environment also brings into question the role and existence of libraries in higher education. Although the general trend supports the use of internet resources, a study including the views of academics on this topic provides impressive data. According to the research, 80% of the members of the faculty of humanities, 70% of social sciences, 80% of sociology faculties, 30% of economists, and 60% of scientists have the opinion that the role of libraries should continue (Housewright, 2008).

4. Models of learning that arise as a result of digital transformation

Technological changes and developments, the rise of social media applications, the increased use of multimedia content, the creation of interactive content, and faster and easier sharing are changing the models of learning in higher education institutions. The goals of education and knowledge direction, which Vermont (2007) called "process-oriented education", are also changing, and the expectations of the teaching staff in higher education institutions are changing as a result of digital transformation. As a result of this digital transformation, the expectations of the teaching staff are becoming more complex, and they are expected to structure their teaching processes according to the needs of this new era.

The learning models are also updated with digital transformation in the scientific teaching process. The learning models that emerge as a result of digitization can be explained in the following way (Davidson & Goldberg, 2009):

- Hybrid learning model: A learning model that takes place both in the classroom and on online platforms;
- Rotation model: A model that allows students to perform their learning processes at their own pace with one-on-one lectures in the classroom environment and includes online learning support;
- Flexible model: A model in which a large part of the training program is carried out online and teachers can respond immediately online when needed;
- Individual Model: A model in which one or more lectures are offered online according to students' needs, as well as learning in the classroom;
- Online-laboratory model: A model based on teaching all programs on online platforms, but allowing students to call on their teachers when they have difficulty understanding;
- Enriched virtual model: A model where students are not physically present in the school environment and education is provided by an online platform;

- Connected learning model: A model that deals with what students learn, emphasizing the momentary or non-instantaneous learning processes;
- Networked learning: A learning model that focuses on the network dimension;
- Social learning model: A learning model aimed at acquiring competence for social groups;
- Situational learning model: A learning model based on games and collaboration;
- Adaptive learning model: This is an adaptive learning model based on the student's needs.
Together with the digitization of the scientific and educational process, the expectations for the skills that students are expected to acquire from higher education institutions have also changed. The skills with which students can gain a competitive advantage if acquired in higher education institutions can be listed as follows: communication skills, self-learning skills, principles of ethics and responsibility, teamwork, flexibility, critical thinking, digital problem-solving skills, and skills for managing digital documents.

5. Digital transformation of higher education in RN Macedonia

According to the Global Digital Report for 2019, the global internet usage rate was reported as 57%. In the Republic of North Macedonia, the internet usage rate is over 80%, while the Ministry of Information Society and Administration's program for the development of the information society sets a goal of over 80% of the population in RNM. This impressive statistic reveals that the internet usage rate among RNM citizens is quite high and above the global average, which means that 3 out of 4 Macedonian citizens are internet users. The increase in internet usage and investments in infrastructure aimed at expanding internet access have enabled higher education institutions to initiate digital transformation to avoid falling behind the times.

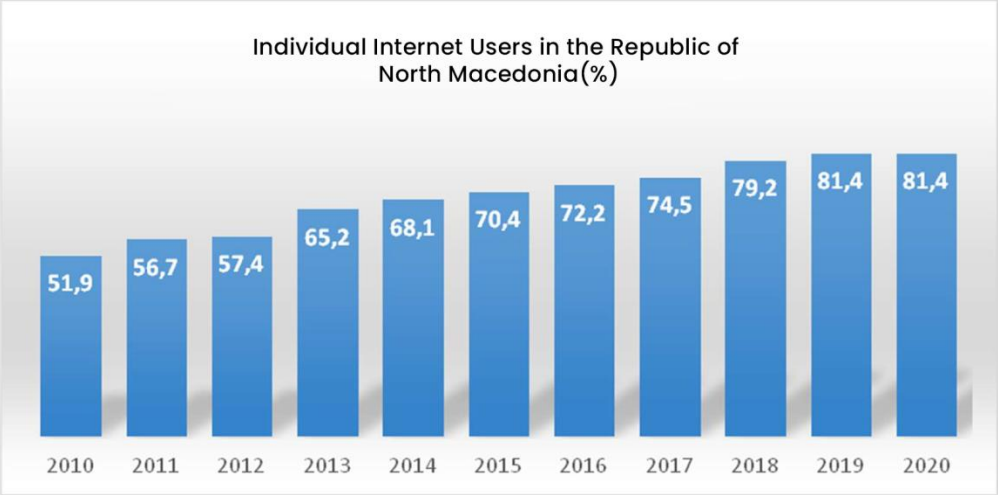


Image 2. Individual internet users in RN Macedonia

According to the Macedonian Digital Compass, the digital transformation of North Macedonia is based on 4 main pillars: Digital Connectivity and ICT Infrastructure; Digital Skills; Digital Government; and Digitalization of Businesses, ICT Enablers and Digital Innovations.

The process of digital transformation of higher education institutions in the Republic of North Macedonia is being realized at an accelerated pace. There are public, public-private and private universities that have significantly implemented this process. Additionally, the Ministry of Education conducts a large part of its services and communication digitally. In 2022, the

process of awarding student scholarships and meals has been completely digitized. Similarly, the procedure for the recognition and equivalence of foreign education is fully digitized.

5.1. Digital transformation of Goce Delchev University - Shtip

The electronic index of the Goce Delchev University in Shtip is an information system primarily intended for the complete e-administration of students from all study cycles at the university:

- First cycle of studies;
- Second cycle of studies, and
- Third cycle of studies.

With the help of the system, the institution has a complete insight into the entire course of studying of students in any faculty/direction/city/study cycle. Through this platform, students can perform all necessary activities during their studies:

- Enrollment in a semester;
- Verification of a semester;
- Registration for exams;
- Registration for project tasks;
- Electronic payment of all necessary expenses for studying;
- Electronic processing of all types of requests from students to the institution;
- Automated procedures for graduation, master's and doctoral studies;
- Monitoring of the electronic bulletin board, and
- Electronic consultations.

The teaching staff carries out the activities for which it is responsible in the part of student administration:

- Electronic evaluation;
- Evaluation of commission applications (with administration of the commissions);
- Verification (in process) and evaluation of completed exam/diploma work/master's thesis/doctoral thesis;
- Administration of electronic notices;
- Insight into the status of registered students for any form of examination, and
- Insight into engagement in all forms, years of engagement and study cycles.

The administrative staff has responsibilities in the following areas:

- Data administration;
- Generating necessary documents, and
- Supporting students in entirety.

Around this system, the following gravitate: Module for enrollment of students (first cycle); Human resources module, and Support module for electronic index users (internal use).

The sector for electronic index is responsible for development, technical and part of the user support, whose responsibility is the functioning of the platform 24/7.

5.2. Digital transformation of University "St. Cyril and Methodius" (UKIM)

The digitalization of UKIM is a process that has a long history and is experiencing particular development during and after the COVID-19 pandemic. The activities in this domain are directed towards:

- Establishing, maintaining, developing and advancing their own communication infrastructure as the basis for implementing computer-based services. Within this activity, its own optical data network has been developed with fast links (1 and 10 Gbps), connecting the largest number of units at the University in the so-called University Computer Network. The University Computer Network with a 1Gbps connection is connected to the Macedonian Academic Research Network - MARNet. In order to improve the reliability and bandwidth of the University Computer Network, i.e. resistance to interruptions and failures, reserve data links are being established in the phase of implementation through the purchase of commercial optical links, with which data rings will be formed, so that a break in any point of the ring will not mean unavailability of the vertices in the ring.
- Development and implementation of numerous computer-based services based on the University Computer Network as infrastructure. These services are in function of supporting the teaching process of units, interaction of students, teaching staff, faculty and institute administration, and external entities. Additionally, such services have been developed to support the work of the university administration, i.e. as support for the realization of certain rights of the students.

In the past decade, UKIM developed a central student information system known as iKnow system as the basis for electronic student records. The system tracks the student from the moment of their enrollment at the university until graduation. In that sense, it contains subsystems for conducting enrollments, i.e. conducting competitions within which candidates apply, submit the necessary documentation in electronic form, which is validated by faculty admission committees and finally ranked. Based on the output ranking lists, candidates who are within the quotas are enrolled and their personal data is automatically entered into the main module of the system, i.e. the electronic student record is formed. Here, the progress of the student during their studies is recorded through the evidence of the enrolled semesters with subjects and credits. The system contains information on study programs with accreditations, related subjects, and the professors who teach the courses. The faculty administration is required to activate the exam sessions according to the university calendar, where students electronically apply for taking exams, and where professors record the results of the exams. This represents the electronic student index. Finally, through a separate subsystem, support is provided for the graduation process. The iKnow system fully includes the second cycle of studies, and recently, adjustments to the system to support the third cycle of studies are being made. In addition, the adaptation of the system is in the final phase, which will enable electronic cashless payment of student obligations arising from the study process with electronic payment cards.

As an additional aid in conducting classes, the iLearn system is also used, which is a digital distance learning platform and an implementation of the well-known Moodle platform. iLearn is a system that recognizes two components: a digital learning support platform as a means of "offline" work for students, and a video conferencing system for conducting distance learning and real-time exams. Within the first system, setting up and accessing materials, multimedia learning resources, homework and activities, testing, grading, monitoring student progress, and evaluating teaching through questionnaires, among other things, are provided. Microsoft Teams was chosen as the video conferencing platform within the second component, which the University currently provides for free to its members.

The University also has a digital repository of documents (https://repository.ukim.mk) in which the current and past scientific and artistic production of the University is archived. The main goal of the repository, called the Treasury of Scientific and Artistic Works of UKIM, is to enable centralized storage of information about the collection of scientific and artistic works of the teaching and scientific-research staff of the University, together with their additional (meta) data, which enables better organization, processing, exchange and search, and at the same time will enable an increase in the level of visibility of the University. Recently, doctoral theses, as well as other documentation arising from the process of studying for doctoral candidates from UKIM, have also been archived in the Treasury. In addition, as part of a separate project, past doctoral theses of doctors of science who graduated from UKIM and whose theses are available in paper form are being digitized.

For easier access to university IT services that require user authentication as a precondition for access, a Single Sign-On system has been developed and implemented at the University. This system enables every employee and student at the University to be guaranteed access with a single username and password to multiple electronic services at the University (iKnow system, iLearn system, the Repository, Eduroam - WiFi network available at some faculties as well as almost all European universities, and specific electronic services at some technical faculties).

Finally, it should be noted that this brief overview only covers the digitization activities organized and implemented by the University, and does not include the digitization processes carried out independently by its constituent units, especially those units that cultivate disciplines in the technical sciences.

5.3. Digital transformation of "St. Kliment Ohridski" University – Bitola (UKLO)

At the "St. Kliment Ohridski" University – Bitola the process of digitization has been introduced in the scientific-educational process, as well as in communication and providing services to students. The COVID-19 pandemic had a significant impact on education, which led to a rapid adoption of digital technologies in the university and administration of UKLO. Like many other universities, UKLO had to quickly transition to online learning in order to continue providing education for its students while adhering to public health guidelines.

Here are a few examples of the digitization process implemented at UKLO:

Student's file:

- Enrollments for candidates for university admission (first and second cycle);
- Semester enrollment;
- Exam registration;
- Requests and issuance of certificates and documents;
- Self-evaluation of the university through student surveys related to study programs and teaching staff;
- Mobility;
- Payment of obligations (semesters, exams, other obligations and debts).

Professors and students services:

- Entry of grades and exams/quizzes;
- Reports for exams/quizzes;
- Communication with selected group of students based on various parameters.

Education:

- Online/hybrid teaching through Meet and Teams;
- Classroom (communication, assignments, learning materials);
- Moodle (repository of learning materials).

As it is stated above, just like in UKIM, at UKLO there is active electronic student index on the platform Iknow where students electronically apply for exams, and where results of the students' exams are recorded by the professors. The iKnow system includes the second and third cycle of studies. Also, the system enables electronic cashless payment of students.

The University has digital repository called Eprints Repository, on the given website http://eprints.uklo.edu.mk/ where, current and past scientific and artistic production of the University is archived.

5.4. Digital transformation of the University of Information Science and Technology "St. Apostle Paul" - Ohrid

As part of the digital transformation of the University of Information Science and Technology "St. Apostle Paul" in Ohrid, (UIST) the Moodle Learning Management system is used for teaching implementation, which the University has been using since its inception. This enables the exchange of learning materials (presentations posted by subject teachers), homework assignments, project tasks, quizzes, tests, etc.

Since 2020, the University has also been using the Microsoft 365 platform, which enables online teaching, meetings (appointments) between students and employees. This platform also enables the exchange of learning materials, homework and project tasks, testing students' knowledge, etc.

At UIST, an electronic student record system has been implemented, tracking students' progress, renting books from the UIST library, electronic financial and material accounting, and a web module for enrolling new students. These modules currently work at the level of desktop applications (except for the module for enrolling new students) and do not allow the use of distance learning services by students. It is necessary to upgrade the current software or implement new software so that these services would be available to students in electronic form, from a distance.

5.5. Digital transformation at Mother Teresa University (MTU)

MTU provided education for its students while facing the COVID-19 pandemic and was taking care of public health guidelines like the other public universities.

Here are a few examples of the digitization process implemented at Mother Teresa University today:

- Online courses: MTU uses Google Classroom as a learning management system to provide its students with access to online content. The university expanded its offerings of online courses and moved existing courses online to continue providing education during the pandemic and beyond. This allowed students to continue their studies remotely and allowed Mother Teresa University to reach a wider audience;
- Virtual classrooms: Universities have also adopted virtual classrooms and other online collaboration tools to enable students to communicate with their professors and classmates in

a virtual environment. This includes the use of platforms such as Zoom, Google Meet, and Microsoft Teams for synchronous and asynchronous learning;
- Digital resources: Universities have created digital resources, such as digital libraries with access to e-books, online articles, and journals, more widely avai3lable to students in order to facilitate learning over the Internet. This has enabled students to access course materials and other resources remotely;
- Digital library: EBSCO and other libraries;
- COURSERA: Mother Teresa University has opened an account with COURSERA, which offers students free access to most of their content during and after the pandemic, with only one course per academic year;
- Blended learning: Universities have implemented a blended learning model, which combines online and in-person instruction. This allows the university to offer a combination of online and in-person learning, depending on the needs and preferences of the students;
- Online exam registration has been offered to the administration using software developed by Mother Teresa University;
- Online class attendance registration is done through Google Forms;
- Online training and seminars: Most of the seminars during the pandemic are held online using various specialized software solutions;
- Online meetings: Senate and Rectorate meetings are sometimes held online using Google Classroom; and
- Internet guests: Some of the guest speakers, including distinguished professors from abroad, are realized using online software systems.

Overall, the COVID-19 pandemic has led to a significant increase in the use of digital technologies in universities, enabling them to continue providing education to their students during the crisis.

5.6. Digital transformation at the University of Tetovo

The primary purpose of the electronic index at University of Tetovo is to provide a comprehensive e-administration system for students across all study cycles at the university, including the first, second, and third cycles. The system allows the institution to monitor the progress of students in any faculty, direction, city, or study cycle. Students can use the platform to carry out necessary activities throughout their studies, such as enrolling in a semester, registering for exams and project tasks. The system also provides automated procedures for graduation, master's and doctoral studies, as well as electronic processing of student requests to the institution.

The teaching staff can use the system to carry out their responsibilities in the part of student administration, including electronic evaluation and commission applications, verification and evaluation of completed exam/diploma work/master's thesis/doctoral thesis, administration of electronic notices, and monitoring of the status of registered students. The administrative staff is responsible for data administration, generating necessary documents, and providing support to students.

The electronic index system is supported by modules for student enrollment, human resources, and user support, which are used internally.

6. Concerns about digital transformation in education and training

The digital transformation of education is revolutionary. Like in any revolution, there are gains and losses. The digital transformation of education arises as a result of need. A large part of the focus of the digital transformation of education is on the development of virtual learning

platforms and online courses. It is a proven fact that online platforms and virtual courses are effective and accessible (Chatterjee & Nath, 2014). Technological development is considered a driving force for modernization and prosperity. However, there are negative situations and worrying aspects created by the digital transformation realized together with technological development (Gringard, 2016). The threats to cyber security, the spread of false and misleading information through social media (Allcott & Gentzkow, 2017), and the fear of massive layoffs as a result of automation are considered the main "dark sides" of digital transformation.

There are two types of mainstream approaches to this topic: "enthusiasts" who support the role of technology in education and training, and "skeptics" who approach it with doubt. Enthusiasts advocate for the advancement of technology use, which is a dominant trend worldwide. Supporters of digitization in higher education promote the view that this is the golden era of education and science, where one can access any desired information.

Researchers in this field have different approaches to digitalization of education and opinions on these approaches are skeptical or, rather curious.

According to Chris Bigum and Jane Kenway (2005) there are three categories of approaches around the digitalization of education like: doomsters, critics and boosters. As they say “the Boosters, the Doomsters, the Anti-Schoolers and the Critics - leading to their own exposition of a practically workable and educationally justifiable stance that schools might best take towards high technology and future schooling” (Bigum & Kenway, 2005). Doomsters are the one who see nothing but dangers and disadvantages in digitalization, while critics possess a cautious attitude towards digitalization and their pessimism is not absolute, instead they have adoptive mindset but they remain skeptical about the use of computers in schools or elsewhere. Furthermore, according to Pekka Mertala (2019) there are two sub-groups identified among boosters, the first is the digital re-schooling, which refers to descriptions of formal education provisions being reoriented and recast for a digital era and the second one the digital de-schooling, which refers to the de-institutionalization of education (Mertala, 2019).

Today, the dominant view in the world is that of the curious group. However, the approaches and criticisms of skeptics who claim that technological transformation of education will have negative consequences are also striking. The skeptical approach argues that digital transformation will cause public schools to lose their dominance, create social incompatibility and inequality (Collins & Halverson, 2012). Although the use of technology in individual learning provides opportunities for effective and faster learning, teaching is fundamentally a social and emotional process.

"The skeptics" who oppose technological transformation in education argue that teachers should moderately use technology in their transfer of knowledge to students. As a concern, the question arises whether state schools can adapt to the technology-oriented educational process during the digital transformation process. If the educational methods developed in the last 150 years cannot be harmonized with the development of technology, it is argued that technology can create unequal instead of equal opportunities (Collins, 2008). The "skeptical" approach, which claims that digital transformation in education will reduce the significance of schools, argues that schools will have a harder time in the learning process compared to the past and present. Possibilities such as homeschooling, workplace learning, distance education, online education portals, which are the result of the digital transformation of education, may reduce the importance of schools while eliminating the space in the educational process (Collins, 2008).

Although distance learning in primary and secondary education still requires dependence on schools, this dependence disappears at the university level. The fact that undergraduate and

graduate education is paid for in many countries makes online and distance education attractive. The concept of a virtual university, which does not require any physical connection to the university, is becoming more prevalent. An example of the concept of a virtual university is the University of Phoenix. According to data from the University of Phoenix in 2008, 30,000 of its 100,000 students are online students.

Digital transformation in education increases efficiency, and the number of students who can attend classes with digital platforms is not limited. A business school in the USA saved an average of $5.5 million annually during the period 2001-2016 by implementing its digital transformation.

The level of effectiveness in university education is determined by measuring the results of learning and student satisfaction (Piccoli et al., 2001). The experience of learning with physical presence in the classroom has benefits such as the possibility to receive answers to questions in real-time and to transmit the instructor's career experiences live.

Efficiency and effectiveness are the anticipated positive outcomes of digital transformation. However, there were also some undesirable consequences resulting from online education. These negative consequences include changes in roles, reduced human interaction, and strategic learning. Changes in roles refer to the shift in the role of the teacher/educator. The task of the teacher is not only to transmit information but also to decide on the volume of information to be conveyed and to determine the pedagogical method. In online education, the teacher's pedagogical characteristics are reduced. Additionally, digital transformation in education significantly reduces interaction between students and teachers.

Minimizing human interaction is not seen as a desirable and expected outcome of digital transformation in education. On the other hand, digital transformation in education also has a negative impact on strategic learning.

The arts of individual digital learning cause inequality: In the classical process of education, teaching is delivered with certain teaching programs to all students, whereby it is clear that your results will be approximately the same for everyone. Such a result is not possible to obtain with individual digital learning, because knowledge is drawn from multiple sources, different from everyone, so the final knowledge will not be equal for everyone.

Loss of authority of teachers: The digital transformation of education changes the role of the teacher and undermines the authority of the teacher.

Problems with standard evaluation and assessment: Methods for measuring and evaluating the results of student learning are objective and aim to establish whether every student has learned the same. Evaluation and measurement systems for schools in e-learning processes will not be as successful as before.

The school aims to provide all the important information that students need for the rest of their lives. As a result of digitization and technological development in education, knowledge is exponentially increasing, making it difficult for schools to fit all the information into their curricula and convey it to their students. For these reasons, teachers need to teach students how to learn, what information they need, and which sources of information they should use. The weakening of the teacher's role may not allow for this.

Inequality: Public schools are institutions where students from different socio-economic classes are educated. Will public universities have the same opportunities as private universities in the process of digital transformation?

Citizenship and social cohesion: One of the main goals of education is to teach students to be good citizens. Another mission of education is to teach students about the shared culture and values of society. The reduction of the role of schools as a result of digital transformation can cause problems such as a decrease in citizenship and social cohesion.

Less competition: Schools are competitive environments. The feeling of competition enables the school to teach students even if they do not succeed. Competition is presented to the student in a controlled way that will be safe. In online learning portals, students may not learn about the feeling of failure and the empathy that comes from it.

Conclusion

In order to keep up with the industrial revolution, known as Industry 4.0, it is essential to digitize the entire educational process with a special focus on the digital transformation of higher education. Graduates of the digital educational process are compatible with the needs of the digital industry and represent a competitive advantage for businesses.

Although technological change brings an end to some professional groups, it also creates new jobs and occupations in many areas. While routine tasks are entrusted to machines, digitally educated individuals are creative, have digital and social skills, and are in high demand in the new world. Many countries are experiencing a shortage of highly qualified workers. It is estimated that by 2030, the global talent shortage will reach 85 million.

The process of digital transformation of the entire educational process in the country is visible but not fast enough, and the digital transformation of higher education institutions is also a slow process. There is an uneven pace of its implementation in different universities in the country.

The establishment of an online educational platform among universities and coordination of the process will facilitate equal development of digital transformation and access to information.

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THE PSYCHOMETRIC FEATURES OF THE QUIET EGO SCALE AND THE CONSTRUCT VALIDITY OF THE QUIET EGO

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Abstract

The concept of quiet ego is conceived as a personal identity that transcends selfishness without ignoring personal interest at the same time. It is measured through a scale consisting of 14 items. The limited scope of research on this concept in psychological literature, as well as the absence of research for the Macedonian population, is the main motive for this research. This research aims to examine the psychometric properties of the *Quiet Ego Scale* and the validity of the construct of *Quiet Ego* (Quiet Ego Scale, Waymet, Bauer & Slaskia, 2014). Two studies were conducted for the purposes of the study. The first study is a correlational one, in which, in addition to the Quiet Ego Measurement Scale, instruments for measuring of narcissism (Narcissism Measurement Inventory, Raskin & Terry, 1988) and of empathy (Toronto Empathy Questionnaire, Spreng et al, 2009) are been set. In this study the analysis of the main components also take part. The results have shown that the Quiet Ego Scale has satisfactory internal homogeneity and a factor structure that confirms the theoretical solution of the construct, as well as a significant correlation with concepts similar and contrary to the researched concept. Using an experimental design, in the second study the levels of narcissism and empathy were manipulated (increased narcissism vs. reduced narcissism and increased empathy versus reduced empathy), in order to investigate the impact of different levels of narcissism and empathy on the level of quiet ego. The results of the second study confirmed the relationship between quiet ego, narcissism and empathy and justification for using the construct of the quiet ego.

Keywords: quiet ego, psychometric features, validity, empathy, narcissism

Introduction

Bauer and Wayment (Bauer & Wayment, 2008) introduce the concept of *quiet ego* in psychology, in order to describe a model that will cover a real image of themselves and the balance between awareness of their own needs and their satisfaction on the one hand, as well as the needs of others and the level of satisfaction, on the other. This concept is conceived as a personal identity that transcends egoism, without simultaneously ignoring self-interest. The quiet ego is described as quieting the ego so that a person can hear others as themselves, in an attempt to live more humanely and sympathetically (Bauer & Wayment, 2008). The terms *ego*-quieting and *quiet ego* arise precisely from the need to name *the process* of overcoming selfishness, as well as the *state in* which egoism is silenced or reduced at the individual and collective level (Wayment & Bauer, 2017). The concept of *quiet ego* integrates several concepts of positive psychology, for which there is evidence that they have a positive role in mental well-being, but which have not been recognized so far as components of one common concept (Wayment, Bauer & Sylaska, 2014).

The concept of quiet ego refers to personal identity in which there is a place for personal interests and needs, but also for the needs of others. The quiet ego is the balance between selfishness and self-esteem. It is a self-identity that includes others without losing itself. The term *quiet* refers to the constructive quietness of the ego, which allows a person to hear both their own and other people's needs.

Contrary to the quiet ego is the *loud* ego, whose voice basically needs attention and from whose loudness it is impossible to hear others, to see their needs, to understand their worldview (Bauer & Wayment, 2008). The quiet ego, compared to the loud ego, is more balanced in assessing personal strengths and weaknesses, which in turn represents a step towards personal growth, towards greater compassion and better understanding of oneself and others. The loud ego implies a focus exclusively on it's own need at a certain point, that needs to be satisfied immediately, even to the detriment of ones` own goals in the long term. The loud ego focuses on the immediate effects of activity, such as preserving the positive image of oneself or one owns social status. If the loud ego is aimed at long-term goals, that focus is on material or social progress (increasing of material wealth or improving the social status), not on personal growth and development (Mor & Winguist, 2002).

The loud ego is close to narcissism (Boin, & Voci, 2019) and is characterized by unrealistically high self-confidence, a spectacular perception of ones` own importance, followed by the need for attention, approval and confirmation of its own dominance (Campbell, & Buffardi, 2008). People with these characteristics are confident that they deserve special treatment, because they experience themselves as special and unique. It may seem that these positive perceptions of themselves may be positively related to personal well-being – but it is only an illusion (Robins & Beer, 2001), because when confronting the unrealistic image of oneself, negative emotional states occur, which sometimes imply even aggressiveness towards others (Baumeister, Smart & Boden, 1996).

The quiet ego consists of four components (Wayment & Bauer, 2017). The first component is *detached awareness*, which refers to focusing on the present moment, to perceiving and interpreting the present situation, freed from the weight of previous experience and personal expectations of what people or events should be like. Perceiving the situation without judgment about it enables the quieting of the ego (objective awareness).

The second component is *inclusive identity*. It refers to an identity that includes others. It implies perceiving and accepting, first of all, of the similarities between people, and not primarily between their differences. It implies an increased level of compassion and cooperation with others.

The third component is *to take a perspective*, which implies an opportunity to understand the point of view of others, to be empathic and altruistic.

The fourth component is *growth* and it implies perception of situations as an opportunity for personal growth and personal development in the long term.

Structural components of the quiet ego



These four components contribute to a personal orientation towards balancing between themselves and others, as well as to psychological development of themselves and others. The quiet ego interprets and evaluates itself and others through balancing and growing. Balancing implies caring for yourself and others, and growing up refers to both your own psychological growth and the psychological growth of others (Bauer & Wayment, 2008).

Research overview

Problem and aim of the research

The concept of *quiet ego* is from a more recent date in psychology. A limited extent of research on the quiet ego in the world is known so far, and empirical research on this concept is absent in Macedonian context. Hence the need for this research. Its aims are to investigate the psychometric characteristics of the Macedonian adaptation of the Quiet Ego Scale, i.e. to research the structure of the Quiet Ego Scale by analyzing the items and the main components, as well as to investigate the construct validity by comparing the concept of quiet ego with similar (empathy) and opposed (narcissism) concepts. Furthermore, this research aims to experimentally verify that there is an impact of narcissism and empathy on the quiet ego. Therefore, the problem in the study is formulated through the question: *Does the level of quiet ego depend on the level of narcissism and empathy?* The presumed answer to the problem in the study is formulated through the hypothesis: *If the level of narcissism increases, then the level of quiet ego will be reduced, and if empathy levels increase, then the level of quiet ego will increase*. *If narcissism levels decrease, then the level of quiet ego will increase, i.e. if empathy levels increase then the level of quiet ego will increase.*

Two studies have been conducted within this study: correlational and experimental. The first study, the correlational, questioned the reliability and construct validity of the Quiet Ego Scale, while the second study used an experimental design, within which the levels of narcissism and empathy have been manipulated, in order to determine the impact of different levels of narcissism and empathy.

Study 1

Participants. In the first study, a convenient sample has been used consisting of 213 students from different faculties (the Institute for Social Work and Social Policy, the Institute for Psychology and the Institute for Special Education from the Faculty of Philosophy in Skopje, the Faculty of Tourism in Ohrid, the Faculty of Education in Bitola). Of them, 32 respondents were male, and 181 were female, aged 18 to 49, with an average age M= 21.91.

Procedure. The survey has been conducted from March to May 2022, electronically through the Google Forms program. The respondents were given information about the subject and objectives of the research, as well as instructions for filling in each of the instruments. Anonymity was guaranteed by excluding the possibility of collecting e-mail addresses from respondents. Data were collected by sharing a call to participate in the survey followed by a link to the electronic version of the instruments.

Instruments. The Quiet Ego Scale (Bauer & Wayment, 2015) was used to measure the quiet ego. It consists of a total of 14 items answered on a five point Likert scale (from "1" almost always, to "5" indicating almost never). The highest score is 74 and the lowest is 14. A higher score indicates a higher level of suppressed ego. The measure of internal consistency of the sample from this research is α=0.65.

Narcissism was measured using a shortened version of the *Narcissism Measuring Inventory* (Raskin & Terry, 1988) consisting of 16 dichotomously formulated items. The lowest

score is zero and the highest score is 16. A higher score indicates a higher level of narcissism. The measure of internal consistency of the sample from this research is α=0.60.

For measuring the empathy, the *Toronto Empathy Questionnaire* (Spreng et al, 2009) has been used, which has 16 items answered on a five point Likert scale (1 never, 2 rarely, 3 sometimes, 4 often and 5 always). The lowest score is 16 and the highest score is 80. A higher score indicates a higher level of empathy. The measure of internal consistency of the sample from this research is α=0.64.

Display and interpretation of results

Descriptive statistics of the variables within the survey (lowest and highest score, arithmetic mean, standard deviation, and Cronbach's alpha coefficient) are shown in Table 1.

Table 1.
Descriptive statistics for the variables within the survey N=213

	Min	**Max**	**M**	**SD**	**Skewness**	**Kurtosis**	**Cronbach`s α**
Quiet Ego	33	70	49.71	6.18	.190	.546	.650
Narcissism	0	14	5.29	2.88	.600	.203	.626
Empathy	36	75	56.73	7.94	-.026	-.661	.638

Regarding the distribution, from the shown results of skewness and kurtosis, it can be concluded that quiet ego and narcissism are normally distributed with a higher concentration of the scores around the arithmetic mean. Empathy has a negative skewness, which means that most respondents are concentrated on the right side of the distribution, that is, they have mostly higher scores. At the same time, empathy has a negative kurtosis, which indicates that its distribution is platykurtic, that is, its scores are scattered throughout the distribution, without a greater concentration around the arithmetic mean. Regarding the average values, the average value of the scale for measuring the quiet ego is relatively high, that is, it is higher than the theoretical average value, while the average value of the scale for measuring narcissism is lower than the theoretical average value. The results obtained from the descriptive analysis show that the three instruments used in the research have acceptable values of the Cronbach's alpha coefficient (Cronbach's α), which indicates an acceptable internal homogeneity of the scales.

In order to check the internal structure of the Quiet Ego Scale, a principal components analysis has been performed. The Kaiser-Meyer-Olkin (KMO) value was .67, while the Bartlett's test of sphericity value was statistically significant ($\chi 2 = 533.676$, $df = 91$, $p < .001$), indicating that the factor analysis criterion was met.

Table 2

Characteristics of the individual items of the Quiet Ego Scale

Item	M	SD	Total r of that item	α without that item
1	4.71	.599	1.154	.650
2	3.41	1.177	1.138	.606
3	3.41	1.115	.764	.613
4	4.10	.951	1.061	.626
5	4.61	.723	1.154	.643
6	2.86	1.232	1.138	.612
7	2.80	1.193	.764	.612
8	3.32	1.194	1.061	.615
9	4.47	.792	1.154	.656
10	3.15	1.350	1.138	.629
11	2.70	1.154	.764	.671
12	3.61	1.138	1.061	.614
13	4.25	.764	1.154	.650
14	1.72	1.061	1.138	.651

Table 3

Factor saturation of the Quiet Ego Scale items with an orthogonally Varimax rotated matrix

Item	1	2	3	4
1				.382
2		.718		
3			.807	
4	.762			
5	.456			
6		.792		
7			.650	
8	.717			
9				.787
10		.716		
11	.421			
12			.719	
13	.648			
14				-.765

From table 3 it can be seen that all items have satisfactory factor saturation greater than .30. The factor structure with the method of principal components extracted 4 factors, which coincides with the factor model proposed by the authors of the Quiet Ego Scale. The isolated 4 factors explain 53.71% of the total variance, which is considered an acceptable proportion.

Table 4 shows the correlations between the variables: quiet ego, narcissism, and empathy.

Table 4.
Correlations between variables in the research

	Quiet ego	Narcissism	Empathy
Quiet ego	1		
Narcissism	-.136*	1	
Empathy	.307**	.009	1

The results shown in Table 4 show a significant positive correlation between the quiet ego and empathy (r=.307; p<0.01). The quiet ego is significantly negatively related to narcissism (r=-.136; p<0.05). The results for the association of the quiet ego with empathy and with narcissism indicate that with an increase in empathy, the quiet ego also increases, and with an increase in narcissism, the level of the quiet ego decreases.

Study 2

Participants. In the second research, a convenient sample consisting of 112 respondents, all students from the Faculty of Security, was used. Of them, 73 respondents were female, and 39 respondents were male. The respondents were between the ages of 18 and 44, with an average age M=21.07.

Instruments and procedure. In this study, the quiet ego was measured under conditions where narcissism and empathy were intentionally manipulated (high vs. low narcissism; high vs. low empathy). Narcissism and empathy were manipulated through different instructions given to subjects. Namely, subjects were randomly given half a page of text with one of four different instructions: to decrease narcissism, to increase narcissism, to decrease empathy, and to increase empathy. The purpose of this manipulation was to test the hypothesis that a higher level of narcissism causes a decrease in the level of quiet ego, a lower level of narcissism causes an increase in the level of quiet ego. At the same time, the hypothesis that a higher level of empathy increases the level of quiet ego and a lower level of empathy decreases the level of quiet ego was also tested. The instructions were created for the needs of this research and they were inserted in the introductory part, immediately after the given instructions for giving answers to the measuring instruments included in the research. Before starting to answer the measuring instruments, all participants had to read half a page of text that differed for each of the four groups. The group with increased narcissism received a text emphasizing the role of each young individual as a key actor in the future of the society. The group in which narcissism was reduced received a text that emphasized the equality of all people and minimized interpersonal differences. The group that increased empathy contained text that emphasized the importance of closeness, caring, and warmth in relationships with others. The empathy-decreasing group received text that emphasized individual responsibility for one's own life and the primary role of self-care over caring for others. After the instructions, all subjects were given three measuring instruments: the Quiet Ego Scale, the Narcissism Inventory and the Empathy Scale. In doing so, account was taken of the order of giving the measuring instruments. The groups that contained instructions to increase narcissism, that is, to decrease empathy, first responded to the Narcissism Inventory, while the groups that received instructions to decrease narcissism, that is, to increase empathy, were first given the Empathy Scale.

The research was conducted during the exam period as well as during the period of regular lectures of the students from the Faculty of Security. The period of data collection was from June to October 2022, at the Faculty of Security in Skopje. The participants were familiar with the objectives of the research, that is, that it is a question of research that is carried out

within the framework of doctoral studies. The questionnaires were anonymous. Only those questionnaires that were completely answered were taken for processing the results.

Presentation and interpretation of results

The results obtained from the descriptive analysis of the second study are shown in Table 5.

Table 5.
Descriptive statistics for the variables within the research for all respondents N=112

	Min	**Max**	**M**	**SD**	**Skewness**	**Kurtosis**	**Cronbach`s α**
Quiet ego	22	68	46.79	7.36	-.378	.671	.732
Narcissism	0	12	5.14	2.95	.501	.501	
Empathy	44	74	59.51	8.32	-.222	-.472	

Regarding the distribution, from the shown results of skewness and kurtosis, it can be concluded that narcissism is normally distributed with a higher concentration of the scores around the arithmetic mean. Quiet ego and empathy have a negative skewness, which means that most respondents are concentrated on the right side of the distribution, that is, there are mostly higher scores for these variables. At the same time, empathy has a negative kurtosis, which indicates that its distribution is platykurtic, that is, its scores are scattered throughout the distribution, without a greater concentration around the arithmetic mean. A scale for measuring the quiet ego in the second study has a Cronbach's coefficient (Cronbach`s α = .732) indicating a high internal homogeneity of the scale (higher compared to the first study).

The results obtained from the descriptive analysis of the second study are shown in Table 6.

Table 6.
Arithmetic mean and standard deviation of the dependent variable quiet ego in conditions of manipulated independent variables

Groups	**M**	**SD**	**N**
1 Increased narcissism	42.40	7.46	25
2 Reduced narcissism	48,48	7.12	31
3 Increased empathy	48.26	6.26	27
4 Reduced empathy	47.17	6.73	29
Total			112

Table 7.
ANOVA

	Sum of squares	df	Mean square	F	Sig.
Treatments	700.462	3	233.487	4.753	.004
Inside	5305.815	108	49.128		
Total	6006.277	111			

The results obtained from data processing with the ANOVA method show a statistically significant Fisher's statistic F(3)=4.753, p<.005, which means that the null hypothesis can be rejected and the hypothesis that if the level of narcissism increases will decrease the level of quiet ego, and if the level of empathy decreases, the level of lent ego will increase, as well as, if the level of narcissism decreases, the level of quiet ego will increase, that is, if the level of empathy increases, the level will increase of quiet ego.

Discussion

The results of the first study should also be interpreted in terms of the characteristics of the sample included in the research. Namely, most of the sample in the first study consists of respondents from the supporting study areas (special education, psychology, social work and social policy) where the respondents expectedly show a higher level of empathy, compared to their colleagues from the non-assisting study areas.

The empirical analysis of the data obtained with the Quiet Ego Scale shows that it is, in general, usable in the Macedonian context, because it has an acceptable internal homogeneity and factor structure as defined by its authors. At the same time, the results of the second study showed an acceptable validity of the concept of quiet ego itself. It is recommended to repeat the research in the future on a larger sample and on a sample of a larger age range.

The quiet ego as a concept that refers to the personal identity that includes others, without losing oneself, is inevitably related to two other important concepts in psychology: empathy and narcissism. Empathy refers to the capacity of a person to understand the needs, emotions and thoughts of others, that is, the ability of a person to take the position of other people. The quiet ego, as a four-component structure, includes a part called perspective taking, which refers precisely to the possibility of a person to understand and to experience the experiences and thoughts of another person. Empathy is the basis of successful interpersonal relationships, without which the experience of closeness and connection with another person is not possible. In that sense, the research findings are congruent with the conceptual relationship of the quiet ego and empathy.

Opposite to quietness as one pole of the quiet ego variable is the loud ego, which is conceptually close to narcissism. Namely, the loud ego consists of a grandiose perception of one's own importance and unrealistically high self-esteem, which is followed by a need for attention, approval and confirmation of one's own dominance (Campbell & Buffardi, 2008). Hence, the results obtained in the first study of the research, which refer to the significant negative association between the quiet ego and narcissism, confirm the assumptions that the possession of an extremely high need for attention and a grandiose positive self-image are exclusive to the quiet ego.

Conclusion

The concept of the quiet ego in psychology refers to the balance between egoism and self-silence, that is, to the personal identity in which there is a place for both personal interests and needs, as well as for the needs of others. The scale that measures the quiet ego has an acceptable internal homogeneity and a factor structure identical to that defined by the authors of this concept and is applicable in the Macedonian context.

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ATTENTION DEFICIT HYPERACTIVITY DISORDER

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Abstract

Attention deficit hyperactivity disorder (ADHD – attention deficit hyperactivity disorder) and ADD – attention deficit disorder (ADD) are neurodevelopmental disorders characterized by symptoms of inattention, impulsivity, and hyperactivity, and in the case of ADD it is attention without hyperactivity, which contradicts the child's developmental level. With all the research that is being done and that notes scientific knowledge, the picture of ADHD is changing and there are more specific prognoses and treatments for ADHD. This syndrome includes an increased motor activity in the child that is followed by a lack of attention and unpredictable and impulsive reactions. It can appear in the second or third year, but it is usually diagnosed when the child starts school. In the case when only the symptoms of a lack of attention are observed in a child or an adult, and they are not followed by hyperactivity, then it is about ADD (attention deficit disorder) - lack of attention. These people are withdrawn and lethargic, they live in their own world, they are quite sensitive, and they are often accused of being lazy and unmotivated, so they become anxious with low self-esteem (Ristevska, 2018). But many of them are highly intelligent and thanks to their sensitivity and creativity, they can find themselves in music, sports, art, and other areas that interest them.

The aim of this thesis is to present and analyze attention deficit and hyperactivity in ADHD and ADD syndromes. These syndromes are one of the most common developmental problems that appear in childhood and continue throughout life. ADHD and ADD syndromes are and have been present in the past and continue to appear in more and more people, so there is a need for more research related to the topic of attention deficit and hyperactivity in both syndromes. Inclusion is becoming more frequent and present in people's lives, and ADHD and ADD syndromes are one of the most prevalent problems today.

In this thesis, the history will be mentioned first and will be accompanied by explanations of the terms ADHD and ADD. Then follows an explanation of the differences between the two syndromes. The daily life of children with ADHD and ADD will also be mentioned. This thesis would not be complete without explaining the different types of ADHD and ADD, but also what factors contribute to the development of these syndromes. As the main goal of this thesis, attention deficit and hyperactivity in ADHD and attention deficit in ADD will be addressed. The characteristic signs of the disorder will also be mentioned. As the last but not least important part of this thesis, a treatment will be offered on how the two syndromes are diagnosed, the possible prevention, and the treatments that follow after the diagnosis of these syndromes.

1. History of ADHD and ADD

Hippocrates - the father of medical medicine, first mentioned ADHD and noticed patients who could not focus on one thing and had quick reactions to the things that surrounded them. After Hippocrates' opinion on ADHD, this topic was not elaborated on and mentioned until 1798. Sir Alexander Crichton, a Scottish physician in his book " An Inquiry into the Nature and Origin of Mental Derangement" noted that there are people who have difficulty staying on one task or game and called it the disease of attention. Medical textbooks in the 1800s referred to children who had the symptoms now characteristic of ADHD. "At that time several different names were used for the condition such as: 'nervous child', 'hypermetamorphosis', 'mental instability, 'unstable nervous system', and 'simple hyperexcitability.'[12]Many people think that ADHD is a diagnosis of the 21st century, or at least the diagnosis of ADHD was first noticed in the 1980s and has been suspect ever since. The American Psychiatric Association (APA) defines mental health conditions to help standardize the terms and criteria used for this diagnosis. A brief timeline of the changes in the behavioral disorder now known as ADHD:

- **1968**: The year when the behavioral disorder called "hyperkinetic reaction of childhood" was introduced.
- **1980**: "ADD" replaced "hyperkinetic reaction of childhood," with changes to the classification.
- **1987**: "ADD without hyperactivity" was removed and replaced with "ADHD."
- **1994**: Three subtypes were added to the classification of ADHD.
- **2013**: "Subtypes" of ADHD were changed to "presentations" of ADHD.

The term "ADD" is not officially used, but it is often used by many people. Invariable use of the terms "ADD" and "ADHD" has also been noted. To describe the presentation of ADHD some people use the term "ADD" as a subset of "ADHD" called inattention or distractibility.

2.Terms ADHD and ADD

2.1 ADHD

ADHD (Attention Deficit Hyperactivity Disorder) is a new term used by psychiatrists for childhood disorders, which has had different names in the past. "This disorder was first termed “hyperactivity,” then “attention-deficit disorder” (ADD), and then, to differentiate between children who had ADD but did not exhibit hyperactivity, either (plain) ADD or ADD with hyperactivity.’’[13] ADHD which is a new official term called Attention Deficit Hyperactivity Disorder has been chosen by psychiatric experts and the symptoms associated with this term have been published in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) by American Psychiatric Association. One of the most common problems in childhood is attention deficit hyperactivity disorder (ADHD). "In this syndrome, increased motor activity is observed in the child, followed by a lack of attention and unpredictable and impulsive reactions. It can appear in the second or third year, but it is usually diagnosed when the child starts school" (Ristevska, 2018). ADHD syndrome is more common in boys than in girls. This syndrome

[12] Children and Adults with Attention-Deficit/Hyperactivity Disorder. (2018). More Fire Than Water: A Short History of ADHD. *CHADD*, at: https://chadd.org/adhd-weekly/more-fire-than-water-a-short-history-of-adhd/

[13] Wender, P. H., & Tomb, D. A. (2017). *ADHD: A guide to understanding symptoms, causes, diagnosis, treatment, and changes over time in children, adolescents, and adults*. Oxford University Press. pp 1-3.

occurs in childhood and can last throughout life, and without treatment, it can have more serious consequences for the person himself or affect his society. It also manifests itself with other disorders, the most common of which are learning and behavioral disorders.

2.2 ADD

When the symptoms of attention deficit disorder are observed in an adult or a child and are not followed by hyperactivity, then it refers to ADD (attention deficit disorder). People with ADD live in their world, they are withdrawn and lethargic, they are often accused of being lazy and unmotivated, and because of that label, they have anxiety and low self-esteem. But except for many of them, who are of high intelligence and according to their sensitivity and creativity, they find themselves in the world of music, sports, art, and in other different areas that interest them. (Ristevska, 2018).

3. Types of ADHD

Attention deficit hyperactivity disorder (ADHD) is the medical term for the biological neurological condition once called ADD. Its symptoms fall into one of three quantitative subtypes:

- inattention
- impulsivity and hyperactivity
- a combination of inattention and hyperactivity

In the past, ADD was diagnosed by doctors or professionals when someone had persistent symptoms of inattention and distractibility and a few not-so-persistent symptoms of hyperactivity and impulsivity. Now that ADD has been renamed into today's Attention Deficit ADHD subtype.

The symptoms of inattention are:

- "Easy distractibility
- frequent forgetfulness in daily life
- trouble paying attention to details or listening when other people speak
- difficulty concentrating on tasks or activities
- trouble following instructions and completing tasks as directed
- a tendency to lose focus or get sidetracked easily
- difficulty staying organized or managing time
- a tendency to put off or avoid tasks that require long periods of mental efforts, such as homework or work projects
- a habit of losing vital things needed for daily routines and activities''[14]

These signs might show up at school, at work, at home, or in personal relationships.

This type in adults/children can cause:

[14] Kinman T. Raypole C. (2021). ADHD vs. ADD: *What's the difference?*. Healthline. Healthline Media, at: https://www.healthline.com/health/adhd/difference-between-add-and-adhd

- They have difficulty remembering important dates such as birthdays, anniversaries, deadlines for making payments on an account, or completing a task
- they procrastinate on their schoolwork, and projects, and don't complete their assignments on time
- it is difficult for them when they have to pay attention to things that interest them, such as the latest book, or their favorite series, and they often make mistakes in doing something.

3.2 Hyperactivity

This type of ADHD also called hyperactive-impulsive type includes symptoms of hyperactivity and impulsivity. For a child to be diagnosed with the type of ADHD called hyperactivity and impulsivity, they must have at least six or more of the following symptoms:

- "The child talks a lot
- swings
- does not sit still in a chair
- gets up from the stool when he is expected to sit and be quiet
- is spinning
- distracts the other children in the class
- gives answers ahead of time
- he is in a hurry when answering, so he makes mistakes
- starts tasks before listening to instructions
- easily abandons assigned tasks
- copies from other children instead of answering a test himself
- is always in trouble
- is irritable
- cannot maintain a friendship
- does not wait his turn
- interrupts when someone is speaking
- imposes itself on society
- runs
- climbs
- it just doesn't stop"[15]
- problems with playing quietly or participating in relaxing activities
- a constant feeling of restlessness that tends to run or climb in inappropriate situations
- shows problems with sitting at school, at work, or in some other circumstances
- trembles roll over, and claps his hands.

“Hyperactivity means having increased movement, impulsive actions, a shorter attention span, and being easily distracted.”[16] Hyperactivity in adults with ADHD manifests in more subtle ways, and researchers should continue to ask questions about how restlessness manifests in other ways. If during the diagnostic evaluation of a patient, where professionals and sometimes

[15] Manual for teaching assistants, LEARNING TOGETHER Manual for teaching assistants for working with children with developmental disabilities, 2015, p 31

[16] *Hyperactivity: Medlineplus medical encyclopedia*. MedlinePlus. U.S. National Library of Medicine, at :https://medlineplus.gov/ency/article/003256.htm

other patients are present, the patient being examined sits still and is attentive so that the diagnosticians can assume that he does not have ADHD, even though this is not true. Questioning should reveal how the patient is behaving and feeling. In adults, hyperactivity is expressed as inner restlessness, a feeling of constant restlessness, inability to relax, therefore there is a need for drugs or alcohol that will help the patient to relax or fall asleep (Weisfelt et al. 2001). Hyperactivity can be supplemented and improved with sports activities up to five times a week. Because hyperactivity requires constant movement, the person often gets injured. If the restlessness in these people is reduced or eliminated, the hyperactivity becomes clearer. It manifests itself in the inability to stop talking, excessive talking, or failure to complete tasks. People with ADHD never stop and always need to move.

3.3 Combined type of ADHD

A combined type of ADHD does not mean that it is more severe compared to ADHD which is only diagnosed as a hyperactive type or predominantly inattentive type. Individuals diagnosed with combined ADHD means that symptoms of this type are more likely to be evenly distributed between the two types. Some experts state that this type of ADHD is more prevalent than the other two types, especially among adults. It is supposed to be easier for parents and teachers to recognize the signs of combined ADHD. As a result, people with this syndrome have a better chance of getting the correct diagnosis.

4. Diagnosis of ADHD

Symptoms of ADHD are present before the age of 12. Children diagnosed with ADHD by age 16 had six persistent symptoms of inattention or 6 symptoms of hyperactivity-impulsivity that had been present for at least 6 months. ADHD symptoms must be present in at least two or more situations such as at school, at home, or with relatives or friends. These symptoms interfere with the quality of social or school functioning. Parents who think their child may have ADHD should consult a doctor. Family doctors may also refer children to mental health professionals such as a psychiatrist or clinical psychologist, who can do a thorough evaluation and diagnose ADHD. Stress, sleep disorders, anxiety, depression, and other physical conditions or illnesses can cause symptoms similar to those of ADHD. Therefore, a thorough evaluation is necessary to determine the cause of the symptoms. During the evaluation the mental health professional or doctor may:

- examine the child's mental health and medical history
- to communicate with parents and ask permission to communicate with teachers and other adults who know the child well and see his actions in certain situations, all to understand how children behave both at school and home
- use standardized behavioral rating scales or prepare ADHD symptom checklists to determine whether a child meets the criteria for an ADHD diagnosis
- to prepare psychological tests that will consider memory, functioning, visual, and spatial reasoning skills.

These tests can help uncover psychological or cognitive strengths and challenges, as well as identify possible learning problems.

5. What causes ADHD?

A combination of biological or hereditary factors and environmental or life experiences is responsible for ADHD. Brain imaging studies have revealed structural and connectivity differences in the brains of children with ADHD and typically developing children. This consequence is sometimes hereditary and runs in families. “ADHD is highly heritable, although

there is no single causal risk factor and non-inherited factors also contribute to its etiology. The evidence to date suggests that both rare and multiple common genetic variants likely contribute to ADHD and modify its phenotype."[17] Children born prematurely due to extremely low birth weight or those children who are exposed to various difficulties or traumas from the earliest age are subjected to exceptional early difficulties. The environment in which an individual lives also appears as a cause of ADHD syndrome. "In 2004, University of Washington researchers found that toddlers who watch lots of TV are more likely to develop attentional problems. For every hour watched per day, the risk rose by 10 percent."[18] According to Dr. Ruff's (2004) study of 800 Amish families, their children were prohibited from watching television and playing video games. As a result of this research, it was shown that none of the children developed ADHD syndrome. This research also showed that those Amish families who left the church and adopted a modern lifestyle, which mostly included technology, showed the presence of ADHD syndrome. The research shows that although the genes of both groups are the same, the environment played a major role in the development of this syndrome.

6. Treatment of ADHD

The American Academy of Pediatrics (AAP) recommends behavior management training as a treatment for children younger than 6 before prescribing or trying medication. This pediatrician advises drug therapy and behavioral training (together) for children who are older than 6 years. Schools can also be part of the treatment. Good treatment plans include monitoring the child's behavior and making changes according to the child's needs along the way. Medicines are what can help children with ADHD to function in everyday life. They can control their behavior, and control what makes them difficult with family and friends at school.

7. Types of ADD

ADD is one of the most common developmental problems in children that continues throughout their lives, but it can also occur in adults who have not been previously diagnosed. ADD is a misunderstood syndrome that is poorly treated today. There are seven types of ADD and they are:

"Type 1. Classic ADD (ADHD) – inattentive, distractible, disorganized, hyperactive, restless, and impulsive.
Type 2. Inattentive ADD – inattentive, easily distracted, disorganized, and often described as space cadets, daydreamers, and couch potatoes. Not hyperactive!
Type 3. Overfocused ADD – inattentive, trouble shifting attention, frequently getting stuck in loops of negative thoughts or behaviors, obsessive, excessive worrying, inflexible, frequent oppositional, and argumentative behavior. It may or may not be hyperactive.
Type 4. Temporal Lobe ADD – inattentive, easily distracted, disorganized, irritable, short fuse, dark thoughts, mood instability, and may struggle with learning disabilities. It may or may not be hyperactive.
Type 5. Limbic ADD – inattentive, easily distracted, disorganized, chronic low-grade sadness or negativity, "glass half empty syndrome," low energy, tends to be more isolated socially, and frequent feelings of hopelessness and worthlessness. It may or may not be hyperactive.
Type 6. Ring of Fire ADD – inattentive, easily distracted, irritable, overly sensitive, cyclic moodiness, and oppositional. It may or may not be hyperactive.

[17] Thapar, A., Cooper, M., Jefferies, R., & Stergiakouli, E. (2012). What causes attention deficit hyperactivity disorder. *Archives of disease in childhood*, *97*(3), pp.260-265.
[18] Christakis DA, Zimmerman FJ, DiGiuseppe DL, McCarty CA. (2004). "Early television exposure and subsequent attentional problems in children." Pediatrics. at: https://www.additudemag.com/what-causes-adhd-symptoms/

Type 7. Anxious ADD – inattentive, easily distracted, disorganized, anxious, tense, nervous, predicts the worst, gets anxious with timed tests, social anxiety, and often has physical stress symptoms, such as headaches, and gastrointestinal symptoms. May or may not be hyperactive."[19]

7.1 Symptoms of ADD

"ADD is the inattentive type of ADHD. Children with ADD have six or more of the following symptoms, some of which start before they reach seven years of age:

- Forgetful in daily activities
- Poor attention to detail and careless mistakes in schoolwork and homework
- Easily distracted by extraneous stimuli
- Trouble sustaining attention
- Loses things necessary for tasks or activities
- Dislikes and is reluctant to exert sustained mental effort
- Does not follow through on instructions and fails to finish chores and schoolwork
- Difficulty organizing tasks and activities
- Does not seem to listen when spoken to directly."[20]

Children with ADD until the third or fourth grade are not considered problems children with ADD because such erratic behavior is expected of them. Symptoms must be present for at least six months and occur in multiple settings. "Children's symptoms are most commonly seen at home and school, but they are also likely to show up in other settings where attention is needed such as church or temple, music lessons, and sports activities."[21]

8. Diagnosis of ADD

"Today, there is no instrument or procedure that can adequately diagnose ADD."[22] At the moment, ADD syndrome can be diagnosed with the convergence of different measures. These measures allow experienced clinicians to determine whether an individual has symptoms characteristic of ADD. The symptoms of ADD appear in all people at some point in their lives. It is the clinician's job to determine whether the symptoms an individual exhibits significantly affect and cause permanent impairment compared to most people of the same age or developmental level. The real question is whether the person with ADD suffers from severe and more intense impairment than other patients of the same age. The evaluator of the patient with ADD must see if the person has had the symptoms since early childhood, or if the person did not have any symptoms before, but now has them as a result of a previous: depression, anxiety, illicit drug use, or some other psychiatric disorder. When an individual is clinically diagnosed with ADD, it does not mean that the diagnosis process ends there. Adequate differential diagnosis is needed to screen for symptoms of other possible disorders that may cause, contribute to, or be comorbid with ADD.

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[19] Amen D. (2019). *Learn about the SYPMTOMS and 7 types of add (infographic): Brainmd.* BrainMD Blog, at: https://brainmd.com/blog/how-to-identify-attention-deficit-disorder-in-yourself-or-a-loved-one-discover-the-7-types-of-add/

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[21] Ashley, S. A. (2005). p 3.

[22] Nadeau, K. G. (2013). *A comprehensive guide to attention deficit disorder in adults: Research, diagnosis and treatment*. Routledge. p 102.

9. Treatment of ADD

ADD treatment can take many forms and be treated in many ways. “An individualized treatment plan for a child with ADD may include medication, talk therapy, lifestyle modification therapy, changing and creating a diet plan, and introducing exercise.” [23] “Studies show that adult attention deficit disorder (ADD ADHD) is treated successfully with a combination of medication and behavior therapy.”[24] There is a type of adult with attention deficit disorder (ADD) that does not accept treatment for treatment. Also, many of them perceive the symptoms of ADD as creative symptoms and symptoms that have a large part in contributing to success in their lives.

Conclusion

ADHD and ADD are syndromes that are related to each other, yet what ADD lacks and ADHD has, is hyperactivity. Children with hyperactivity are normal in all respects and have the same thoughts, desires and needs as all humans. However, what makes them different is that they have increased movement and impulsive actions. It is important to identify this disorder, so that the individual can receive appropriate treatment and the negative symptoms can be directed in a positive direction. What both syndromes have in common is that they involve attention deficits. In these people, attention is absent when they have to perform tasks that require attention, and they are part of a daily routine or the task is dull for the individual to perform. Attention deficit and hyperactivity disorder are frequently asked questions in people with ADHD and ADD. It is important to promptly diagnose both syndromes in order to make life easier for individuals diagnosed with these syndromes. Attention deficit and hyperactivity are also associated with other symptoms that are characteristic of these disorders. To be diagnosed with these disorders, a person must have at least six of these symptoms. The different types of ADHD and ADD are also discussed in this thesis. Prevention, as well as treatments for these disorders, are also addressed to facilitate the explanation and analysis of ADHD and ADD. As part of the treatments, possible drugs are included, which are the most popular for treatment, but also psychosocial interventions and different types of psychotherapy. In the therapy of these two syndromes, the relationship of the parents with the schools that the individuals attend is also important. For individuals with these disorders, schools must be tailored to their needs and offer them individualized educational plans. As part of the therapy, and also a very important part of the life of these individuals is the awareness of the parents about these disorders. There are various strategies that parents can use at home to alleviate the syndromes. Parents and schools that attend to individuals can significantly help reduce attention deficit and hyperactivity, but also enable the individual to have a positive attitude towards the syndrome they have. Attention deficit hyperactivity disorder does not make these individuals any different from others. If professionals and family work hard and lovingly on the strengths and weaknesses of these individuals, and if appropriate help is provided, they can become aware of their full potential and lead happy, fulfilling, and successful lives. The future for individuals with these disorders does not have to be bleak. This paper offers an overview treatment of both syndromes and serves as a motive for further analysis and treatment of ADHD and ADD to facilitate the lives of these individuals.

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ENGLISH LANGUAGE STUDENTS' PERCEPTION ON HOMEWORK IN THE REPUBLIC OF KOSOVO'S ELEMENTARY SCHOOLS

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Abstract

Given that much research stresses out the positive homework impact on the students' achievements in learning a foreign language, this study examines the English language elementary students' opinions on homework in order to depict whether the Republic Kosovo's elementary schools emphasize the significant role of homework in the foreign language teaching and learning process. Therefore, qualitative interviews with 30 English language elementary students from the sixth grade are conducted as a method for collecting data. The sample consists of 30 interviews' transcript, and the analysis rests upon coding and the interpretative-inductive approach. The research results show that the elementary education in the Republic of Kosovo recognizes the homework importance and that homework plays a significant role in students' success, i.e. it helps students to learn the lessons better and also allows them to become independent learners.

Key words: homework assignments, students' achievement, elementary school, Republic of Kosovo.

1. Introduction

Homework benefits are one of the most discussed issues in the past few years. There are two main arguments about homework in education and language teaching and learning. One declares that homework act as an obstacle between life and learning outside of school. The other argument declares that homework is seen as an advantage toward success (Coram, 2010). If given proper amount, homework may be one of the most important ways towards the success. Teachers need to find a way in between giving very little homework and over assigning, because the right amount of homework may raise students' interest to complete it and gain knowledge as much as possible. As stated by Janusheva et al. (2018), homework assignments contribute to train students for independent work, active and critical attitude to work and develop a sense of responsibility among students. This gradually leads to the preparation of their self-education.

Homework is considered as a relevant part of the teaching and learning process, which improves students' learning and enriches their capacity in a particular subject. Further, as Costley (2013) points out, homework helps students develop their effective study skills and become independent learners. Some studies even show that there are differences in age when it comes to the importance and the effect of homework on students'achievements. According to Muhlenbruck, Cooper & Lindsay (1999), younger students tend to be more prone and willing to finish their tasks as homework whereas older children and secondary school children tend to laze more in doing homework. However, as stated by Bempechat (2019), too much homework often does not provide the desired effect. Homework is seen to be one of the key elements to help student's attainment, and acts as the bridge between home and school.

Homework is a very good tool to eliminate different obstacles that students run into while dealing with one specific subject or even a specific paper that they might find harder to comprehend. An important aspect related to this issue is that teachers have to be careful not to over assign, because it may cause additional stress on them (Viadero, 2008) and that the right amount of homework has to meet the needs of lessons and the students (Coram, 2010). Furthermore, Boston (2002) sees the homework relevance only in correlation with the teachers' feedback and direction for its improvement, which gradually leads to the preparation of self-education.

The present scrutiny investigates the English language elementary students' opinions on homework in order to get an insight into the homework usage in the English language teaching and learning process in the Republic of Kosovo's educational system. Thus, qualitative interviews with 30 elementary students from the sixth grade are conducted as a method for collecting data. The sample comprises of 30 interviews' transcripts and the analysis includes coding and the interpretative-inductive approach.

One of the main limitations of this probe is that it is conducted only with sixth graders considering that they are not mature enough to give extended and elaborated answers. Still, the present paper gives general picture of the English language elementary students' perception on homework and the role that the homework has in the Republic of Kosovo's educational system.

2. Broader research context

A substantial amount of research highlights the positive homework effects on students' achievements. One of the effects of homework is that it can have an immediate impact on the student's retention and understanding of the material it covers (Cooper 1989). Doyle & Barber (1990) argue that there are various types of homework and that the students' achievements are conditioned by the particular homework type. According to Cooper, Robinson & Patall (2006) and Costley (2013), the homework affects the students' achievements and contributes to the development of independence among students and to the acquirement of work habits. Further, they prove that homework assists in developing higher cognitive processes and in reflection of students' conclusions and that they provide information for the teacher about the acquired knowledge of students, which, on the other side, is the basis for giving useful feedback that guides their learning and contributes to the promotion of their achievements. Furthermore, Darn (2007) claims that homework helps students to increase their understanding and motivation, and develops the students' habits for independent learning and the skills for problem solving. According to Darn (2007), the homework has to be useful for the students, important for learning, interesting and different. It has to take into account the individual styles of students' learning and to be close to the problems in the real life. Christopher (2007/2008) indicates that homework helps students to practice and to improve their achievements. Viadero (2008) also confirms that parents and teachers say homework is very important and it helps their children reach their goal. Homework assignments develop students' research potential to solve problems, encourage creative and critical thinking. Additionally, the importance of homework for the application of students' knowledge and exercising habits necessary for gaining further knowledge (Andrilovikj & Chudina, 1985; Vilotijevikj, 1999; Stevanovikj, 2001; Kamchevska, 2006). Finally, there are many didactic guidelines regarding the homework, as, for ex., the Guidance (2013) prepared from the Bureau for Development of Education in Republic of Macedonia, which stresses that homework assignments should be appropriate to the students' age and reflect their higher cognitive processes. As this document state, it is expected for teachers to give assignments which help students to resolve various

problem situations, verify knowledge practically, encourage students to seek additional literature and to collect information for a variety of projects, etc.

The negative homework effects are also stated. Hayward (2010) reports that students choose whether they complete their homework or not based on the importance of that assignment. He, further, says that the students can feel that it may affect their grade or what their teacher and parents will think of them or whether they are interested in the topic. Costley (2013) also states that homework has some negative effects too. According to him, children can get bored due to repetition of homework. Homework can steal from their free time activities which are also important for their life skills. And sometimes parents get too involved with their children homework which causes pressure and confusion. Furthermore, most studies concluded that homework should not be abolished or be considered as too much work given to the students of different ages in these certain cases, but a certain criterion depending on the subjects they study should be taken into consideration. For example, if a student has 10 to 13 subjects at school, then the amount of homework given to them should be carefully monitored by a supervisor, head teacher or any officially assigned academic staff so they see if the children are given too much homework or they should be given more. According to Coram (2010), the right amount of homework needs to fit the students and the lessons needs.

3. Methodology

This research deals with the English language elementary students' attitudes on homework with the aim to indicate whether the Republic of Kosovo's elementary schools emphasize the significant role of homework in the English language teaching and learning process. Therefore, qualitative interviews with 30 English language students from the sixth grade from the elementary school "Motrat Qiriazi" are conducted, which is acknowledged as a method for collecting data (Holstein & Gubrium, 1995; Kvale, 1996; Silverman, 2000; Berg, 2001; Mason, 2002; Dörnyei, 2005; Richards, 2009; Mann, 2011; Seidman, 2013; Roulstone, 2014). The 30 interviews' transcripts represent the sample, which is in line with the attitudes of Cheek (2008), Yin (2011) and Gentles et al. (2015) that interview transcripts may be used as a sample. Five questions referring to students' thoughts, values, and beliefs are posed, which is in accordance with Patton's (2002) suggestion on questions that should be used in an interview. The interviews' are coded, using the suggestions of Strauss & Corbin (1990) and the analysis rests upon the interpretative-inductive approach used by many (Marshall 1999; Meriam, 2002; Thomas 2006; Creswell 2009; Kahlke 2014; Harding & Whitehead 2016), which does not have a formal methodological frame and stress the inductive thinking which leads to creating idea form the collected data.

4. Results, analysis and discussion

Regarding the first question: How homework helps your language learning?, the answers imply that the students learn a lot from their homework and this is in correlation with Cooper's research (1989) who claims that homework does have an immediate effect on student's learning.

Homework keeps us in line with the language. It does remind us of the upcoming lesson in the next class.

Homework helps us to better understand the lesson.

Homework does help us become more independent.

As for the second question: How homework affects your grade?, the answers suggest that students are aware that doing homework affects their grade and this is in correlation with Hayward (2013) who claim that students complete their homework according to the importance. Obviously, the students consider homework assignment as very relevant for their grades.

I regularly do my homework, which helps me learn the lesson and this will surely lead to a solid grade.

If homework did not affect my grade I would not stress a lot about it.

Answers of the third question: According to you, how often you should be assigned with homework?, reveal that students love to do homework every day, which is in line with Coram (2010), who suggests that students need the right amount of homework and this will lead the student to a much better success. However, these answers are not correlated with Costley (2013) who states that homework takes a lot of students' free time and steal away the time they would want to deal with something that is more interesting for them.

I enjoy doing my homework as that helps me understand better.

Students are more prone to homework assignments which are clear in design, which is in accordance with Doyle & Barber (1990), who claim that the students' achievements depend on the type of homework.

I love clear homework assignments, because I can process them easier.

Some students' answers indicate that homework should be given twice a week. And some of them have uncertainties.

We are sometimes given too much homework, and we are lazy to get started when we know how much homework we have.

Sometimes we do not manage to finish all the assigned homework.

I don't think we need that much homework.

The responses from the fourth question: Do your teacher provide feedback on the homework?, specify the feedback relevance in doing the homework assignments, which is line with Boston (1998). The students do receive feedback on their homework assignments.

I feel much better when I get feedback from the teachers about my homework as that shows that the teachers really check on our homework properly.

Teachers' feedback helps us improve ourselves.

5. Conclusion

The research results show that homework has a generally positive impact on students learning process and understanding the studied subject much better and that the primary educational system in Republic of Kosovo point out to the homework relevance. The results also indicate that students have a positive approach towards the homework, and support the idea that homework makes the lesson easier for them to understand and makes them independent learners. What is really important is that students receive feedback from their teacher and this feedback is helpful to them. According to the results, the best way to make students not worry or laze over homework is to find a way to make the homework much more practical, much less boring and much more entertaining if possible. At the same time, all the schools should really pay good attention on how much homework is one student being given per week and if that seems to be too much then reduce that amount so the students have more time for other activities, are less lazy to do their homework and have some free time for hanging out and socialize.

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INTERNET SAFETY AND ATTITUDE OF STUDENTS WORKING ON A COMPUTER IN LOWER SECONDARY SCHOOLS

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Abstract

The use of the Internet and students addiction of Internet has become very actual and inevitable issue, thus the interest in protection of the students and gaining knowledge about safety use of Internet are indispensable.
The aim of this paper is to inform and raise children's/students awareness of Internet safety and the potential risks they may be exposed to while using the Internet; then to give insight of the students' behavior and their success at school, according to the perception of the students themselves and their parents, as well as to show their opinions regarding the frequency of Internet use while working with a computer.
Population consists of students of lower secondary schools in the municipality of Pristina, bearing in mind that students of this age spend a lot of time on the computer using the Internet, that can be harmful for the physical development at their age.

The instrument that is used for data collection is questionnaire, and instruction guide is distributed on how students of this generation should access the Internet, how they should protect themselves from the Internet, the way they use the computer and the time they should spend on the Internet. The methods for processing the data and gaining scientifically based conclusions were analysis, comparison and synthesis.
The results in this paper show that students generally do not have enough knowledge about the safety risks of the Internet use and have underestimated the time they spend on the Internet. The vast majority of them think that sitting in front of the computer has no, or has little effect on their physical problems during their physical development.

Keywords: Internet, security, computer, children/students, school, etc.

1. Introduction

The word Internet meaning "International Network", is a global WAN network that communicates through mediums, telephone lines and satellites.

The Internet is a mean of communication and entertainment used worldwide. The Internet is no longer a novelty for children/students and young people but a necessity for their needs at school and at home. All children have a number of rights that must be respected, even online. They have the right not to be disturbed, offended or harassed by other users. They have the right to communicate and also have fun. On the other hand, children have the right to receive information with suitable content for their age, and we can say that technological developments have generated new opportunities for them that includes the right to produce information, to express themselves and to generate ideas. Now they are protagonists of the Internet, and not just passive consumers. The rapid development of technology in recent years is simultaneously accompanied by the exposure of children/students to the risks that appear as a result of students unsafe browsing on the Internet. Therefore we as a society must take measures so that children/students are safe while using the computer and using the Internet.

The Convention of the Council of Europe for the Protection of Children against Exploitation and Abuse contains provisions that criminalize the use of new technologies, and in particular the Internet, that can to harm or abuse children.

It is the only international treaty that makes abuse and misuse a criminal offence, with criminal penalties for:

- Those who recruit children into abuse
- Production, supply, distribution and possession of child pornography and access online in it;
- Encouraging children in chat rooms, or online gaming sites for the purpose of abuse.

As a preventive measure, the convention recommends that primary school children be informed about the dangers of using the Internet without control.

2. Previous research in the field

Many of the students do not have adequate knowledge about their safety on the Internet and do not have knowledge about the later consequences that they can face during the stay when they work in front of a computer, as well as the length of the time they spent in front of the computer. That’s why this research is very important.

Equipping schools with information and communication technology equipment is usually the first step they wish to advance the school in achieving quality education, enabling quality learning for all. Equipping schools with computers and the way they are used is a factor that affects the interaction and cooperation of students, therefore the teacher must take into account the organizing the classes while designing activities that are carried out with the help of information technology. Since the teaching process is not only the acceptance and distribution of knowledge, but also a multi-dimensional process which is realized with different activities. The placement of computers can be done in different ways, by placing them in computer cabinets to classrooms with one and many computers.

2.1. Studies on children's Internet addiction conducted in different countries of the world

Lisa Hawker, UK National Association for the Prevention of Violence against Children, author of a UK study, also gives the good news that comes out of this report and insists on another aspect of this research, which shows that as far as traditional risks are concerned, today's toddlers are safer. Last year in Great Britain, 21,500 cases of sexual molestation of minors were

verified and 6,000 of them ended in rape. But despite these alarming data, violence against children in the long term has decreased (Hawker, L, 2010)**.**
Children are generally attracted to the Internet for many reasons: shortening the time span of messages, simplicity and recognition of situations, clarity and fascination of proposals, repetition of contents, etc. But let's not forget that on many web pages, even for children, there are many advertisements and publicity and is not a surprise why these sites are offered for free, and these advertisements in most cases tend to divert the purpose of accessing the Internet. While for adults who are even more balanced, advertising is just a series of propositions, often vague, for impulsive children, eager for "everything and immediately" - this becomes a kind of order, an infallible promise. If the parents do not give answer positively the unreasonable demands of the child, he protests, rebels; and if he normally gets what he claims, he becomes dissatisfied, starts on the path of consumerism and conformity (Hawker, L, 2010).

Children's exposure to the computer is becoming more and more widespread and inappropriate. Its extraordinary utility of internet in the production sectors, in social organizations and in the families themselves, is undeniable. Precisely for this reason, its use is taught in primary school and a little earlier. For children, the computer is logically a tool for having fun, to access video games. Patrician Greenfield writes: “online video games develop parallel thinking capacity and reaction speed, but tend to suppress reflection. However, the real danger lies in the variety and attraction of video games. An over-exposure to their fantasy world can produce impatience and an inability to endure the complicated world of real life." Children are more comfortable with computers than with parents and teachers. The typical goal of a computer is to keep it connected all day. Children fall madly in love with computers. Even children who grow up with the opportunity to use the computer to the maximum will have less desire to engage in anything that resembles, even slightly, what we have called elementary school. The fact that very few schools in the United States have shared the joy of the computer as a teaching tool, and that in most American schools the use of the computer is explained as a business tool, it cannot help but encourage you to consider the computer as "a tool for learning, which certainly does not replace the spoken and written language, the direct connection with reality, the book, the game, the complicated event, the interpersonal relationships that characterize the school, even the methodologically advanced one" (Hawker, L, 2010).

In order to prevent the aggravation of the situation and to guarantee children a safe Internet, international and local actors in Kosovo are undertaking initiatives and awareness activities. One of these activities is the project organized by Word Vision Albania [The project entitled "Children's online safety", December 2013-January 2014] which, in cooperation with the Ministry of Education, has "prepared a package with interactive CDs, brochures and posters that were given to children/students, parents and teachers, in 11 regions of Albania.

2.2. Studies done by a Kosovo sociologist on the use of the Internet by children

According to sociologists, the consequences of staying for too long time in front of the screens are huge. Professor of sociology, Fadil Maloku, tells Radio Free Europe that in a study conducted by the Association of Sociologists of Kosovo, it turned out that the new generations who use the Internet a lot have a lot of information, but they lack the knowledge. "The studies that have been done outside and inside Kosovo, by the Association of Sociologists of Kosovo, regarding the use of the Internet among children, show that they are exposed to some kind of radioactivity, which makes them sluggish, anemic, and the children are actually the ones who will have problems in the future". "The Association of Sociologists of Kosovo has conducted a research regarding the use of the Internet among preschoolers and teenagers. The overall

results are that prolonged use of electronic devices is harmful. Children are exposed to radioactivity which is very harmful and for children it will generate generations that will be addicted and lazy and they will not have a normal perception that other children could have". According to this study, there is no data on how many hours a day children are allowed to be exposed to the screen, but according to the data, Kosovo is in the first place in the region in terms of internet use, taking into account the young age, where the average age is 23.4 for women, 23.3 for men. So, a new Internet population, compared to the generation of the 80s, they are a slower generation with more information, but not with more knowledge and knowledge than the generation of the 80s (Maloku, 2016).

Today, almost every child spends a lot of time exposed to screens, TV, iPad, or any other electronic devices, and I think it can't help in fact it'll be harmful if they spent too long exposed to those devices. Then, the other problem is that the games as well as the various films for children are now not very controlled and also not adequate for certain ages, the children do not choose but they do watch them", says Mentor Kastrati, a parent. Excessive exposure of children to technological tools has been a topic of debate in many countries around the world, often being evaluated as harmful (Kastrati, M, 2016).

World Organization Vision Albania and Kosovo [Study conducted by the non-governmental organization World Vision Albania in cooperation with World Vision Kosovo and Child Protect, Fact Albanian sheet, pdf. www.wvi.org/kosovo] and Child Protection and Participation Learning Hub, has conducted a study on "Safety of Children online". The survey was carried out in the period December 2019 - January 2020 through interviews of 900 children and with a geographical extension in several cities such as Pristina, Gjilan, Ferizaj, Peja, Mitrovica and Gjakova, The study showed that Albanian children use three main ways to have access to the internet. In 65% of cases, access to the Internet is provided by mobile devices, followed by PCs with 59% and laptops with 43%. Unlike the culture of other countries, Albanian families prefer to keep computers in their children's rooms, thus reducing the level of control over Internet consumption (Organizata World Vision Albania and Kosovo).

The study shows that 47% of them have been contacted online by unknown persons. Such a phenomenon is also evidenced by our study, where 43.8% of the respondents stated that contact with unknown and vulgar persons is a possible danger for them. Too many hours in front of the computer have a negative impact on the health of children. They make them grow up in a world disconnected from reality, addicted on computers, video games and chats. The situation is considered worrying. The data, although few, show that children are at risk from pornography, from offensive e-mails and from addiction to social networks. Also, the closest project is the design of a friendly reporting/referral Mechanism, which will be used directly by the children themselves, even by their most vulnerable part. An e-mail address that children themselves can use to report cases of online abuse has been put into operation. [Source: Ministry of Education and Sports www.arsimi.gov.al] show the approach to this problem. "The aim is to achieve a balance between the use of the Internet and Internet safety for children/students. The internet service offered in schools has content filtering and management through a central panel, based on the requirements of the school and the Ministry of Education and Science. Integration of ICT in teaching now starts in the first grade. In primary classes, teachers use modules, including e-safety. It is intended that the student be prepared with the necessary digital knowledge and skills for the 21st century, of European and international standards, where one of the standards is "digital citizenship". With the e-safety module, all primary school teachers will be trained" (Organizata World Vision Albania and Kosovo).

2.3. The family as the main environment of children's education

The family is not founded out of habit by the fact of standing next to others, but by the desire and joy of living together, in the growing ability to cooperate with love. It is a group, or a psychological reality, whose foundation is the mutual integration of individuals, where they belong and the interactions between members (Giuseppe, M, 1994).

In the perspective of the danger brought by the use of the Internet in the family, we are witness to the fact that many families have been destroyed due to the lack of time for relationships between family members, or the perception that what the virtual world offers is more beautiful than the situation or the climate within one's own family. But on the other hand, the Internet with its infinite world and different pages, just as it contributes to making the family experience a community life, where it also enables connections and approaches between relatives, within the country and emigration, as well isolates its members from each other, to the point of misunderstanding each other. This is how we can observe what happens willingly or unwillingly in our families, where sometimes the father is totally absorbed in the newspapers, so much so that he neglects the dialogue with his little one, the mother who is seduced by a television series, the children isolated in the room in front of the computer. The signals and sounds, already classic and familiar to us, that notify us of the arrival of a message in chat/sms/iphone or android, reach many times and prevent family conversation during meals, and are seemingly simple, but unfortunately frequent examples, of the misuse of the Internet/computer, which thus leads to the fragmentation of family life. Family warmth begins and fades when there is an individualistic use of various Internet sites, when there are unlimited scenes and events of sexuality without real love, when they broadcast infidelity between spouses as a necessary costume, even as an exemplary model (Giuseppe, M, 1994).

In the other perspective, the positive one, we can come across the fact without a doubt, that geographical, historical, scientific and artistic documentaries are not missing at all on various websites, including televisions that are already seen via the Internet, affects the increase of knowledge and contribution that well-informed parents can benefit from conversations with their children, but also in cases where the child asks them about homework needs, or issues of personal curiosity (Musai, B, 2011).

To set limits to the use of the Internet means to adapt rules, possibly "proposed", but also "imposed", if necessary. The first and most effective rule is the good example of parents. If they do not prioritize the Internet before dialogue and relationships within the family, if they are not "fascinated" by "favorite websites" and games, if they show critical skills in the face of all the messages of the small computer screen, they are practically teach children a basic truth:

Not to become addicted to the computer and the Internet is possible and beautiful (Musai, B, 2011).

2.4. Guidelines for Internet use

Up to 10 years of age children should be supervised to make sure they do not come across inappropriate content. Parents whose children are under the age of 10 should use internet safety devices/programs to limit access to certain content, websites and activities, and actively participate in the child's activities in internet. 11-14 years old children are the most resourceful

when using the Internet. However, they still need oversight to ensure their protection from inappropriate content. Internet safety devices should be used to restrict access to certain content and websites, as well as to receive reports on children's online activities. Also, children at this age should understand that private information should not be given out on the Internet. 15-18 years old children should have almost no restrictions in terms of content, websites and activities. Teenagers are quite adept at using the Internet. However, parents should set some basic safety guidelines for them too. They should be able to understand the inappropriate messages their children have received and show them how to avoid unsafe situations. It is not a bad idea to remind children what personal data should not be given out over the Internet (E-shkollor, 2006).

2.5. School and children's/students education towards the Internet

Education has the task of educating children/students, and this is already addressed in the curriculum level, since education is the result of subjective factors (genetic inheritance, individual temperament and commitment) and environmental influences. Physical development, sensory skills mainly depend on the first factors; from the second are strongly limited spoken language, thought and direction, direction in the sense of orientation, and critical orientation to the use of the Internet in school is essential and irreplaceable. Educating children/students in the critical use of the Internet is a primary duty of parents. Parents have the right and the duty to prescribe and prevent, but only according to those criteria of rationality and balance that can be faced in the moral conscience that is gradually formed in children. Authority really frees the child from impulsivity, contradictions, conformism, from addiction to the Internet, so it produces moral freedom, understood as internal consent to universal values, as habitual possession of oneself, as independence from socio-cultural conditions (Duun, R & Duun, K, 2000).

What forms the child in the family is not so much verbal learning, as the atmosphere he absorbs, the presence and behavior of parents, brothers and sisters, grandparents, etc. The indirect but continuous action of domestic life regulates the children's impulses and educates the personality in complete harmony and integration, if the family is firmly structured and morally healthy; otherwise, when family it is not united and lacks social ethics, children grow up emotionally unstable, unable to acquire a strong character and enter productively into society. Internet education should be positive. By exposing children/students to what is aesthetically and morally excellent, they are helped to develop their own judgment, prudence, and the ability to reason. And here, it is important to recognize the fundamental value of parental example and the advantages of introducing young people to the classics of children's literature, to the fine arts and to appropriate contemporary music. Beauty, a kind of mirror of the divine, inspires and enlivens hearts (Duun, R & Duun, K, 2000).

It is already indisputable the strong educational value of the computer and, at the same time, it is also accepted the contradiction and the problem that follows it, implied by the fact that the "Internet" - as such, is neither very good nor very bad. Seen from a pedagogical perspective, the Internet can be used for good or bad. Such an assessment, however, cannot be easy a priori, because many variables that interact in a particular situation contribute to its determination, but let's focus on a theoretical analysis that belongs in particular to the family context, which is always characterized by original aspects and always changing interpersonal dynamics. A pedagogical reflection on this topic includes the benefit of a research attitude or attitude and problematic understanding - not always common among educators themselves - that moves

away from the pursuit of easy diagnoses and treatments, from the temptation to simplify and reduce the problem of measurable, from empirical data. It should not be forgotten that the task of education is to promote the full potential of the educational subject and the human community, directing them in the best way in the directions of values and goals, in the route of being and what you should be. Education and pedagogy in a daily way are active actors in a demanding project to be involved in the highest degree and at different levels, of human formation, and which are put into operation to educate him with awareness, conscience and responsibility, which no pedagogy book can provide alone.

Plato proposes to look carefully at "everywhere", to become aware of its educational consequences, it is worth mentioning, for example, the need to exclude from the " polis " those artisans who with their works they are shown to be incapable of satisfying man's thirst for beauty and harmony. To compare this theory of Plato, so that we can be educated by relationships with others, we can bring as an example some suggestions present in the educational philosophy of the philosopher and pedagogue. Martin Buber. We can identify relationships as educational when talking about relationships interpersonal dialogue, in the experience of our original, as active participants in dialogue and interaction (Danilović, M, 1998).

It should also be said that, almost paradoxically, the meeting can become real and constructive even through moments of interpersonal difficulties, misunderstanding, conflict: "interpersonal and dialogical struggle" - as Martin would call it. Buber, - it can be fruitful and educational, it can help to find oneself and others in new ways, to redefine mutual relations in a direct and transparent way, respecting the difference: to erase the conflict is to deny the encounter , to cultivate an inappropriate atmosphere, which means indifference, the opposite of true educational relations" (Danilović, M, 1998).

Cyberbullying. "Cyber bullying" is when a child/student or teenager is threatened, abused, humiliated, mocked, insulted or deliberately targeted by another child/student or teenager. By leveraging the use of the Internet, interactive and digital technologies or mobile phones.

Cyber bullying is usually not a one-time communication, it can happen continuously.

There are many forms of cyber bullying, but these are the most common:

- E - mails, threatening, insulting, mocking, prejudicial messages, etc.;
- Ridiculous or offensive posts on social networks;
- Offensive labels (pseudonyms) through posts on social networks;
- Posting photos, videos of other people without their approval, with mocking and insulting intent;
- Creating fake profiles on social networks in the name of another individual with the purpose of mocking or insulting (Madison, O, 2013).

Computer systems in everyday life – Ergonomics. At first glance, working on a computer seems comfortable and easy. However, the design of the place of stay needs special care, in order to prevent health risks.

Ergonomics is the field that takes care of the adaptation of products and processes according to human anatomy in order to improve human well-being at work and optimize productivity.

Constant screen work causes muscle tension and pain as the back and body require movement.

Remember to take frequent breaks to stretch and use your lunch break to go for a short walk, and often rest your eyes by looking at a distant point beyond the screen (Mine, V, 2012).

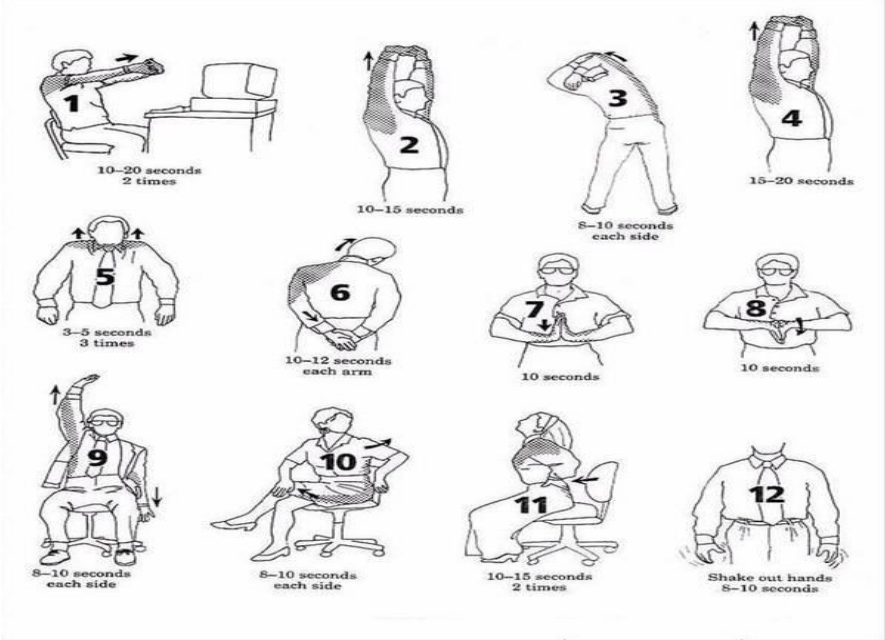


Figure 1. Exercises during a break from the computer

Room climate. Room climate affects work performance and should not be underestimated. In addition to all ergonomic considerations, workplace safety should not be overlooked. Careless distribution of cables can cause accidents.

In addition, the distribution of the electrical system must be planned to carry the load of all electronic devices. Bad climate in the room can cause allergies, premature fatigue and other health risks (Mine, V, 2012).

3. Methodological framework

The aim of this paper is to indicate that students should be aware of the impact that Internet has on them, as well as the effects it has on their physical health from staying to long in front of the computer while using Internet.

The purpose of this paper is to inform and raise students' awareness of Internet safety and the potential risks they may be exposed to while using the Internet; in the behavior and success of students at school, according to the perception of the students themselves and their parents, as well as their opinions regarding the frequency of Internet use they spend while working with the computer.

The object of this research is "Security on the Internet and their attitudes while working on a computer for students of lower secondary schools in the municipality of Pristina". During the research, we used research instruments and methods in order to collect the most accurate data and achieve reliability.

4. Methods, procedures and instruments for the research

The data in the research were collected through the qualitative and quantitative methods, also relying on the relevant instrument.

Quantitative data were obtained using anonymous student questionnaires, as a more convenient method of data collection, and for students to be more honest in their responses.

The qualitative method was used, that is, through which we clarified the case of the study and determined the objectives of the research, collecting data and information to derive the results of this research.

Research hypotheses:

Staying in front of the computer for a long time affect the development of physical health in children;

The use of the Internet has a positive effect and encourages critical and creative thinking in children.

Research questions:

What impact does the use of the Internet have on children?

How long staying in front of the computer affects health?

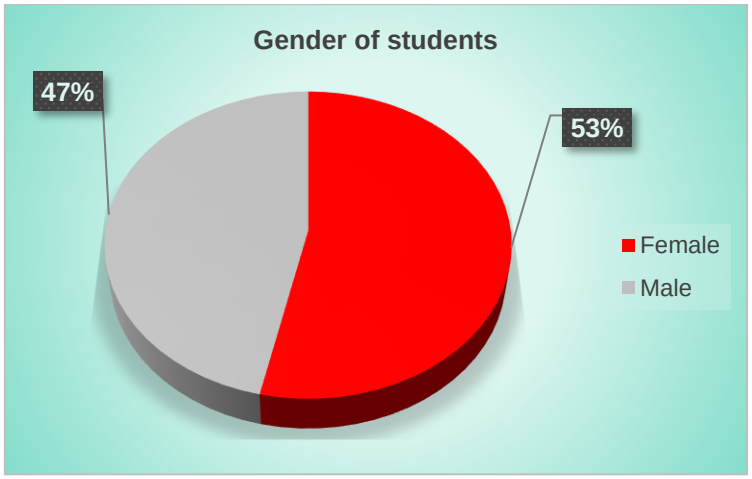
Population and sample. Population consists of children from lower secondary schools in the municipality of Pristina, because this age of children spends a lot of time on the computer and Internet and spends unnecessary and harmful time for their age. The sample consists of 220 students.

Research instruments. The instrument that is used for data collection is questionnaire for students from 6 to 9 grade, and a guide is distributed on how they access the Internet, how to protect themselves from the Internet, how to stay in front of the computer and the time they should spend on the Internet.

The *methods for processing the data and gaining scientifically based conclusion* were analysis, comparison and synthesis.

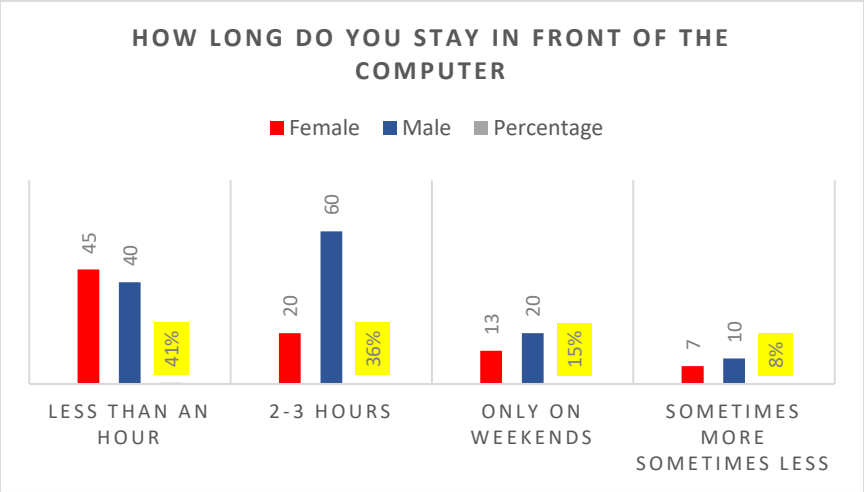
5. Results and discussion

In this research, 215 students of grades 6 to 9 in lower secondary schools in the municipality of Pristina were included, because this age of children spends a lot of time on the computer and the Internet and spends unnecessary and harmful time for their age. The data obtained from the questionnaire are presented in graphs according to the answers of the students.



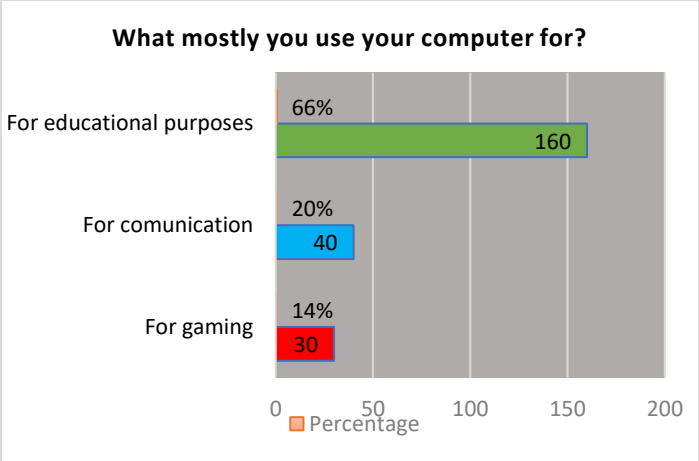
Graph 1. Gender of students

The gander of students that participated in the research is given in Graph 1. According to the shown results, from 215 students of 6 to 9 grade in the municipality of Pristina, appears that female gender dominates with 115 female students, or 53%, while 100 are male students, which is 47%.



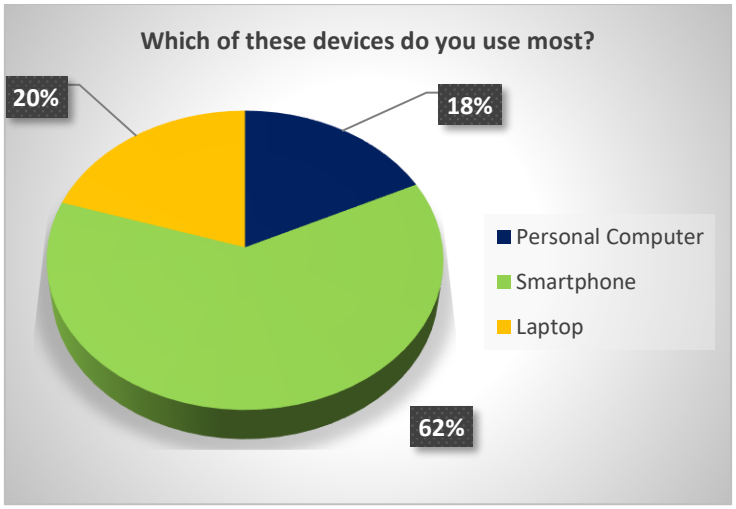
Graph 2. How long the students stay in front of the computer?

Graph 2, shows how long students' stay in front of the computer during the day. As can be seen, 41% of students stay less than one hour, 36% stay two to three hours, 15% stay only on weekends and 8% stay sometimes more and sometimes less, what is worth mentioning here is that the stay in front of the computer for the specified time, the gender also differs, as indicated in the graph.



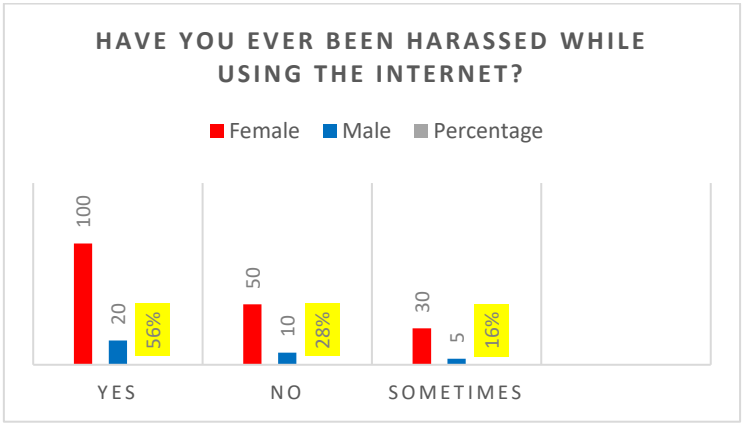
Graph 3. The purpose that is used computer for

In order to understand as accurately as possible for what purpose is mostly used the computer by the students', from the given answers it turns out that 66% of them use it for learning purposes, 20% for communication and 14% for games. This is according to the answers received, but it is our believe, bearing on mind that they receive the questionnaire in school where is expected from them to learn, that they use it more for communication than for other purposes, like for learning and for educational goals overall.



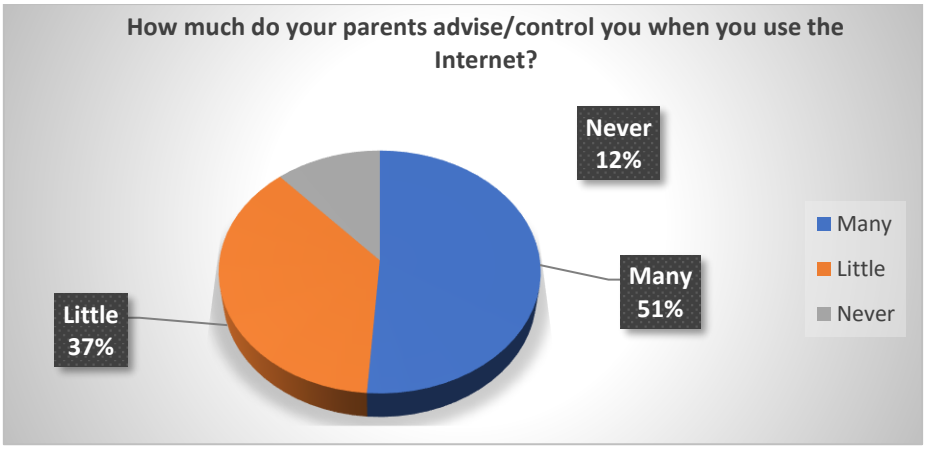
Graph 4. Devices that students use most

As can be seen from the Graph 4, it is obvious that students mostly use the smartphone for their own purposes with 62%, while there are also those who, in addition to the phone, also use personal computer with 18%, but in contrast to the personal computer students also use the laptop with 20%.



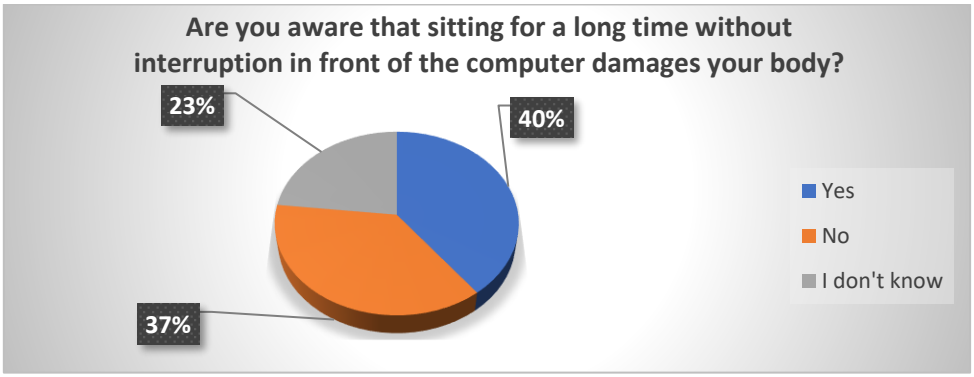
Graph 5. Harassment while using the Internet

Although students are not clear when they are bullied or when, they are not safe when using the Internet, from the answers that emerged, 56% are bullied, 28% have not been bullied and 16% sometimes have been bullied. It is indicative that female gender dominates over the male gender when speaking about harassment while using Internet.



Graph 6. Parents advice/control

Between Graph 5 and Graph 6 there is a correlation because parents who advise/control their children while using the Internet are less bullied, compared to those who do not deal with their children. According to the graph, it appears that 51% advise their children, 37% less deal with them and 12% do not deal with their children.



Graph 7. Time sitting in front of the computer without interruption, and opinion of the students about possible harm

According to the students' answers about the time sitting in front of the computer without interruption and the harm it might cose on their physical health, it turns out that only 40% of them are informed about the consequences, 37% are not informed and 23% do not have any knowledge about the consequences that they may have while sitting quietly in front of the computer for longer time without interruption.

6. Conclusions and recommendations

To confront the students with security while using the Internet, as well as their posture in front of the computer, must be challenged today's educational communities and parents, especially the society.

During this research, we prepared a leaflet to inform students about safety and the attitude they should be aware of when using the computer or other IT devices.

The research showed that, students do need explanations and help for safety use of Internet, and they need to be warned about consequences from long stay without interruption in front of the computer, or other IT device. Furthermore, research showed that this sometimes might not be enough, and the school as educational institution should do much more in safety and protection of the students, as well as the parents who need to be aware of the circumstances when Internet use is involved and thus will provide sufficient time and pay more attention to their children.

During the research, we have noticed that teachers in schools provide students with insufficient knowledge about internet safety and posture in front of the computer, or rather, very few teachers teach lessons related to this subject for pedagogical needs, because they lack teaching strategies with use of ICT. Furthermore, teachers instruct students to research on the Internet for educational purposes and that affects the correct use of ICT.

The research showed that students are aware they had developed addictions, in addition, they felt the need for ICT education. Thus, they were looking for help to free themselves from their dependence on ICT use, especially the Internet.

Therefore, educational institutions, parents and society should promote increased awareness and practices for computer safety and posture for students in their important stage of development to their physical and psychological being.

Based on the above mentioned, the recommendations that come from this research are: school personnel teaching IT subjects must have the appropriate qualification and be trained annually by Training should also be extended to kindergarten staff regarding the risk of child abuse in general and child abuse on the Internet more specifically;

School program regarding teaching IT should be regularly updated and expanded to include safety and protection of the students online;

Parents should be advised to talk to their children about the Internet use and safety, and sometimes try to share an online activity with them;

Students should be aware not to give information about their home address, school or phone numbers to people they don’t know;

Students should not download photos or videos sent from unknown sources;

To encourage the students to tell their parents or teachers immediately if they feel unsafe or threatened when using the Internet.

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Appendices

Questionnaire for students

Dear students, I have made this questionnaire for the purpose of research for a seminar paper of the third cycle of studies on the topic "Security on the Internet and their attitudes while working on a computer for students of lower secondary schools in the municipality of Pristina". Your answers will be anonymous.

(Please select one of the options)

Gender: Female (1) Male (2)

Age: _____ Grade: _____Location: _____

1. Are you an internet user?
    a) Yes
    b) No

2. How long do you stay in front of the computer?
    a) Less than an hour
    b) Two to three hours
    c) Only on weekends
    d) Sometimes more sometimes less

3. What do you use most the computer for?
    a) For games
    b) For communication
    c) For educational purposes

4. Which of these devices do you use?
    a) Personal computer
    b) Smart phone
    c) Laptop

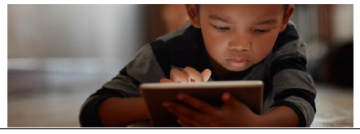
5. Have you ever been harassed while using the Internet on your device :
    a) Yes
    b) No
    c) Never

6. How much your parents advise/control you when you use the Internet?
    a) A lot
    b) A little
    c) Never

7. Are you aware that sitting for a long time without interruption in front of the computer damages your body?
    a) Yes
    b) No
    c) I don't know

Thank you for your cooperation!

What can you do?



Children's safety on the Internet age 11-15 and the way of standing in front of the computer

- If children and adults in your home share the same computer workstation, make certain that the workstation can be modified for each child's use.
- Position the computer monitor so the top of the screen is at or below the child's eye level. This can be accomplished by taking the computer off its base or stand, or having the child sit on firm pillows or phone books to reach the desired height.
- Make sure the chair at the workstation fits the child correctly. An ergonomic back cushion, pillow or a rolled-up towel can be placed in the small of the child's back for added back support. There should be two inches between the front edge of the seat and the back of the knees. The chair should have arm supports so that elbows are resting within a 70- to 135-degree angle to the computer keyboard.
- Your child's muscles need adequate hydration to work properly and avoid injury. Encourage your child to drink four 8-ounce glasses of water a day. Carbonated beverages, juices and other sweet drinks are not a substitute.
- Urge your child's school or PTA officials to provide education on correct computer ergonomics and to install ergonomically correct workstations.

⇒ Also get in touch with the child's school to make sure good workstations are in place and education on correct computer ergonomics is a priority.

⇒ Keeping your back strong and supple is the best way to avoid getting back pain. Regular exercise, maintaining good posture and lifting correctly will all help prevent future problems.

BETIM ISMAJLI

Primary Business Address
Address Line 2
Address Line 3
Address Line 4

Phone: 555-555-5555
Fax: 555-555-5555
E-mail: someone@example.com

Online safety advice

As children between the ages of 11 and 15 make the transition to a more independent stage with the move to secondary school, they become more confident internet users with more varied habits. Internet use can be hugely positive for children, but it's vital to continue discussing online safety with them.
Just because your child goes



online for school, it doesn't mean there still aren't potential dangers lurking. These best practices will minimize your child's exposure to online risks no matter what platform or software their school is usingplatform or software their school is using.

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KEEP IN MIND...

Have free and frank discussions

Encourage your child to talk to you about how they use the internet and show you what they do. Discuss with them the kinds of things they might come across. A good time to talk is when they get a new device or mention a new website.

Manage their devices

Encourage them to use their tech devices in a communal area such as the living room or kitchen and set up a user account for your child. If you think they aren't old enough to have a mobile phone or tablet, stay firm and explain the reasons why.



Put yourself in control

Activate parental controls on your homeb roadband, all devices including mobile phones and games consoles. Safe search settings can also be activated on Google (and other search engines), YouTube and on entertainment sites like iTunes and iPlayer.

Keep private information private

If your child does have a social networking profile, teach them to block or ignore people and how to set strict privacy settings. Request that you or someone you both trust becomes their 'friend' or 'follower' to check that conversations and posts are appropriate.

Children Need to Practice Good Computer Ergonomics, Too



"Emphasis needs to be placed on teaching children how to properly use computer workstations," stated Dr. Scott Bautch, a member of the American Chiropractic Association's Council on Occupational Health. "Poor work habits and computer workstations that don't fit a child's body during the developing years can have harmful physical effects that can last a lifetime. Parents need to be just as concerned about their children's interaction with their computer workstations as they are with any activities that may affect their children's long-term health," added Dr. Bautch.



To reduce the possibility of your child suffering painful and possibly disabling injuries, the American Chiropractic Association (ACA) and its Council on Occupational Health offer the following tips:

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THE IMPACT OF EXPERIMENT-BASED TEACHING ON LEARNING THE SUBJECT CHEMISTRY IN LOW SECONDARY EDUCATION

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Abstract

Experiment-based teaching is a learning strategy by which students gain knowledge and skills through investigating, answering questions, collaborating, self-managing, and solving problems through communication, while the traditional method serves ready-made information to students that vanish very quickly. Therefore, in this paper, the topic of experiment-based teaching in chemistry and the role of incorporating experiments in students' learning and development of their skills and abilities have been closely examined. This research implies an action research methodology, with a quasi-experimental design, and is conducted in Primary school „Dardania" in Municipality of Pristina, from which students of two seventh grades participated. The pre and post-test method was used in the classroom where the lesson instructions were based on experiments, while in contrast, in another classroom with a group of students who served as a control group, the teaching was realized by applying the traditional teaching methods.

Overall, the techniques and instruments of the research included the following: pre-test, observation of students during the learning process, checklist, and post-test. The research results showed that in the classroom where the learning is based on experiment-based teaching, the students are more motivated and active and show higher results in learning chemistry compared to students who have learned the same units based on traditional methods without integrating experiments. The practical value of this research relies on providing valuable results in encouraging teachers to use experiment-based teaching more often so that students can gain practical knowledge and skills to practice experimental work as the results indicated that students who learn in classes where teaching based on experiments is used, achieve higher results and show higher performance in the subject chemistry than those who have completed the lessons in classes where traditional methods are used without applying experiments.

Key words: chemistry, learning, experiment-based teaching

1. Introduction

Due to enormous and rapid change in educational reforms in Kosovo, without a proper analysis and feasibility studies, a lot of problems have been caused and placed in surface in the educational sector. Reforms in education include legislation, curriculum and infrastructure. Regarding the new reforms, the main achievement of the new curriculum is related to efforts

to putt students in the center of the teaching and learning process. Putting the student in the center does not mean being content with using same teaching techniques, which in the pedagogical literature are known as "student-centered learning techniques", but the teaching mindset must be changed, and the perspective must be changed (Berisha, R, 2011). Experimental learning is a student-centered learning and curricular approach that requires students to apply knowledge and skills to propose workable solutions to problems (Sousa, C, 2014).

The chemistry subject offers a special perspective of understanding the environment in which we live. Learning in the natural sciences is perceived as different from learning in other fields, as it differs in these aspects: in the way it collects data and interprets it; in the way information is validated before general acceptance; and by recognizing the limitations of scientific research and knowledge in the fields it deals with (DEIL, 2007). The Ministry of Education, Science and Technology (MEST) adopted the New Kosovo Curriculum Framework (KCF) in 2011 as an effort to improve the quality of education in Kosovo and to harmonize with developed countries. This framework is supposed to facilitate a shift from objective and content-based methodologies to contemporary teaching and learning methodologies based on student outcomes and the development of student competencies (MASHT, 2016). The development of scientific education is a key element for development of the society in any country of the world. In order to achieve a higher level of scientific education, continuous efforts must be made to improve and acquire new teaching methods, replacing more and more traditional methods every day. Current traditional education is very important to change, both in the teaching of the subjects of natural sciences, such as chemistry, biology, and physics, as well as social sciences, in order to bring positive effects to enhance students' skills and abilities.

According to the different stage of the lesson, the activities can be classified into the following types: introductory activities; activities of the main part of the lesson; (students' activities) and activities in the final part of the lesson (activities for reflection and evaluation); such as activities conducted through an analytical diary; five minute composition, etc. (Pejchinovska, M., Kamchevska, B, 2015).

Natural sciences represent the curricular field, which offers students the opportunity to develop an understanding of concepts, theories and basic laws of the development of nature (MAS, 2014). Therefore, in order to understand and learn natural sciences as well as possible, the teacher must find the most effective teaching method and suitable activities and create the curriculum according to the necessary learning requirements (Holubova, 2008). Teaching with the student at the center requires greater commitment from both students and teachers. The student should be a more active thinker and researcher while the teacher should become a facilitator and mentor instead of being a source of information (MASHT & USAID, 2013). Thus, numerous researches have shown that the teaching of natural sciences based on experiments enables the promotion of student learning and provides more efficient lessons than traditional methods in both social sciences and natural sciences (Kingston, 2018). From this form of teaching, the students connect the previous theoretical knowledge with the new practical knowledge, which will benefit them through experiments and demonstrations in the subject of chemistry.

2. Literature review

Prior empirical studies in the natural sciences have established the importance of conceptual understanding of the topics. The most important objective in natural science research is the construction of a methods and activities that can help students in understanding scientific and

alternative concepts. Example, for effective approach in teaching and learning natural sciences is the program Learning Through Research that is realized in both, the theoretical and practical work of the primary school teachers, who follow these procedures: research process, research characteristics and application, the objectives of the research procedures in class; teachers' and students' tasks in the research procedures in class; a review of the mentor's role in the research procedures; the meaning and the role of the teaching forms in the research process – individual and group approach in the RPs application; observation of the class –components, stages, and types of observation; survey and interview and their application in class; case study; taking up roles; experiment and application of the experiment in class. (Pejchinovska, M., Talevski, D. J., Janusheva, V., 2014).

Natural sciences represent collection of knowledge that includes facts, concepts, principles and theories, and which can be called both science and product (Laksana, 2017). Experimentation-based learning is a compressive (or optimal results) approach to classroom learning that is designed to engage students in complex investigations, authentic problems, and careful responsibilities and assignments (Özdemir, 2006). Various collaborative teaching frameworks have been developed across curriculum, and studies have shown the effectiveness of these collaborations in promoting learning and social connections for students, compared to traditional classroom learning methods (Holst, 2003). Experiment-based teaching is not complementary to the activities that support learning, but it is based on the curriculum and presents an approach in the form of instructions that teaches the concepts of the curriculum through practical laboratory work. Education in natural sciences is an important part of students' general education at school. In the age of information explosion and rapid development of technology, today it is impossible for the school to be conceptualized as the place where knowledge is transmitted to children and then they are asked to reproduce it (Musai, 2015). Habok and Nagy (2016) add that experiment-based teaching is not only a substitute for increased teaching and learning activities, but it is a fundamental part of curriculum that includes a project-based approach to develop skills that are very necessary for situational teaching. In general, teaching based on experiments is a method that includes the combination of theory and practice or rather knowledge and doing. This refers to the process in which students gain knowledge from the core curriculum and from what they know in solving authentic problems, to ensure the best results (Mujtaba & Zuana, 2013).

The application of experiments in the teaching and learning of chemistry is an institutional approach that coordinates curriculum-based learning, linking theory with practical laboratory work, enabling students to face more complex tasks and questions, or problems that involve solving them, making decisions, and investigating skills by the student himself who is supported by the teacher (Kim, 2016). Through experiential teaching, students learn all the concepts of the curriculum. Experiment-based teaching is based on sufficient questions that guide inquiry and allow students to apply their knowledge (Bell, 2010). In teaching and learning the subject of chemistry through experiments, the tasks have special importance, being structured on the basis of questions and problems that are very challenging and require students to draw up a plan on how to solve the problems, how to make a decision about those problems, how to develop investigative skills and provide opportunities for students to learn independently (Parëati, Suarni, Suastra, & Adnyana, 2019). Experiential learning is a method in which students work together to investigate real-life issues and problems, using problem-solving strategies and various resources to produce a final product (MASHT & USAID, 2013). Furthermore, in his study on making chemistry teaching relevant, Holbrook (2005) summarizes the results of several studies on the relevance of chemistry teaching issues. Among the many problems encountered, some include the fact that the teaching of chemistry is unpopular and irrelevant to students, although there is believed to be a failure to promote higher order

cognitive skills. Therefore, gaps are created between what students want to learn and what they already learn. Teachers and teaching chemistry are not changing; this might be the reason teachers fear change and need professional development. Learning in the natural sciences aims to equip students with skills in acquiring and managing information. Learning focuses on integrating habits, from basic to complex processes, leading to creative problem-solving, decision-making, and investigative consideration (Musai, 2015).

Through the teaching carried out with experiments, the teachers will create a positive and motivated cooperation with the students, which will impact their engagement in planning the experiment and innovative future activities. This could serve as a way to improve students' knowledge in the subject of chemistry by involving them in various learning activities and integrating theoretical and practical perspectives, followed by the implementation of practical laboratory work, which was perceived as a challenge so far.

3. Methodological framework

The methodology of this research is action research, by means of any systematic inquiry conducted by teacher-researchers, principals, or other researchers in teaching/learning environments to gather information about how their particular schools operate, how they teach, and how well teach their students (Kingston, 2018).

To carry out this research successfully, we used the quasi-experimental design, including two main elements: an experimental class and a control class. *The experimental class* is also called the treatment group, because it receives the experimental procedure (intervention), in order to test the results. In this way, the group used the experiment as an approach to answer on the research problem. *The control class* is the group in the scientific experiment that is not exposed to any experimental changes.

For teachers of natural sciences, the organization of practical laboratory work is more complex than social work, because it involves understanding natural phenomena and processes or the environment through experiments and demonstrations, etc. Teachers must be well prepared for lessons by planning the programs carefully and considering the students' needs, abilities, and interests for learning, so that the teaching and learning process would be effective. Therefore, the purpose of this research is to identify the impact of experiment-based teaching on the learning of science and chemistry in seventh grade students, understanding the role and importance of experiment-based teaching in improving students' outcomes as well as the impact of this method on the planning and implementation of the lesson.

The research question that guide this study include: *What impact does experiment-based teaching have on seventh-grade students' late learning in chemistry? Does the application of experiments affect the stimulation and motivation of students for the subject of chemistry?*

General hypothesis: H 1: Students who learn in classes where teaching based on experiments is used have achieved higher results and performance in the subject of chemistry compared to students who have completed the lessons through traditional methods.

Special hypotheses H 2: In the classes in which the experiments were applied, students' interest in the subject of chemistry has increased compared to the students who have completed the lesson with traditional methods.

Sample of the research. The research was conducted in the „Dardania" lower secondary school in the Municipality of Pristina, where 44 students of the 7th grade took part in the study's sample.

Class VII - $_1$ (with 22 students) was an experimental class where learning was developed through experiments, while class VII- $_2$ (with 22 students) was a control class where learning was developed using traditional methods. In both classes, the same teaching units were teached, in the same environment, but with different teaching and methodological approaches.

3.1. Methods, procedures, and instruments for the research

The instruments that were used in this research for data collection are the following: pre-test, checklist and post-test that were used for both classes. The pretest was carried out in both classes with the same questions, to determine the level of knowledge of the students before applying the teaching based on experiments. The pre-test and post-test questions were the same for both classes, to check the prior knowledge the students poses (pre-test) and to evaluate the knowledge they have gained after the exposure to experiments (post-test). Through the checklist, notes were taken on the activity and abilities of the students for solving problems, their motivation and cooperation in the administration of the experiments. While the post-test was carried out after the administration of the experiments, and allowed the researcher to answers the questions and prove hypothesis of this study.

Experimental class	Control class
Learning with three modern methods	Traditional teaching
Experiment, research, integration and presentation of information.	We have not used additional research and information. We used only those that are presented in textbooks.
Giving additional experimental tasks at home and in the classroom.	I have not defined additional tasks.
Learning in groups.	The lesson is not carried out in groups.
Application of Experiments.	Learning theory.
Internet and other sources searched.	Dependence on the teacher.

Table 1. Changes in activities in control class and in experimental class

The table above (Table 1.) shows the activities that were used in both classes, in control and in experimental class. In the control class we presented the traditional teaching activities, while in the experimental class we presented teaching activities of the experimental (demonstration) method. In experimental class contemporary techniques have been used (experiments, demonstrations) that affected the learning of students, while control class implied only the traditional teaching technique. In the experimental class, through the teaching of every lesson, an experiment was developed with purpose to understand which method used there is showing higher results in the students' learning.

4. Results and discussion

From this research, we have achieved significant results in the students' learning performance and their interest in learning of the subject chemistry when they used experiment-based teaching. Also, this research has influenced teachers to use experimental method and modern techniques that will facilitate the teaching of natural sciences in general and the subject of chemistry in particular. From the indicated results of this research, it is noted that the positive

results that the students have benefited from the implementation of chemistry lessons with modern experimental methods, compared to the students of the first grade are notable.

In addition, findings from this research enabled us to understand featured skills of the students in solving experimental tasks which are related to their thinking skills, the creativity they have in giving new ideas and how they approach solving the problem. The application of the experimental based teaching in the lower secondary schools in Kosovo is of particular importance for the students, since with their help, students learn faster and easier, thus making the subject of chemistry more pleasant to the students.

4.1. Comparison of the results of the pre-tests of the control and experimental classes

In order to better understand the differences of teaching based on experiments compared to traditional teaching, through the relevant figures, we have presented the evaluation of students with grades. We provided these data for both the pre-test and the post-test. Below are presented the results from the answers of the students, from the control class and the experimental class.

The results of the pre-tests of the control and experimental class:

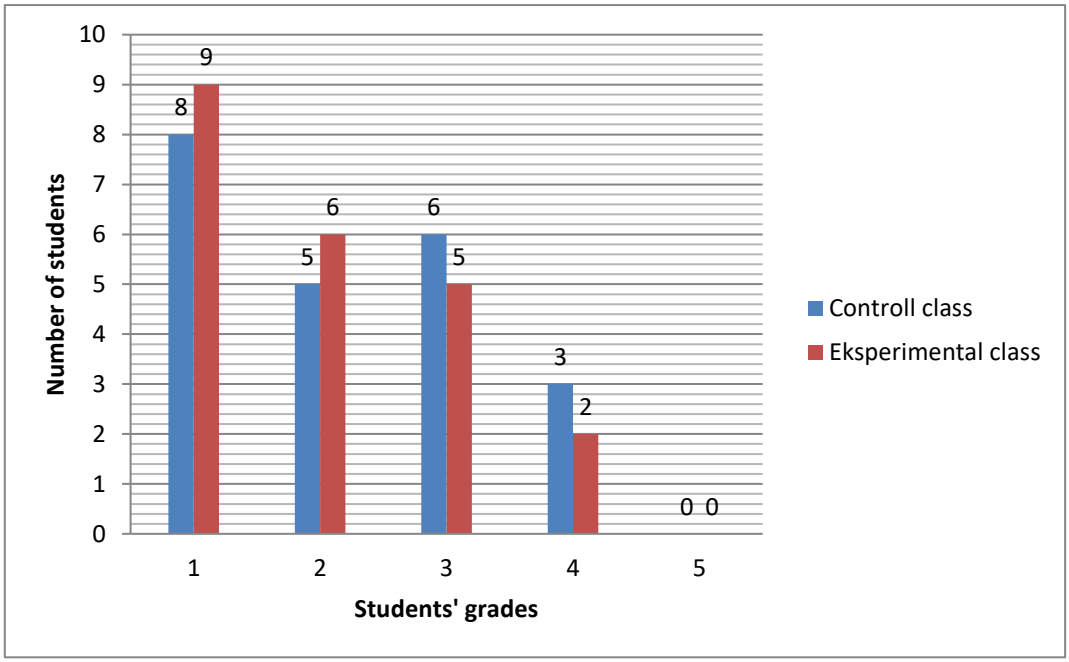


Figure 1. Comparison of the results in the pre-test between control class and experimental class

From the graph, it could be noticed that the control class, in the pretest of the learning units developed before the research, showed slightly higher results than the experimental class. So, the control class had slightly higher prior knowledge.

4.2. Comparison of post-tests results of control and experimental classes

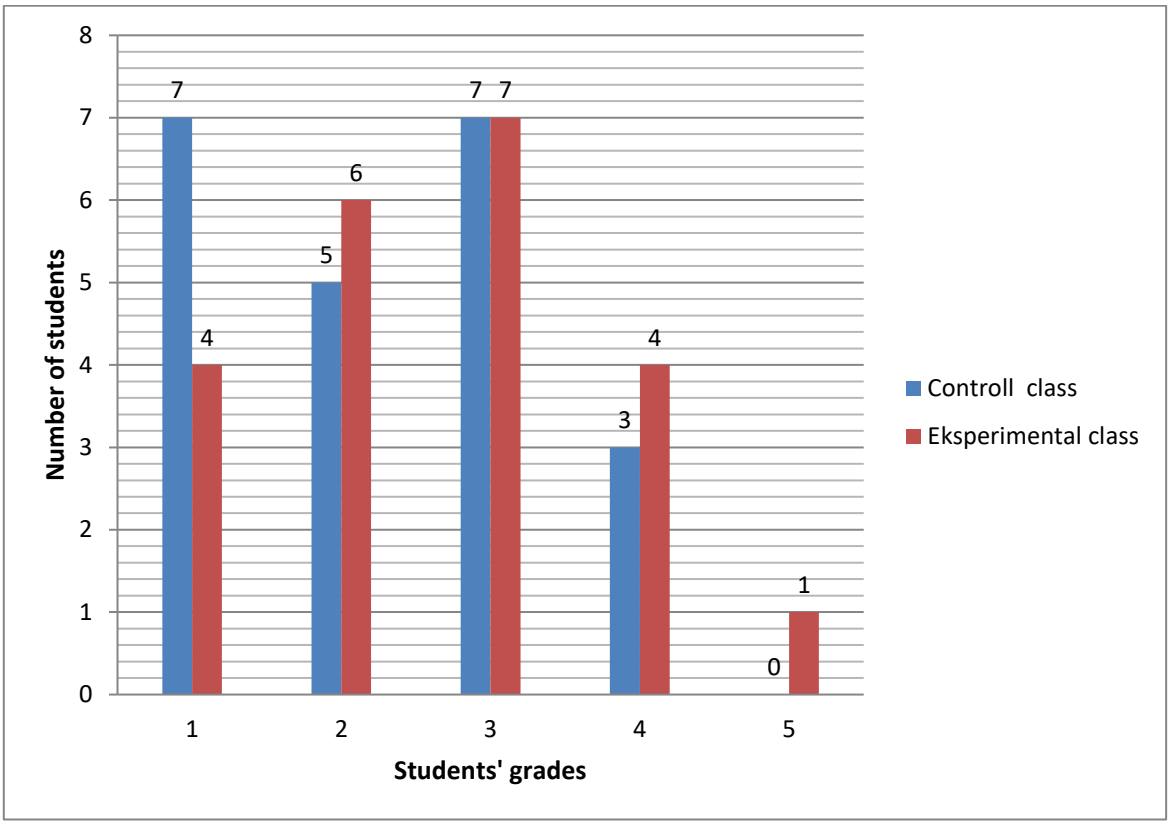


Figure 2. Comparison of results in post-test between control class and experimental class

In the graph, are presented the results of the students with the grades of the post-test from the teaching units realized after the research (intervention) was carried out. The learning units in the control class were teached through traditional teaching, while in the experimental class with teaching based on experiments. From the results of the post-test, it could be noted a difference between the control class and the experimental class. The experimental class, in this case, has better results than the control class. It should not be forgotten that the control class, in the pre-test, showed slightly higher results. The followed obtained results, in the experimental classroom, are believed to be indicated from the use of experiment-based teaching. From the data in Figure 2 it is noticed that the experimental class shows better results if we compare with the pre-test results. As seen here, the result is much higher. In this context, even when compared with the results with the control class, they are perceived as much higher.

These results are also supported by the results of the different studies in this field. In the study, regarding the levels of success achieved by the experimental group, the group that learned with experimental teaching methods, and the control group, which learned with traditional approach, a significant statistical difference is noticed in favor of the experimental group. This is an indication of the fact that teaching developed with based experiments contributed to student success more than teaching with the actual (traditional) curriculum, as it is stated in the contemporary findings regarding this problem (Pejchinovska, M., Kamchevska, B., 2016).

5. Conclusions and recommendations

The aim of this paper was to identify the impact of experiment-based teaching on the learning of the subject chemistry at the school level. Quasi-experimental method was used in the realization of this research. Based on the methodology procedures offered by this method, the study implied an experimental class, in which project-based teaching was developed, and a control class in which traditional teaching methods were developed. Through the use of pre-tests and post-tests, has been identified that experiment-based teaching promotes better results among students in the experimental classroom.

From the findings of the study, it is noted that the results of the post-test in the experimental class were better than in the control class. These positive results are believed to be related to the use of the experiments. In this regard, it appears that the experimental class was more successful than the control class. Therefore, it could be understood that the teaching based on experiments has positively influenced the results of learning the subject chemistry among the students of the seventh grades of the „Dardania" Lower Primary School in the Municipality of Pristina. The results of this study are also supported by the results of other researchers. According to the study of the authors Baert, Beunens, & Dekeyser (2002), teaching based on experiments influences students to learn with higher satisfaction and more easily. They asserted that teaching based on experiments can provide students with learning in the learning environment (Dekeyser, 2002).

According to Pawaits' study, (Pawait, 2019) it is indicated that that there is a significant difference in learning outcomes between the group of students who follow teaching based on practical experimental work and the group of students who follow learning through traditional methods. These changes are noted for the reason that learning, through experiments, creates students' critical and creative thinking skills. Students' teamwork through experiments, demonstrations, technologies and different materials affects student learning. Through the work in groups, the opportunity is created for the students to present their work as a team (Holubova, 2008).

Based on the review of the literature and the results of this research with seventh grade students, few important findings and recommendations have been compiled:

- The students of the „Dardania" school experienced for the first time teaching through the experimental method, an innovative method for them. Initially they had fears, emotions and doubts whether they would be capable of performing certain experiments by themselves and whether they would solve the problems that required solutions;

- From the testing through the post-tests, the students and teachers were satisfied with the results achieved and considering this fact, the teachers have expressed interest in continuing to use all modern methods such as experiments, demonstrations, projects during the teaching and learning process in the subject of chemistry;

- Inquiry based-teaching and learning is important to be promoted in the Kosovan education system; this approach might led to higher results in teaching science;

- To be successful, experiment-based teaching must be consistent with the curriculum of the relevant teaching unit in the subject of chemistry. It should be clear to everyone that the method is addressed to all the students in the class, a working group should be formed, the experiments, tools and basic literature should be selected so that the experiment or demonstration can be carried out more successfully to get as much information as possible and more precisely. For this purpose, the continuation of the use of the learning method

based on experiments will more often make positive contributions to the achievement of self-confidence and raising the results of students.

In general, the recommendations of this research are supported by other researchers, where according to Pupovci (2002) traditional framework of education was based on teacher-centered learning and memorization, and this outdated practice still continues in many cases. As a result, Kosovo ranks among the lowest among all countries participating in the PISA scientific test (OECD, 2016) with its results in science. Such low performance indicate that science teaching in Kosovo is inadequate and may result from poor performance of inquiry-based teaching and learning and/or active learning.

Thus, the most important characteristics of the application of experiments is to raise the success of students and make available new teaching methods, including the engagement of students and the implementation of the relevant methods, where students will be main actors of learning. The teacher must emphasize and clarify to the students that this teaching method offers them higher results in learning chemistry and in general success by raising their self-confidence and conviction that their work will be constantly evaluated during learning.

Students can improve their learning outcomes in chemistry if teachers make the subject more attractive by implementing experiments and showing concrete examples by engaging students as main actors in this process.

Teachers should choose suitable forms for creating the habit of experimental work of students. Teachers should look for ways to enrich their classes with means of concretization-eventually the regulation of chemistry laboratories. Students should be trained for practical laboratory work by conducting experiments and demonstrations. The task of the teacher is not only to teach but also to support his students, to motivate and increase their activity, their interest and willingness.

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MEDIEVAL SYMBOLISM, QUALIFICATION, STRUCTURE, ATTRIBUTION, AND ARCHAEOGRAPHIC VIEW OF THE SAINT CLEMENTS WORD FOR PALM SUNDAY

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Abstract
The word for Palm Sunday of St. Clement Ohridski is dedicated to the feast, which is susceptible to analysis from several aspects: interpretation of the medieval symbolism in the text. Its determination as a lesson, an eulogy word, or a compilation of elements of both kinds, its structure. No less interest causes the question of attribution, i.e., the determination of its authorship, as well as the data where the transcriptions of the word for Palm Sunday are found and the existence of only one edition.
Key words: medieval symbolism, qualification, structure, attribution, archeographic display

1.1 Medieval symbolism

The presentation of the feast is done emotionally but based on quotations and reminiscences of the biblical text. At the end of the teaching, inviting the faithful to the Holy Eucharist, St. Clement uses a literal text: "God's table is prepared, the Lamb of God is offered, which took on itself the sins of the world." (Grozdanoski, 2002:241). The semantics of the lamb - Christ, was established in the early Christian period, who came to die for the salvation of mankind... Thus the lamb is established as the oldest and most significant symbol of Christ, (Petkanova, 2000: 87) means victory and suffering, and slaughter of the paschal lamb is an allegory of Christ's suffering. It is present several times in the words of St. Clement Ohridski and the symbol of the table, which "is found throughout the Middle Ages, with direct and figurative meaning" (Petkanova, 2000: 87) According to Petkanova, the church offers a table with the teachings of Christ and his feat for people, - they are spiritual food , to nourish the soul. Christ's sacrifice should strengthen the believer spiritually, to bring his redemption and salvation. The teaching of Saint Pascha - Easter, as we have seen, is full of medieval symbolism, which is used in early Christian (biblical) and medieval works, before and after St. Clement, by John Chrysostom, by Constantine Preslavski, Euthymius, Cyprian, Gregory Tsamblak (with modified semantics), Damascene Studite, etc.

In this word, St. Clement quotes the biblical text from the Psalms and the Gospel, uses quotes from Apostle Paul, paraphrases and uses the Gospel according to Matthew and Luke, refers to the Epistle of Apostle Paul, the teaching of the Church based on the Holy Tradition. (Grozdanoski, 2002:240). The entire lesson contains "biblical verses" and is based on "the authority of the Holy Scriptures... there is no verse that is not biblical, only some of them are literally expressed, and some, due to the needs of the listeners, are shortened or simplified... " (Grozdanoski, 2002:240). The lesson for Palm Sunday is carried by a biblical-historical determination with the presence of dogmatic elements.

1.2 Qualification (lesson or a eulogy word)

St. Clement Ohridski wrote the word for Palm Sunday based on the Gospel description of Christ's solemn entry into Jerusalem, "whereby he mostly used the text from the Gospels

according to Matthew and Mark, because there the narrative is "more extensive", but Grozdanovski mentions that St. Clement also used "apostolic reading for the feast " (Grozdanoski, 2002:257). Likewise, St. Clement quotes the Gospels according to Luke and John, the Psalter, the Apostle Paul, the Symbol of Faith, biblical contents from the Old Testament, but also paraphrases and makes compilations of several biblical quotations. In the manuscript tradition, but also by researchers, the word for Palm Sunday is categorized as a eulogy word, a word, a teaching, and such dilemmas also arise when it comes to the word for Pascha (Easter), and partly for the word Transfiguration, because in the word for Palm Sunday "has a reinforced catechetical element, which brings it closer to a catechetical sermon, but not to a eulogy word". (Stanchev, 1988: 68) With Grozdanoski, it is only qualified as a general word, while the other two for Easter and Transfiguration as instructive words. (Grozdanoski, 2002: 250, 239,242) And Bonchev (Bonchev, 1970) qualifies the words for Pascha and Transfiguration as instructive, while the word for Palm Sunday is categorized as praiseworthy. In Collected works of BAN (Clement Ohridski. Collected works, 1970). Stanchev provides a detailed analysis, in which he is categorical that these three words are instructive. Ugrinova - Skalovska (Ugrinova - Skalovska, 1996) St. Clement's work for Palm Sunday carefully titles it "On Palm Sunday, a word of St. Clement, Bishop Velichki, as Christ's meeting with the children" and the second as a Lesson for Easter. And Takovski titles this word only as "Word for Palm Sunday" (Takovski, 2012:148), and the word for Pascha as "Teaching of Holy Pascha - Easter" (Takovski, 2012:154).

1.3. Structure

The three words contain the same structure: an introduction, a narrative part, an exposition of the celebrated feast and a morally instructive part. Such a four-part composition in three words is marked by solid verbal formulas and biblical quotations. The structure of the words is constructed from an introduction, a narrative part (motivation and announcement of the feast), an exposition of the feast and an educational (moralizing) part. In the second part of the word about Palm Sunday, the resurrection of Lazarus is used as a narrative, the event from the previous part, and the exposition of the feast, its celebration is taught through a Gospel story. This word, specifies Stanchev, has a larger moral education part which "consists of two moments: catechetical sermon and own moral education" (Stanchev, 1988: 67).

Contrary to Stanchev's analysis, for a four-part compositional structure of the Lesson of Holy Pascha - Easter, Velinova speaks of a three-part structure: "the first explains the meaning of the feast, the second is an oratorical celebration of the most important thing for the Christian church, the Gospel event, the third is a short moral lesson (Velinova, 1995: 96) where the introduction and the announcement of the feast could form a common part. After the introductory part, which is actually a formulaic address, i.e., an explanation of the feast and the celebration, then follows the narrative part, which in the Teaching of Holy Pascha - Easter is thematically determined by the Resurrection, i.e. a kind of story - explanation, which deals with the questions of embodiment and the crucifixion of Jesus. The presentation of the celebration in this word is done using a rhetorical tirade, the anaphora "today" is repeated six times:

Today (God) destroyed the enemy with His death and resurrected as from a dream, and incorruption and life poured out upon humans.

Today the gates of hell were broken and those held in it were resurrected, illuminated by an ineffable light and exulting, with the angels: "Glory to God in the heights, and to the dragon peace, among the men good will!"

Today, our great-grandfather Adam rejoices, destroys the first curse, and spreads his hands together with Eve, resurrecting in the Lord.
Today heaven and earth are filled with joy, and, after they were reunited, they gather for joy the incorporeal powers and the human race.
Today the apostle Paul cries out, saying, "Christ, our Pascha, was slaughtered for us."
Today, the church calls with a sublime sermon, saying: Come children, listen to me, I will teach you the fear of God!" (Takovski, 2012: 155-156).

1.4 Attribution

In some cases, this word is attributed to John Chrysostom, and in others it is anonymous. In the Belgrade transcript from 1328, it is stated that the author is St. Clement. Kuev notes that Chrysostom wrote two words for that feast, but their content is different. In both Mihanovic's and Hlud's transcripts, the word is given immediately after Clement's word about Lazarus, although it is not decisive for determining the authorship, but it can be treated as some kind of argument and indicator. We can locate the noticeable internal connection between those two words especially in the pathos and rhythm. That is why Kuev believes that this word should join the indisputable works of Clement, and we accept this fact as correct with all the relativity of probability. The oldest copy of this word is from the twelfth century, found in parchment, and kept in the GPB, St. Petersburg, (F. n. I. 46). The word was published in: Novye slova Klimenta Slovenskogo - Sbornik ORYAS, vol. LXXX, vol. 1, 1905, p. 28 - 36.

Kodov (Clement Ohridski. Collected works, 1970: 605), relying on the materials at his disposal and the data provided by Stojanović and Sobolevski, believes that all the transcripts represent the same editorial office and come from one source, their mutual differences are insignificant. The oldest copy is in Zlatostruj from the 12th century, it is located in GPB, St. Petersburg, (F. p. I. 46), and the word was published by Sobolevski (Izvestiya ORYAS, vol. XI, 1906, vol. 1, p. 50- 52, after a transcript from Zlatostruj from the 12th century) and Stojanović (Novye slova Klimenta Slovenskogo, page 44 - 52, after a transcript from the manuscript № 261 (437) from the Belgrade National Library).

1.5 Table - archeographic representation of the Word for Palm Sunday

WORD FOR PALM SUNDAY				
Nº. trans cripts	**Where is the transcript found**	**Description**	**Place where the transcript is found**	**editions**
1.	in twelfth-century parchment Chrysostom	1°, in two columns, small constitutional script. see: I. I. Sreznevsky. Information and notes about little-known and unknown monuments. XII. Spb., 1867, p. 6 - 27.	GPB, St. Petersburg, (F. n. I. 46).	
2.	in parchment triode from 1328.	1°, in two columns, constitutional letter, Macedonian edition with Bulgarian words. see: L. Stojanovi. Catalog of the National Library in Belgrade. Belgrade, 1903, p. 75 - 78, No. 261.	in the National Library in Belgrade, (№ 437).	New words of Clement of Slovenskogo - Collection of ORJAS, vol. LXXX, book. 1, 1905, pp. 28 - 36.
3.	in parchment color triode 14th century.	4º, semi-constitutional letter, Macedonian edition. see: A. N. Popov. Description of manuscripts and catalog of books of church press libraries A. And Khludova. Moscow, 1872, p. 292 - 293, No. 135.	GIM, Moscow, (Chlud. Q. 135), previously owned by A. I. Khludov.	
4.	in the so-called German collection from 1359.	296 pages 4°, parchment, semi-constitutional letter, Macedonian edition. see: Ioan Iufu. Slovnik lui Gherman. - Ortodoxia, год. XII, 2, Bucuresti, 1960, pages 264 - 265, D. Ivanova - Mircheva. German collection - Bulgarian written monument from the 10th century in a transcript from 1359 - Bulgarian	in the Central Patriarchal Library of Bucharest, (V. P. R. M. 224), the present signature is (mss. slav. 1). earlier the manuscript was the property of the monastery of Voronec (west of Suceava, northern regions of Romania).	

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CODE-SWITCHING IN ELT CLASSROOMS IN THE REPUBLIC OF KOSOVO

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Abstract
The use of the mother tongue also known as L1 as a needed and important constituent in the L2 classroom has been discussed amongst teachers of English as a foreign/second language for a long time. Therefore, the present study wants to answer the following research question: What are the circumstances ELT teachers and students switch between English and Albanian, with the goal to better understand teachers' and students' language choice regarding code switching in ELT classrooms. In order to reach the goal, a sample of 15 interviews conducted with primary, secondary, and higher education ELF teachers and of 15 interviews carried out with ELT high schools and university students, from the Republic of Kosovo is determined. The interviews are transcribed and then coded and the analysis rests upon the interpretative-inductive approach. The results of this study show that the majority of the EFL teachers use their mother tongue to either explain their ideas clearly, give instructions, manage the classroom, or understand instructions and ideas appropriately in English, etc. Teachers always switch to their mother tongue (L1) when using EFL (L2) and in very rare cases the opposite. The research results also display that EFL learners use code switching to express themselves better, to explain ideas, to communicate with each other, and to increase comprehension such as in cases when they ask their professors or their colleagues questions, but there are cases worth mentioning when professors and learners use it without even realizing it. This research will help teachers and students have a better understanding of the role of code-switching in ELT classes, and will make them more aware of this very common phenomenon.

Keywords: *English language, code-switching, teaching and learning L2, mother tongue.*

1. Introduction

English language, as a truly global lingua franca, as the language most widely spoken throughout the world, is the main foreign language taught in our education system and it is considered a very important subject in our curriculums. If we want to meet the needs of students when it comes to their communicative language skills, it is necessary to improve the quality of ELT by improving the methods and techniques that EFL teachers use. The use of L1 (also known as the native language or mother tongue) in the classroom is considered to be an issue for English as a foreign language teachers. As a phenomenon, code switching can be observed especially in multilingual and bilingual situations inside and outside of the classroom environments. People who speak or are fluent in more than one language usually mix them when using. We have different cases with Albanian Diaspora, who mix Albanian and German, Albanian and French, but we also have cases of multilingual people in Kosovo who incorporate L2 (English in most of the cases) when speaking in their L1, many times without even realizing that they are switching codes. Code switching is used by multilingual people to contextualize conversations in their communications and it is also a widespread phenomenon when it comes

to language teaching, specifically in multilingual classrooms, such as the primary, secondary and higher education institutions in Kosovo. CS is always seen in EFL classes. As Baker (2006) imply, when EFL students cannot come up with the right word to express their thoughts and ideas, they tend to use words from L1 in order to complete their thoughts. Thus, according to him, seen from a sociolinguistics perspective code-switching performs a variety of functions, one of which is to substitute a word in place of an unknown word in the target language.

This research answers the question: What are the circumstances ELT teachers and students switch between English and Albanian, with the goal to better understand teachers' and students' language choice regarding code switching in an ELT classrooms. A sample of 15 interviews conducted with primary, secondary, and higher education ELF teachers and of 15 interviews carried out with ELT high schools and university students, from the Republic of Kosovo is determined. The interviews are transcribed and coded and the analysis rests upon the interpretative-inductive approach. Code-switching is very common in our educational institutions, and hopefully this research will contribute to a better understanding of language choice in code-switching by teachers and students.

2. Broader research context

Code-switching has been defined as the practice of moving back and forth between two languages or between two dialects or registers of the same language at one time (Nordquist, 2019). It is also known as style-shifting and code-mixing. Different linguists study it to understand when individuals do it, such as when bilingual or multilingual speakers change languages from one to the other, whereas sociologists study it to understand why people do it, such as how it connects to their membership in a group or in the context of the conversation (whether it is professional or casual), etc. According to Zentella (1985), code-switching performs several functions. First, code-switching may be used to disguise fluency or memory issues in a second language. Second, code-switching is used to transition between informal (L1) and formal context (L2). Third, code-switching is used to exercise control, especially by parents with their children e vice versa. Fourth, code-switching is used to connect people with each other in different social situations (e.g., specifying one's ethnicity). Johnson (2000 in Gudykunst, 2004) states that code-switching also "functions to announce specific identities, create certain meanings, and facilitate particular interpersonal relationships."

Seen from a sociolinguistics perspective code-switching performs a variety of functions such as to highlight a specific point, to substitute a word in place of an unknown word in the target language, to express a concept that has no equivalent in the culture of the other language, to reinforce a request, to clarify a point, to express identity and communicate friendship, to ease tension and inject humor into a conversation, and to introduce certain topics (Baker, 2006).

In some cases, code-switching is used to conceal fluency in L2. In other cases, it is used by students to switch from formal situations to informal situations. There are many cases where code-switching is used to demonstrate power and authority even though this mainly happens in family situations. Code switching is also used to relate to other speakers on different social or educational occasions. Code-switching is a technique of adapting language for the purpose of individual intentions, such as creating relations among members of a multilingual community, and linking gaps with speakers who have the same cultural identity.

As Cook (2001) suggests "Teachers should be clear in their minds that they are usually teaching people how to use two languages, not how to use one in isolation. Rather, the aim is people who can stand between two viewpoints and between two cultures, a multi-competent speaker who can do more than any monolingual." Code-switching has been opposed for different reasons. First, using the mother tongue in the classroom is considered a factor that delays language acquisition and opposes the natural method of people learning languages. EFL learners could become reliant on teachers' code-switching and this may result in a lack of L2

exposure which makes it hard for them to guess or interfere with meaning from the context, which is a necessary skill in life. Code switching can also influence the way EFL learners connect to other people using a foreign language. Second, code-switching has been considered a strategy used by teachers that use the mother tongue to hide their language insufficiency. The same "rules" that apply in a bilingual situation should apply in the classroom because a classroom is a language community that tries to give its participants opportunities to learn and utilize language by giving them meaningful input.

Usually, teachers of English as a foreign language switch codes to help students understand grammar. By using the L1, by switching codes the EFL teachers can assist students to transfer their L1 knowledge into the foreign language, so as Cole (1998) says: "a teacher can exploit students' previous L1 learning experience to increase their understanding of L2". The teacher also uses it to signal the transition from one stage of the lesson to the other, to give instructions, and to manage the class. Thus, according to Sert (2005), switching codes in an EFL classroom functions to switch topics affective functions, and repetitive functions. For their dialogue to continue and to compensate for their lack of language production, students switch codes to obtain translations for unknown terms in the target language. Additionally, they use code-switching to accentuate or support the idea they want to convey. They repeat to ensure that they fully comprehend the linguistic input and to demonstrate their understanding to the teacher.

Many studies consider code-switching to be both common and an effective teaching and learning tool in EFL situations. We shouldn't employ translation in class since, according to Cook (2001), bilinguals constantly switch between languages, and foreign language learners constantly translate in their minds. According to studies, code-switching is a useful technique for achieving a variety of communicative and metalinguistic goals, comprehending concepts, and exploring their ideas.

Student's questionnaire show that EFL students have a positive attitude toward teachers' use of L1 in EFL classes (Xhemaili, 2017). Students use their native language when they do not understand a specific word or concept, to discuss with their colleagues before speaking in English, to ask questions, and to express opinions or ideas which they were unable to do in the target language. Xhemaili further states that EFL learners point out the need of using their mother tongue during the courses as it helped them with being more confident in expressing themselves. They claim that English teachers' use of L1 helped them learn and understand English more easily. Students admit that EFL teachers typically use L1 to explain ideas and concepts that seem hard to be understood by students, to check their understanding, and to elicit language. The majority of the students confirmed that it was pretty difficult to understand the English lessons if the English teacher completely used English.

In his observation in classrooms, Xhemaili (2017) finds out that only a few students could interact in English with the teacher concerning the material that teachers were teaching. Results show that English teachers do use the mother tongue (L1) during classes. L1 is generally used mostly in informal situations, such as when it comes to explaining complex grammar rules, motivating students by sharing jokes, chatting, giving instructions, and clarifying the meaning of specific unknown words. Mother tongue was also used: when students talked to each other (in pair or group work). The students use L1 to ask for help from each other. Most of the EFL students used L1 to ask questions to teachers, whereas teachers clarified to the student's inquiries in both English and students' L1.

Xhemaili (2017) also observes that teachers sometimes wrote phrases or sentences on the board and asked students to translate them together. EFL teachers asked some wide-ranging related questions to activate the students' background/general knowledge in order to increase their comprehension. In order to help their understanding, teachers also used flashcards, definitions, pictures, and synonyms to describe the word(s), but didn't directly translate them.

In his study Xhemaili (2017), also asks EFL teachers to answer whether or not they use their mother tongue in their classes and if yes, why they think this could be more effective than using English only, and some of their answers are listed in the table below.

Albanian	**Incorrect translation**	**Correct translation**
Aktualisht	actually (në fakt)	Currently
Edukim	education (arsim)	Upbringing
ekonomist (që merret me një biznes të caktuar, jo me shkencën e ekonomisë)	economist (ekonomist që merret me shkencën e ekon.)	Accountant
Gjimnaz	gymnasium (palestër)	high school
inxhinier (që nuk merret me sisteme shumë të ndërlikuara)	engineer (inxhinier që merret me sisteme shumë të ndërlikuara)	Mechanic
klasë (në kuptimin e dhomës së nxënësve)	class (shtresë sociale, nivel, grup nx.)	Classroom
klasë (nivel shkollor)	Class	grade (Am.), form (Br.)
Kontrolloj	control (zotëroj)	check (on), monitor
Library	library (bibliotekë)	bookstore, bookshop
Note	note (shënim)	grade (Am.), mark (Br.)
Rregulloj	regulate (vë në kontroll, sistemoj)	Fix
Shef	chief (kryetar) chef (kuzhinier)	Boss

Some concepts are more difficult and have to be translated into students' L1 in order to help them follow up on the activities and achieve better results. Students' mother tongue enables students to understand new concepts that are first created in English and as such, they need exclusive explanations in L1. The learner benefits greatly from using L1 since they are better able to comprehend concepts and acquire all language abilities. Students may need to translate concepts they find difficult into their native language in order to understand them better. Students may be less nervous when learning difficult concepts in English.

Code-switching can have a positive or negative impact on the speakers or writers, depending on the relative unit structure of the L1 and L2. Most learners apply their native language knowledge to a second language, and this transition can result in both positive and negative transitions. Positive transference occurs when the meaning of the transferred element matches the native speaker's acceptance. Negative transfer is seen when the opposite occurs which results in errors. The greater the difference between the two languages the greater the negative transfer. Similarities and differences in word meaning and form affect how quickly learners acquire a foreign language (Odlin, 1989).

3. Methodology

Considering the importance of the research question (Janusheva, 2022), this probe answers the question of what are the circumstances ELT teachers and students switch between English and Albanian, with the goal to better understand teachers' and students' language choice regarding code switching in their ELT classrooms. Thus, a sample of 15 of interviews conducted with primary, secondary, and higher education ELF teachers and of 15 interviews carried out with ELT high school and university students, from the Republic of Kosovo is set.

The sample is purposeful, because as stated by Lincoln & Guba (1985), each sample is determined for a particular purpose. The sample determination is further in line with the attitudes of Cheek (2008), Yin (2011) and Gentles et al. (2015) that interview transcripts may be used as a sample. As a method for collecting data, the interview is used by many researchers (Fontana & Frey, 1994; Holstein & Gubrium, 1995; Hughes, 1996; Richards, 2009; Seidman 2013). The interviews' questions are divided according the meaning, which according to Richards (2009) enables its natural flow. The questions are related with the circumstances in which teachers use code switching, thus, according to Patton (2002), they affect teachers' and students' beliefs. The interviews' are coded, using the suggestions of Strauss & Corbin (1990), and the data analysis exploits the general interpretative-inductive approach used by many (Marshall 1999; Meriam, 2002; Thomas 2006; Creswell 2009; Kahlke 2014; Harding & Whitehead 2016), which does not have a formal methodological frame and stress the inductive thinking which leads to creating idea form the collected data.

4. Analysis, results, discussion

4.1. Teachers' interviews

Many of the factors that lead to code-switching in a bilingual setting also apply to language classes. All educational levels use L1 frequently in daily practice, sometimes unconsciously for reasons other than the ones that cause bilinguals to switch codes. The authors separately code the interviews and then compare the emerged codes and categories. The main categories which arise from the teachers' interview are: being close to the students, showing respect, elucidating instructions and concepts, contributing in effective teaching, students' lacking of language capability, checking students' understanding, underlining specific issue, and keeping discipline.

According to interviews, EFL teachers admit using a more informal language variety with students to show commonality or use some words or phrases of a student's native language (in cases when the language spoken in the classroom is different).

> *By using students' mother tongue (L1), I assure my students that I am close to them and that they do not have to hesitate when it comes to them expressing their own opinions.*

There are also cases where teachers who share the same cultural identity with a student may use code-switching when speaking to that student to show respect which is in line with Baker (2006), who said that code-switching is a technique of adapting language for the purpose of individual intentions, such as creating relations among members of a multilingual community, and linking gaps with speakers who have the same cultural identity.

Teachers also admit using code-switching to clarify instructions or difficult concepts. Teachers use an equivalent word in their native language instead of the target language term because they are aware that some of their students do not know the term in the L2, and this is known as the equivalence. An instance of equivalence was when an Albanian-speaking professor (considering that there are foreign professors working in our institution) was explaining something about the nature to his students, he used the word "lartësi mbidetare" instead of the word "altitude" because he knew that his students do not yet know the English word for altitude. If that teacher wants to explain to his students something regarding altitude, he will most likely use code-switching again to help students understand the topic correctly.

> *When I want to explain specific difficult topics/words I use students' mother tongue (L1) which assures me that they understand it better.*

Some EFL teachers declare that some students experience difficulties in understanding instructions, specifically referring to complicated topics in formal speeches, thus explaining these in a less formal way will help students understand their assignments and new concepts better which in turn results in better achievements. Some acknowledge that occasionally they hesitate to use code-switching because they feel unauthentic when they do not speak the L1 of multilingual students.

> *I have students who do not speak Albanian since their mother tongue is Bosnian or Turkish, so I try not to use Albanian language for the sake of these students.*

The interviews also suggest that in order to explain hard concepts, EFL teachers use visual materials or translated resources to aid students' access the information at their own pace or in a language they understand better (L1).

Most of the teachers that undergo the interviews admit that code-switching help them teach English communicatively.

> *I use code-switching to manage the classroom. Code-switching helps us manage class activities because in this way we can attract students' attention by using words in L1, while teaching in L2.*

Teachers say that they use code-switching to teach grammar and difficult words, which is in correlation with Cole (1998), who said that teachers of English as a foreign language switch codes to help students understand grammar.

> *By switching codes, we can easily explain difficult grammar concepts, since explaining difficult words/phrases in the L2 is much more difficult, considering students' language competencies.*

Teachers in EFL classrooms switched languages during conversations because their students do not have the language capabilities to understand them when they speak continuously in the L2. They use a technique known as floor-holding to not interrupt their conversation/lecture. For example, when a teacher is delivering a lecture on the effects of stress on people with low self-esteem, he uses the term "lodhje" referring to fatigue when saying: One of the symptoms of stress is "lodhje".

> *I know they do not understand the term (fatigue) and I chose to use the Albanian word (lodhje), so they would know what I am talking about and I would not stop my conversation.*

By switching codes, the EFL teachers can assist students to transfer their L1 knowledge into the foreign language, which is line with Sert (2005) who stated that teachers also uses code-switching to signal the transition from one stage of the lesson to the other, to give instructions, and to manage the class.

> *A teacher can exploit students' previous L1 learning experience to increase their understanding of L2. We use CS is to give instructions, specifically at the beginning of the classes in order to help students understand instructions appropriately, so they can complete required tasks.*

Some of the respondents report that they use code-switching to check students' comprehension which is in line with Xhemaili (2017) who declares that EFL teachers use code switching to ask some wide-ranging related questions to activate the students' background/general knowledge in order to increase their comprehension.

> *At the end of the course, students are expected to: be acquainted with vocabulary and key facts and concepts of English, be able to read and understand books in English, be able to follow lectures and take notes, be able to make an oral presentation on various topics, develop writing skills, etc., so by switching codes we would precisely measure whether our students achieved the goals or not.*

Many of the teachers claim that they use code-switching to highlight important points during the lecture which is in correlation to Baker (2006) who explained that from a sociolinguistics perspective code-switching performs a variety of functions such as to highlight a specific point.

> *By highlighting the most important points by using students' L1, helps them draw students' attention which according to them always results in proper understanding of the lesson.*

Some of interviewed teachers say that they use code switching to keep discipline in the classroom, admitting that they have to do it when it comes to disruptive students, since according to them, students underestimate English when it comes to such situations.

4.2. Students' interviews

Several categories arise from the students' interviews: manifesting better expression, defining and illuminating a concept or meaning easier, lacking of language competence, not revealing their language fluency, showing authority, creating interpersonal relations, not being consciousness.

The main reasons why EFL students switch from L1 to L2 to are to express themselves better, to clarify and explain certain meanings, to talk about specific topics and help them communicate with their peers better, which is in correlation with Johnson (2000 in Gudykunst, 2004) who states that code-switching also 'functions to announce specific identities, create certain meanings, and facilitate particular interpersonal relationships.

> *Even though I would love to express myself solely in English, it is quite impossible, since I do not have a rich vocabulary.*

> *When I want to clarify something I use words from my native language because by doing so, I feel like I am conveying the meaning appropriately.*

The majority of students consider the translation of phrases, sentences, clauses, and words as the first step to comprehending a text or a speech, and by using their L1, they can explain meaning better as well which is in line with Xhemaili (2017) who observes that teachers sometimes wrote phrases or sentences on the board and asked students to translate them together. The idea of translating words phrases and sentences is not in line with Cook (2001), who stated that we shouldn't employ translation in class since, according to him bilinguals constantly switch between languages, and foreign language learners constantly translate in their minds.

Students, use mother tongue (L1) to talk to each other in general, and specifically when they do the pair or group work. When it comes to facing difficulties, they use L1 to ask each other for help. Due to their limited English proficiency, majority of the EFL students were found to be using their mother tongue to ask questions to teachers and their colleagues. This is also in line with Xhemaili (2017) who said that only a few students could interact in English with the teacher concerning the material that teachers are teaching.

> *I feel shy to use L2 (foreign language) when asking questions to professors because I know that their English competencies are high and they can find mistakes in my grammar.*

Students also used code-switching to hide their language fluency in the foreign language which is in correlation with Zentella (1997), who claimed that code-switching may be used to disguise fluency or memory in the second language.

> *I do this with words that I think I am not pronouncing correctly, or that I think I am using inappropriately.*

Code-switching is used by students to also show switching from formal to informal circumstances and considered important because they can show authority, which is in line with Zentella (1997), who stated that code-switching is used to exercise control.

> *By code-switching I can show authority, mainly amongst their family members and friends.*

Some students declare that they change codes to modify language for the sake of personal intentions/achievements.

> *I use code switching, such as when creating interpersonal relations among other bilinguals, and connecting gaps with speakers who share the same cultural identity.*

Some EFL students sometimes switch between codes inadvertently, without realizing that they use a native word. Speaking of their hobbies or explaining some personal issues, they use L2 without even apprehending it or intending to use it.

> *Other than reading books, I love playing tennis with my siblings "fundjavave" (on weekends).*

> *I have problems interacting with people and this causes me parehati (discomfort).*

An interesting situation is switch between codes when a concept or a specific word does not exist or does not have an identical translation in the L2. When explaining to his students the concept of thought and language and their relation to each other, the teacher tells his students that there are words that do not have their equivalent words in another language, such as the German expression "schadenfreude" which is the perfect word for this case. The German word "schadenfreude" consists of the words "schaden" (evil) and "freude" (pleasure), and it means basically "being pleased because others experience bad things". EFL professors can use this technique of code-switching in such situations to help their students understand formal literary and/or scientific terms that do not have an equivalent in the L2.

5. Conclusion

The research results show that EFL teachers and EFL students know the functions of code-switching in class and when necessary, they agree to use it, in specific cases. From the results, it can be concluded that code switching occurs in ELT classes almost all the time. When it comes to communicating thoughts and ideas, code-switching is a strong component, as well as in ELT classrooms, consequently, it helps you communicate the meaning. The participants strongly believe that code switching is an important tool for teachers and students when learning and teaching English as a foreign language. Where teachers and their students have the same mother tongue it is easier for both sides to switch codes, which results in better understanding.

As teaching strategy in English as a foreign language class, the participants strongly advise that when giving instructions, explaining new topics, defining complex unknown words, explaining new definitions, elaborating difficult grammar concepts, managing classrooms, reinforcing students' actions, and overall, motivating them, EFL professors should use code-switching. This will help the students to improve their learning outcomes and understand things appropriately.

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ENGLISH TEACHING JUST GOT AN UPGRADE: HOW AI IS REVOLUTIONIZING TESOL

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Abstract

The field of Teaching English to Speakers of Other Languages (TESOL) is ever-evolving, and as such exploring the potential of Artificial Intelligence (AI) in language teaching and learning is becoming increasingly important. AI-powered language learning tools, such as chatbots, are changing the way students learn and practice English. As these AI-powered chatbots gain momentum, educators worldwide discuss their potential implications on the process of language teaching.

By examining the potential use of chatbots such as ChatGPT, this paper aims to contribute to the limited available literature on AI and TESOL and provide valuable insights for teachers on the benefits and challenges of incorporating AI in their daily work. Discussing the ways chatbots can enhance ESL/EFL classes, as well as the ways they can hinder the learning process, due to issues related to academic dishonesty, this paper highlights both the advantages and the disadvantages of such emerging technologies, as well as AI's practical use in a classroom, in hopes to improve the language learning outcomes.

Keywords: *Artificial Intelligence (AI), Teaching English to Speakers of Other Languages (TESOL)*

Introduction

Artificial Intelligence (AI) has the potential to significantly impact the field of Teaching English to Speakers of Other Languages (TESOL) in various ways. Or so ChatGPT says when asked "How AI can impact TESOL?"

By providing immediate feedback and explaining nuanced notions within seconds, such language models can certainly alter the way we use language, and thus, the way we teach it, as well. AI technologies continue to develop rapidly, and according to recent reports (Educause, 2019), AI use in education is projected to have grown by a staggering 43% in the period between 2018 and 2022. The report predicts that AI use in teaching and learning will, undoubtedly, continue to grow in years to come. Contact North's insights, as cited in Zawacki-Richter et al. (2019) support these claims stating that "there is little doubt that the [AI] technology is inexorably linked to the future of higher education".

The application of AI in education (AIEd) has been studied at length for the past 30 years, according to Zawacki-Richter et al. (2019). According to Russel & Norvig (2010), as cited by Zawacki-Richter et al. (2019), AI originated in the 1950s when a two-month workshop

was organized by John McCarthy at Dartmouth College. In the proposal for the workshop, McCarthy introduced the term "artificial intelligence" for the first time in 1956. Defining AI as “Computers which perform cognitive tasks, usually associated with human minds, particularly learning and problem-solving”, Baker and Smith (2019), also note that AI should not be seen as only technology only, but as an umbrella term that envelops different types of computer learning.

Though there is an abundance of available research to do with AIEd, with recent developments in powerful chatbots such as ChatGPT, the pedagogical aspects of teaching, especially teaching English to speakers of other languages, need to be reexamined on a broader scale. And although there are significant advantages to using AI to aid in education, there are also new ethical concerns and potential hazards that arise as a result of its implementation.

As with any technology or tool, the use of AI models like the aforementioned ChatGPT in academic settings also raises the potential for academic dishonesty. One of the most significant concerns is the possibility of students using AI models to generate or plagiarize content for assignments, papers, or exams. Since AI models like ChatGPT are designed to generate text, they can easily produce content that resembles original work, making it difficult for educators to detect plagiarism.

2. Methodology

This paper follows the qualitative research design that involves a review of existing literature related to the use of artificial intelligence in English Language Teaching and the possible applications of AI in TESOL.

The sources of the literature review include various academic journals, books, and online articles. The review focused on identifying the current trends in AI application in ELT, and the advantages and disadvantages of using AI in teaching. In terms of its validity, this paper aims to include a comprehensive review of materials from a wide range of sources from reputable and diverse authors and publications.

In addition, the paper provides some examples of how AI can be used in different aspects of TESOL, such as conversation, vocabulary, and writing practice. The examples on the researcher’s own experience in teaching ESL.

Overall, this paper aims to contribute to the growing body of knowledge about the potential benefits of AI in TESOL and provide insights into the challenges and opportunities associated with integrating such technologies.

Note: The author declares that no funding was received for the data presented in this paper and that there are no conflicts of interest that could potentially bias the conclusions.

3. AI in Language Teaching: Literature Review

As technology advances, AI applications are being developed and implemented in various aspects of language education. By reviewing some of the notable studies published thus far, this paper aims to examine the current state of research on AI in language teaching, focusing on the noted benefits, challenges, and potential future directions for the integration of AI into language teaching and learning.

In a 2018 online webinar on “The Role of Artificial Intelligence (AI) in English Language Teaching, Learning and Assessment: Either Friend or Foe?” organized by Learning

Technologies SIG, multiple researchers presented their findings in the field. In a brief presentation, Prof. Gilbert Dizon discussed two recent studies that examined the use of Amazon's AI – Alexa in regard to Japanese EFL (English as a Foreign Language) learners. The first small-scale study mentioned, focused on four such students, at one university. The study found that Alexa's ability to understand L2 utterances was moderate, but EFL learners generally had positive views towards its use it being used in classes. The second, larger-scale study had 21 participants and aimed to research the differences between Alexa's and students' intelligibility of L2 speech. It also investigated whether the interaction with Alexa promoted improvements in learners' pronunciation skills. The findings showed that indeed, learners improved their L2 pronunciation through their interaction with Alexa.

A more recent, 2022 blog post by Brent Warner, discusses the potential of AI for language learning and the influence it can potentially have on ELT. Warner's focus is on ChatGPT – the most advanced AI language model to date, developed by OpenAI. Warner claims that ChatGPT's ability to create human-like responses to text-based inputs, could potentially make it a powerful educational tool for language learners. For example, he states that learners could practice their writing and reading skills by having "conversations" with the ChatGPT model in English.

British Council (2023) notes ChatGPT's potential use for automation for certain tasks teachers have could be transformative. Furthermore, according to them, AI has the potential to transform ELT by providing personalized learning experiences and improving the accuracy and efficiency of language assessments. Yet, they also highlight the potential challenges of successfully incorporating AI into the day-to-day teaching process. They mention concerns to do with privacy and data safety and the need for additional teacher training to ensure that AI-powered tools are used as intended.

Jiang's 2022 study on artificial intelligence in the EFL context also notes the same possible benefits to EFL, by using some of the six dominant forms of AI application, including Automatic Evaluation Systems, Neural Machine Translation Tools, Intelligent Tutoring Systems (ITSs), AI Chatting Robots, Intelligent Virtual Environment, and Affective Computing (AC) in ITSs.

A small 2018 study by Shin, put such findings into practice and found that using Artificial Intelligence through the Flipped Learning model had a positive impact on students' self-efficacy. The experimental group in the study, the author notes, showed statistically significant improvement in their speaking ability compared to the control group.

4. AI into Practise: How to use ChatGPT when Teaching

In combination with other teaching methods, ChatGPT can be a valuable tool for teachers to supplement their language teaching and provide students with additional practice opportunities.

4.1. Conversations

ChatGPT can be used as a conversational partner for students to practice their speaking and listening skills. This AI model can respond to students' questions and prompts, providing them with an opportunity to practice real-life conversations. Furthermore, ChatGPT can alter its writing style to fit different levels of knowledge. This, in turn, means that even students with lower language levels can potentially use it as a conversation tool. In addition, the model can

quickly define and translate any unknown words, which makes in extremely useful when trying to ensure full vocabulary understanding.

4.2. Writing Practice

By using ChatGPT to get additional writing practice, teachers can effectively provide students with personalized feedback and help them further improve their writing skills. ChatGPT can generate a multitude of writing prompts and can provide feedback on students' written responses within seconds. The model can analyze students' writing and provide suggestions for improvements, in terms of sentence structure and grammar, helping them improve.

Students can also work on bare-bones ChatGPT-generated essays, adding necessary descriptions, improving sentence structure to make it sound more human-like etc.

4.3. Vocabulary Practice

ChatGPT can also generate a plethora of varying vocabulary practice exercises. By imputing specific, target vocabulary words or phrases, teachers can use this AI to generate sentences or paragraphs that incorporate those words, allowing students to practice their understanding and usage in context. In addition, the model can create quizzes within seconds, including a variety of questions such as multiple-choice questions, fill-in-the-blank exercises, and other similar vocabulary-testing activities.

5. Conclusion

The possible integration of AI in TESOL offers a plethora of exciting possibilities to revolutionize language teaching and learning, as we know it. The use of AI-powered tools, such as ChatGPT, can provide students with much-needed personalized and engaging learning experiences that can help them improve their English language proficiency. By leveraging AI, teachers can offer their students more opportunities for practice, especially when in regard to vocabulary, writing, and conversation practice, and more meaningful feedback. Though AIEd offers an abundance of benefits, it is essential to recognize the possible challenges that can arise, such as issues related to academic dishonesty and the need to balance the use of technology with more traditional pedagogical approaches.

While the research in the particular area of ESL and AI is still limited, the initial studies available thus far indicate that AI can positively impact student outcomes. However, it is important to note that the adoption of AI must be done thoughtfully, with careful consideration given to the specific needs of the learners and the context of the classroom.

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