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The Emergence of Virtual Learning in Libya during Coronavirus Pandemic

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Abstract: The COVID-19 outbreak has changed the worldwide nature of education, from face-to-face learning to virtual learning. Coronavirus has spread rapidly, as many countries were not prepared for urgent lockdown. Most developed countries around the globe have adapted virtual learning as an alternative to face-to-face schooling. This process has not been a comparatively significant challenge, since these countries are familiar with using technologies in education. Some countries such as Libya, had a considerable time to take steps to face the pandemic, as it did not record any cases of the global disease until 4th March 2020. This study highlights the steps taken by the education sector in Libya towards the use of virtual learning. The Ministry of Education in Libya has taken proactive steps to prevent the transmission of the virus in schools by closing all educational institutions before any cases were recorded in the country. The urgent unplanned closure of all educational institutions was not followed by any plan to maintain the progression of students' learning. Broadcasting lessons on TV was the only method that the ministry had in place in order to preserve the curricula-based learning system. This way of teaching does not suit the curricula types, as they primarily require a learner-centred environment, while TV classes are teacher-based classes. Consequently, Ongoing training on using technology in education should be adapted in order to promote teachers' skills and knowledge of virtual learning.

Key words: *Virtual learning, education in Libya, technology, efficacy of virtual learning.*

1. Introduction

The coronavirus pandemic has affected almost all countries around the world. As the virus rapidly spread from China to Europe and other continents, the world's economy has declined, factories have closed, mosques and churches have closed, flights were cancelled, schools and educational institutions ceased face-to-face classes, and so on. Most countries have established particular procedures to fight the rapid spread of the virus. The most urgent decision which was taken by most governments was a lockdown, connected with recommended social distancing. This affected education, as schools and universities conduct group-work in a context where it is impossible to maintain social distancing of two meters. Therefore, the only way to continue teaching and learning is through what is known as virtual learning or distance learning.

The urgent adoption of virtual learning was not only a challenge for governments, but also for students and teachers. Students' attitudes towards the use of virtual learning, as opposed to face-to-face learning, were influenced by time flexibility, interaction with teachers and technical facilities (Swan, Shea, Fredericksen, Pickett, and Pelz, 2000). In other words, there



are key factors that have an effect on building a positive attitude towards online learning, which should be considered when adopting online learning. Jiang and Ting (1998) claimed that teacher-student and student-student interaction is a significant factor that influences students' perceptions of any kind of learning. Therefore, students will adapt to online learning, so long as they can find an appropriate learning environment. In reflection of this, Klingner (2003) states that "students valued the flexibility of online learning and opportunities to communicate with teachers and peers in online learning settings".

Teachers face many challenges while transitioning from regular classes to virtual teaching. Teachers' unwillingness to change their traditional methods of teaching, along with their resistance to using technology in education and pedagogic changes are the main factors that might influence the emergence of virtual learning (Franco, 2004). Thus, the teachers' need to be aware of changes in the educational paradigm by adapting to virtual learning is crucial. Mehmet and Aura (2007) claim that teachers need to be trained to use new technologies before moving to virtual learning. Furthermore, the role of teachers is set to change from disseminators of knowledge to supervisors of learning.

1.1 Objectives of the study

This study aims at investigating the main challenges that might face the Libyan teaching staff and students when moving to use virtual learning as an alternative way at the ordinary face-to-face schooling. Also, it shed lights on the previous trial that have taken place in different areas around the globe during the natural disaster.

1.2 Purpose of the study

The main purpose of the study is to highlight the importance of moving to virtual learning as an alternative way of teaching and learning instead of the complete closure of the ordinary schooling system during the pandemic. This might be used during any other situations "like wars" that prevent students and teachers to be at schools in person.

2. Theoretical Review

2.1 Virtual Learning

Virtual learning is a modern version of learning in which a learner does not need to be physically in the university or school. Instead, a learner has the convenience of a learning experience tailored to his/her schedule. Frederick, King, Michael, Kell and Schrader (2001, p.7) defined distance education as "formalized instructional learning where the time/geographic situation constrains learning by not affording in-person contact between student and instructor. In-person education is formalized instructional learning where the time/geographic situation constrains learning by requiring synchronous person-to-person interaction." Thus, teachers can easily implement the teaching approaches, methods, strategies and techniques that they think would lead to improved achievement.

'Virtual learning' is a term used to describe the teaching learning process, which is done based on the "principle of active pedagogy". That is to say, students need to develop a sense of autonomy in order to be an independent learner and to be responsible for the ongoing and effective interaction with peers and their instructor, with a view to participating effectively. Although teachers and students do not meet personally in distance learning, they can meet virtually, which means that they can interact synchronously or asynchronously. For instance, they can interact with each other at the same time through virtual chats or interviews, while the teacher can be a part of the interaction, or just a supervisor. In addition, they can post their comments on a thread where all students can read and discuss a certain topic. This can be one



of the ways by which positive attitudes can be created during the move towards greater use of virtual learning by educational institutions.

Johnson (2019) described virtual learning as the gateway to a better education system that uses all possible technologies to improve the achievements of learners, including webinars, podcasts, e-books, videos and audio lectures and instructional videos. She also detailed a number of advantages of virtual learning:

- **Easy tracking and assessment:** it is easy to evaluate students through both summative and formative assessments as the instructor can use software to check the progression of students.
- **Seamless delivery:** all the course materials, discussion, and quizzes, are available to all students, regardless of what time they enter the online class.
- **Time-saving:** teachers do not need to explain lessons many times due to the fact that they will be recorded, meaning that students can access any part of the lesson at any time, with no need to ask the teacher to repeat any part of the lesson.
- **Flexibility:** teachers and students can choose where and when to study and finish their tasks. Students can also review the whole curriculum from time to time and discuss with their peers whenever they wish.

On the other hand, Johnson claimed that virtual learning does face some disadvantages that need to be considered:

- **Dwindling attention spans:** students' attention can be distracted by multitasking, given there are other activities they could be doing on the computer besides studying. This might lead to skimming the lesson materials or listening to audio and/or videos while doing something else.
- **Getting lost in the material:** some students will need the help of the instructor during the time when they are studying, which might not be possible in real time.
- **Discomfort with technology:** some instructors and students do not feel at ease when using technology, which means that they would spend more time training to learn the skills of using online platform, rather than actually teaching or learning.
- **Limitations:** virtual learning may not be the best way to teach young learners, as it does not include face-to-face contact (which involves important factors such as eye contact), and as a result, they might not develop critical thinking and high order thinking skills.

Although virtual learning is not a perfect way of teaching, it might be the best solution in crises when students and teachers cannot be in person in classes. Therefore, during the Coronavirus pandemic, institutions that have developed basic virtual learning before a pandemic began could switch to virtual learning easily.

2.2 Toward Virtual Learning

Allen and Seaman (2010) detail a number of contingency plans that were implemented to prevent the spread of N1H1, which are remarkably similar to those that have been implemented in 2020 - i.e. educational institutions switching from face-to-face classes to online classes. Also, Meyer and Wilson (2011, as cited in Murphy, 2020) point out that all educational institutions in Texas employed online learning (or as they called it, the Sloan Semester), when many institutions suffered physical damage in the landfall in 2005. Therefore, those countries that have alternative plans to switch to virtual learning during disasters have reacted rapidly to the coronavirus outbreak.

Murphy (2020) states that most American universities switched to virtual learning, as the



students' physical interaction became part of the threat, writing that "every university declared emergency eLearning policies (100%)". This shows that the education sector was ready for the transmission to virtual learning before the pandemic happened, since they had already built the basis of e-learning.

On the other hand, developing countries like Libya were not ready to switch to online learning. The education sector in Libya has suffered from the urgent lockdown of the whole country and the immediate closure of schools and universities. There were no alternative plans to continue teaching and learning during the pandemic. The only way to keep students apprised of the curriculum and the material they needed to study during the academic year was through broadcasting some classes on national TV channels. However, these classes have not met the characteristics of either a real class or a virtual class.

2.3 The Efficacy of Virtual Learning

The main goal of education is to spark a pursuit of knowledge in learners. Therefore, teachers use different methods and strategies that lead to better achievements. Historically, in the 1960s and 1970s, teachers only used chalk and blackboards as teaching tools in face-to-face teaching. In the 1990s, videotapes and computers were used as teaching aids, which helped students to perform well. Nowadays, during an era of technological revolution and advanced computers and smart tools, teachers have found better ways to deliver their ideas through using advanced technology as teaching aids in classrooms (Mehmet & Aura, 2007). As these teaching methods, approaches, strategies and techniques developed and became more effective, virtual learning became one of the most effective methods of education, especially in times of natural disasters. According to Chou and Liu (2005), the effectiveness of virtual learning is still a matter of argument. They state that "students learning basic IT skills in TVLEs have better learning effectiveness than their counterparts in traditional classrooms." They concluded their study by saying that "our study supports the hypothesis that the learner's emotional learning climate in the virtual learning is higher than their counterparts in the traditional environment" (Chou and Liu, 2005, p.75-76), which implies strongly that virtual learning is more effective than face-to-face learning. In addition, Riffell and Sibley (2005) claim that "some of the positive learning outcomes are improved learning as measured by test scores, student engagement with the class material, improved perception of learning and of the online format, stronger sense of community among students, and reduction in withdrawal or failure (as cited in Nguyen, 2015, p.310)".

Many virtual learning advocates agree that virtual learning is the most effective teaching method, which is evident in its efficacy in students' achievements, its use in professional development, its cost-effectiveness (to combat the increasing cost of education), and the opportunity of providing a global class to anyone with internet access (De la Varre, Keane, & Irvin, 2011; Gratton-Lavoie & Stanley, 2009; Lorenzetti, 2013). Although virtual learning seems to be more effective than any other type of traditional education, there are many challenges that teachers and students face while using virtual teaching and learning technologies.

2.4 The Challenges of Virtual Learning

The challenges that virtual learning presents are different from one setting to another; developing countries may face more challenges in creating a successful virtual learning environment than developed ones do. Al-Hujran, Aloudat, Al-henawwi, and Ismail (2013) have clarified the main challenges that developing countries might face when transitioning to virtual learning:



- A lack of awareness about the usefulness of virtual learning.
- An unclear understanding of what virtual learning is.
- Resistance to using e-learning from lecturers.
- Resistance to changing from traditional learning methods by students.
- Non-continuous availability of the virtual learning website.
- The role of the institute in determining how students use virtual learning tools.
- The role of the lecturer in determining how students use virtual learning tools.
- A lack of user policy or user guidelines, which can adversely impact the usefulness of virtual learning.
- The type of subject determines the use of virtual learning.
- Social networks provide more practical platforms for virtual learning than those of traditional learning systems.

Although transitioning to virtual learning has become a necessity during the pandemic, the education sector in developing countries needs to take those challenges into consideration. Pre-service training and in-service training should be planned in order to create a positive attitude towards virtual learning, as well as to lead to the successful implementation of virtual learning. Nevertheless, all education sectors worldwide must respond to the pandemic by switching to virtual learning, regardless of if they were ready for the change or not.

2.5 The Response of the Libyan Education Sector to the Pandemic

The threat of the rapid spread of coronavirus has urged the Ministry of Education in Libya to take urgent steps to prevent the social transmission of the virus through face-to-face schooling. The full closure of all educational institutions was urgent and compulsory, as the government announced a curfew in the whole country for two weeks, starting from 16th March.

The ministry moved to virtual learning by the beginning of April through broadcasting lessons on national TV channels. It was not clear whether the lessons being broadcasted on TV were part of assessment tasks or if they were excluded. The non-transparent policy that the education ministry followed made students, teachers, and administrators confused regarding what they should do in order to deal with the teaching-learning progress and how to follow a curricula-based system. In contrast with what other countries doing through the movement to virtual learning, the ministry announced that there will be intensive classes for all grades, as the academic year end-date was to be changed (The Ministry of Education in Libya).

3. Methodology

Research methodology shows the methods and the instruments that the researchers used to collect relevant data and analyze the data to get the information the researcher sought for. In this study, the researcher used samples of some the broadcasted lessons which were sponsored by the Ministry of Education in one of the national channels. The instrument was structural observation in which the researchers have used a certain rubric to get reliable data.

4. Observation and Discussion

Throughout the pandemic in Libya, virtual learning, as has already been noted, was carried out through TV lessons broadcast on national channels. The present study uses a sample of a number of lessons of English Language (teaching and reading skills), which were chosen randomly from the ministry of education website (the lessons were used as an alternative way of face-to-face classes). Structured observation was used to determine if virtual learning was implemented properly, or not.



Structured Observation

1. Did the teacher use Communicative Language Teaching? What actions or activities did you observe to support your answer?

No, he didn't. the teacher dominated the class while students seemed to be a passive listener, trying to catch up with the teacher and following the text from the book. This was obvious as the teacher did not give any chance or time to students to think or read silently.

2. How much were the students involved in and engaged with the lesson?

The teacher did not stop talking for the whole class, which meant that students were only listening to him passively. This meant that students were not engaged and involved in the class.

3. What did you notice about teacher talk time vs. student talk time?

The teacher dominated the whole class time with no chance given to students.

4. What was the lead-in activity of the lesson?

The warmer was a brainstorming question to get students ready for the lesson. Also, he asked about the previous lessons.

5. How was the new material presented?

The teacher used the data show and the white board in order to explain the lesson.

6. How did the learners practice the new material?

No evidence was given to assure that students practiced the new material.

7. Was there an evaluation?

Yes, there were some questions at the end of the session that would show if students got the information presented in the material

8. In this space, write any final comments you have about the lesson you observed.

The teacher presented the lesson neatly by using a data show and the whiteboard. He also modelled the listening section as he might not have audio facilities with a clear language, even though made a few pronunciation mistakes. However, the teacher might be asked why he did not follow the lesson plan presented in the teacher's book and what CLT activities he missed while students were only listeners.

The teaching video was used by the Ministry of Education in the school lockdown in order to keep students in track. This video was broadcast on national TV, since internet facilities are not available in the whole country. This was a challenging time for both students and teachers, as they had to adapt new strategies in a short space of time. The lessons were for 3rd preparatory students, who are supposed to be at pre-intermediate level (15 years old).

The teacher has arguably done a great job, as he presented the lesson neatly on the data show and modeled the listening section with clear language. The teacher tried to pronounce words slowly, clearly and accurately. Also, he presented the lesson smoothly from the warmer to the presentation and practice, ending with an evaluation. Also, he had distributed the time of the lesson in an intelligent way, as it was only 18 minutes in length, while it was supposed to be 40 minutes in face-to-face teaching. Although the virtual class was a new challenge, the teacher tried to cover all the elements of a successful teaching process.

Although virtual teaching is a challenging task for teachers unfamiliar to it, these teachers can implement some changes in their teaching strategies to achieve the main goals of the lesson. Teachers do not need to use L1 too much, as they do not want to consume too much time explaining the words in English. Instead, they can use context clues to explain words and give opportunities to students to guess the meaning. Also, being in a virtual environment does not



mean that we need to neglect the student's time. Teachers should give time for students to work, even if they are not physically in the class. This is because they need to feel like they are in a real class. In addition, teachers need to adopt new activities that might get students engaged in the new teaching system and prevent them feeling bored or neglected. These activities must match with the learning preferences of most of the students at that age.

The teacher moves smoothly from the warmer to presentation, then to practice and evaluation, but it appears that he did not give much time for the students to practice themselves. Furthermore, no interactive activities took place, as the teacher dominated the whole class time. Also, using this model is not an easy task for non-native teachers, which means that the teacher should be careful when giving a natural model of the language, as any mistakes will be copied by students. The teacher could use techniques such as pre-, during- and post-reading task strategies. Also, he could use a KWL chart (what I know, what I want to learn, and what I learned) in order to facilitate his job in introducing a reading task. These activities could increase the students' learning time and ensure learner-centered classes, as all students will be engaged and involved. Although the challenge is difficult, teachers need to do their best to create a learner-centered environment and must use communicative language teaching activities that enable students to use language, rather than only learn it.

5. Conclusion

Virtual learning has become a necessity as an alternative to face-to-face learning during any natural disasters that prevent learners to be physically in schools and universities. Many educational institutions have developed a base of virtual learning. Therefore, they easily switched to using virtual learning once COVID-19 was announced as a pandemic. Contrary to this, many education sectors in developing countries have suffered in attempting to find an alternative teaching method to face-to-face learning, as they had not developed the basics of virtual learning earlier. Therefore, teachers and students faced many challenges while adapting to virtual education. Thus, the education sector should be ready to switch to virtual learning during any unforeseen serious events. The study therefore recommends the following:

- Training teachers on how to use virtual education.
- Training students to use virtual learning.
- Encouraging teachers and students to use virtual education.
- Creating virtual materials along with the secure materials.
- Demonstrating interesting virtual learning classes.
- Making learning centers available to students.

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الفهرس

الصفحة	اسم الباحث	عنوان البحث	ر.ت
1-23	يونس يوسف أبونايجي	وضع الضاهر موضع الضمير ودلالته على المعنى عند المفسرين	1
24-51	محمد خليفة صالح خليفة محمود الجداوي	دراسة استقصائية حول مساهمة تقنية المعلومات والاتصالات في نشر ثقافة الشفافية ومحاربة الفساد	2
52-70	Ebtisam Ali Haribash	An Interactive GUESS Method for Solving Nonlinear Constrained Multi-Objective Optimization Problem	3
71-105	احمد علي الهادي الحويج احمد محمد سليم معوال	العوامل الخمسة الكبرى للشخصية وعلاقتها بالذكاء الوجداني لدى طلبة مرحلة التعليم الثانوي	4
106-135	محمد عبد السلام دخيل	في المجتمع الليبي التحضر وانعكاساته على الحياة الاجتماعية "دراسة ميدانية في مدينة الخمس"	5
136-158	سالم فرج زوبيك	الاستعارة التهكمية في القرآن الكريم	6
159-173	أسماء جمعة القلعي	دور الرياضات العملية الصوفية في تهذيب السلوك	7
174-183	S. M. Amsheri N. A. Abouthferah	On Coefficient Bounds for Certain Classes of Analytic Functions	8
184-191	N. S. Abdanabi	Fibrewise Separation axioms in Fibrewise Topological Group	9
192-211	Samah Taleb Mohammed	Investigating Writing Errors Made by Third Year Students at the Faculty of Education El-Mergib University	10
212-221	Omar Ali Aleyan Eissa Husen Muftah AL remali	SOLVE NONLINEAR HEAT EQUATION BY ADOMIAN DECOMPOSITION METHOD [ADM]	11
222-233	حسن احمد قرقد عبدالباسط محمد قريصة مصطفى الطويل	قياس تركيز بعض العناصر الثقيلة في المياه الجوفية لمدينة مصراته	12
234-244	ربيعة عبد الله الشبير عائشة أحمد عامر عبير مصطفى الهصيك	تعادم الدوال الكروية المناظرة لقيم ذاتية على سطح الكرة	13
245-255	Khadiga Ali Arwini Entisar Othman Laghah	λ -Generalizations And g - Generalizations	14



256-284	خيري عبدالسلام حسين كليب عبدالسلام بشير اشتيوي بشير ناصر مختار كصارة	Impact of Information Technology on Supply Chain management	15
285-294	Salem H. Almadhun, Salem M. Aldeep, Aimen M. Rmis, Khairia Abdulsalam Amer	Examination of 4G (LTE) Wireless Network	16
295-317	نور الدين سالم فريوع	التجربة الجمالية لدى موريس ميرلوبوتي	17
318-326	ليلى منصور عطية الغويج هدى على التقبي	Effect cinnamon plant on liver of rats treated with trichloroethylene	18
327-338	Fuzi Mohamed Fartas Naser Ramdan Amaizah Ramdan Ali Aldomani Husamaldin Abdualmawla Gahit	Qualitative Analysis of Aliphatic Organic Compounds in Atmospheric Particulates and their Possible Sources using Gas Chromatography Mass Spectrometry	19
339-346	E. G. Sabra A. H. EL- Rifae	Parametric Tension on the Differential Equation	20
347-353	Amna Mohamed Abdelgader Ahmed	Totally Semi-open Functions in Topological Spaces	21
354-376	زينب إمام أبو راس حواء بشير بالنور	كتاب الخصائص لابن جني دراسة بعض مواضع الحذف من ت"392" المسمى: باب في شجاعة العربية	22
377-386	لطيفة محمد الدالي	Least-Squares Line	23
387-397	نادية محمد الدالي ايمان احمد اخميرة	THEORETICAL RESEARCH ON AI TECHNOLOGIES FOR LEARNING SYSEM	24
398-409	Ibrahim A. Saleh Tarek M. Fayez Mustafah M. A. Ahmad	Influence of annealing and Hydrogen content on structural and optoelectronic properties of Nano-multilayers of a-Si:H/a-Ge: H used in Solar Cells	25
410-421	أسماء محمد الحبشي	The learners' preferences of oral corrective feedback techniques	26
422-459	أمينة محمد العكاشي ربيعة عثمان عبد الجليل عفاف محمد بالحاج فتحية علي جعفر	التقدير الإيجابي المسبق لفاعلية الذات ودوره في التغلب على مصادر الضغوط النفسية " دراسة تحليلية "	27



460-481	Aisha Mohammed Ageal Najat Mohammed Jaber	English Pronunciation problems Encountered by Libyan University Students at Faculty of Education, Elmergib University	28
482-499	الحسين سليم محسن	The Morphological Analysis of the Quranic Texts	29
500-507	Ghada Al-Hussayn Mohsen	Cultural Content in Foreign Language Learning and Teaching	30
508-523	HASSAN M. ALI Mostafa M Ali	The relationship between <i>slyA</i> DNA binding transcriptional activator gene and <i>Escherichia coli</i> fimbriae and related with biofilm formation	31
524-533	Musbah A. M. F. Abduljalil	Molecular fossil characteristics of crude oils from Libyan oilfields in the Zalla Trough	32
534-542	سعدون شهبوب محمد	تلوث المياه الجوفية بالنترات بمنطقة كعام، شمال غرب ليبيا	33
543-552	Naima M. Alsharif Mahmoud M. Buazzi	Analysis of Genetic Diversity of <i>Escherichia Coli</i> Isolates Using RAPD PCR Technique	34
553-560	Hisham mohammed alnaib alshareef aisha mohammed elfagaeh aisha omran alghawash abdualaziz ibrahim lawej safa albashir hussain kaka	The Emergence of Virtual Learning in Libya during Coronavirus Pandemic	35
561-574	Abdualaziz Ibrahim Lawej Rabea Mansur Milad Mohamed Abduljalil Aghnayah Hamza Aabeed Khalafllaa ³	ATTITUDES OF TEACHERS AND STUDENTS TOWARDS USING MOTHER TONGUE IN EFL CLASSROOMS IN SIRTE	36
575-592	صالحة التومي الدروقي أمال محمد سالم أبوسته	دافع الانجاز وعلاقته بالرضا الوظيفي لدى معلمي مرحلة التعليم الأساسي "ببلدية ترهونة"	37
593-609	آمنة سالم عبد القادر قدورة نجية علي جبريل انبية	الإرشاد النفسي ودوره في مواجهة بعض المشكلات الأخرية الراهنة	38
610-629	Hanan B. Abousittash, Z. M. H. Kheiralla Betiha M.A.	Effect Mesoporous silica silver nanoparticles on antibacterial agent Gram- negative <i>Pseudomonas</i> <i>aeruginosa</i> and Gram-positive <i>Staphylococcus</i> <i>aureus</i>	39
630-652	حنان عمر بشير الرمالي	برنامج التربية العملية وتطويره	40
653-672	Abdualla Mohamed Dhaw	Towards Teaching CAT tools in Libyan Universities	41



673-700	عثمان علي أميمن سليمة رمضان الكوت زهرة عثمان البرق	سبل إعادة أعمار وتأهيل سكان المدن المدمرة بالحرب ومعوقات المصالحة الوطنية في المجتمع الليبي: مقارنة نفس-اجتماعية	42
701-711	Abdulrhman Mohamed Egnebr	Comparison of Different Indicators for Groundwater Contamination by Seawater Intrusion on the Khoms city, Libya	43
712-734	Elhadi A. A. Maree Abdualah Ibrahim Sultan Khaled A. Alurffi	Hilbert Space and Applications	44
735-759	معتوق علي عون عمار محمد الزليطني عرفات المهدي قرينات	الموارد الطبيعية اللازمة لتحقيق التنمية الاقتصادية بشمال غرب ليبيا وسبل تحقيق الاستدامة	45
760-787	سهام رجب العطوي هدى المبروك موسى	الخلج وعلاقته بمفهوم الذات لدى تلاميذ الشق الثاني بمرحلة التعليم الاساسي بمنطقة جنزور	46
788-820	هنية عبدالسلام بالوص زهرة المهدي أبو راس	الصلابة النفسية ودورها الوقائي في مواجهة الضغوط النفسية	47
821-847	عبد الحميد مفتاح أبو النور محي الدين علي المبروك	ودوره في الحد من التمر التوجيه التربوي والإرشاد النفسي المدرسي	48
848	الفهرس		52