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TABLE OF CONTENT

A Suggested Training Program to Qualify EFL Teachers on the Uses of Augmented Reality Technology.

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Abstract

The current research aimed at determining the level of cognitive knowledge of English language teachers at secondary stage in Madinah city, including theoretical and practical aspects of computer and AR technologies uses in teaching English to other speakers, and training needs to AR technologies. It also aimed at recognizing the content of the training program and its duration.

The research employed the descriptive methodology. Its tool was (the questionnaire), which was distributed to the population, numbering (52) teachers, (47) responded. The results exhibited a very high level of EFL teachers in using the computer in teaching English to other speakers. They revealed deficiencies in the cognitive part related to the uses of AR among EFL. The targeted use of AR applications in teaching English to other speakers is weak, as (82.98%) of them had never used AR applications. They also ensured a training need among the target audience on the uses of AR technologies in teaching English to other speakers. The research also determined the content and duration of the needed AR training program. There is a need to training program on AR uses for teaching English language for non-native speakers. The EFL teachers in Madinah Secondary schools need no less than two days training including theoretical and practical aspects of using AR in teaching the English language.

Keywords: Augmented reality, English language, other speakers, teaching, Secodary stage, Madinah.

Developing an Integrated System for Automatic Question, Answer, and Distractor Generation Using Transformer Models

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Abstract

This article presents the development of a system for generating multiple-choice questions, which offers several advantages, including rapid scoring, consistent grading, and reduced examination duration. Addressing the challenge of question creation, we propose a novel approach by framing it as a sequence-to-sequence learning problem. Here, sentences from a text passage are directly mapped to corresponding questions, leveraging a data-driven methodology that eliminates the need for manually crafted rules. This strategy enhances efficiency and minimizes errors potentially introduced by human intervention. Our investigation into question generation is influenced by recent advancements in diverse fields such as neural machine translation, model generalization, and image captioning, with a particular focus on the application of transformer models.

Keywords: Question generation, NLP, Transformers, BERT, Multiple-choice question, Automated test set generation.

1. Introduction.

Recent years have witnessed a burgeoning interest in question generation, particularly within educational applications. This technology primarily aims to automatically generate natural questions from specified texts, thereby facilitating enhanced comprehension and engagement with reading materials [1]. Test questions play a pivotal role in the educational process, serving as a critical measure of student understanding [2,3]. The task of designing and assessing these questions, however, can be labor-intensive and time-consuming [4]. Consequently, the potential for automated question generation and answer evaluation systems has garnered significant interest among researchers and educators alike [5,6]. In academic settings, tests commonly require students to select the correct answer from multiple choices or to complete sentences with appropriate words. Tools such as multiple-choice questions (MCQs), true/false (T/F) assessments, and fill-in-the-blank (FiB) items are widely employed to evaluate student knowledge [7].

Question generation techniques predominantly employ heuristic methods to transform descriptive texts into corresponding questions. Existing rule-based methodologies are categorized into three principal types: template-based methods [8], syntax-based approaches [9-11], and semantic-based technologies [12-15]. Essentially, two critical steps are requisite for successful question generation using AI-driven methods: context selection and question construction. These processes are facilitated through the application of semantic or syntactic parsers to the text of an input context, which enable the algorithm to identify pertinent topics for questioning. Upon identifying the relevant topic within the context, intermediate representations are transformed into natural language questions either through transformation-based approaches or by utilizing templates. AI-driven methods typically rely on manual feature engineering, a labor-intensive process demanding substantial domain-specific knowledge and expertise. Furthermore, these methods often involve multiple components that suffer from limited scalability and reusability, thereby diminishing their reliability.

There has been a significant increase in the adoption of deep neural models for question generation. These models are entirely data-driven and capable of end-to-end training, which enables the simultaneous development of both question construction and context selection capabilities. Compared to traditional rule-based methods, neural question generation models are demonstrably superior, producing questions that are better phrased and more varied. The predominant method employed is sequence-to-sequence (Seq2Seq), which utilizes various encoders and decoders to enhance the quality of the generated questions. Introduced in 2017, the inaugural neural question generation model utilized a Recurrent Neural Network (RNN)-based Seq2Seq model with an attention mechanism, marking a significant advancement over rule-based methods [16,17]. Subsequent research has sought to refine the effectiveness of RNN-based Seq2Seq architectures by incorporating enhancements such as diverse question types [18,19], response position characteristics [20,21], response splitting techniques [22,23], and advanced internal attention mechanisms [24,25].

The field of question generation is rapidly evolving, with significant interest in innovative frameworks like pre-trained models [26], variational autoencoders [27], graph-based structures [28], and adversarial networks [29]. While Maximum Likelihood Estimation remains a prevalent training strategy, alternative methodologies such as multi-task learning [30], reinforcement learning [31], and transfer learning [32] have also proven effective in optimizing neural question generation models.

2. Results and Discussion.

This article describes the development of a multiple-choice question (MCQ) generation system designed to offer numerous advantages including expedited scoring, standardized grading, and reduced examination durations, benefits that are well-documented in the literature [33]. Given the prevalence of competitive examinations, MCQs have emerged as the favored assessment format for evaluating a candidate's knowledge. Notably, Kazakhstan has adopted the Unified National Testing system, which relies on MCQs for university admissions. Furthermore, empirical research supports the efficacy of MCQs in higher education settings [34], underscoring their value in academic assessments.

Multiple-choice questions (MCQs) encompass three fundamental components: the interrogative sentence, the correct answer key, and distractors [35]. The interrogative sentence may present a question or a statement with a blank to be filled. The answer key provides the correct option, while distractors are strategically crafted incorrect options that challenge the student's ability to select the correct answer.

Developing an effective MCQ necessitates identifying sentences that are conducive to this format [36]. A critical step in this process is the extraction of the most informative sentences from a text. Various methodologies for selecting significant sentences have been explored in scholarly literature, including criteria based on sentence length [37], inclusion of specific words [38], parts-of-speech patterns [39], summarization techniques [40], and syntactic structures [36].

In the construction of answer keys, meticulous consideration is essential in determining which words to replace or omit to formulate an interrogative phrase, a process that demands precision and careful analysis [36]. Term frequency (TF) has been utilized as a straightforward method for identifying the main subject within a sentence [41]. In certain contexts, the TF-IDF metric offers an alternative to pure term frequency for enhancing the relevance of the subject matter [42]. Moreover, the literature describes various techniques for selecting the correct answer in MCQs, including matching based on parts of speech [43], parsing structures [44], pattern matching [44], and the integration of semantic information [45].

After a comprehensive evaluation of various architectures, we selected Google’s T5 model as the foundation for our project [46]. T5 conceptualizes all NLP tasks as sequence-to-sequence transformations, thereby facilitating a unified approach across different tasks. For instance, in summarization, T5 takes text as input and outputs a summary; similarly, in sentiment analysis, it processes text to output a sentiment-indicative sequence. This versatility also extends to question generation, an application not originally anticipated during the model’s pre-training phase. By simply inputting the answer and context, T5 is capable of generating pertinent questions. However, to prevent the generation of irrelevant or tautological questions, and to avoid including the answers within the questions themselves, it is necessary to implement a filtering mechanism. For this purpose, we adopted a pre-trained version of BERT. This model utilizes a cloze-style task known as 'Masked Language Modeling' to fill gaps within sentences, thereby fostering bidirectional text comprehension. BERT’s ability to process text from both directions significantly enhances its utility in tasks requiring deep linguistic understanding, such as evaluating the relevance and quality of generated questions and answers. Moreover, our system has been augmented to include multiple-choice question functionality, which is particularly useful for creating rapid assessments or simplifying quiz processes. However, the indiscriminate selection of distractors can lead to overly simplistic questions that fail to challenge the learner adequately. To address this, we propose incorporating Named Entity Recognition (NER) technology from SpaCy, which involves extracting entities from the text and using them as potential answers, thereby increasing the complexity and educational value of the questions. This approach not only enriches the learning experience but also promotes more substantive engagement with the material.

After assessing the correctness of the model, we obtained values for the following metrics: BLEU 1 - 52.58; BLEU 2 - 36.27; BLEU 3 - 25.15; BLEU 4 - 17.59; METEOR - 28.03; $ROUGE_L$ - 49.66.

3. Conclusion.

The article presents a comparative analysis of the Pre-trainedT5+BERT+NER system against various other models. Evaluative studies demonstrate that the Pre-trainedT5+BERT+NER model, which integrates sentence-level information, surpasses all competing models and established baselines. Certain models, including IR, SUM, and MOSES+, fell short of performance expectations, underscoring the inadequacy of mere training set memorization. In contrast, Seq2seq and M2S+cp base models exhibited commendable performance on metrics related to sentence-question compatibility. Furthermore, the AutoQG and GE systems displayed comparable levels of performance, albeit

with only minor modifications that did not amount to genuine paraphrasing. Our system, which incorporates pre-trained embeddings, consistently delivered superior results. While the inclusion of paragraph encoding slightly detracted from overall performance, it was instrumental in eliminating extraneous noise and in distilling critical information. Ultimately, the Pre-trainedT5+BERT+NER model proved its efficacy by generating questions that were not only more relevant but also richly detailed, thereby affirming its superior capability in producing high-quality question content.

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Educational Guide for Generative Artificial Intelligence (GenAI) Applications: A Descriptive and Analytical Study

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Abstract

This exploratory research study aimed to identify the most prominent generative artificial intelligence (GenAI) software/applications that can be used in the educational system by teachers, educators, and learners as tools that can help enhance the processes of teaching and learning. It adopted a qualitative, descriptive, and analytical research approach as the scientific research methodology relied upon to achieve its objectives. The study used a data collection tool consisting of an analysis card composed of five main sections: defining the tool, its primary functions, its potential advantages, its potential disadvantages, and a summary (overview). The study included a purposive stratified sample of 120 GenAI applications that were carefully selected based on established scientific criteria, following a comprehensive review of the literature and a careful study of the recommendations and proposals of international educational scientific conferences, seminars, and workshops specializing in the field of educational/instructional technology. The study was implemented during the academic year 2023/2024 amidst the widespread dissemination of GenAI applications in all aspects of life, including the education sector. The results of the study led to the preparation of a comprehensive educational guide/handbook that introduces the most prominent GenAI software/applications that can be used in the educational system. The smart applications in this guide were divided into five main categories: (1) Chatbot tools (9 applications) that allow for automated communication and interaction with users through text conversations. (2) Scientific research, writing, and document interaction tools (38 programs) that help researchers and writers accomplish their tasks efficiently, such as searching for information and data, writing content, and managing documents. (3) Media creation tools (46 tools) that enable users to create distinctive media content, such as images, videos, and audio and musical materials. (4) Design, presentation, and visual communication tools (14 applications) that help in designing presentations, creating designs and graphics, and improving visual communication. (5) Teaching and learning tools (13 software) that provide innovative solutions to enhance teaching and learning, such as interactive educational applications, assessment tools, electronic learning platforms, and tools to assist in taking notes, lesson planning, suggesting activities and resources, and creating attractive and effective materials and presentations. These categories represent a comprehensive classification of GenAI applications, making it easier for the reader to find the tools that suit their needs. The study concluded with some recommendations, the most important of which are: (1) Effectively disseminating the GenAI tools guide/manual to all stakeholders in the education sector. (2) Implementing intensive and diverse training programs to enhance the capabilities of those concerned with education in GenAI tools. (3) Producing comprehensive awareness materials about AI and GenAI software and disseminating them through multiple channels. (4) Developing a comprehensive interactive digital educational guide/handbook that addresses the principles, ethics, policies, and procedures related to AI and its uses in teaching and learning environments. (5) Including a course on AI in educational curricula and teacher training programs. (6) Enhancing coordination, cooperation, and partnership between educational institutions and AI specialists to raise awareness about this field and intensify guidance and support programs on the use of GenAI tools in the educational process.

Keywords: Artificial Intelligence (AI), Generative AI (GenAI) Software/Applications, Generative AI (GenAI) Tools, Educational Guide, Educational Handbook, Educational Guidance Manual, Teaching and Learning, Education.

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The woman, victim of domestic (intra-family) violence in Romania in the period 2013-2024

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Abstract:

Domestic violence has a major impact, not only on the victim and their family, but also on the entire society as a whole. Thus, the main objective of this study is to identify and analyze the impact on victims in Romania, in the period 2013-2024.

The study aims to identify and analyze trends in the evolution of domestic violence over the last 12 years. The main objective is to identify the problems that victims face in trying to defend themselves from the aggressor. Another objective is to identify possible solutions that will emerge from the research and its conclusions.
Mainly, the study is based on the following: a) the theoretical analysis that is based on the explanations provided by the fundamental theories through which the phenomenon of domestic violence can be understood as a whole; b) secondary data analysis, which is using data provided by the Romanian Police, the National Agency for Equal Opportunities between Men and Women in Romania, as well as many other studies and profile researches, aiming to identify the trends of domestic violence against women.

Thus, the study reveals the following: a) the defining characteristics of the impact of domestic violence on the female victim, b) the identification of the main causes of the conflict between the partners, c) the dynamics of the relationship between the victim and the aggressor.

Keywords: aggressor, victim, crisis, violence, woman.

Embracing AI in EFL Classrooms: between fears and needs

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Abstract

This study investigates the transformative potential of artificial intelligence (AI) in education, focusing on its application in the English as a Foreign Language (EFL) classroom. Despite its widespread use, EFL teachers' use of AI, particularly in the Kuwaiti context, remains unexplored. The use of AI in education seems to be unavoidable, hence, this study was implemented to investigate EFL teachers' current familiarity with and usage of AI and explores teachers' perspectives towards embracing AI tools in their EFL classrooms. A sequential mixed-methods approach was employed to provide an in-depth perspective on teachers' use of AI. A questionnaire with multiple choice and open-ended questions was first distributed to EFL teachers in various colleges and public schools in Kuwait (n=183), followed by group interviews (n=23) to obtain broader insight into teachers' perspectives and obtaining detailed information and examples of AI use. The findings suggest that while teachers believe that AI offers innovative tools to support second language pedagogies, such as personalized learning and student-centered learning, it might also pose ethical concerns. Issues such as cheating, inaccurate information, and teacher replacement seem to be the primary concerns. The findings of this study have significant implications for educators and policymakers who intend to incorporate AI into their language curricula.

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Teachers' pedagogical beliefs about language learning and technology integration practices in EFL context: An exploratory study

Maha Alghasab

Abstract

Assuming that beliefs and classroom practices are logically multivariate and interrelated, this study attempted to explore teachers' pedagogical beliefs about language learning and teaching and how these beliefs influence their technology integration practices in English as a foreign language (EFL) classroom. Situated in the state of Kuwait, a case study approach was used employing quantitative and qualitative data collection methods. The first phase of the study aimed to explore teachers' beliefs about language learning and teaching using a questionnaire (N = 250). From that sample, the second phase aimed to select participants purposively for in-depth interviews and classroom observation. Three Kuwaiti teachers who held different beliefs about language learning were chosen as significant cases for the in-depth qualitative analysis.

The findings revealed that EFL teachers are predominantly inclined to embrace a structural/transmissive approach to language learning and teaching. Such an approach seems to impact the way teachers use technology in the class, which subsequently lessens its potential. Interview data and observation of classroom practices also suggested that teachers' positive beliefs about other approaches (e.g. constructivism/social constructivism) are not necessarily present in their practices when technology is embedded in their classrooms. For example, although teachers reported their beliefs that technology can be used to engage students in social interaction, such beliefs do not always come to pass in actual classroom practices. Therefore, pedagogical training that focuses on bridging the gap between effective Second Language Acquisition (SLA) approaches and technology integration is deemed indispensable.

Keywords:
English as a Foreign Language (EFL); Technology integration; Teachers' beliefs ; Classroom practices; Second Language Acquisition approaches (SLA).

The Malaysia Teacher Standard: A Review From Global Perspectives

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Abstract

This review evaluates the Malaysia Teacher Standard (MTS) within the framework of global teacher standards. The review explores key aspects of MTS, including its objectives, implementation, and impact on teacher professionalism in Malaysia. A total of 27 papers were thoroughly analysed, focusing on the strengths and weaknesses of MTS in comparison to international standards. The findings reveal that MTS's emphasis on teacher ethics and professional development aligns with global trends but faces challenges in terms of uneven implementation and limited monitoring mechanisms. While the flexibility of MTS allows for contextual adaptation, disparities in resource distribution especially in rural areas hinder its effectiveness. Recommendations for improvement include increasing support for teacher development in underserved areas and introducing outcome-based evaluations to better assess teacher performance. The review concludes that with enhanced monitoring and resource allocation, MTS has the potential to significantly improve the quality of teaching in Malaysia.

Keywords: Malaysia Teacher Standard, teacher professionalism, global teacher standards, professional development.

The Effects of Visual Text Layout Features on EFL Timed Reading Comprehension

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Abstract:
Educators seem more inclined to ensure that the content of a reading comprehension task corresponds to the English language level of the learner without giving a second thought to the typographic and visual layout of the text. And yet, the visual characteristics of a reading comprehension text could have an impact on the performance of a learner, especially during 'timed' reading comprehension test situations; even more so when the learner is Arab and habitually reads from right to left rather than vice versa, as for English. The current study presents an experimental framework consisting of multiple reading texts displaying different visual aspects of text layout, with emphasis on the following four visual elements: line spacing, font size, paragraph distinguishing features and left/justified margin alignments. This study aims to shed light on developing reader-friendly texts that facilitate reading for Arab learners of English during timed reading comprehension test situations. The participants (95 females and 70 males) taking part in the following study are first-year students at the English Department of the College of Basic Education. Four timed reading comprehension experiments, testing the visual features mentioned above, will be carried out followed by a very short questionnaire of three questions to determine reading preferences. All quantitative data in the present study will be processed utilizing SPSS data analysis. The findings from the experiments will enable tutors to establish legibility guidelines to facilitate timed reading tasks for EFL learners during reading comprehension tests.

Introduction
Typography features and text layout undoubtedly influence the speed of legibility of a document. Therefore, when a document is presented with a potentially difficult to read text format, such as using certain font types, a small font size, minimal linear spacing, the average reader is likely to adjust their field of vision to the text in front of him/her. However, would an EFL learner be able to cope in a similar situation during a 'timed' reading comprehension test situation? And more specifically, how much visual adjustment would an Arab EFL learner, who's accustomed to reading texts in the opposite direction to English (i.e., from right to left), have to do? The latter question was the inspiration behind this paper.

After having taught reading for longer than three decades, the researcher of the present study came to the realization that perceptual and typographical factors seem to affect different aspects of reading, for example speed, comprehension, and accuracy. Although research studies in this area are plentiful, it has come to the researcher's attention that hardly any study of this sort focused on EFL timed reading comprehension involving Arab participants that are accustomed to reading in the opposite direction (from right to left). The 'Reading' is a language skill course that is taught during the first year at the English Department in the College of Basic Education (CBE). Reading comprehension also takes up a significant part of the English placement test students must take to be admitted to the English Department. It is there for necessary to develop reading comprehension text layout guidelines that simplify facilitate during test situations for students studying English at CBE. Therefore, in this paper we focus on investigating through experimentation the ideal layout of texts (such as, font size, linear spacing, left/right margin alignments, and so on) for EFL reading comprehension tests. Five different reading comprehension text layouts will be examined for insights over their effects on legibility as well as comprehension during timed test situations in the hope that students at CBE could achieve higher scores.

Literature Review
A considerable amount of research has already been conducted in the field of typography and text layout affecting legibility preferences, comprehension, and information recall during reading comprehension tasks. Moreover, most recent empirical research addresses comparative variables between printed text format versus digital screen text format, which is largely justified given the increasing global digitalization of language tests (e.g., Dillon et al. 1988; Geske 1996; Weisenmiller 1999; Bernard et al. 2003; Dyson 2004; Sheppard et al. 2023) Admittedly however, there are still numerous reading comprehension test situations that are paper based (as is the case in the present study).

A quick review of the experimental studies in the literature to date shows that certain typographic text layout features do in fact have significant effects on speed and accuracy during reading comprehension test situations. An experimental study by Lonsdale et al. (2006) confirmed that participants completed timed-tests reading tasks much faster and more accurately when text layout conformed to reader-friendly legibility guidelines (see Hartely and Burnhill 1977), such as reasonable line length, adequate interlinear spacing, and clear distinctions between paragraphs. Emulating the same experiment design in another study, Lonsdale (2014) reached the same conclusions, but this time focused on general reading and without the constraint of time. Although an early study on use of different font type argues that there are little significant differences in legibility when using Serif versus non-Serif font types, but that Serif font types seemed to improved information recall during reading (Paterson and Tinker 1932; Gasser et al. 2005).

An interesting study by Soleimani and Mohamadi (2012) could have impacted the scope of the present study, in a way, because it examines the relationship between font type, font size, line spacing and legibility during EFL timed reading comprehension. This study was carried out on Iranian participants, and since Persian, like Arabic is read from right to left, it could have considered whether left/right margin alignments for example, affects ease and speed of text legibility in English reading comprehension tasks, but it did not. The study concluded that bigger font size (12 pt.) is both easier to read and facilitates information recall, thus confirming the same results as other numerous studies (e.g., Legge and Bigelow 2011; Rello et al. 2016). In fact, there does not appear to have been any investigation that explicitly explores Arab learners' legibility preferences in English reading comprehension test situations. One study to date has focused on the effect of text direction on legibility of Chinese texts (not English) by Chinese participants (Lin et al. 2013). They concluded that text direction and character size all produced an effect on search time of target words as well as eye fatigue. Therefore, it is hoped that the present study may add a contribution to address this relative paucity of empirical studies in this specific field.

4.0 Methodology

4.1 The Pilot Test

This paper looks at the effect of reading comprehension text layout on speed of legibility and comprehension, especially in test situations. Since the aspects of legibility and comprehension are not always easily observable, the researchers in the present study set up an experiment to gain insights over the variables involved in reading effectively under pressure of time. Only one researcher was responsible for the experiment procedures. Three different intermediate reading passages were chosen [topics: How Not to Catch a Cold (363 words), Wintertime (326 words), and Seat Belts (369 words)]. We focused on three text layout variables (single space, double space, and font size 14, respectively). Each of the three reading passages had three multiple choice comprehension questions. At the end of the reading task, the participants were asked to answer a short questionnaire consisting of the following three questions:

1) Rank the reading text layout according to ease/speed of reading?
2) Rank the reading text layout according to ease/speed of locating the answers?
3) Rank the reading text according to which one's appearance you prefer most/least?

Twenty-six female students and twenty-three male students from two different Reading classes volunteered to took part in this pilot study. Students were given the three reading comprehension tasks and were asked to switch on their phone stop watches to time the process. They were asked to time themselves twice: once after reading each passage and once after answering the comprehension questions of each passage. The correct answers were checked in group with the researcher.

The students were then asked to take part in a group discussion in which they were told to revisit the three 'rank the reading' questions mentioned above. It was hoped that this discussion would generate insights over the effect of different visual text layout of all three timed readings and pinpointing the one that seemed easier to read under pressure of time. Furthermore, they were asked about their opinions on how each text layout affected their comprehension when answering the questions. Both the data collected from the timed reading experiment, the number of errors made on the reading comprehension questions, and the students' feedback during the group discussion were analyzed to determine the necessary variables to be selected for the actual study experiment as well as the methods of data collection.

4.2 The Experiment Methods

We decided to take a different approach for the experiment of the present study, in which 40 female and 70 male students took part. This time, only one intermediate reading comprehension passage consisting of three paragraphs was chosen (topic: Dancing, see Appendix). This passage was presented in five different text layouts:
A) The College's English language placement test layout
B) Single space
C) Double space
D) Unjustified right margin
E) Font size 14
All five reading comprehension papers were coded at the very top left corner of each paper (A, B, C, D and E) to make it easier for the researchers to identify the layout of each paper at a glance. The reason only one topic was chosen – unlike the pilot test – was to ensure that all students were subjected to the same language content and the same comprehension questions. Also, students were asked to answer three comprehension questions – the same questions were provided in all five versions.

Here too, students were asked by the researcher to use the stop watches in their phones. Again, they were instructed to time themselves twice: once after reading the passage and once after answering the reading comprehension questions. The researcher then corrected the three reading comprehension questions with the students. As a result, three variables were being examined across five different text layouts, namely: 1) ease of legibility (measured in minutes and seconds), 2) ease of comprehension evidenced when answering the questions (measured in minutes and seconds), and 3) number of correct answers out of three.

Unlike the pilot study however, students were not asked for their opinions during a group study because they were unaware of the differences in text layouts of the reading passage. That is to say, the students assumed that they were all given the exact same reading comprehension task.

The results from both the timed reading/answering measurements and the questionnaire will be entered into the SPSS data analysis application for frequency, mean, standard deviation and significance calculations.

5.0 Results

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Teachers' perceptions of the barriers to effective teaching in Qatar's government schools.

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Abstract

This study sought to identify the barriers to effective teaching from the perspective of teachers in Qatar's government schools. This study used survey questionnaire data from the Qatar Education Study 2018, a nationally representative sample of 424 school teachers to determine what they consider the top barriers facing them as they work to provide effective instruction. Drawing on insights from Bronfenbrenner's (1974) ecological systems theory (EST), the current study seeks to understand how EST's five different systems influence effective teaching in the context of Qatar. Based on Stata 16 data analyses, percentages and mean ratings were used to identify salient barriers to effective teaching. Results indicated that student-related barriers, such as motivation, differing student abilities, and school-related barriers including teachers' workload influence effective instruction. A discussion of pertinent results is offered and relevant recommendations for policy-making intervention and calls for future study and research are provided.

Keywords: teaching effectiveness, barriers, Qatar,

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