Contrasting the Immediate Impacts of Traditional Tools and Modern Digitalised Systems in Overcoming Speaking Anxiety in Foreign Language

Dr. Mohamad Ahmad Saleem Khasawneh

Assistant Professor, Special Education Department, King Khalid University, Saudi Arabia, mkhasawneh@kku.edu.sa

Abstracts

Speaking has remained a significant factor that impedes effective communication in foreign language learning (FLL). Exploring the degree of impact of traditional and digitalized methods became necessary. The paper established the difference between traditional and digitalized methods in reducing speaking anxiety among first-year university students learning a foreign language. The study was centred on defining the causative factors and signs of speaking anxiety. The study adopted a quantitative research design, including 936 first-year foreign language students obtained through social networks. The data were collected using a survey developed from the modified FLAS, supplemented with questions developed to capture specifics of the factors that lead to speaking anxiety and the effects of the different teaching methods. The survey was conducted online through Google Forms and shared on social media platforms to cover a wide population. The quantitative data were, therefore, analysed using descriptive statistics and a t-test to determine the levels of reducing anxiety based on traditional and digitalized learning. The study showed that the effect of the traditional methods, such as deep breathing, role-playing, and group discussions, was only moderate in reducing speaking anxiety, but in the case of the digitalized methods, it was found that these methods proved to be way more effective. Strategies like leveraging social networks, mobile apps, virtual and augmented reality interfaces, and automatic speech recognition technology offered significant degrees of anxiety reduction. The outcomes imply the need for a paradigm shift and the use of technology in the language classroom to foster a learning environment.

1. Introduction

Foreign language speaking anxiety has been identified as a common concern that hinders the learning of important communicative features to a great extent. This form of anxiety hinders pronunciation, grammar, vocabulary use, fluency, and comprehension, distorting language performance among learners. Because of their nervousness, speakers can mispronounce words or speak slowly and thus cannot convey messages effectively. Fluency is affected by anxiety as it interferes with proper thinking and fails to construct coherent and grammatically correct sentences. Choices of words that are used become less, and the learners often include simpler words to avoid mispronouncing them and narrowing their choice of expressive language. The

ability to speak smoothly, quickly, and accurately is significantly impaired, resulting in slow, interrupting, and inexpressive speech conveying uncertainty.

1.1. Study Background and Context

Previous studies on the traditional strategies for addressing speaking anxiety in foreign language learning (FLL) involved different classroom practices. To reduce the anxiety levels of their FL students, teachers use encouraging responses, rewards, and several speaking tasks (Campbell & Ortiz, 1991). Other social techniques used to reduce anxiety are peer cooperation and interactions during group assignments (Alrabai, 2014). Furthermore, many handbooks and formatted curricula aim to approach speaking systematically, thus decreasing the level of anxiety among the learners since they know what to expect and what skills are within the focus of accomplishment (Bailey & Nunan, 2004). Such conventional implements, though they are somewhat efficacious to some degree, tend to chiefly depend on the extent to which the teacher ensures the learners' comfort and acceptance (Horwitz et al., 1986). Furthermore, the problem of unfair distribution of competent teachers, as well as fluctuating circumstances in classrooms, can affect the outcomes of the given traditional approaches (Horwitz, 2013).

At the same time, the digitalized contemporary world presents innovative tools to handle speaking timidity. Technology has brought innovative language learning tools, including platforms, AI-driven applications, and artificial intelligence-based language-acquiring systems. Learner interaction on social platforms such as Facebook and Twitter offer learners a natural and relaxed way of practicing their speaking skills (Hsu, 2015). Speech recognition and immediate feedback systems are typical applications for learning a foreign language, since these components enable learners to achieve better pronunciation and fluency (Godwin-Jones, 2018). With the help of the AI models and virtual reality environment, the actual speaking situations can be replicated, and the learners get the chance to practice without worrying about the backlash from their peers or teachers (Cheng & Chan, 2019). Most of the applications used in this method can accommodate different learning rates and offer feedback, making it easier to handle some demerits of conventional practices (Boonmoh & Ghoneim, 2020). Moreover, the nature of technology enhances practice frequency as students can practice on their own time, away from the classroom, thus enhancing their speaking skills despite fear (Reinders & Wattana, 2015).

1.2. Study Objectives

The primary aim of this paper was to explore the degree of the impacts of traditional and digitalised systems of reducing foreign language speaking anxiety. The following specific objectives were pursued:

a.   To analyse factors that increase speaking anxiety in the communication ability of foreign language learners.

b.   To analyse the impacts of traditional activities that are aimed at reducing foreign language speaking anxiety.

c.   To analyse the impacts of digitalised systems in reducing foreign language speaking anxiety in FLL.

d. To compare the traditional and digitalised systems in reducing FL speaking anxiety.

1.3. Research Questions

The following research questions anchored the processes in this paper:

a. What factors increase speaking anxiety in the communication ability of FL learners?

b. To what extent do digitalised systems for reducing speaking anxiety function better than the traditional methods?

2. Review of Related Literature

2.1. Speaking Anxiety; A General Review

Foreign language anxiety (FLA) is universally recognized as a social phenomenon that hinders the learning of a foreign language to a great extent. According to Tien (2018), Spielberger's measure of anxiety describes it as a state that is prevalent in certain situations. Tien (2018) further stated that anxiety results from the complex interaction between a person's biological predisposition and psychological status. Woodrow (2014) also elaborates that anxiety is commonly defined as either dispositional or situational. From this point of view, anxiety is considered an inherent disposition present in every individual from birth that may be activated due to some stress or threatening stimulus. Therefore, FLA is a constant low-grade anxiety, apprehension, or concern that may vary in quality. The importance of acknowledging the complexity of anxiety is that when it is present, it affects the learning process significantly when learning a foreign language. FLA can occur in different forms and to varying degrees, considerably hindering language learning and utilization. The psychological and emotional aspects of FLA are intricate and multifaceted because of the various symptoms and responses among the affected people. As indicated, tackling FLA entails recognizing its roots, symptoms, and effects on learners. Interventions should be done based on the learners' psychological and emotional states, with consideration given to their individuality. This approach can assist educators in designing better ways to contribute to the improvement of the learning experiences of their learners and the acquisition of language.

FLA can be dissected into two primary categories: state anxiety and specific-situation anxiety, according to Ellis (1994). State anxiety, on the one hand, is a temporary condition that affects a person in specific circumstances only and does not have a direct link with his/her personality. This is a rather chronic form of anxiety and one that poses enormous resistance to change. State anxiety is a short-term affective state emerging from the existence of specific environmental stimuli; it entails temporary, intense stress. Specific-situation anxiety occurs in certain situations, e.g., speaking in a foreign language class, since there are negative expectations regarding one's performance. It is, therefore, helpful in establishing the categorization of anxiety so that the root causes can be pinpointed and adequate interventions put in place to counter the effects of this condition. There is a clear distinction between the types of anxiety, and its treatment and prevention methods are different. Trait anxiety, for instance, requires long-term psychological

interventions to manage, while state anxiety can be managed using short-term coping strategies. When it comes to specific situations of anxiety, one focuses on employing effective ways and means of overcoming the fears experienced within certain circumstances. Therefore, knowing the differences between these types of anxiety will allow educators and researchers to have a clearer strategy for assisting language learners.

Among the identified FLAs, speaking anxiety is particularly distinctive due to the proximity of the related issues to the assessment of speaking abilities. This kind of anxiety is shown through several physical symptoms, as analyzed by Beatty and Dobos in Damaida Sari (2017). Some of the symptoms exhibited in such situations include tachycardia, clamminess of the palms, and tingling in the extremities, which can impact speaking performance negatively. Other reactions that Edmund J. Bourne classifies include palpitations, muscular tension, nausea, dry mouth, and sweating. When the physical signs affirm learners' body language, these constraints may prevent them from expressing ideas concisely and precisely, thus stunting their language development. Such symptoms as short breath, palpitations, trembling, and others pressure learners comprehensively into discomfort once they are involved in speaking activities. These symptoms manifest in different intensities in various speakers, thus affecting their speaking performance in a less or more severe manner. This consequently presents the need to appreciate the physiological responses to design the right mechanisms that can be used to approach speaking anxiety. This knowledge can enable one to plan and develop modes of handling anxiety that include the psychological and physical systems. In other words, when speaking anxiety is distinguished from other known forms of anxiety, the need arises to understand how physiological and psychological factors interact and contribute to the learning process so that learners can be effectively helped in managing their situation. Its integration signifies that the focus on developing the language learners' speaking proficiency is all-round, as it has been seen to be balanced and responsive to languages' various dynamics.

Horwitz et al. delineated three critical components of language anxiety: communication apprehension, test anxiety, and fear of negative evaluation. Communication apprehension is a general fear of interacting with others, failing to speak in groups and to the public, listening, and learning oral messages. Students' anxiety is defined as the fear of evaluation and is directly linked to perfectionism. Impaired negative evaluation refers to a focus on negative constituent feedback, particularly in social evaluation conditions, for instance, interviews, oral presentations, and contests in speech. This fear stretches to other forms of interactions and thus augments the level of anxiety experienced by language learners. These components shed light on the complexity and pervasiveness of language anxiety in the learning context among students. Each component has its peculiarities; thus, the approach to its management and minimization is also peculiar. For instance, communication apprehension will require personal tactics to overcome feelings of anxiousness in interpersonal communication. Techniques for accustoming the learner to anxiety and the process of taking the test are the main facets of test anxiety. The presented conception of language anxiety contributes to the understanding of more effective and diversified interventions, which are essential to meet the individual demands of learners. Thus, it is possible to conclude that only a complex approach that includes the identification of its causes, manifestations, and effects on learners is effective in managing language anxiety.

2.2.   Diiefernt Dimensions of Speaking Anxiety in FLL

Speaking anxiety in a foreign language involves several complex dimensions. Gardner and MacIntyre in Melouah (2013) defined FLA as possessing a particularly negative effect on learners whenever the individuals are supposed to operate in a foreign language. This reaction is characterized by an intricate network of self-esteem, personal and emotional attitudes, and behaviors regarding the distinct language acquisition process. Douglas, Samuel, and Cope, as cited in Alsowat (2016, p. 165), explain that language anxiety is more than the fear of speaking the FL, for it is a complex affair concerning the individual. These include a lack of self-esteem, claustrophobia, and extraneous thoughts regarding perceptions from fellow students. The above factors make language learning complex as the learners' anxiety and performances are compromised. The nature of this connection shows that it is necessary to focus not only on speaking anxiety but also on various interconnected aspects. It means that the intervention should include psychological, emotional, and social dimensions so that learners can be effectively helped. Thus, one can design more adequate interventions for language learners by acknowledging the role of various factors that cause speaking anxiety. Such an approach is necessary for understanding individual learners' needs and enhancing the learner's speaking abilities. In managing speaking anxiety, it is necessary to understand its determinants, modes of presentation, and effects on the learners. Thus, by focusing on these aspects, educators can facilitate favorable conditions for the language learning process and enhance its results.

This phenomenon of speaking anxiety has evolved as a significant concern to scholars in the past, and previous studies offer rich information on the situation concerning foreign language learners. NurIsnaini (2018) analyzed the speaking anxiety of the students of UIN Raden Intan Lampung and stated that some of the factors included fear of self-prediction, irrational belief, oversensitivity to hazards, anxiety sensitivity, wrong perception of body signals, and low self-efficacy. It revealed that students were frequently uncertain, did not want to fail, got stressed when asked to speak out, and had stage fright. These results shed light and stress that speaking anxiety is complex and has a direct influence on the learner's communication and participation in language learning activities. In another study by Mareeyah and Aleemasah in 2018 on Thai students' speaking English anxiety, the subject anxiety had influenced poor practice, insufficient vocabulary in English, nervousness in making presentations, and poor understanding of the materials. Other reasons included as factors are:

i.   The students disliked the FL.

ii.   Class conditions were not favourable.

iii.   Ineffective ways used in teaching

iv.   Limited use of technology.

More specifically, the study pointed out that these students groomed themselves before speaking and aimed at avoiding stress as the ways of dealing with the identified anxiety. The framework of this research is founded on the point that the talking anxious phenomenon needs psychological and pedagogical intervention.

Mai-Munah (2015) studied the factors contributing to speaking anxiety of senior high school students in Jambi City. The study identified five primary factors:

i.   Little speaking skills,

ii.   Insecurity,

iii.   Concerns with others' responses,

iv.   Perceived low self-confidence,

v.   Apprehension when it comes to communicating with teachers in English, and

vi.   Culture that emphasizes on teachers' authority.

The research presented here implies that end-user speaking apprehension was caused by both individual variables and environmental factors. Practical suggestions for effective practices for supporting the learning of mathematics, disability, low self-esteem, and high anxiety levels were also underlined by the study. Another study on speaking anxiety among students of UIN Walisongo Semarang by Huda (2018) shed more light. The findings pointed toward anxiety as being evident, with effects: overthinking, not being prepared, previous unfortunate experiences, low skill level, lack of confidence, fear of doing poorly on tests, and test anxiety. As such, the factors highlighted above are, namely, some of the reasons that pointed to a high level of speaking anxiety during the presentations. Research findings suggested that it was necessary to design measures to effectively reduce each of these factors, as they precipitated anxiety in order to enhance students' speaking ability and language acquisition process.

Santriza (2018) focused on the anxiety in the speaking performance of the second-grade students of SMAN 5 Banda Aceh. Consequently, the study noted that 72% of the students had test anxiety, 73% had communication apprehension anxiety, and 55% had negative evaluation anxiety. These findings categorize students' anxiety into three major types: test anxiety, communication apprehension, and fear of negative evaluation, which are terms that can be used interchangeably. The study highlighted the importance of such approaches to tackle these forms of anxiety and boost the learners' self-esteem and performance in speaking English.

2.3.   Traditional and Digital Interventions for Reducing Speaking Anxiety

2.3.1. Traditional Interventions

There are various traditional means of reducing FL speaking anxiety. Group discussions can be made relevant and interesting by organizing topics important to the special student group. Presentations, one of the main strategies, allow the preparation and giving of formal speeches. However, the stress of having to do presentations often can be very off-putting, which, with time, can be erased as the students get used to speaking in public. These presentations help the students get acquainted with the powers of establishment and rhetoric, which are important for speaking. Role-play activities complement speaking fluency, as students can participate actively in groups and encourage each other. These activities allow the students to speak out in public because the immediate scorn from their peers is not levelled on them. In this way, students gain confidence

gradually due to regular practice and positive reinforcement. Thus, the effectiveness of the given strategies is based on the opportunities to practice speaking in conditions that will not be stressful.

Furthermore, the influence of teacher intervention on speaking anxiety is interactive and effective in promoting the learning environment. Affirmative feedback has been cited as one of the most useful ingredients that assist students in identifying what they need to do better. Such feedback must be constructive and written positively, guiding the students to a higher level of understanding. Teacher support is also important in equal measure, as it assists in boosting the morale of students. Credit goes to teachers for fostering a classroom environment conducive to students freely sharing anything they want to share. Due to positive reinforcement, students can be confident in overcoming their fears and phobias, which is why a teacher's role is very important. Constructive feedback, if shared appropriately, helps boost the students' self-esteem and interest in speaking. Teachers can also conduct one-on-one feedback sessions to re-establish and ease specific learning apprehensions. The above sessions enable the students to be given a chance to debate their difficulties before being advised on the same, hence increasing their confidence levels. Finally, teachers can also show how some speaking can be done and how you can reduce nervousness and do better. Thus, the rendered techniques are important to see how, in applying them, one can build up his or her coping strategies.

2.3.2. Modern Digitalized Systems

Speaking anxiety has been eased with the help of modern digitalized systems, particularly language learning. The approaches presented new, efficient ways to minimize speaking anxiety with the use of technology like social media, online forums, and mobile applications. In particular, social networks allow students to speak foreign languages in a freer atmosphere and without pressure. Such applications enable learners to converse with natives and other learners and, therefore, feel that they are not alone. The other communication possibilities are connected with online forums and discussion boards where students can practice and get feedback. Such forums prove especially useful for students who may feel uncomfortable speaking, provoking a shift from writing to speaking. Applications developed for language practice are interactive and filled with the elements of games, so practicing speaking will not be boring. Such apps usually have some options like voice recognition, the analysis of pronunciation, and speaking with native speakers simultaneously. If students include these tools in the learning procedure, they can speak daily and receive feedback, avoiding nervousness and working on mistakes.

As much as it would encourage more actions, incorporating technology in language learning is also as effective because exhibiting actions or speaking can be set at one's convenience and pace. Thus, it can be advantageous for the students, especially those who struggle to speak in front of a full classroom due to nerve issues. Through practicing in such an environment, a student may slowly and steadily increase his level of confidence and, in the process, decrease his level of anxiety. In addition, there is the use of technology, which offers a variety of resources and materials that improve the learning process. Students can listen to podcasts, watch videos, or any form of multimedia, and in the process, they will be enhancing their listening and speaking skills.

The next effective approach to alleviating speaking anxiety in language learning is digital game-based learning (DGBL). DGBL incorporates features such as games, which, in this case, will be applied to make practicing speaking more fun. These games have tasks, incentives, and levels that encourage student practice and the enhancement of skills. Being a blend of game play and game competition, DGBL can help enhance learners' interest since they play to learn and not be stressed or anxious while speaking. For instance, games that promote language learning let the students use the language in many different capacities. Such games involve dialogues, role plays, and other speaking activities to assist learners in mastering their speaking skills and overcoming any fear they might have. The application of DGBL also enhances social aspects by encouraging students' cooperation to accomplish given objectives and address various issues. Thus, implementing such cooperation can bring positive changes in how classmates help each other, decreasing speaking apprehension.

3.   Study Methodology

There are methodological processes followed in both the data collection and analysis in this study. The methods are discussed in various sections.

3.1.   Study Approach

The approach employed for this study is quantitative, which is most appropriate in evaluating the efficiency of the implementation of traditional and digitized language learning promotional strategies in the reduction of speaking anxiety in FLL. This approach is highly apt considering the fact that it is likely to offer quantitative, specific, and scientific findings since structured tools such as questionnaires, assessment, and statistics shall be used in the study. Quantitative research style used in the study is useful in that it enables the systematic determination of the levels of speaking anxiety and the proficiency in speaking as well the vocabulary skills before and after the intervention. The work employs pre-tests and post-tests to obtain quantifiable data on the learners since the purpose of the comparison is numerical in nature. Furthermore, the practice of using assessment scales, including a Foreign Language Speaking Anxiety Scale (FLSAS), guarantees that the anxiety levels are measured correctly. This methodology not only helps in establishing the presence of any changes in the anxiety level, it also aids in comparing or analysing the effectiveness of various approaches used in teaching and the changes that occur in speaking anxiety level.

3.2.   Study Population

The target participants are first-year university students studying foreign languages; this is a heterogeneous group of learners at a relatively early level of learning. These participants were recruited from different social sites by targeting the frequently used social sites among university students, hence the coverage and representation. Invitations for the study were shared on Facebook, Instagram, and discussion boards related to universities, ensuring that the target population is reached through the internet. The criteria for selecting participants were based on enrolment at the first level of a foreign language learning process, which is the most suitable for

observing the effects of both traditional and applied approaches to teaching and learning on students' speaking fear and language fluency. Besides, this approach allows to achieve a relevant population sample concerning the study purposes while relying on the communication and interaction patterns of students in social networks to achieve a higher response rate and participant variability.

3.3.   Sampling Strategy and Size

In this research, a stratified random sampling procedure was used in order to increase the likelihood of attaining an accurate representation of first-year university student taking foreign language classes and their demographic characteristics. A total of 936 participants were included in order to have adequate data to compare the traditional and the digital teaching methodologies at 95% and a margin of error of 3%. This was done in order to have a proper representation of the subgroups defined by age, gender, and major in the selected population. Specifically, the sample includes approximately 52% female and 48% male participants, with age distributions reflecting the typical university freshman cohort: 75/100 of them were 18-19 years old, 20% were 20-21 and only 5% were those who were 22 years and above. Also, 40% of the sample represents students of humanities, 35% of students of social sciences, 15 % of students of natural sciences, and 10% of students of other fields. This type of sampling guarantees not only the size of the sample but also the variability, which makes the final results widely applicable in terms of explaining the level of speaking anxiety in foreign language learners based on the difference in the choice of teaching methods.

3.4.   Instrument for Data Collection

The tool used in this study is a self-administered survey questionnaire that has been carefully constructed to assess multiple dimensions of foreign language speaking anxiety as well as the effects of traditional and digital methods of learning. The questionnaire is designed in the form of three major sections consisting of 30 items in all. The first dimension contains 10 items from the original FLAS that measures the participants' level of anxiety in speaking the foreign language after taking into account aspects such as communication apprehension, fear of negative evaluation, and test anxiety. The second part consists of 10 items which are aimed at the assessment of the extent to which different factors that might cause speaking anxiety in the foreign language are influential, such as, lack of vocabulary, fear of making mistakes, pressure from other students, and so forth. The third and last part includes 10 items that refer to the frequency and estimations of the traditional and digitalized learning materials and tools which are used in the classroom and their perceived helpfulness and effectiveness regarding such factors as students' interest, ease of use, and speaking skill development. Each survey item is answered with a 5 Likert scale with the options; strongly agree, agree, neutral, disagree, and strongly disagree, which is very helpful as it does not lead to students giving very generalized answers about their attitudes, experiences or preferences. This Likert scale enables the measurement of abstract data, which requirement for statistical analysis enables the determination of the effectiveness of traditional as well as digitalized techniques in eradicating foreign language speaking anxiety. This consideration of the survey design enables an all-round collection of qualitative data on psychological features of speaking anxiety as well as quantitative

data on the practical effects of various teaching-learning approaches to back up the study's research questions.

3.5. Administration of Administration

The administration of the instrument was done through Google Form since it provided a platform to designing and distributing the survey. The current study adopted Google Form as a data collection tool that avails itself as a user-friendly medium that enhances compliance with the questionnaire's implementation, thus enhancing the responses' reliability. The survey link was shared on the university's Facebook, Twitter, and LinkedIn accounts, focused on first-year foreign language students. These were chosen based on the popularity of the platforms within the target audience, thus the researchers were assured of a large, and varied revue of participants. With face-book, ability to share materials reach a large population and in a short time allows for compiling responses from a diverse geographical region within a short span of time. The digital and automated format of the survey also ensured that data was collected and monitored in real-time hence any problems that may be associated with the survey could be quickly corrected in addition data could be quickly compiled and analysed. This method of administration was preferred in order to capture the impartiality of respondents while at the same time be easy to administer to the participants, in addition to creating a comprehensive set of data for the subsequent analysis.

3.6. Data Analysis Method

This paper's survey data was analysed descriptively, as well as through t-test analysis, in order to obtain a more thorough understanding of the effects that traditional and digitalized approaches to learning possess on foreign language speaking anxiety. Frequency analyses was used for organizing and condensing the data to give simple quantitative characteristic of the responses of the 936 participants including measures of central tendency, dispersion and shapes of the responses. These encompass arithmetical means, standard deviations, frequencies and percentages that will describe the broad tendencies and features of the data. After that, an independent samples t-test will be used to test the hypothesis that means of two groups; the one with traditional learning and the one in contact with digitalized systems, differ significantly. This statistical test established whether, or not, there was any significant difference in the levels of speaking anxiety between the used groups with the aim of providing adequate comparison for the effectiveness of each learning method. The utilization of these analytical tools made it possible to conduct comprehensive and profound analysis of the data thus providing the study with the basis for analysis of the factors that motivate speaking anxiety and analysis of the difference in the effectiveness of various teaching approaches.

4. Results and Discussion of Findings

4.1. Results

Foreign language speaking anxiety encompass varying concerns, including physical, emotional and psychosocial concerns. To explore and compare the impacts of traditional and digitised

means of reducing FL speaking anxiety, it was pertinent to establish anxiety from the view of the study participants, expand on the causative factors and manifestations. Hence, this section is further segmented into different units.

A.   Evidence of Speaking Anxiety in FL Learners

The initial effort in the survey was to elicit the views of the first-year university students in foreign language education on establishing their speaking anxiety. Ten survey questions were developed from the Foreign Language Speaking Anxiety Scale (FLAS) and also modified to suit the immediate requirements in this study. The table below contains the results of the survey and other relevant statistical measures:

Table 1: Descriptive Statistics of Evidence of Speaking Anxiety

| Question	Mean	Standard Deviation	Standard Error	Skewness	Kurtosis
I feel confident when speaking a foreign language during online learning sessions.	3.05	4.97	0.16	0.59	-0.88
I panic if I have to speak a foreign language in online learning without prior preparation.	7.46	1.87	0.06	0.36	-1.04
The more speaking tests I take, the more confused I become.	8.76	0.76	0.02	0.23	-0.67
I feel anxious and lack confidence when asking and answering questions in my foreign language class.	10.57	0.66	0.02	-0.16	0.55
A patient lecturer helps to reduce my nervousness when speaking a foreign language.	6.04	2.49	0.08	0.42	-0.78
I fear that other students will laugh at me when I speak a foreign language.	12.04	0.44	0.01	-0.38	1.24
I get nervous even when speaking a foreign language that I have prepared in advance.	7.38	1.27	0.04	0.16	-0.54
I tremble at the thought of being called upon to speak in my foreign language class.	12.85	0.41	0.01	-0.29	1.58
I am not relaxed whenever I have to speak in my foreign language class.	11.19	0.52	0.02	-0.46	1.09
I get anxious when I have to speak a foreign language in online learning.	8.48	1.33	0.04	0.38	-0.96

The descriptive statistics table summarizes the degree of Speaking anxiety experienced by first-year foreign language students during online learning sessions. The overall finding that the estimated means are significantly different also means that there are significant differences in the levels of anxiety about specific elements of foreign language learning, with such items as "I tremble at the thought of being called upon to speak in my foreign language class (M=12.85, SD=0.41) and "I fear that other students will laugh at me when I speak a foreign language"

(M=12.65). However, items in the confidence dimension, such as 'I feel confident when speaking a foreign language during online learning sessions', have lower mean scores (M= 3.05 SD=4.97), implying that students lack confidence. The standard deviations and standard errors measure the dispersion and reliability of these findings; large standard deviations like 'I feel confident when speaking a foreign language during online learning sessions' (SD= 4.97) imply more variance. Skewness and kurtosis values also describe the distribution, negativity of which in the item, "I feel helpless and uneasy when answering or asking questions in my foreign language class" (-0.16) points towards the accumulation of lower scores, the positivity of which in the item "I stammer at the thought of speaking to my foreign language class" (1.58) which suggests high peak around the mean. Such statistical information is helpful to distinguish the particular aspects that might influence the increase of speaking anxiety in the context of foreign language learners and ensure that focused efforts are implemented accordingly. Specifically, for evaluating intrapersonal barriers and students' anxiety levels, the data confirms introducing intrinsic barriers and 'fear of ridicule' or 'lack of preparation' extrinsic barriers and behavioural aspects of the (sleepy, heated, or irate) lecturers. Thus, knowing these factors, the study would be able to design further research by comparing traditional and digitalized teaching approaches and improve the conditions of learning for foreign language students.

B.   Causative Factors of Speaking Anxiety in FLL

There are various causes of language anxiety, but when it comes to speaking anxiety in FL, there are five main causes of speaking anxiety, as evidenced in the reviewed studies. These five causes were included in the survey, and the results are summarised in the graph below.

Fig 1: Results of Causative Factors for Speaking Anxiety
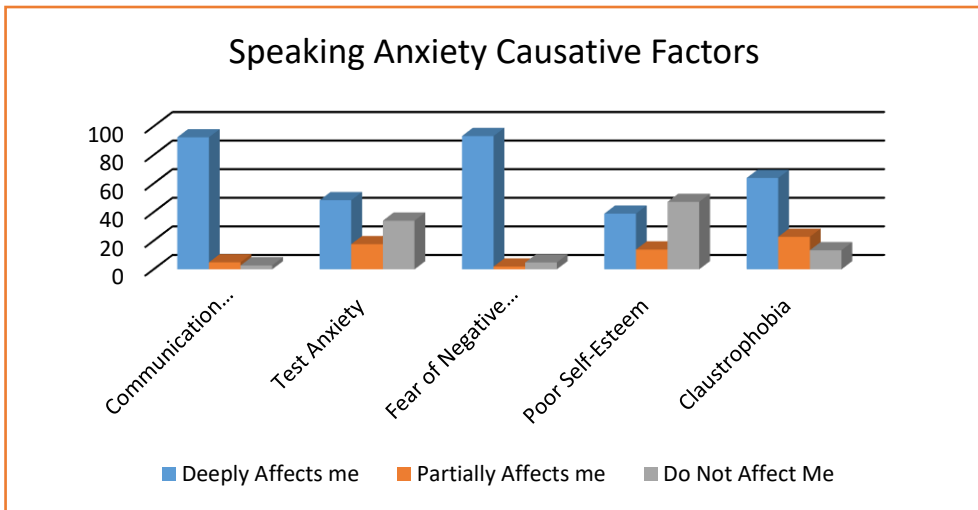
From the findings highlighted in the Figure 1, there is much that can be understood about the probable causes of speaking anxiety among first-year foreign language students. Communication apprehension appears as a dominant factor, as 92.37% said that it 'deeply affects' them – quite a contrast from the meagre 2.75% who are unaffected. Likewise, fear of negative evaluation markedly affects 93.22%. Test anxiety remain somewhat substantial, yet it proves to be more evenly spread across all the domains in question, reaching the rate of 48.03%. Low self-esteem seems to be less generally relevant, severely affecting 38.47%. Contrary to expectations, claustrophobia to a large extent impacts 63.91% of the students as a result of fear that may arise due to limited space required to carry out learning or observation during language tasks. These statistics prove that speaking anxiety is a complex phenomenon, and apprehension and fear of negative evaluation are the most observed problems. Hence, there is a need for intervention in language education to address such specific anxieties, be it in terms of communication approach, methods for test preparation, the climate otherwise in a classroom. Therefore, the need to address these factors is imperative in promoting students' language learning experiences and achievements to support the combination of both the conventional and ICT techniques in minimizing speaking apprehension.

Fig 2: Results of Manifestation of Speaking Anxiety in FL

Manifestation of Speaking Anxiety
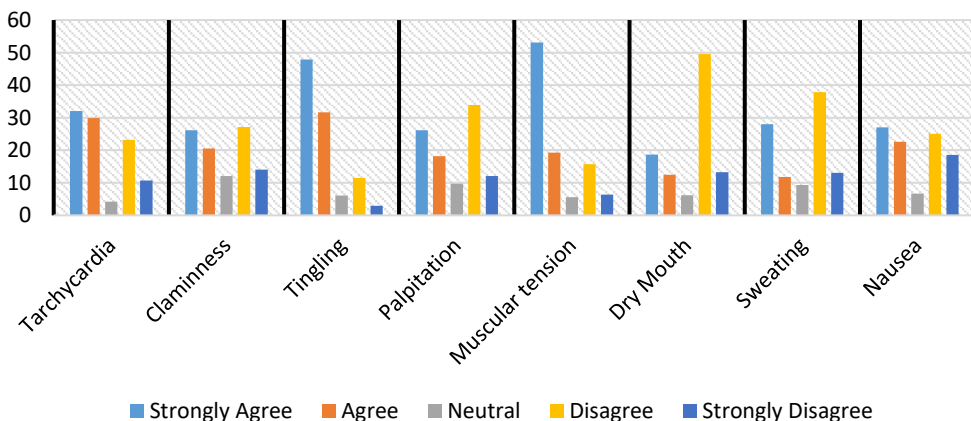
Concerning the data of the first-year foreign language students' speaking anxiety level, figure 2 illustrates a detailed explanation of the intensity and frequency of the physiological symptoms of speaking anxiety. Most of them indicated that muscular tension was manifesting feature of speaking anxiety, with a score of 53.23% who strongly agree to have experienced it while 19.22% accepted they have experienced manifestation of muscular tension due to speaking anxiety. This result means that nearly 72% of the participants ac of the respondents are moderately/heavily influenced. Tingling sensations are also evident as manifestation, as about

47.86% of the participants strongly agreeing and 31.66% respondents agreed, which depicts that this anxiety marker is very common as per the result. On the other hand, symptoms such as dry mouth and sweating present conflicting patterns compared to the above symptoms with nearly half of the students, 49%.52% and 37.83% respectively, denied that they suffer from these symptoms because speaking anxiety manifests physically in so many ways. Tachycardia and clamminess are moderately serious signs, which affect approximately 32.07% and 26.19% of the respondents strongly agree in experiencing these symptoms, with the results on palpitations and nausea more spread out because, again, anxiety is diverse. The range of scores for the neutral response to all the symptoms is also quite low, meaning that students are quite clear on their physical reaction to anxiety. Thus, the described research proves that speaking anxiety is poly-dimensional and students experience a number of physiological manifestations.

C.   Comparing the Traditional and Digitalised Methods for Reducing Speaking Anxiety

The onus of this study was to evaluate the degree of impacts of the traditional methods and digitalised tools in reducing the foreign language speaking anxiety. We developed 15 survey items for the comparison.

Table 2: Results of Traditional and Digitalised Systems

Survey Items Table with Hypothetical Statistical Measures

Survey Items	Mean	Standard Deviation	Degree of Freedom (df)	F-value	t-value	P-value
Taking deep breaths before speaking helps me feel less anxious about using a foreign language.	3.52	2.52	935	4.23	2.12	0.034
Practicing meditation reduces my anxiety when speaking a foreign language.	3.23	2.6	935	4.56	2.14	0.032
Engaging in mindful exercises improves my confidence in speaking a foreign language.	3.76	2.4	935	4.78	2.36	0.019
Role-playing activities in class help me feel more comfortable speaking a foreign language.	3.83	3.3	935	4.32	2.40	0.018
Participating in group discussions reduces my fear of speaking a foreign language.	3.47	2.5	935	4.54	2.25	0.024
Direct intervention from my teacher lowers my anxiety about speaking a foreign language.	3.62	2.6	935	4.22	2.31	0.021
Practicing with classmates in a supportive environment makes me less nervous about speaking a foreign language.	3.73	2.4	935	4.76	2.37	0.019
Interacting with others on social media platforms helps me feel more confident speaking a foreign language.	6.58	0.4	935	11.56	5.89	0.000
Participating in online forums reduces my anxiety about using a foreign language.	7.37	0.5	935	11.12	5.67	0.000
Using mobile applications for language practice helps me feel less anxious when speaking a foreign language.	5.92	0.3	935	12.34	6.23	0.000

Virtual reality environments make me more comfortable speaking a foreign language.	6.83	0.4	935	11.78	5.92	0.000
Augmented reality tools help me feel less nervous about speaking a foreign language.	6.83	0.4	935	11.45	5.84	0.000
Automated speech recognition technology reduces my anxiety about pronouncing words in a foreign language.	6.92	0.3	935	12.11	6.12	0.000
Digital game-based learning activities make me feel more relaxed about speaking a foreign language.	6.84	0.4	935	11.87	5.97	0.000
Engaging in language practice through digital tools is more effective for reducing my anxiety than traditional methods.	6.95	0.3	935	12.45	6.25	0.000

Table 2 offers a breakdown of the results formed based on the effectiveness of the traditional approaches and application of the digitalised systems to reduce speaking anxiety from the angle of the foreign language students. The mean values, SD, df, F-values, t-values, and p-values, as presented above, clearly show the relative effectiveness of the described anxiety-reducing strategies. The deep breathing technique (mean = 3. 52, sig = 0. 034) has a moderate rating, indicating that this technique could successfully reduce anxiety. Meditation (mean = 3. 23, sig = 0. 032) and Mindful exercise (mean = 3. 76, sig = 0. 019) also score moderate ratings, which indicates a positive feeling towards the use of these. Likewise, role-playing activities (mean = 3.83, p = 0.018) and participating in group discussions (mean = 3.47, p = 0.024) also depict a decrease in anxiety levels, supporting the fact that interactive and traditional techniques that involve speaking decrease speaking anxiety.

On the other hand, digitalised methods have significantly higher mean values and highly significant p-values, therefore showing much greater effectiveness in mitigating anxiety. For instance, communication on social networks (mean = 6.58; t = 0.000), being a member of online communities (mean = 7.37; t = 0.000), and utilising mobile applications (mean = 5.92; t = 0.000) reduce anxiety. Additional support for the higher efficacy of digital interventions also came from the comparison of computerised aids and technologies, including virtual reality environment (mean=6. 83, p=0.000), augmented reality tools (mean=6.83, p=0. 000), and automated speech recognition technology (mean=6. 92, p=0. 000). Not only do these technologies make the learning process more interactive, but the immediate feedback along with tailored practice, which is so beneficial in combating the fear derived from speaking a foreign language, is provided. Digital game-based learning activities (M = 6. 84, F = 0. 000) and the overall perceived usefulness of using digital tools rather than traditional ones (M = 6. 95 F = 0. 000) point out that technology integration in language education, calls for a shift in the paradigm towards the use of technology in mitigating speaking anxiety.

4.2.   Discussion of Findings

4.2.1.   Findings on the Causative Factors for Speaking Anxiety

Following the findings illustrated in Figure 1 regarding the causes of foreign language speaking anxiety, current research in this area is corroborated and supplemented. Communication

apprehension was identified as the most obvious factor. Horwitz, Horwitz, and Cope ((1986)) were the first to define communication apprehension as one of the factors inhibiting language anxiety and claimed that it greatly influenced students' communication skills. The findings in this study also agreed with MacIntyre and Gardner (1991), who observed that individuals avoid communicative situations, thus minimizing their practice of the foreign language. The finding that 93.22% of students get deep anxiety because of the fear of negative evaluation aptly correlates with Young's (1990) contention that fear of negative judgment by fellow students as well as instructors is a key reason for FL anxiety. The data also reveals major concerns regarding anxiety and test-taking, with the students expressing stress and anxiety averaging 48.35%. This conforms with prior research by Aida (1994), who noted that test stress was a key predictor of FL acquisition, especially with pressure arising from the consequential tests in languages. Another core attribute, low self-esteem, was noted, which aligns with Cheng, Horwitz and Schallert (1999), who confirmed that self-perceptions and self-worth are important components of FL learning experiences. Furthermore, claustrophobia affects many students, an area not discussed considerably in past research, meaning that physical and psychological concerns related to learning spaces might also be influential.

The outline in Figure 2 presents an expansion and a distinction of earlier studies about the manifestations of speaking anxiety. Notably, tachycardia is documented to be experienced by 61.34 students (32.07% strongly agree and 29.88% of the students agree), as seen in the physiological symptoms of anxiety described by Gregersen and collaborators (2014). Clamminess was reported by 46.74% of students who responded that they agree, with 26.19% strongly agreeing with the statement and 20.55% responding that they only partially agree. Tingling sensation: 79.52% of respondents' percentage (47.86% strongly agree and 31. 66% agree) could specify the high level of physical anxiety symptoms, which is in agreement with Liu and Jackson (2008), who defined the importance of the physical component in language anxiety. These symptoms explain why cognitive and somatic intervention modalities are needed to treat anxiety conditions. Moreover, muscular tension, which was experienced by 72.29%, 53.07% of students claiming to strongly agree and the19.22% agreeing with the statement engages with the physical indicators of FL anxiety, as supported by the research detailed by Ewald (2007) conducted.

Therefore, the results of Figure 1 2 not only support the prior literature on the antecedent causes and consequent performance features of FL speaking anxiety but also extend it by revealing additional factors not considered before the use of the technological gadget in reducing anxiety. The high percentage of discouraged communication apprehension, the fear of negative evaluation and physical signs such as tachycardia and muscular tension also justify the multi-faceted aspect of FL anxiety, as argued by Horwitz and others. In addition, the comparison with the findings of previous research by Liu & Jackson (2008) and Gregersen et al. (2014) enhances the literature's understanding of how the application of traditional and modern teaching approaches affects students' anxiety levels while learning FL and the emergence of new approaches to the FLE process.

4.2.2. Comparing the Traditional and Digitalised Systems for Reducing FL Speaking Anxiety

The findings, as presented in Table 2, show a statistically significant difference between the traditional and the digital approach toward reducing speaking anxiety among foreign language students. This is in tandem with other studies that have examined methods of coping with anxiety. For example, Horwitz, Horwitz, and Cope (1986) emphasised the significance of techniques of anxiety modulation, such as deep breath, that indicated moderate efficacy (mean = 3.52, p = 0.034) in the light of Table 2. Nonetheless, the data indicate that the digitalised approaches are significantly more effective in handling speaking anxiety, supported by higher numerical averages and lower p-values. For instance, social networks (mean = 6.58, p = 0.000) and online communities (mean = 7.37, p = 0.000) exhibit great progress in anxiety decrease. Furthermore, using of mobile applications (mean = 5. 92, p = 0. 000) supports the view of Liu and Jackson (2008), who noted that MALL (mobile-assisted language learning) allows individuals to learn in a personal and context-sensitive manner. Lee and Hsieh (2019) confirm the possibility of lowering the anxiety level with the help of virtual reality and augmented reality tools as the authors prove that the application of advanced technologies helps students get exposed to specific language practice in an environment that facilitates the speaking process.

The enhanced mean scores of the targeted anxiety, established for digital game-based learning and the automated speech recognition technology, at 6.84 and 6.92 respectively, significantly different from the control at p = 0.000, underscore the potential of technology-enhanced language learning. Reinders & Wattana (2015) and Sykes & Reinhardt (2013) also support these findings, as game-based learning and automated feedback have been shown to increase student interest and reduce anxiety through non-critical feedback. With a mean score of 6.95, p = 0.000, this study has revealed the overall perceived effectiveness of digital tools over traditional methods in language education. This not only suggests a shift towards the use of technology in language education, as highlighted by Warschauer (2000) and Chapelle (2009), but also provides reassurance about the positive direction of the field, inspiring confidence in the potential of digital tools.

5.   Conclusions

The paper established the difference between traditional and digitalised methods in reducing speaking anxiety among first-year university students learning a foreign language. The study was centred on defining the causative factors and signs of speaking anxiety. The study adopted a quantitative research design, including 936 first-year foreign language students obtained through social networks. The data were collected using a survey developed from the modified FLAS, supplemented with questions developed to capture specifics of the factors that lead to speaking anxiety and the effects of the different teaching methods. The survey was conducted online through Google Forms and shared on social media platforms to cover a wide population.

The quantitative data were, therefore, analysed using descriptive statistics and a t-test test to determine the levels of reducing anxiety based on traditional and digitalised learning. The study showed that the effect of the traditional methods, such as deep breathing, role-playing, and group

discussions, was only moderate in reducing speaking anxiety, but in the case of the digitalised methods, it was found that these methods proved to be way more effective. Strategies like leveraging social networks, mobile apps, virtual and augmented reality interfaces, and automatic speech recognition technology offered significant degrees of anxiety decrease. The outcomes imply the need for a paradigm shift and the use of technology in the language classroom to foster a learning environment. However, it is important to note the following limitations of the study: the results collected from the survey might have been influenced by self-report bias, and more research, especially longitudinal, is needed to determine the lasting effects of the intervention. This reiteration of the need for further research underscores the study's commitment to academic rigour and encourages future studies in the field. Accordingly, educators' use of both traditional and digital approaches addressing the students' need to minimise anxiety and improve language acquisition is suggested.

Acknowledgements

WORKS CITED

Abualrish, M. A., & Khasawneh, M. A. (2024). Using social media as a platform of communication between school administration and the local communities to promote inclusive education for children with special needs. Studies in Media and Communication, 12(2), 79. https://doi.org/10.11114/smc.v12i2.6560

Aburezeq, I. M., Dweikat, F. F., Al-Shaar, A. S., & Khasawneh, M. A. S. (2022). Case Study on the Dissemination of Radicalism on social media. Information Sciences Letters, 11(6), pp. 2339–2343. DOI: http://dx.doi.org/10.18576/isl/110640

Ahmad Saleem Khasawneh, M. (2024). The efficacy of a programme utilizing digital learning technology in fostering the life skills of students with learning disabilities. International Journal of Learning, Teaching and Educational Research, 23(4), 18-33. https://doi.org/10.26803/ijlter.23.4.2

Al Kasey, A.A.M., Al-Omari, A.K., Khasawneh, M.A.S., ...Khairy, M.A.Y., Al-Asmari, S.M.S.(2023).The reality of distance learning skills among general education teachers from the point of view of supervisors and school principals. Information Sciences Letters, 12(3), 1533-1547. https://doi.org/10.18576/isl/120340

Al Sabi, Y. N., Jaradat, S. A., Ayasrah, M. N., Khasawneh, M. A. S., & Al Taqatqa, F. A. S. (2022). Shyness and its Relation with Self-esteem in Light of Some Variables. Information Sciences Letters, 11(6), 2345-235. https://doi.org/10.18576/isl/110641

Al-Ajeely, S. A., Al-Amrat, M. G. R., Khasawneh, M. A. S., & Alkhawaldeh, M. A. (2023). Problems with Thinking and Daily Habits among Mothers of Children with Autism in Saudi Arabia. Migration Letters, 20(S3), 1105-1114. https://migrationletters.com/index.php/ml/article/view/4006

Al-Ajeely, S. A., Alkhawaldeh, M. A., & Khasawneh, M. A. S. (2023). Developing Curricula Standards in General Education in the Light of International Standards. Migration Letters, 20(S3), 1090-1104.

Alanazi, A. S., Almulla, A. A., & Khasawneh, M. A. (2023). Evaluating the effects of integrating cognitive presence strategies on teacher attitudes and student learning outcomes in special education and autism classrooms. International Journal of Special Education (IJSE), 38(2), 80-89. https://doi.org/10.52291/ijse.2023.38.24

Alanazi, A. S., Almulla, A. A., & Khasawneh, M. A.S. (2023). Exploring the E-learning supporting systems for students with special needs. Revista de Gestão Social e Ambiental, 17(7), e03917. https://doi.org/10.24857/rgsa.v17n7-0

Alelaimat, A. M., Baibers, H. S., & Khasawneh, M. A. (2023). Examining the impact of YouTube vlogging on communication skills in teens with speech and language disorders. International Journal of Data and Network Science, 7(4), 2077-2082. https://doi.org/10.5267/j.ijdns.2023.10.100

Al-Gaseem, M. M., & Khasawneh, M. A. S. (2022). Action Research in Science Teacher Education Program: Significance and Benefit According to the Students-Teachers' Assessments. Przestrzeń Społeczna (Social Space), 22(3), 97-113.

Al-Gaseem, M. M., & Khasawneh, M. A. S. (2023). Environmental Orientation for Art Teachers Education Program (EOATEP). Journal of Higher Education Theory and Practice, 23(12), 209-223.

Al-Kahlan, T. B. S., & Khasawneh, M. A. S. (2023). Advantages of using the Interactive Whiteboard as an Educational Tool from the Point of View of Middle School Teachers in Asir Region. Migration Letters, 20(S1), 889-900.

Al-Kahlan, T. B. S., & Khasawneh, M. A. S. (2023). Understanding the Cognitive Processes of Digital Reading in the Age of E-Books. Migration Letters, 20(S3), 1130-1140.

Al-Kahlan, T. B. S., & Khasawneh, M. A. S. (2024). A Training Program to Develop the Culture of Competency-Based Assessment among Preparatory Stage Teachers in the Asir Region. Migration Letters, 21(S2), 442-460.

Al-Kahlan, T. B. S., & Khasawneh, M. A. S. (2024). Motivations for Using Social Media Among University Students. Kurdish Studies, 12(1).

Al-Kahlan, T. B. S., & Khasawneh, M. A. S. (2024). The Degree of Application of Total Quality Management and Its Relationship to Strategic Planning in The Ministry of Education in The Kingdom of Saudi Arabia from The Point of View of Administrators. Migration Letters, 21(S3), 61-76

Al-Kahlan, T. B. S., & Khasawneh, M. A. S. (2024). The Effectiveness of a Proposed Electronic Program to Develop the Teaching Performance Skills of Secondary School Teachers in Abha Governorate. Kurdish Studies, 12(1).

Al-Kahlan, T. B. S., & Khasawneh, M. A. S. (2024). The Impact of Teaching Science Through Self-Regulated Learning in Achieving and Developing Self-Management Skills Among Students with Hyperactivity and Attention Deficit Disorder. Kurdish Studies, 12(1).

Alkhasawneh, T., Al-Shaar, A. S., Khasawneh, M.A.S.., Darawsheh, S., & Aburaya, N. (2022). Self-Esteem and its Relationship to some Demographic Variables among Students with Learning Disabilities. Information Sciences Letters, 11(6), pp. 1929–1936. http://dx.doi.org/10.18576/isl/110609

Alkhasawneh, T., & Khasawneh, M. A. (2024). The effect of using augmented reality technology in developing imaginative thinking among students with learning difficulties. International Journal of Data and Network Science, 8(3), 1679-1688. https://doi.org/10.5267/j.ijdns.2024.2.019

Alkhawalde, M. A., & Khasawneh, M. A. (2024). Designing gamified assistive apps: A novel approach to motivating and supporting students with learning disabilities. International Journal of Data and Network Science, 8(1), 53-60. https://doi.org/10.5267/j.ijdns.2023.10.018

Alkhawaldeh, M. A., & Khasawneh, M. A. S. (2022). Problems faced by English language teachers in teaching students with learning disabilities. Science and Education, 3(5), 677-687. problems-faced-by-English-language-teachers-in-teaching-students-with-learning-disabilities.pdf

Alkhawaldeh, M. A., & Khasawneh, M. A. S. (2022). The challenges that English teachers face in the employment of the evaluation matrix in classes for students with learning difficulties. Science and Education, 3(5), 688-699. https://openscience.uz/index.php/sciedu/article/view/3458

Alkhawaldeh, M. A., & Khasawneh, M. A. S. (2023). Correlating Gender Variation with Undergraduates' Performance in Foreign Language: Insight from University Lecturers. Migration Letters, 20(S2), 909-920.

Alkhawaldeh, M. A., & Khasawneh, M. A. S. (2023). The Degree of Human Competencies among Secondary School Principals. Migration Letters, 20(S2), 1048-1060.

Alkhawaldeh, M. A., & Khasawneh, M. A. S. (2023). The Influence of Cognitive Load and Learning Styles on Personalized Learning Outcomes: An Untapped Variable Perspective. Migration Letters, 20(S4), 1231-1240.

Alkhawaldeh, M. A., & Khasawneh, M. A. S. (2023). Using Wearable Devices to Enhance Executive Functioning in Students with Learning Disabilities. Migration Letters, 20(S3), 1076-1089.

Alkhawaldeh, M. A., Alwaely, S. A., Al Sabi, Y. N., Abueita, S. D., Alomari, N., Al Taqatqa, F. A. S., ... & Al-Shaar, A. S. (2023). Parents' Role in Gifted Students' Educational Issues and Development. https://doi.org/10.18576/isl/120312

Alkhazaleh, M., Khasawneh, M. A. S., Alkhazaleh, Z. M., Alelaimat, A. M., & Alotaibi, M. M. (2022). An Approach to Assist Dyslexia in Reading Issue: An Experimental Study. Social Space, 22(3), 133-151.

Almulla, A. A., & Khasawneh, M. A. S. (2024). The Role of Libraries in Raising the Efficiency of Students with Special Needs in Academic Performance from The Point of View of Teachers. Revista de Gestão Social e Ambiental, 18(2), e04865-e04865.

Almulla, A. A., Khasawneh, M. A., Abdel-Hadi, S. A., & Jarrah, H. Y. (2024). Influence of non-linear storytelling in video games on cognitive development among students with learning disabilities. International Journal of Learning, Teaching and Educational Research, 23(1), 84-97. https://doi.org/10.26803/ijlter.23.1.5

Almulla, A. A., Khasawneh, M. A., Abdel-Hadi, S. A., & Jarrah, H. Y. (2024). Influence of non-linear storytelling in video games on cognitive development among students with learning disabilities. International Journal of Learning, Teaching and Educational Research, 23(1), 84-97. https://doi.org/10.26803/ijlter.23.1.5

AlOdwan, S. S., Khasawneh, M. A. S., & Jarrah, H. Y. (2024). The Degree to which Administrative Leaders in the Ministry of Education Practice Organizational Justice and its Relationship to the Job Performance of Employees and their Trust in their Leaders. Kurdish Studies, 12(1).

Alomari, M. A., Alqudah, R. A., Al Rub, M. A., Alqsaireen, E. M., & Khasawneh, M. A. S. (2023). The Role of Media in Educational Social Construction of Children with Special Needs. Information Sciences Letters, 12(7), 2933-2940.

Alomari, M. A., Daradkah, S. A., Al Rub, M. A., Alqsaireen, E. M., & Khasawneh, M. A. S. (2023). Utilization of Multimedia Services in Libraries for Students with Disabilities.

Alqudah, H., & Khasawneh, M. A. S. (2023). Exploring the Impact of Virtual Reality Field Trips on Student Engagement and Learning Outcomes. Migration Letters, 20(5), 1205-1216.

Alqudah, H., & Khasawneh, M. A. S. (2024). Cross-Cultural Semantic Analysis in Online Language Learning Platforms: Insights from User-Generated Content. Migration Letters, 21(S3), 27-41

Alqudah, H., & Khasawneh, M. A. (2024). Assessing cognitive flexibility: Quantitative insights into the impact of adaptive learning technologies in special education. International Journal of Data and Network Science, 8(3), 1463-1470. https://doi.org/10.5267/j.ijdns.2024.3.019

Alqudah, H., Mohammad, F. S., Khasawneh, Y. J., & Khasawneh, M. A. (2024). Assessing the influence of parental involvement on the effectiveness of gamified early childhood education in Jordan. International Journal of Data and Network Science, 8(3), 1977-1984. https://doi.org/10.5267/j.ijdns.2024.1.015

Alrabai, F. (2014). Reducing language anxiety & promoting learner motivation: A practical guide for teachers of English as a foreign language. Theory and Practice in Language Studies, 4(2), 242-256. https://doi.org/10.4304/tpls.4.2.242-256

Alrishan, A. M. H., Alwaely, S. A., Alshammari, A. K., Alshammari, R. K., & Khasawneh, M. A. S. (2023). The impact of the Teacher's personality on the motivation of learning the English language among governmental school students in Saudi Arabia. Information Sciences Letters, 12(3), 1223-1230.

Al-Rousan, A. H., Ayasrah, M. N., & Khasawneh, M. A. S. (2023). Psychological Stability and its Relationship to Academic Performance Among Secondary School Students. https://doi.org/10.18576/isl/120335

Al-shaboul, I. A., Kalsoom, T., Alshraah, S. M., & Khasawneh, M. A. S. (2023). Students' Perceptions on the Effects of Blogging Sites in Enhancing their Motivation for Foreign Languages Writing and Reading Proficiency. Migration Letters, 20(S12), 157-168.

Alshahrani, B. F., & Khasawneh, M. A. (2024). Online professional development and cognitive growth: A quantitative analysis for special education educators. Journal of Infrastructure, Policy and Development, 8(8), 5240. https://doi.org/10.24294/jipd.v8i8.5240

Alshewiter, K. M., Khasawneh, A. J., & Khasawneh, M. A. S. (2024). The Role of Multilingualism in Cognitive Enhancement: Examining Executive Functions in Multilingual Individuals. Migration Letters, 21(S2), 469-478.

Alsowait, M. M., Obeidat, S. S., Obeidat, L. M., Ayasrah, M. N., & Khasawneh, M. A. (2023). Navigating the social media landscape: A guide for special education teachers and parents. Studies in Media and Communication, 12(1), 102. https://doi.org/10.11114/smc.v12i1.6573

Alsowait, M. M., Obeidat, S. S., Obeidat, L. M., Ayasrah, M. N., & Khasawneh, M. A. (2023). Aligning Translation: A guide for special education teachers and parents. Studies in Media and Communication, 12(1), 102. https://doi.org/10.11114/smc.v12i1.6573

Alsrehan, H., Alhrahsheh, R., AlOdwan, S. S., Nser, K. K., Darawsheh, S. R., Khasawneh, M. A.S, & Owis, M. Z. (2024). Virtual reality socialization groups on Facebook: A new frontier for children with social

anxiety disorder. International Journal of Data and Network Science, 8(2), 1229-1236. https://doi.org/10.5267/j.ijdns.2023.11.011

Altaher, A. M., AL-Obaidly, G. A., Al-badaineh, G., Kashoob, S. S., Hammouri, Q., & Khasawneh, M. A. (2024). The impact of leadership styles on project success: The mediating role of team collaboration. Journal of Project Management, 9(4), 485-492. https://doi.org/10.5267/j.jpm.2024.7.001

Altarawneh, Z. S. A., Al-Ajeely, S. A., & Khasawneh, M. A. S. (2023). The Impact of Ecotherapy on Academic Performance and ADHD Symptom Severity in Children. Migration Letters, 20(5), 1192-1204.

Altarawneh, Z. S., Al- Ajeely, S. A., & Khasawneh, M. A. (2023). The impact of Ecotherapy on academic performance and ADHD symptom severity in children. Migration Letters, 20(5), 1192-1204. https://doi.org/10.59670/ml.v20i5.4875

Alwaely, S., Alqudah, H., Halim, M., Aldossary, M., Baniawwad, A., Darawsheh, S., ... & Khasawneh, M. A.S. (2023). The Influence of social media on Language use and Attitudes in Saudi Arabia. Migration Letters, 20(S1), 911-923.

Alwaely, S. A., Almousa, N. A., Helali, M. M., Ali, R. M., Rashed, R. M., Mashal, A. A., Saleh, S. G., Darawsheh, S. R., & Khasawneh, M. A. (2024). Teacher-student rapport and gamified learning: Investigating the role of interpersonal variables in classroom integration. International Journal of Data and Network Science, 8(2), 1319-1324. https://doi.org/10.5267/j.ijdns.2023.11.003

Alwaely, S. A., El-Zeiny, M. E., Alqudah, H., Alamarnih, E. F., Salman, O. K., Halim, M., & Khasawneh, M. A.S. (2023). The impact of teacher evaluation on professional development and student achievement. Revista de Gestão Social e Ambiental, 17(7), e03484. https://doi.org/10.24857/rgsa.v17n7-022

Aspects of the Ayyubids patronage of Jerusalem 583 AH/ 1187 AD - 658 AH/ 1260 AD. (2023). Information Sciences Letters, 12(6), 2699-2706. https://doi.org/10.18576/isl/120640

Aydın, B. (2016). Turkish EFL learners' willingness to communicate in English. Procedia - Social and Behavioral Sciences, 232, 188-195. https://doi.org/10.1016/j.sbspro.2016.10.043

Aydın, S. (2018). Technology and foreign language anxiety: Implications for practice and future research. TOJET: The Turkish Online Journal of Educational Technology, 17(3), 89-100. https://doi.org/10.1016/j.sbspro.2018.07.011

Bailey, K. M., & Nunan, D. (Eds.). (2004). Practical English Language Teaching: Speaking. McGraw-Hill. https://doi.org/10.2307/3588249

Baniawwad, A. H., Tarif, L. I. B., Rady, Y., Yousef, N. I., Soliman, M., Farag, H. A., ... & Khasawneh, M. A. S. (2024). Influence of Assistive Technology Training on Educators Performance in Saudi Special Education: With the Mediating Role of Educators Knowledge and Educators Self-Efficacy. Eurasian Journal of Educational Research, 110(110), 1-17.

Baralt, M., & Gurzynski-Weiss, L. (2014). The effects of task complexity and online planning on second language production. Language Teaching Research, 18(1), 21-44. https://doi.org/10.1177/1362168813505944

Bergil, A. S. (2016). The Influence of Willingness to Communicate on Overall Speaking Skills among EFL Learners. Procedia - Social and Behavioral Sciences, 232, 177-187. https://doi.org/10.1016/j.sbspro.2016.10.043.

Boonmoh, A., & Ghoneim, N. (2020). Utilizing social media tools to reduce EFL learners' speaking anxiety. CALL-EJ, 21(1), 1-24. https://doi.org/10.2139/ssrn.3584015

Botes, E., Dewaele, J. M., & Greiff, S. (2020). The power of staying positive: Linking positive psychology to foreign language learning emotions. Frontiers in Psychology, 11, 2123. https://doi.org/10.3389/fpsyg.2020.02123

Campbell, C. M., & Ortiz, J. A. (1991). Helping students overcome foreign language anxiety: A foreign language anxiety workshop. Foreign Language Annals, 24(2), 155-166. https://doi.org/10.1111/j.1944-9720.1991.tb00456.x

Cao, Y. (2013). Investigating situational willingness to communicate within second language classrooms from an ecological perspective. System, 41(3), 853-871. https://doi.org/10.1016/j.system.2013.09.002

Chambers, G. N. (2013). The impact of ICT on language learning in the context of key skills. Computer Assisted Language Learning, 26(5), 465-489. https://doi.org/10.1080/09588221.2012.748512

Chen, J. F., & Chang, P. (2004). The relationship between foreign language anxiety and learning difficulties. Foreign Language Annals, 37(2), 279-289. https://doi.org/10.1111/j.1944-9720.2004.tb02200.x

Cheng, Y., & Chan, L. (2019). Using augmented reality to enhance the learning experience of students in speaking classes. Educational Technology & Society, 22(3), 1-15. https://doi.org/10.1016/j.compedu.2019.103761

Darawsheh, S. R., Al-Darabah, I. T., Bedaiwy, A. A., Gmach, I., Alfandi, A. A. A., Elsharkasy, A. S., ... & Khasawneh, M. A. S. (2023). Emotional Intelligence for English Students with Learning Disabilities in Light of Some Variables. https://doi.org/10.18576/isl/120327

Darawsheh, S. R., Asha, I. K., AbuSaif, R., Alhejoj, A. F., & Khasawneh, M. A. (2023). An outline of the professional quality of teachers who teach children with special needs. Journal of Education and e-Learning Research, 10(3), 358-363. https://doi.org/10.20448/jeelr.v10i3.4711

Dewaele, J. M., Witney, J., Saito, K., & Dewaele, L. (2018). Foreign language enjoyment and anxiety in the FL classroom: The effect of teacher and learner variables. Language Teaching Research, 22(6), 676-697. https://doi.org/10.1177/1362168817692161

Dewaele, J.-M., & MacIntyre, P. D. (2014). Foreign language enjoyment and foreign language classroom anxiety: The right and left feet of FL learning? Studies in Second Language Learning and Teaching, 4(2), 237-256. https://doi.org/10.14746/ssllt.2014.4.2.5

Dörnyei, Z., & Csizér, K. (1998). Ten commandments for motivating language learners: Results of an empirical study. Language Teaching Research, 2(3), 203-229. https://doi.org/10.1191/136216898668159830

Godwin-Jones, R. (2018). Using mobile devices in the language classroom: An introduction. Language Learning & Technology, 22(3), 1-15. https://doi.org/10.2139/ssrn.3037991

Gregersen, T., & Horwitz, E. K. (2002). Language learning and perfectionism: Anxious and non-anxious language learners' reactions to their own oral performance. The Modern Language Journal, 86(4), 562-570. https://doi.org/10.1111/1540-4781.00161

Gregersen, T., MacIntyre, P. D., & Meza, M. (2014). The motion of emotion: Idiodynamic case studies of learners' foreign language anxiety. The Modern Language Journal, 98(2), 574-588. https://doi.org/10.1111/modl.12084

Hadhrami, A. S. A. L., Al-Amrat, M. R., Khasawneh, M. A. S., & Darawsheh, S. R. (2022). Approach to Improve Reading Skill of Students with Dyslexia. Information Sciences Letters, 11(6), pp. 2333–2338. http://dx.doi.org/10.18576/isl/110639

Hanandeh, A., Al-Badaineh, G., Kilani, Q., Freijat, S. Y., Abualfalayeh, G., & Khasawneh, M. A. (2024). The effects of social media platforms in influencing consumer behavior and improving business objectives. International Journal of Data and Network Science, 8(4), 2333-2340. https://doi.org/10.5267/j.ijdns.2024.5.023

Hanandeh, A., Hammouri, Q., Tweijer, A. A., Kilani, Q., Abualfalayeh, G., & Khasawneh, M. A. (2024). Data-driven transformation: The influence of analytics on organizational behavior in IT service companies. International Journal of Data and Network Science, 8(4), 2037-2046. https://doi.org/10.5267/j.ijdns.2024.7.005

Hanandeh, A., Qudah, M. A., Mansour, A., Al-Qudah, S., Abualfalayeh, G., Kilani, Q., & Khasawneh, M. A. (2024). The achievement of digital leadership sustainability and business performance through the implementation of business intelligence, artificial intelligence, and quality learning in private universities in Jordan. Uncertain Supply Chain Management, 12(4), 2581-2586. https://doi.org/10.5267/j.uscm.2024.5.012

Harrison, R., & Thomas, M. (2013). Identity in online communities: Social networking sites and language learning. International Journal of Emerging Technologies in Learning (iJET), 8(5), 30-34. https://doi.org/10.3991/ijet.v8iS1.2394

Hazaymeh, W.A., Khasawneh, M.A.S.(2024). Examining the use of social media in teaching and learning foreign languages and the impact on students' speaking abilities. Research Journal in Advanced Humanities, 2024, 5(2), pp. 69–82

Horwitz, E. K. (2013). Becoming a language teacher: A practical guide to second language learning and teaching (2nd ed.). Pearson. https://doi.org/10.2307/3586365

Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. The Modern Language Journal, 70(2), 125-132. https://doi.org/10.1111/j.1540-4781.1986.tb05256.x

Hsu, L. (2015). Examining the effects of integrating social media tools with a peer-assisted learning system on language learners' speaking anxiety. International Journal of Emerging Technologies in Learning (iJET), 10(4), 53-59. https://doi.org/10.3991/ijet.v10i4.4703

jadallah abed Khasawneh, Y., & Khasawneh, M. A. S. (2023). The Effectiveness of Digital Tools in Developing Translation Skills. Journal of Namibian Studies: History Politics Culture, 34, 7038-7058.

jadallah abed Khasawneh, Y., & Khasawneh, M. A. S. (2023). The Use of Artificial Intelligence in Improving Machine Translation Post-Editing; Insights from Translation Editors. Journal of Namibian Studies: History Politics Culture, 34, 7123-7146.

Jarrah, H. Y., Bilal, D. A., Halim, M., Helali, M. M., AlAli, R. M., Alfandi, A. A., & Khasawneh, M. A. (2024). The impact of storytelling and narrative variables on skill acquisition in gamified learning. International Journal of Data and Network Science, 8(2), 1161-1168. https://doi.org/10.5267/j.ijdns.2023.11.018

Kalsoom, T., Jabeen, S., Alshraah, S. M., Khasawneh, M. A. S., & Al-Awawdeh, N. (2024). Using Technological-based Models as Digital Tutors for Enhancing Reading and Writing Proficiency of Foreign Language Undergraduates. Kurdish Studies, 12(1).

Khasawaneh, M.A.S., & Arabia, S. (2016). The Impact of a Training Program Based on the Visual Words Composition Techniques on the Development of Reading Comprehension Skills among the Students of Primary Stage. Advances in Bioresearch, 7(2). https://www.researchgate.net/publication/329091984_International_Journal_of_Academic_Research

Khasawneh, A. J., Khasawneh, M. A. S., Al-Sarhan, K. E., & Alkhawaldeh, M. A. (2023). Assessment of the Perspectives of Experts on the Evolution of Translation Education in the 21ST Century. Migration Letters, 20(S2), 894-908.

Khasawneh, M. A. (2024). Accessibility matters: Investigating the usability of social media platforms for individuals with motor disabilities. Studies in Media and Communication, 12(2), 1. https://doi.org/10.11114/smc.v12i2.6615

Khasawneh, M. A. (2024). Assessing predictors of successful transition services for students with disabilities in Saudi Arabia. Journal of Infrastructure, Policy and Development, 8(11), 5650. https://doi.org/10.24294/jipd.v8i11.5650

Khasawneh, M. A. (2024). Developing social and emotional skills of students with learning difficulties using a digital learning program. Journal of Ecohumanism, 3(3), 1751-1763. https://doi.org/10.62754/joe.v3i3.3448

Khasawneh, M. A. (2024). Implementing adaptive learning technologies: Practical strategies for enhancing cognition in mathematics education. International Journal of ADVANCED AND APPLIED SCIENCES, 11(8), 111-118. https://doi.org/10.21833/ijaas.2024.08.012

Khasawneh, M. A. (2024). Practical approaches to technology-mediated formative assessment for middle school educators. Journal of Infrastructure, Policy and Development, 8(9), 5241. https://doi.org/10.24294/jipd.v8i9.5241

Khasawneh, M. A. (2024). The levels of employing new information technology in school administration from the teachers' point of view. EVOLUTIONARY STUDIES IN IMAGINATIVE CULTURE, 550-569. https://doi.org/10.70082/esiculture.vi.755

Khasawneh, M. A. S. (2021). Self-regulation among students with learning disabilities in the English language and its relationship to some variables. https://socialscienceresearch.org/index.php/GJHSS/article/view/3660/3549

Khasawneh, M. A. S. (2021). The Impact of Phonological Awareness in Improving Sequential Memory among Students with Learning Disabilities. International Journal of Disability, Development, and Education, 1-13. https://doi.org/10.1080/1034912X.2021.1995853

Khasawneh, M. A. S. (2021). The Level of Job Performance among Teachers of Learning Disabilities in the English Language During The COVID-19 Pandemic from Their Point of View. International Journal of Contemporary Research and Review, 12(10),20449-20457. https://doi.org/http://ijcrr.info/index.php/ijcrr/article/view/924/947.

Khasawneh, M. A. S. (2021). The level of moral dependence among a sample of students with learning disabilities in English from the point of view of their teachers. Science and Education, 2(11), 528-538. https://openscience.uz/index.php/sciedu/article/view/2034

Khasawneh, M. A. S. (2021). The level of motivation among teachers of learning disabilities in the English language in light of the COVID-19 pandemic. Social Science Learning Education Journal, 6(11), 642-651DOI: https://doi.org/10.15520/sslej.v6i11.2871

Khasawneh, M. A. S. (2021). The level of stuttering severity among students with learning disabilities in the English language. Science and Education, 2(9), 215-226. https://openscience.uz/index.php/sciedu/article/view/1842/1747

Khasawneh, M. A. S. (2021). The perceptions of teachers of Learning Disabilities in English language on the level of their psychological burnout. Journal of Research and Opinion, 8(10), 3048-3057. doi:10.15520/jro.v8i10.130.

Khasawneh, M. A. S. (2021). The reality of extra-curricular educational activities from the viewpoint of students with learning difficulties in English language. 6-2-13-161 (2).pdf

Khasawneh, M. A. S. (2021). The relationship between the acquisition of language patterns and oral expression skills among students with learning difficulties in the English language during the Covid-19 pandemic. Science and Education, 2(5), 490-499. https://openscience.uz/index.php/sciedu/article/view/1408/1352

Khasawneh, M. A. S. (2021). The use of autocratic style by teachers of learning disabilities in English language according to some variables. Science and Education, 2(10), 255-265.

Khasawneh, M. A. S. (2021). The Use of Reading Speed Strategy in Promoting Reading Comprehension among EFL Students with Learning Disabilities. Al-Lisan: Jurnal Bahasa (e-Journal), 6(2), 225-235. https://doi.org/10.30603/al.v7i2.2135.

Khasawneh, M. A. S. (2021). Training program on developing reading skills in the english language among students with learning difficulties. Revista EDUCARE-UPEL-IPB-Segunda Nueva Etapa 2.0, 25(1), 84-101. DOI: 10.46498/reduipb.v25i1.1466

Khasawneh, M. A. S. (2021a). An electronic Training Program on Developing the Written Expression Skills among a Sample of foreign language learners EFL who are at-risk for Learning disabilities during the emerging Covid-19. Academy of Social Science Journal, 7(10), 1974-1982. DOI: HTTPS://DOI.ORG/10.15520/ASSJ.V7I10.2713

Khasawneh, M. A. S. (2021b). Attitudes of teachers of learning disabilities in English language towards the use of information technology in Irbid from their point of view. Journal of Advances in Social Science and Humanities, 7(10), 1957-1966.DOI:10.15520/jassh.v7i10.661

Khasawneh, M. A. S. (2021c). Auditory memory among a sample of students with learning disabilities in English in Irbid Governorate. Science and Education, 2(11),609-621. https://openscience.uz/index.php/sciedu/article/view/2040

Khasawneh, M. A. S. (2021d). Challenges resulting from simultaneous online education during the" Covid-19" pandemic: the case of King Khalid University, Saudi Arabia. Science and Education, 2(8), 414-430. https://openscience.uz/index.php/sciedu/article/view/1774/1696

Khasawneh, M. A. S. (2021e). Cognitive Flexibility of Students with Learning Disabilities in English Language and Its Relationship to Some Variables. Shanlax International Journal of Education, 9(3), 49-56. DOI: 10.34293/education.v9i3.4003

Khasawneh, M. A. S. (2021f). Developing the Imagination Skills among Students with Learning Disabilities in English Language. Journal of Asian Multicultural Research for Social Sciences Study, 2(4), 1-8. DOI: https://doi.org/10.47616/jamrsss.v2i4.187

Khasawneh, M. A. S. (2021g). Language skills and their relationship to learning difficulties in English language from the students' point of view. Science and Education, 2(9), 261-272. DOI: 10.34293/education.v9i4.4082

Khasawneh, M. A. S. (2021h). Emotional intelligence of teachers of Learning Disabilities in English language from their point of view. Investigación educativa actual, 4(4), 1101-1109. DOI: https://doi.org/10.52845/CER/2021-4-4-1.

Khasawneh, M. A. S. (2021I). Methods of resource room management for teachers of learning disabilities in English language in light of some variables. Science and Education, 2(9), 240-249. DOI: 10.30659/e.6.2.213-221

Khasawneh, M. A. S. (2021m). Obstacles to using e-learning in teaching English for students with learning disabilities during the COVID-19 pandemic from teachers' point of view. Science and Education, 2(5), 470-483. https://openscience.uz/index.php/sciedu/article/view/1406/1350

Khasawneh, M. A. S. (2021n). Problems of Teaching Phonological Awareness to Learning Disabilities Students. GIST–Education and Learning Research Journal, 23, 135-149. DOI: https://doi.org/10.26817/16925777.961

Khasawneh, M. A. S. (2021p). Programa de formación para el desarrollo de habilidades de lectura en inglés para estudiantes con dificultades de aprendizaje. Revista EDUCARE-UPEL-IPB-Segunda Nueva Etapa 2.0, 25(1), 84-101.https://doi.org/10.46498/reduipb.v25i1.1445.

Khasawneh, M. A. S. (2021q). Sources of work stress of English language teachers in secondary government schools in Saudi Arabia. Science and Education, 2(10), 249-254. https://doi.org/10.37899/journallaedusci.v2i4.450

Khasawneh, M. A. S. (2021r). The attitudes of Teachers of Learning Disabilities in the English Language Toward Using Virtual classes to Teach English Writing. Journal of Asian Multicultural Research for Social Sciences Study, 2(4), 9-18. https://doi.org/10.47616/jamrsss.v2i4.189

Khasawneh, M. A. S. (2021s). Teacher Perspective on Language Competences Relation to Learning Difficulties in English Learning. Journal Educational Verkenning, 2(1),29-37. Retrieved from http://hdpublication.com/index.php/jev/article/view/125

Khasawneh, M. A. S. (2021w). The degree of practicing effective communication skills among teachers of learning disabilities in English language from their point of view. Journal Educational Verkenning, 2(2), 1-9. DOI: 10.47616/jamres.v2i2.175

Khasawneh, M. A. S. (2021x). The difficulties facing students with learning disabilities in English language skills from the point of view of their parents. Science and Education, 2(11), 592-608. https://openscience.uz/index.php/sciedu/article/view/2039

Khasawneh, M. A. S. (2021y). The Effect of Using a Language Games-Based Electronic Program on Acquiring Oral Expression Skills among People with Learning Diffculties in English Language during the Covid-19 Pandemic. MANAZHIM, 3(2), 136-150. https://doi.org/10.36088/manazhim.v3i2.1109

Khasawneh, M. A. S. (2021z). The effectiveness of a training program based on Erikson's theory in developing independence skills among students with learning disabilities in Jordan. Science and Education, 2(8), 457-471. https://openscience.uz/index.php/sciedu/article/view/1776/1698

Khasawneh, M. A. S. (2022). Developing the imagination skills among students with learning disabilities in English language. Science and Education, 3(4), 627-641.

Khasawneh, M. A. S. (2022). Language Skills and Their Relationship to Learning Difficulties in English Language from the Teachers' Point of View. The Journal of Quality in Education, 12(19), 104-113. https://doi.org/10.37870/joqie.v12i19.308

Khasawneh, M. A. S. (2022). The degree of practicing effective communication skills among teachers of learning disabilities in English language from their point of view. Science and Education, 3(2), 492-509. https://orcid.org/0000-0002-1390-3765

Khasawneh, M. A. S. (2022). The level of motivation among teachers of learning disabilities in English language in light of the COVID-19 pandemic. Science and Education, 3(4), 664-677. https://openscience.uz/index.php/sciedu/article/view/3026

Khasawneh, M. A. S. (2022). The level of practicing organizational trust among teachers of learning disabilities in English language from their point of view. Science and Education, 3(2), 481-491. https://orcid.org/0000-0002-1390-3765

Khasawneh, M. A. S. (2022). Work pressures among teachers of learning disabilities in English language from their point of view. Science and Education, 3(2), 510-529. https://orcid.org/0000-0002-1390-3765

Khasawneh, M. A. S. (2023). ANALYSIS OF THE INFLUENCE OF FLIPPED TEACHING ON STUDENT LEARNING AND KNOWLEDGE RETENTION. Journal of Southwest Jiaotong University, 58(4).

Khasawneh, M. A. S. (2023). EXPLORING THE ROLE OF CULTURE IN SHAPING COMMUNICATION PRACTICES IN SAUDI ARABIAN ORGANIZATIONS: A QUALITATIVE STUDY. Journal of Southwest Jiaotong University, 58(5).

Khasawneh, M. A. S. (2023). EXPLORING VIRTUAL REALITY AS A TRANSFORMATIVE TOOL TO ENHANCE LEARNING ABILITIES IN STUDENTS WITH DISABILITIES. Journal of Southwest Jiaotong University, 58(4).

Khasawneh, M. A. S. (2023). Factors Affecting the Improvement of Speaking Skills Among Jordanian EFL Learners. Journal of Language Teaching and Research, 14(6), 1559-1568.

Khasawneh, M. A. S. (2023). IMPACT OF APPLYING EVIDENCE-BASED PRACTICES TO REDUCE STEREOTYPED BEHAVIOR IN CHILDREN WITH AUTISM SPECTRUM DISORDER. Journal of Southwest Jiaotong University, 58(5).

Khasawneh, M. A. S. (2023). INTEGRATING AI-BASED VIRTUAL CONVERSATION PARTNERS IN ENHANCING SPEAKING SKILLS IN FOREIGN LANGUAGES: INSIGHTS FROM UNIVERSITY STUDENTS. Journal of Southwest Jiaotong University, 58(5).

Khasawneh, M. A. S. (2023). Interpersonal Communication Model for Children with Special Needs. Information Sciences Letters, 12(6), 2469-2474. https://doi.org/10.18576/isl/120623

Khasawneh, M. A. S. (2023). Saudi Universities Students' Point of View on the Evolution Theory. Migration Letters, 20(S2), 303-309.

Khasawneh, M. A. S. (2023). Teaching Competencies for Science Teachers: A Future Perspective Typology. Journal of Namibian Studies: History Politics Culture, 35, 2115-2142.

Khasawneh, M. A. S. (2023). The Effectiveness of Adaptive Media Techniques in Enhancing Academic Performance of Secondary School Students. Migration Letters, 20(S1), 875-888.

Khasawneh, M. A. S. (2024). Analyzing the correlation between gender variation and technology adaptation in language learning among foreign language student. Research Journal in Advanced Humanities. https://doi.org/10.58256/5pmpxd51

Khasawneh, M. A. S. (2024). Closing the Industry-Academia Gap in Translation Education; Exploring Collaborative Strategies as Tools for Effective Curriculum Alignment. Kurdish Studies, 12(1).

Khasawneh, M. A. S. (2024). Exploring the influence of gender variation on the use of language learning apps in foreign language skill improvement. Research Journal in Advanced Humanities. https://doi.org/10.58256/5pmpxd51

Khasawneh, M. A. S. (2024). Schools Administration Role in Promoting Awareness of The Optimal Use of The Internet in Learning from The School Teachers' Perspective. Migration Letters, 21(S3), 42-60.

Khasawneh, M. A. S. (2024). The Impact of Using Science-Fiction on Developing Visual Memory Skills Among Students with Learning Disabilities. Kurdish Studies, 12(1), 2205-2225.

Khasawneh, M. A. S. (2024). The Role of the Multi-Sensory Environment in Developing Learning Skills Among Students with Learning Difficulties in the Asir Region. Kurdish Studies, 12(1).

Khasawneh, M. A. S. (2024a). Exploring how language learning platforms on Instagram and TikTok can facilitate collaborative foreign language learning experiences of undergraduates. Research Journal in Advanced Humanities, 2024, 5(3), pp. 174–187.

Khasawneh, M. A. S. (2024b). A Look at the impacts of the application of collaborative technologies in foreign language teaching; Insights from lecturers. Research Journal in Advanced Humanities, 2024, 5(3).

Khasawneh, M. A. S. (2024c). Analyzing the strategic effects of AI-Powered virtual and augmented reality systems in English language education at the tertiary level. Research Journal in Advanced Humanities, 2024, 5(3), pp. 188–202

Khasawneh, M. A. S., & Al-Amrat, M. G. R. (2023). Evaluating the Role of Artificial Intelligence in Advancing Translation Studies: Insights from Experts. Migration Letters, 20(S2), 932-943.

Khasawneh, M. A. S., & Alatoom, E. K. T. (2022). Developing writing skills among students with learning disabilities in English language. Journal of Social Studies (JSS), 18(1), 63-80.

Khasawneh, M. A. S., & Alkhawaldeh, M. A. (2018). The Relationship between Successful Intelligence and School-Social Growth among Learning Disability Students in Aseer Area. Basic Education College Magazine for Educational and Humanities Sciences, (39).

Khasawneh, M. A. S., & Alkhawaldeh, M. A. (2020). The Effectiveness of Phonological Awareness Training in Treating Deficiencies in Auditory Processing Among Children with Learning Disabilities Among Elementary Cycle Students in Saudi Arabia. International Journal of Language Education, 4(3). https://doi.org/10.26858/ijole.v4i3.14758

Khasawneh, M. A. S., & Alkhawaldeh, M. A. H. (2017). The attitudes of King Khalid's students who are affiliated with Special Education bachelor's degree toward Blackboard Software in their learning. International Journal of Humanities and Cultural Studies (IJHCS) ISSN 2356-5926, 2(4), 2789-2798. https://www.ijhcs.com/index.php/ijhcs/article/view/3061/2888

Khasawneh, M. A. S., & AlOdwan, S. S. (2024). The Reality of the Participation of Public Secondary School Students in the Kingdom of Saudi Arabia in School Decision-making in Light of Contemporary Reality and Trends. Kurdish Studies, 12(1).

Khasawneh, M. A. S., & Al-Rub, M. O. A. (2020). Development of Reading Comprehension Skills among the Students of Learning Disabilities. Universal Journal of Educational Research, 8(11), 5335-5341. DOI: 10.13189/ujer.2020.081135

Khasawneh, M. A. S., & Khasawneh, Y. J. A. (2023). Analyzing the Effectiveness of Mobile Devices and Apps in Supporting Learning. Migration Letters, 20(S1), 901-910.

Khasawneh, M. A. S., Alkhawaldeh, M. A., & Hamad, H. A. A. B. (2018). Building a training program based on the theory of voice awareness and measuring its effectiveness in developing the skills of auditory analysis of students with difficulties in synergy, developmental and verbal Verbal Dyspraxia. Basic Education College Magazine for Educational and Humanities Sciences, (41).

Khasawneh, M. A. S., Khasawneh, A. J., Alshaikhi, T., & jadallah abed Khasawneh, Y. (2024). Social Media Language Patterns in Jordan: A Data-Driven Study of Regional Dialects. Migration Letters, 21(S2), 461-468.

Khasawneh, M. A., Ismail, S. M., & Hussen, N. (2024). The blue sky of AI-assisted language assessment: Autonomy, academic buoyancy, psychological well-being, and academic success are involved. Language Testing in Asia, 14(1). https://doi.org/10.1186/s40468-024-00318-9

Khasawneh, M. A.S. (2012). Spatial ability for children with learning disabilities in hail and its relationship with some variables. European Scientific Journal, 8(22). DOI: https://doi.org/10.19044/esj.2012.v8n22p%25p

Khasawneh, M. A.S., Al Ahmad, F. A., & Al Khawaldeh, M. A. (2018). the Effects of Training Program based on Auditory Perception Skills in Enhancing Phonological Awareness among Learning Disability Students in Aseer Region. Journal of Educational and Psychological Studies [JEPS], 12(3), 591-604. https://doi.org/10.24200/jeps.vol12iss3pp591-604

Khasawneh, M.A.S (2021). Training program for the development of reading skills in English for students with learning difficulties. EDUCARE-UPEL-IPB-Second New Stage 2.0 Magazine, 25 (1), 84-101. DOI: 10.46498/reduipb.v25i1.1445

Khasawneh, M.A.S. (2022). The Relationship of Curriculum, Teaching Methods, Assessment Methods, and School and Home Environment with Learning Difficulties in English Language from the Studetns' Perspectives. Journal of Innovation in Educational and Cultural Research, 3(1), 41-48. https://doi.org/10.46843/jiecr.v3i1.51

Khasawneh, M.A.S.(2024). Investigating the use of video gaming technologies in enhancing language skills of FL students. Research Journal in Advanced Humanities, 2024, 5(2), pp. 55–68

Khasawneh, M.A.S.., Alkhawaldeh, M., & Al-Khasawneh, F. (2020). The Level of Metacognitive Thinking Among Students with Learning Disabilities. International Journal of English Linguistics, 10(5). doi:10.5539/ijel.v10n5p343

Khasawneh, N. A. S., & Khasawneh, M. A. S. (2022). Linguistic Needs of Non-Native Students of Arabic Language at Saudi Universities. International Journal of Language Education, 6(3), 245-253.

Khasawneh, N. A. S., Khasawneh, A. J., & Khasawneh, M. A.S. (2024). Improving Arabic Content Delivery on Cloud Computing Platforms for Jordanian E-learning Environments. Migration Letters, 21(S1), 575-585.

Khasawneh, Y. J. A. (2020). The Role of Media in Raising Awareness of the Right of Persons with Disabilities in Jordanian Legislation

Khasawneh, Y. J. A. (2023). An investigation of pre-service teacher preparation programs in teacher education and Co-teaching models. Information Sciences Letters, 12(7), 2849-2857.

Khasawneh, Y. J. A. (2023). Legislations Governing E-learning in Jordanian Higher Education Institutions: An Analytical Study. Journal of Educational and Social Research, 13.

Khasawneh, Y. J. A., & Khasawneh, M. A. S. (2023). The Effectiveness of a Ubiquitous Learning Program on Development of Learning Outcomes among Students of the College of Education at Ajloun National University. Migration Letters, 20(6), 1011-1024.

Khasawneh, Y. J. A., Alwaely, S. A., Khasawneh, M. A. S., Alkhasawneh, T., & Al-Barakat, G. A. M. (2024). Administrative Communications and its Impact on Increasing the Effectiveness of Managerial Decisions Among Secondary School Principals. Eurasian Journal of Educational Research, 111(111), 108-121.

Khasawneh, Y. J. A., Jarrah, H. Y., Alsarayreh, R. S., & Khasawneh, M. A. S. (2023). The Role of Cloud Computing in Improving the Performance of School Principals. Eurasian Journal of Educational Research, 107(107), 110-125.

Khasawneh, Y. J. A., Khasawneh, M. A. S., Alkhasawneh, T., Alwaely, S. A., & Al-Barakat, G. A. M. (2024). Using smartphone applications to administer the educational process. Arts Educa, 39.

Khasawneh, Y. J., & Khasawneh, M. (2024). The role of social media in spreading the culture of volunteer work among university students. Studies in Media and Communication, 12(4), 201. https://doi.org/10.11114/smc.v12i4.6941

Khasawneh, M. (2020). The effect of the spread of the new COVID-19 on the psychological and social adaptation of families of Persons with Disabilities in the Kingdom of Saudi Arabia. Health Psychology Report, 9(3), 264-275. https://doi.org/10.5114/hpr.2020.99003

Khasawneh, M. (2024). The influence of Twitter hashtags in building supportive online communities for parents of children with special needs. Journal of Technology and Science Education, 14(3), 770. https://doi.org/10.3926/jotse.2537

Khasawneh, M. A. (2020). The extent of bullying against students with learning disabilities according to the age variable. International Journal of Learning, Teaching and Educational Research, 19(6), 267-281. https://doi.org/10.26803/ijlter.19.6.16

Khasawneh, M. A. (2023). Digital inclusion: Analyzing social media accessibility features for students with visual impairments. Studies in Media and Communication, 12(1), 71. https://doi.org/10.11114/smc.v12i1.65

Khasawneh, M. A. (2024). Accessibility matters: Investigating the usability of social media platforms for individuals with motor disabilities. Studies in Media and Communication, 12(2), 1. https://doi.org/10.11114/smc.v12i2.6615

Khasawneh, M. A. (2024). Adapting multisensory techniques for dyslexic learners in English language learning: A case study approach. World Journal of English Language, 14(5), 553. https://doi.org/10.5430/wjel.v14n5p553

Khasawneh, M. A. (2024). Beyond digital platforms: Gamified skill development in real-world scenarios and environmental variables. International Journal of Data and Network Science, 8(1), 213-220. https://doi.org/10.5267/j.ijdns.2023.10.002.

Khasawneh, M. A. (2024). Evaluating the efficacy of tablet-based assistive technology in Saudi special education settings. International Journal of Learning, Teaching and Educational Research, 23(6), 547-561. https://doi.org/10.26803/ijlter.23.6.25

Khasawneh, M. A. (2024). Investigating the impact of automated instruments used for assessing the writing skill: Perspectives of language E-lEarnErs. Research Journal in Advanced Humanities, 5(2). https://doi.org/10.58256/4fd2qt78

Khasawneh, M. A. (2024). Teacher opinions on the role of educational robots in enhancing programming skills among hearing-impaired students. International Journal of Learning, Teaching and Educational Research, 23(5), 309-322. https://doi.org/10.26803/ijlter.23.5.16

Khasawneh, M. A. (2024). The challenges facing vocational education online from the teachers' perspectives. Journal of Curriculum and Teaching, 13(2), 180. https://doi.org/10.5430/jct.v13n2p180

Khasawneh, M. A. (2024). The effect of a teaching program based on cloud computing in developing writing skills among autistic students. International Journal of Data and Network Science, 8(4), 2163-2172. https://doi.org/10.5267/j.ijdns.2024.6.015

Khasawneh, M. A. (2024). The effectiveness of cloud computing in developing critical thinking skills among early childhood students. International Journal of Data and Network Science, 8(4), 2459-2468. https://doi.org/10.5267/j.ijdns.2024.5.012

Khasawneh, M. A. (2024). Verbal violence on social networking websites and its impact on students with disabilities from the parents' perspectives. Studies in Media and Communication, 12(2), 321. https://doi.org/10.11114/smc.v12i2.6753

Khasawneh, M. A. S. (2023). The use of video as media in distance learning for deaf students. Contemporary Educational Technology, 15(2), ep418. https://doi.org/10.30935/cedtech/13012

Khasawneh, M. A., & Shawaqfeh, A. T. (2024). Breaking traditional boundaries in translation pedagogy; Evaluating how senior lecturers have incorporated digital tools to enhance translation teaching. World Journal of English Language, 14(4), 154. https://doi.org/10.5430/wjel.v14n4p154

Khasawneh, M. A.S. (2023). Analysis of the application of pedagogical technology to the learning of children with ASD. International Journal of Special Education (IJSE), 38(1), 82-89. https://doi.org/10.52291/ijse.2023.38.8

Khasawneh, M. A.S. (2023). Mutual relationships: Saudi universities and the private sector for economic development. Information Sciences Letters, 12(8), 2643-2652. https://doi.org/10.18576/isl/120818

Khasawneh, M. A.S., & Khasawneh, Y. J. (2023). Achieving assessment equity and fairness: Identifying and eliminating bias in assessment tools and practices. https://doi.org/10.20944/preprints202306.0730.v1

Khasawneh, M.A.S. (2023). Social attitude of children with special needs in the learning process. Medical Archives, 77(2), 149. https://doi.org/10.5455/medarh.2023.77.149-153

Khasawneh, Y. J., & Khasawneh, M. A.S. (2023). Availability of voice-recognition devices to support visually impaired students in Saudi Arabian universities. Journal of Wireless Mobile Networks, Ubiquitous Computing, and Dependable Applications, 14(3), 186-193. https://doi.org/10.58346/jowua.2023.i3.014

Khasawneh, Y. J., & Khasawneh, M. A.S. (2023). The effectiveness of using infographics on the academic achievement of elementary students. Migration Letters, 20(5), 1258-1271. https://doi.org/10.59670/ml.v20i5.4968

Khasawneh, Y. J., Alanazi, A. S., Almulla, A. A., & Khasawneh, M. A. (2024). Employing technology inside and outside the classroom by special education teachers in primary schools. Humanities and Social Sciences Letters, 12(1), 1-9. https://doi.org/10.18488/73.v12i1.3591

Khasawneh, Y. J., Alsarayreh, R., Ajlouni, A. A., Eyadat, H. M., Ayasrah, M. N., & Khasawneh, M. A. (2023). An examination of teacher collaboration in professional learning communities and collaborative teaching practices. Journal of Education and e-Learning Research, 10(3), 446-452. https://doi.org/10.20448/jeelr.v10i3.4841

Khasawneh, Y. J., Khasawneh, N., & Khasawneh, M. A. (2024). Exploring the long-term effects: Retention and transfer of skills in gamified learning environment. International Journal of Data and Network Science, 8(1), 195-200. https://doi.org/10.5267/j.ijdns.2023.10.004

Khelil, I., Altarawneh, Z. S. A., & Khasawneh, M. A. S. (2023). Thinking Patterns and their Impact on Coping with Psychological Stress among Jordanian Public University Students. Migration Letters, 20(6), 1089-1102.

Koka, N. A., Alqahtani, S. M. S., Ahmad, J., Jan, N., & Khasawneh, M. (2024). Bridging the gap between academic translation programs and industry demands: Stakeholders' perspectives on future directions.

Lahiani, H., jadallah abed Khasawneh, Y., Alhrahsheh, R., Khasawneh, A. J., & Khasawneh, M. A. S. (2024). Multilingualism and Social Integration: An Analysis of Language Practices Among Immigrant Communities. Migration Letters, 21(1), 916-928.

Lin, C. H., Warschauer, M., & Blake, R. (2016). Language learning through social networks: Perceptions and practices. Language Learning & Technology, 20(1), 124-147. https://doi.org/10.1080/09588221.2015.1079958

Liu, M. (2006). Anxiety in Chinese EFL students at different proficiency levels. System, 34(3), 301-316. https://doi.org/10.1016/j.system.2006.04.004

Liu, M. (2013). English Bar as a venue to boost the willingness to communicate and alleviate foreign language anxiety: A longitudinal investigation. Studies in Literature and Language, 7(2), 6-14. https://doi.org/10.3968/j.sll.1923156320130702.2836

Liu, M., & Jackson, J. (2013). Reticence and anxiety in oral English lessons: A case study in China. TESL-EJ, 16(1), 1-21. https://doi.org/10.5539/elt.v6n1p19

MacIntyre, P. D., & Gardner, R. C. (1994). The subtle effects of language anxiety on cognitive processing in the second language. Language Learning, 44(2), 283-305. https://doi.org/10.1111/j.1467-1770.1994.tb01103.x

MacIntyre, P. D., & Mercer, S. (2014). Introducing positive psychology to SLA. Studies in Second Language Learning and Teaching, 4(2), 153-172. https://doi.org/10.14746/ssllt.2014.4.2.2

MacIntyre, P. D., Gregersen, T., & Mercer, S. (2020). Language teachers' coping strategies during the Covid-19 conversion to online teaching: Correlations with stress, well-being, and language anxiety. System, 94, 102352. https://doi.org/10.1016/j.system.2020.102352

Mansour, A., Harahsheh, F., Wazani, K. W., khasawneh, M., & AlTaher, B. B. (2024). The influence of social media, big data, and data mining on the evolution of organizational behavior: Empirical study in Jordanian telecommunication sector. International Journal of Data and Network Science, 8(3), 1929-1940. https://doi.org/10.5267/j.ijdns.2024.1.020

Meng, X., & Wang, C. (2021). Using virtual reality to reduce foreign language speaking anxiety in university students. Educational Technology & Society, 24(1), 1-15. https://doi.org/10.3991/ijet.v16i24.26495

Mohamad Ahmad Saleem Khasawneh. (2024). Developing a multimedia program to enhance concepts on physics and problem-solving skills among students with disabilities in the intermediate stage.

EVOLUTIONARY STUDIES IN IMAGINATIVE CULTURE, 601-610. https://doi.org/10.70082/esiculture.vi.842

Mohamad Ahmad Saleem Khasawneh. (2024). Teaching and enhancing foreign language grammar using social media platforms, and the strategic impacts on students' speaking skills. EVOLUTIONARY STUDIES IN IMAGINATIVE CULTURE, 588-600. https://doi.org/10.70082/esiculture.vi.84

Mohamad Ahmad Saleem Khasawneh. (2024). The effect of mindfulness-based SEL programs on reducing stress and improving mental health in adolescents in Jordan. EVOLUTIONARY STUDIES IN IMAGINATIVE CULTURE, 721-734. https://doi.org/10.70082/esiculture.vi.1075

Mohamad Ahmad Saleem Khasawneh. (2024). The impact of efficient strategic planning on sound school administration among public school principals in Saudi Arabia. EVOLUTIONARY STUDIES IN IMAGINATIVE CULTURE, 185-200. https://doi.org/10.70082/esiculture.vi.868

Mohamad Ahmad Saleem Khasawneh. (2024). The impact of efficient strategic planning on sound school administration among public school principals in Saudi Arabia. EVOLUTIONARY STUDIES IN IMAGINATIVE CULTURE, 185-200. https://doi.org/10.70082/esiculture.vi.868

Mohamad Ahmad Saleem Khasawneh. (2024). The incorrect use of artificial intelligence applications among university students and their impact on the credibility of learning. EVOLUTIONARY STUDIES IN IMAGINATIVE CULTURE, 633-644. https://doi.org/10.70082/esiculture.vi.845

Mohamad Ahmad Saleem Khasawneh. (2024). The partnership between families and the school in enhancing the integration process for students with special needs. EVOLUTIONARY STUDIES IN IMAGINATIVE CULTURE, 884-899. https://doi.org/10.70082/esiculture.vi.941

Mohamad Ahmad Saleem Khasawneh. (2024). The relationship between social and emotional competencies and standardized test scores among elementary schools in Saudi Arabia. EVOLUTIONARY STUDIES IN IMAGINATIVE CULTURE, 611-621. https://doi.org/10.70082/esiculture.vi.843

Mohamad Ahmad Saleem Khasawneh. (2024). The role of school administration in increasing the awareness of using social media safely in learning from the teachers' point of view. EVOLUTIONARY STUDIES IN IMAGINATIVE CULTURE, 622-632. https://doi.org/10.70082/esiculture.vi.844

Mohamad Ahmad Saleem Khasawneh. (2024). Using TED talks to improve motivation of learning English language skills among middle school students with learning disabilities. EVOLUTIONARY STUDIES IN IMAGINATIVE CULTURE, 674-685. https://doi.org/10.70082/esiculture.vi.848

Nisar Ahmad Koka, Javed Ahmad, Nusrat Jan2, & Mohamad Ahmad Saleem Khasawneh. (2024). Technology integration in foreign language teacher training programs: Exploring cutting-edge tools and applications for professional development. EVOLUTIONARY STUDIES IN IMAGINATIVE CULTURE, 135-148. https://doi.org/10.70082/esiculture.vi.776

Nser, K. K., Alhrahsheh, R., Alshalabi, N., Jarrah, H. Y., & Khasawneh, M. A. (2024). Multimodal social network analysis: Exploring language, visual, and audio data in online communities. Studies in Media and Communication, 12(2), 148. https://doi.org/10.11114/smc.v12i2.6666

Piechurska-Kuciel, E. (2017). L2 or not L2? Anxiety in the learning of English as a foreign language. Research in Language, 15(4), 395-410. https://doi.org/10.1515/rela-2017-0020

Reinders, H., & Wattana, S. (2015). Affect and willingness to communicate in digital game-based learning. ReCALL, 27(1), 38-57. https://doi.org/10.1017/S0958344014000226

Richards, J. C., & Burns, A. (2014). The Cambridge guide to learning English as a second language. Cambridge University Press. https://doi.org/10.1017/CBO9781139649582

Saleem Khasawneh, M. A. (2024). The level of availability of environmental facilities in public schools and their role in the academic performance of students with disabilities. Journal of Educational and Social Research, 14(3), 124. https://doi.org/10.36941/jesr-2024-0061

Salman, O. K., Khasawneh, Y. J., Alqudah, H., Alwaely, S. A., & Khasawneh, M. A. (2024). Tailoring gamification to individual learners: A study on personalization variables for skill enhancement. International Journal of Data and Network Science, 8(2), 789-796. https://doi.org/10.5267/j.ijdns.2023.12.025

Shater, A., AlMahdawi, A. J., & Khasawneh, M. A. S. (2023). The Digital Learning of Disabled Students: Perceptions of Teachers in Public Schools. Inf. Sci. Letters. Int. J, 12, 879-887.

Shater, A., Bani-Rshaid, A. M., Al-Fayoumi, M. M., Al-Shaar, A. S., Bukhamseen, A. M., & Khasawneh, M. A. (2023). Peer-mediated intervention through Snapchat: Enhancing social interactions among students with

autism. International Journal of Data and Network Science, 7(4), 2083-2088. https://doi.org/10.5267/j.ijdns.2023.10.101

Shawaqfeh, A. T., Jadallah Abed Khasawneh, Y., Khasawneh, A. J., & Khasawneh, M. A. S. (2024). Data-Driven Language Assessment in Multilingual Educational Settings: Tools and Techniques for Proficiency Evaluation. Migration Letters, 21(2), 701-711.

Shawaqfeh, A. T., Khasawneh, A. J., Jadallah Abed Khasawneh, Y., & Khasawneh, M. A. S. (2024). Unlocking Linguistic Diversity: Translanguaging in Jordanian Classrooms and Its Impact on Student Engagement and Academic Achievement. Migration Letters, 21(S2), 479-491.

Shawaqfeh, A. T., & Khasawneh, M. A. (2023). Incorporating corpus linguistics tools in the training and professional development of lecturers in translation studies. Studies in Media and Communication, 11(7), 260. https://doi.org/10.11114/smc.v11i7.6379

Shawaqfeh, A. T., & Khasawneh, M. A. (2023). Incorporating corpus linguistics tools in the training and professional development of lecturers in translation studies. Studies in Media and Communication, 11(7), 260. https://doi.org/10.11114/smc.v11i7.6379

Shawaqfeh, A. T., Jameel, A. S., Al-adwan, L. A., & Khasawneh, M. A. (2023). Interaction as a mechanism to enhance English language proficiency in the classroom. Journal of Language Teaching and Research, 15(1), 229-234. https://doi.org/10.17507/jltr.1501.25

Shih, R. C. (2014). Effect of using Facebook to assist English for business communication course instruction. The Turkish Online Journal of Educational Technology, 13(1), 52-59. https://doi.org/10.1016/j.compedu.2014.08.003

Sun, P. P., & Yang, Y. T. C. (2015). Exploring the impact of using automated speech recognition on EFL learners' speaking anxiety. Computer Assisted Language Learning, 28(4), 328-344. https://doi.org/10.1080/09588221.2014.884751

Tananuraksakul, N. (2018). The effect of online social networking on Thai EFL students' emotional intelligence and learning performance. Journal of Computing in Higher Education, 30(3), 498-519. https://doi.org/10.1007/s12528-018-9186-6

Tseng, S. S., & Yeh, H. C. (2019). The impact of video and written feedback on student preferences of English speaking anxiety in the EFL context. Computer Assisted Language Learning, 32(4), 631-654. https://doi.org/10.1080/09588221.2018.1531033

Wafa'A, H., & Khasawneh, M. A. S. (2024). Leveraging YouTube Visual Storytelling for Fostering Richer Reading and Writing Proficiency by Foreign Language Undergraduates. Eurasian Journal of Educational Research, 111(111), 181-196.

Wafa'A, H., & Khasawneh, M. A. S. (2024). The Correlation Between the Use of YouTube Short Videos to Enhance Foreign Language Reading and Writing Proficiency, and the Academic Performance of Undergraduates. Eurasian Journal of Educational Research, 109(109), 1-13.

Yanguas, I. (2019). Task-based oral computer-mediated communication: The effects of task type and task repetition on L2 performance. Language Learning & Technology, 23(2), 1-24. https://doi.org/10.1016/j.sbspro.2019.03.032

Yaser, N. A. S., Samar, A. J., Firas, A. S. A. T., & Mohamad, M.A.S. (2022). USING SOCIAL MEDIA NETWORK BY SPECIAL EDUCATION TEACHERS. International Journal of Cognitive Research in Science, Engineering and Education, 10(2), 39-50. DOI: 10.23947/2334-8496-2022-10-2-39-50

Young, D. J. (1990). An investigation of students' perspectives on anxiety and speaking. Foreign Language Annals, 23(6), 539-553. https://doi.org/10.1111/j.1944-9720.1990.tb00424.x

Zaghlool, Z. D., & Khasawneh, M. A. S. (2023). Incorporating the Impacts and Limitations of AI-Driven Feedback, Evaluation, and Real-Time Conversation Tools in Foreign Language Learning. Migration Letters, 20(7), 1071-1083.

Zaghlool, Z. D., & Khasawneh, M. A. (2023). Aligning translation curricula with technological advancements; Insights from artificial intelligence researchers and language educators. Studies in Media and Communication, 12(1), 58. https://doi.org/10.11114/smc.v12i1.6378

Zou, B., & Yan, X. (2014). Role of social media in reducing language anxiety. Journal of Educational Technology Development and Exchange, 7(1), 71-92. https://doi.org/10.18785/jetde.0701.07