

Faculty of Administrative Science and Policy Studies



Leading An Artificial Innovation In Knowledge, Education And Design

i-SPIKE 2021 INTERNATIONAL EXHIBITION & SYMPOSIUM

E-PROCEEDINGS

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PREFACE

International Exhibition & Symposium on Productivity, Innovation, Knowledge, Education & Design (i-SPiKe 2021) was a platform to inspire and cultivate innovative ideas from various fields of study for academicians, researchers, industries, junior and young inventors to showcase their innovative ideas. The development of novel ideas from the perspectives of innovation, invention, and design on interdisciplinarity promotes network and collaboration in line with the theme "Leading an Artificial Innovation in Knowledge, Education, and Design".

International Exhibition & Symposium on Productivity, Innovation, Knowledge, Education & Design (i-SPiKe 2021) attracted about 153 participants from national public universities across Malaysia. I would like to thank all participants in taking this opportunity to showcase their innovative ideas. Nonetheless, the success of this event is reflected of high level of papers of the inventions received. My gratitude and appreciation also goes to the members and committees of International Exhibition & Symposium on Productivity, Innovation, Knowledge, Education & Design (i-SPiKe 2021) in making this virtual event successful by putting a bundle of efforts herein.

I sincerely hope that International Exhibition & Symposium on Productivity, Innovation, Knowledge, Education & Design (i-SPiKe 2021) will put forward new ideas and keep on promoting collaborative inventions among scholars which may bring change for future with the advent of information era. Appearance of new inventions may make a great progress and improve the development of the whole society.

PROFESSOR DR. HJ. MOHAMMAD ABDULLAH HJ. HEMDI

Rector Universiti Teknologi MARA (UiTM) Kedah 08400 Merbok, Kedah, Malaysia.



PREFACE

Alhamdulillah, my utmost gratitude to Allah SWT as with His blessings and mercy, the International Exhibition & Symposium on Productivity, Innovation, Knowledge, Education, and Design (I-SPIKE 2021) can be successfully held. I want to thank the Rector of UiTM Kedah Branch, Deputy Rectors, and esteemed members of the management for their support and encouragement in making i-SPIKE 2021 a success. I would also like to extend my heartfelt thanks to Dr. Junaida Ismail, the Chairperson of i-SPiKE 2021 for her dedication and commitment in accomplishing this program. My humble gratitude also goes to i-SPiKE 2021 Committee Members and Team, for their continuous hard work and effort.

Innovation and research efforts are essential in educational organizations. These efforts are significant in fostering an innovative and creative culture. Not only that, innovation is also the foundation of quality education. This includes not only academic staffs, but also school students, teachers, and educational practitioners. The Faculty of Administrative Science and Policy Studies of UiTM Kedah as the organizer of i-SPiKE 2021 is very proud to share this avenue with academics, students, teachers, and industry practitioners. It is hoped that this program succeeds in cultivating the spirit of creating and innovating brilliant ideas and useful products for the future. Whether in a pandemic or endemic era, we are still able to pursue scholarly activities effectively. Thanks and congratulations to all involved.

Thank you.

DR AZLYN AHMAD ZAWAWI

Head

Faculty of Administrative Science and Policy Studies Universiti Teknologi MARA (UiTM) Kedah 08400 Merbok, Kedah, Malaysia.



PREFACE

Alhamdulillah, all praises to Allah, by whose grace and blessings made it posssible to conduct our first online exhibition symposium. It is our great pleasure to have you here virtually with us in the International Exhibition and Symposium on Productivity, Innovation, Knowledge & Education (i-SpiKE 2021), with the theme "Leading An Artificial Innovation in Knowledge, Education, and Design". i-SPiKE 2021 organised by the Faculty of Administrative Science and Policy Studies (FSPPP), UiTM Kedah Branch is inline with the objectives of IR4.0. i-SPiKE 2021 aims to encourage participants to participate in the Junior Inventor category (from schools) or the Young Inventor category (academicians from local or foreign universities).

i-SpiKE 2021 is a good platform for the industries, academicians, and students of local and foreign countries from different backgrounds to highlight innovation, invention, and design in their respective fields such as management and education. It is our hope that this exhibition will be a catalyst for all participants to present their best ideas to bring inspiring changes or introduce some innovations and inventions in their daily tasks or activities.

In total we received 154 projects and they are judged by professional juries from various backgrounds such as industries and academicians. On behalf of the conference organiser, I thank you for your participation and hoped that you had enjoyed the moments when your innovation became a reality. Special thanks to all the committee members of the i-SpiKe 2021, I owed all of you so much and I want you to know that this is the best team ever!!! Last but not least, to all participants, we hope to see you in our next exhibition.

Thank you.

DR JUNAIDA ISMAIL

Chairperson

International Exhibition & Symposium On Productivity, Innovation, Knowledge, Education & Design (i-SPiKE 2021)



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PERCEPTION OF DIGITAL READING MATERIAL FOR ACADEMIC PURPOSES AMONG UMK UNDERGRADUATES

Noor Syamimie Mohd Nawi
Faculty for Language Studies and Human Development,
Universiti Malaysia Kelantan
syamimie.mn@umk.edu.my

Lena Ramamurthy
Faculty for Language Studies and Human Development,
Universiti Malaysia Kelantan
lena@umk.edu.my

Syakirah Shafien
Faculty for Language Studies and Human Development,
Universiti Malaysia Kelantan
syakirah.s@umk.edu.my

Suhaida Omar
Faculty for Language Studies and Human Development,
Universiti Malaysia Kelantan
suhaida.o@umk.edu.my

Nik Ahmad Farhan bin Nik Azim Faculty for Language Studies and Human Development, Universiti Malaysia Kelantan farhan.na@umk.edu.my

ABSTRACT

The inclusion of technology in language learning is a new norm particularly when almost everyone, including students, is using electronic gadgets (connected to internet) such as smartphones, tablets and computer in their daily life, especially now. The aim of this project is to identify the students' perceptions on their usage of electronic gadgets in relation to academic reading and writing since they spend a lot of time browsing and reading digital reading material (DRM) online or offline. Throughout the project, we are trying to digitalize reading and writing component in ESL classroom in UMK by changing them from conventional reading and writing. Thus, we are piloting it through English for Business Communication course. For this specific project, a module is developed and it focuses on first semester undergraduates from Business Faculty in Universiti Malaysia Kelantan. Respondents have been using the module for the past 14 weeks (1 semester) and their responses were recorded using qualitative method through online questionnaires and interviews. The teachers considered digitalized reading materials suit the students' needs and the course syllabus. The findings revealed that more than half the undergraduates would prefer to use digital reading material for academic purposes. Lastly, this project serves as a basis for the educators to provide suitable online reading material in helping students for their academic reading and writing purposes.

Keywords: digital, reading-material, academic purposes, undergraduates.



INTRODUCTION

The inclusion of technology in language learning is a common trend nowadays, particularly when almost everyone, including students, is using electronic gadget such as smartphones and tablets in their daily life. A number of research studies have been conducted in relation to the educational values of these electronic gadget and most stated that students havepositive perceptions towards the use of these gadget in classes (Nalliveettil and Alenazi, 2016; Rambousek et. al., 2016; Tenku Putri Norishah et.al., 2014). This is particularly accurate as they rely on their smartphones and tablets to look for information on the spot.

The term Digital Literacy is used to refer to the students' abilities to find, read, use and disseminate information in a digital world (Hagel, 2012a). Being digitally literate would be an advantage in the 21st Century as it is the key that enhances graduate employability. The students are constantly exposed to digital technologies and hence they could be regarded as digital natives but are they digitally literate? It is a major concern if the students are not highly digitally literate which could lead to their inability to utilise the digital contents especially for academic purposes.

The expansion of information and communication technology (ICT) world-wide has prompted its usage in the education field as well. Liu et. al. (2002) review 70 research studies on ICT in second language learning and some of the findings indicated that students' comprehension on language and participation in the lessons were enhanced, and ICT encouraged teacher-student interaction and collaborative learning. In another review of articles on ICT in classrooms by Lloyd (2005), she concludes that there are some factors towards the effectiveness of ICT in education particularly the school readiness that includes the availability of resources, and the skills and motivations of teachers and students. Martinez(2009) also stated that the use internet in language learning led to learner autonomy even among young learners.

METHODOLOGY

The data were collected through interviews with the undergraduates who enroll in the English for Business Communication course at FBI, UMK and selected at random ranging from the first year students. The findings were analyzed using thematic analysis.

RESULT AND DISCUSSION

The evolution of Internet has enabled the users to access information with ease and provided abundant of sources and saves time. The two main focus of this research is to know the frequency and the perception of students regarding digital reading materials in their academic.



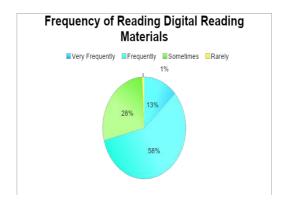


Figure 1. Frequency of digital reading materials

Items (5, 6, 7, 8, 9, 10) in the questionnaire survey was about the frequency of students in reading Digital Reading Material for academic purposes.

The result revealed (13%) and (58%) of respondents 'very frequently' and 'frequently' read Digital Reading Materials respectively. On contrary, (28%) and (1%) of the respondents 'sometimes' and 'rarely' read Digital Reading Materials for academic purposes.

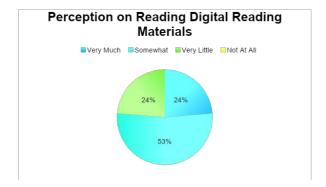


Figure 2. Perception on digital reading materials

Items (11, 12, 13, 14, 15) in the questionnaire survey was about the perception and attitude of students in reading Digital Reading Material for academic purposes.

The result revealed (24%) and (52%) believed that reading Digital Reading Materials are 'very much' and 'somewhat' important respectively. On the other hand (24%) and (0%) of the respondents believed that reading Digital Reading Materials construed 'very little' and 'not at all' important for academic purposes.

Significance

There is a moderate correlation (r=0.610) is recorded between perception and frequency of using Digital Reading Materials for academic purposes.



The findings indicate that the majority of the students practice online reading for information purposes. It can be concluded that they are now using gadgets for academic matters apart from personal and entertainment information.

Digital literacy is a part of the survival skills in this 21st century and students who are technologysavvy but digitally illiterate may not be able to compete with the digital work environment in the future.

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PERCEPTION OF LANGUAGE AWARENESS THROUGH FRAMEGRAM: A CLASSROOM EXAMPLE

Nik Ahmad Farhan bin Azim @ Nik Azim Faculty of Language Studies and Human Development, Universiti Malaysia Kelantan farhan.na@umk.edu.my

Lena A/P Ramamurthy
Faculty of Language Studies and Human Development, Universiti Malaysia Kelantan lena@umk.edu.my

Syakirah binti Shafien Faculty of Language Studies and Human Development, Universiti Malaysia Kelantan syakirah.s@umk.edu.my

Noor Syamimie binti Mohd Nawi Faculty of Language Studies and Human Development, Universiti Malaysia Kelantan syamimie.mn@umk.edu.my

Shahidatul Maslina binti Mat So'od Faculty of Language Studies and Human Development, Universiti Malaysia Kelantan maslina.ms@umk.edu.my

ABSTRACT

Writing in English within the context of English as Second Language (ESL) can be a daunting prospect for many students. Such perennial challenge could potentially be damaging. It is even worse when constructing a piece of writing that requires critical thinking. This research is aimed at answering both conundrums. The research draws the context of Language Awareness (LA) within the framework of Framegram. This framework is used in one of the formative assessments in the university core subject of Adavnced Grammar of Undergraduates (UBI10302): Grammar Article Entry (Instagram Entry). Theoretically, LA is seen as a bridge to connect functional and purposeful language to a given phenomena (issues or problems); characterised by student's deep interest and critical thinking. While students interact as active participatory editors and publishers of their content on Instagram, such dynamic interaction emerged from relationship between student's language phenomena may result in predictable output of language learning. Hypothetically, as their ability to manipulate or discriminate the language increasingly progresses parallel to their interest and motivation on a given issue or phenomena, it is likely that their skills and language too will be improved. Consequently, this improves the student's current writing state in relation to language development and their ability to integrate critical thinking within the process. The research will investigate the extent of usefulness of the Framegram Framework in this course. Ultimately, the data gathered will serve as an informed decision of how the language learners perceived LA as part of their second language learning experience.

Keywords: writing skills, critical thinking, language awareness, language development, language learners



INTRODUCTION

Writing process in English as Second Language (ESL) setting can be very challenging (Moses & Mohamad, 2019). Students may be required to have appropriate language structures in order to produce a meaningful piece of writing. As students engaged in various type of writing, they are also consistently challenged to produce a good quality writing that resonates their critical and creative thinking skill. Understanding the extent of these challenges may provide insightful perspectives on how students could improve their languageand at be able to response critically in writing.

Language Awareness

Language Awareness (LA) relates to the idea of understanding the language explicitly and be able to consciously perceived and be sensitive to the language that is used to communicate in social life. As students are actively aware of the language use and function, Golken (1992) suggests that those students have established a metalinguistics activities as a reflection of metageognitive knowledge of their language learning. Apart from the needs to master the process of language learning, the students are also presented with the challenge to produce a critical piece of writing by applying critical thinking (Sham, 2016). Apart from this, the process of planning, monitoring and evaluating them could potentially be more complex inthe case of English as Second Language (ESL) classroom (Wenden, 1998 as cited inKnospe,).

Many students are typically aware of the idea how language should explicitly be used through the learning of grammatical structures, be it in explicit or communicative grammar learning in classroom. Despite such fact, students are still struggling to write well (S. Singh, J. Singh, Abd Razak, Ravinthar, 2017). This can be seen through multiple grammatical errors in their writing.

Critical Thinking in Language Learning

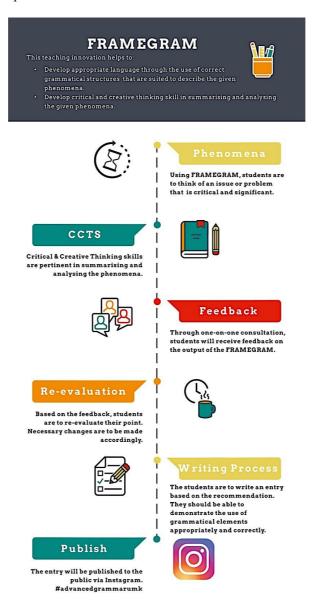
Critical thinking is described as a series of skills that can be constantly utilised by students for whom 'constant revision and application of these skills is a significant way of internalizing what has often been seen to be just an attitude or bent of mind' (Mehta & Al-Mahrouqi, 2014). This skill could be further enhanced as they are given the opportunity towrite about issues which are relevant to their context. However, such opportunity may be limited due the specific nature of writing task in university. Subsequently may reduce their ability to write insightfully. #On top of that, one of the biggest fallacies is the assumption thatstudents have naturally developed such skills despite insufficient attention being given to the development of one (Mehta & Al-Mahrouqi, 2014).

Framegram

Framegram is framework which is mandatory to be used in completing one of the assessments in Advanced Grammar for Undergraduates (UBI10302). The tenets of the framework are based on the idea of LA and critical thinking. This is aimed at addressing the inability of students to be able to use correct and functional language structures by instigating their critical thinking. Subsequently, solving the conundrum of LA and critical thinking in relation to ESL writing context.



This framework follows a series of linear development. Using Framegram, it starts with finding and critically evaluating a phenomena of their own interest and choosing. Thisphenomena will the discussed between student and instructor during consultation. Feedback that they received will be used for the re-evaluation of their writing topic before they start to write an actual Instagram entry and publish it.



FINDINGS

The purpose of this studies is to understand the extent of Framegram in developing appropriate language using correct grammatical structures that are suited in describing the given phenomena. Furthermore, this studies provide an insight into the degree of critical and creative



thinking that is perceived to be important in writing.

Table 1. Perception of the Use of Framegram (n=170)

No.	Item	Agree (%)	Disagree (%)
1.	Framegram helps to build up mypoints & arguments	95	5
2.	Framegram helps to build my language for Grammar Article Entry	94	6
	Framegram helps to think creatively & critically	97	3
4.	Concept of the Framegram can be extended to other domains that may require critical & creative thinking	90	10

The findings of this study reported highly-rated perceived notions of Framegram in helping students to write a critical piece of writing while constantly maintaining a high degree of LA. Item #2 is consistent to the notion that students are linguistically aware of how language is formed and its functions despite grammatical errors made in their Instagram entry. A high percentage of students, as seen in Item #3, believe that Framegram helps them to think creative and critically.

These findings provide several pedagogical implications as it helps instructors to understand practical implication of LA onto their teaching practices. Furthermore, more focus can also be given to creative and critical thinking skills.

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