Gender Influence on Information Literacy Skills in Completing Group Discussion Assessment Among Semester One Students at Selected Polytechnics in Malaysia

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Full Paper

Abstract

This study aims to determine the level of information literacy possessed by semester one students to complete a group discussion assessment and identify gender-based differences in the information literacy skills possessed by semester one students who complete a group discussion assessment at two selected polytechnics in Malaysia (N = 51). However, the study on information literacy skills among Malaysian polytechnic semester one student to complete Group Discussion has not been widely researching in Malaysia hence the gap this study hopes to fill. In this study, students completed 38 items on a survey from Marshall's Information Competency Assessment Instrument (ICAI). The inferential analysis (mean and standard deviation) was utilised to answer the research questions, while the independent t-test was employed to examine the research hypothesis. In completing the group discussion evaluation, students possessed various information skills, according to the study's findings. In addition, there were significant differences between the information literacy skills of men and women. As a nation's knowledge-based economy is a powerful asset, the findings suggest that educators in the twenty-first century should emphasise improving students' information literacy abilities.

Keywords: - Information literacy skills, Information Competency Assessment Instrument (ICAI), polytechnic, group discussion assessment, t-test

1. Introduction

The Knowledge-Based Economy Master Plan indicates that the most critical asset for the K-based economy is human capital. In a K-based economy, educated and skilled human resources, or human capital, are the most valuable asset, and knowledge is the most critical factor of production. The knowledge-based economy may be defined as an economy in which knowledge, creativity, and innovation play an ever-increasing and vital role in generating and sustaining growth (Husin, Ibrahim & Baharom, 2013). With the growth and enhancement of knowledge-based information, the economy, and society, the value of education and knowledge rises. Education is increasingly becoming a prerequisite for a person's competitiveness on the labour market. (Nehari-Talet et al., 2021).

In Malaysia, the polytechnic was introduced in 1969 and has been a part of the higher education system. One of the essential aims of Malaysian polytechnic is to meet the growing demand for skilled human capital in Malaysia. Polytechnic education provides skilled semi-professionals in engineering, commerce, arts and designs, and hospitality to meet the need of the public and private sectors. Malaysian polytechnic has been operating for 50 years, and it was introduced in Malaysia with funding from the World Bank and in collaboration with the Colombo Plan. Currently, there are 37 polytechnics across

the country divided into three groups - premier, conversational, and metro. With the help and promotion of the importance of Technical and Vocational Education Training (TVET) institutions by the Ministry of Higher Education, more and more parents are sending their children to further their tertiary education (diploma, advanced diploma, and degree) in polytechnics. It is estimated that by 2020, an additional 1.3 million TVET workers will be joining the job market under the nation's Economic Transformation Programme by the Education Ministry's Malaysia Education Blueprint (MEB) 2015-2025 (MoHE, 2015). It endeavours to align with the constant and rapid change of technology, the increase in global human resources and climate transformation. This aligns with the Education Ministry's objectives to make the TVET institute relevant. The courses offered to the students are a "work-based learning" concept. This will provide students with good working experience as at least 85% of polytechnic graduates are expected to be employed within six months after completing their studies in polytechnics. Interestingly, like other university graduates, polytechnic graduates must apply English language skills effectively and successfully in their future workplaces.

For non-native English users, English is vital because it is widely spoken worldwide. Knowing English allows graduates to enjoy their lives and work no matter where they are. For students whose mother tongue is not English, mastering English is even more critical for their academic life and future careers. Students should improve their English language skills to master their knowledge of the English language better. Thus, the English language plays an essential role in producing quality employees. Beneficial and valuable training battlegrounds should anchor the teaching and training at TVET institutes before releasing the graduates to the real working world. Most importantly, the language curriculum must be enhanced in line with employability.

Awareness of literacy information skills has increased over the past years, but how it is presented and measured is markedly different. The American Library Association defined information literacy as recognising when information is needed and locating, evaluating, and using the necessary information effectively. The Association of College & Research Libraries (ACRL) defines information literacy as the skills required to find, retrieve, analyse, and use information. The ACRL has created a set of standards that detail the talent needed to be information literate. (Husin et al., 2013). According to Ode (2021), the abilities of male and female undergraduates to investigate or traverse the world of information proficiently are extraordinarily extraordinary. In contrast, it is unclear what criteria determine their skill in navigating the accessible information universe. Therefore, it is imperative to identify the critical factors that influence the information literacy skills of undergraduate students.

1.1 Problem Statement

Graduates of TVET are assured of applying good communication skills to deliver messages and information (Corneal, 2015) effectively. Practical communication skills undeniably ensure a better working environment for the engineering team and community. In Malaysia's polytechnics, the English courses are in three separate semesters: Communicative English 1, 2 and 3. Polytechnic students must learn and apply many language functions and purposes, especially in the workplace.

There are also some learning opportunities as polytechnic learners partake in their English lessons. Despite all the importance, advantages and opportunities, many polytechnic students cannot improve their English language proficiency in oral communication skills. (Hasni, Johor & Ismail, 2019) Researchers, teachers, and policymakers outside of Malaysia profoundly focus on information literacy skills. Lack of literacy skills is an obstacle to efficiently utilising information resources, mainly digital resources, in developing countries. Most students know the e-library resources but do not use them because they lack the skills. (Science, 2018) Theory and practice in second language learning have moved from treating the enterprise as one of mimicry and memorisation to a complex; multidimensional process influenced more by the interaction of the individual and the contexts of acquisition than by notions of standardised, overt forms of cognition. It has moved away from viewing language as a static set of automated processes toward one that accounts for the multiple, complex aspects of language as a central feature of human identity. Language teaching practice has consequently moved away from emphasising the learning of discrete linguistic items to activity that orchestrates full experiences of and involvement in language as it manifests itself in reality; that is, as a means of making and understanding meaning (Meskill & Mossop, 2000).

Semester one students must take the Communicative English 1 course, which focuses on developing their speaking skills to communicate effectively and confidently in group discussions and social interactions. One of the learning outcomes of this course is that students will be able to apply appropriate language and communication skills in discussions and conversations at the end of this course. To test students' understanding of this, they must sit for the Group Discussion (20%) assessment in week 6. Students are evaluated in terms of language, interactive skills and content. In this paper, the researcher focuses on students' abilities if they can show an excellent understanding of the topic, give three relevant, well-supported points, organise ideas very well throughout the discussion, and respond to tasks appropriately throughout the group discussion.

Nevertheless, the influence of the use of internet resources for learning among undergraduates gender is seen as a possible factor influencing the use of electronic information resources, library resources and ICT (Steinerova and Susol, 2007). Also, undergraduates who

lack Information Literacy Skills experience delay and frustration when completing coursework that requires research (Oakleaf & Owen, 2010). However, the study on information literacy skills among Malaysian polytechnic semester one student to complete Group Discussion has not been widely researching in Malaysia hence the gap this study hopes to fill.

2. Research Question

In this regard, this research intends to discover the information literacy skills possessed by semester one students to complete group discussion assessments to provide more details for TVET education, particularly some directly involved in curriculum design and planning. This study focuses on the following question:
1. What are information literacy skills possessed by semester one students to complete group discussion assessment?
2. Is there any difference in semester one students' information literacy skills in completing group discussion assessments based on gender?

2.1 Research Hypothesis

HO₁: There is no significant difference between male and female polytechnic students' information literacy skills in completing group discussion assessments.

3. Literature Review

The term information literacy has been mainly used in the context of library practice. During the last decade, it has attracted increased attention within learning and in library and information science and has been used to describe practices in schools and undergraduate education. Given librarians' long-term engagement with information literacy issues, it is worth noting that the term 'information literacy was not coined initially in the world of librarianship. The first instance of the use of the term is by Paul Zurkowski in a 1974 report on future needs for various competencies in work life in business and industry in the US (Bawden 2001, 230; Bruce, 1997, 5; Kapitzke 2003b, 55). Information literacy has also been described as a way of learning (Bruce 2008).

In Malaysia, the polytechnic library is vital in creating and developing self-reliant students with information-searching skills. A primary survey by the National Library of Malaysia indicates that the polytechnic library actively organised and conducted an information literacy programme. The polytechnic library continues to market its information literacy classes to staff and students to achieve information literate students. Students are exposed to and always have access to a robust information literacy programme conducted by the polytechnic library.

The purpose of the information literacy programme is to assist patrons in using all its resources, services and facilities to the fullest. The information literacy

programme consists of this module: introduction to printed and non-printed materials, accessing the Library's Online Public Access Catalogue (OPAC) and library's electronic resources, evaluating information from printed and non-printed materials, information packaging and legal and ethical information used. The implementation of the information literacy programme, conducted by the polytechnic library, includes workshops and hands-on sessions. It is conducted annually, with a frequency of two (2) to ten (10) classes per year. The targeted audience is students, lecturers, and staff. (Husin et al., 2013). They require information literacy to process information. Information literacy is interpreted as the ability of an individual to recognise, locate, evaluate, and use efficiently the information he needs (Shinew & Walter, 2003). The information literate person recognises the need for information, determines the importance, accesses information efficiently, knows how to evaluate the valid information and its source, knows how to "nestle" founded information in his knowledge base, and understands the economic and legal, social and cultural questions of using this information. Towards these items, we can see that information literacy is the future, the key to success, and a foundation for getting an education (Mandušić & Blašković, 2013).

In another study by Abdullah et al. (2006) stated that information literacy levels among students in public and private universities in Malaysia showed that 50.1% of the students are at the intermediate level, 38.4% are beginners, and 11.5% can be classified as at the advanced competency level. The development of information skills and competencies in students is still lacking, especially at higher education levels.

According to Ali at al. (2010), information literacy competency showed that UPM engineering students need to improve to identify the most efficient search strategy, evaluate internet information and websites, and use information ethically. Without information literacy, it may result in a lack of awareness among students of the importance of developing good information skills. The level of information literacy in Malaysian society is not satisfactory. Yazid (2012), in his study, indicated that information literacy skills among National Library users were low, especially in terms of essential elements of information searching, evaluation, and awareness of legal and ethical use of information. These studies indicate that information literacy skills are essential to developing good information skills. This information literacy skill is the core of locating, evaluating, and using information effectively and ethically. In a study by Ode (2021), the results revealed that gender has no bearing on the information literacy skills of undergraduates in the Library and Information Science Department at the University of Maiduguri, Nigeria. On the other hand, very few studies identify polytechnic students' information literacy skills in completing English tasks in the classroom. Only a few studies, however, have investigated the impact of ICT and mobile learning in improving academic performance. The polytechnic ESL

learners believed learning through mobile could facilitate their ESL learning. They commented that mobile devices ease them in looking for a translation of words and learning new vocabulary. (Hashim, Yunus & Embi, 2018) Undoubtedly, lecturers need a gestation period to be comfortable with 21st-century teaching skills and tools. Information and digital literacy are also vital in line with the objectives of the establishment of polytechnics in Malaysia (Ahmad & Mohamed, 2017).

Another concern related to the constraint of learning through mobile was that it could be difficult for them to find relevant websites for English language learning and choose suitable learning materials. One of the comments was, "I need to learn to search for information.". Others have also commented that there is too much information on the internet. Thus, they should know how to choose the suitable materials and what suits them to learn ESL. (Hashim et al., 2018) This suggests that further investigation must be carried out to determine the information literacy skills of polytechnic students in completing classroom assessments. For this study, the researcher chooses semester one students for their group discussion assessment.

3.1 Conceptual Framework

Based on Fig. 1, the input hypothesis suggests that language acquisition occurs when learners receive messages they can understand, a concept also known as comprehensible input, which refers to classroom learning. However, Krashen (1992) suggests that this comprehensible input should be one step beyond the learner's current language ability, represented as I + 1. Besides that, from a Vygotskian perspective, the teacher's role is to mediate a child's learning activity as they share knowledge through social interaction. Social interaction with a skilful tutor allows the learner to observe and practice their skills. The child seeks to understand the actions or instructions provided by the tutor and then internalises the information, using it to guide or regulate their performance. Scaffolding is provided by the educator or a more competent peer (more knowledgeable other) to support the student as he or she is led through ZPD. Eventually, CALP focuses more on the learners' ability to demonstrate proficiency in the group discussion assessment. CALP refers to the learners' abilities to read, write, and discuss the information available effectively to excel in the group discussion assessment.
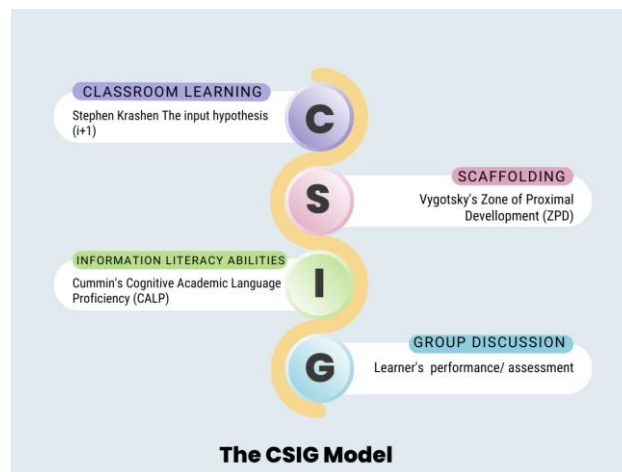

Fig. 1. Conceptual framework of the CSIG model based on Cummin's CALP (Krashen, 1992 and Vygotsky. 2012)

4. Methodology

This is a survey study. This non-experimental design study's data is collected using the online data-collection Google form.

4.1 Research Subjects

The author used closed-ended survey questions to collect data on students' perspectives regarding their information literacy abilities in completing their group discussion assessment. The questionnaire began with the segment on demographics from which the information above was extracted. Subsequently, students were invited to complete 38 items from Information Competency Assessment Instrument (ICAI) developed by Marshall. The Information Competency Assessment Instrument (ICAI) was designed to measure information competency (Marshall, 2006). It is the most prevalent, valid, and trustworthy instrument utilised in other studies (Allari et al., 2022). They were based on standard 5-point Likert scales with the anchors 'strongly disagree' = 1, 'disagree' = 2, 'neither agree nor disagree' = 3, 'agree' = 4, 'strongly agree' = 5. For item 2, 4, 5, 7, 11, 14, 15, 17, 19, 21, 22, 25, 28, 29, 31, 33, 34, 38, 40 are developed with reliability inverse. However, items 14 and 29 are omitted from the questionnaire, and it is due to their irrelevance to the study. Next, the instruments were tested for their reliability through the internal consistency method, the coefficient of Cronbach's alpha value of 0.824 was found, and the reliability range was indicated well. The mean score for ICAI was 3.416 (SD = 0.821).

4.2 Research Procedures

The questionnaire was utterly anonymous: there was no collection of names of participants or their teachers. Specific consent was sought from the participant at the beginning of the study. The questionnaire was shared in 8 Whatsapp groups' from the lecturers to the students in two polytechnics which are Polieknik Sultan Idris Shah and Politeknik Port Dickson. The research subjects individually answered 38 questions from the research instruments in a classroom setting under the supervision of lecturers teaching the classes concerned. The time allocated for the questionnaire was 20 minutes. The data from the Google form was extracted from the Google sheet.

4.3 Data Analysis

As this study is inferential, statistics for Information Competency Assessment Instrument (ICAI) were tabulated in frequency, percentage, mean, standard deviation and T-test to find the significance.

4.4 Findings and Results

The inferential analysis (mean and standard deviation) was used to answer the research questions, while an independent t-test was used to answer the research hypothesis. Data collected were computed and analysed using a Google spreadsheet at a 0.05 level of significance. This part presents the results of the analysis on the gender influence of information literacy abilities in completing group discussion assessments among semester one students in selected polytechnics in Malaysia.

Research Question 1: What are the information literacy skills possessed by semester one students to complete group discussion assessments?

This study is inferential; statistics for Information Competency Assessment Instrument (ICAI) were tabulated in frequency, percentage, mean, standard deviation and T-test to find the significance.

Table 1 shows that polytechnic students feel confident determining what topic to search for when given an assignment with a mean score of 3.804 (SD = 0.775). However, they also feel lost because the topic they want to research is unclear. (Mean = 3.490, SD = 0.834) This was followed by taking a complex topic and breaking it down into more useful, simpler items with a mean score of 3.333. However, the grand mean score task definition was found to be 3.4. It can be inferred that polytechnic students identify the topic criteria using 2.5 as the average benchmark in this study, allowing them to carry out their group discussions easily.

Table 1. Mean and standard deviation of respondents based on identifying the topic

		Mean	Std. Dev
1	When given an assignment for a research paper or a speech, I feel confident determining what topic I need to search for.	3.804	0.775
2	Sometimes I feel lost because the topic I want to research is not very clear to me.	3.490	0.834
3	I can take a complex topic and break it into more practical, straightforward items.	3.333	0.766
4	"Confused" is probably the best term to describe me when starting a project.	3.294	0.923
	GRAND MEAN & STD. DEV.	**3.480**	**0.824**

Table 2 shows that polytechnic students know the difference between "primary" and "secondary" sources with a mean score of 3.824 (SD = 0.888). However, they also sometimes feel unsure of how much information I need for the assignment. (Mean = 3.314, SD = 0.990) This was followed by polytechnic students who were certain they could use the information they found, with a mean score of 3.745 (SD = 0.627). The mean score for item number 7, students get confused because of the many different formats (print, electronic, etc.) when searching for information, was only 2.745. This suggested that most students were aware of determining the right materials for the group discussion topic. Overall, the grand mean score for determining the requirements was 3.407. Therefore, it can be inferred that polytechnic students possess determining the requirements criteria that allow them to read the right content for their group discussion assessment by using 2.5 as the average benchmark.

Table 2. Mean and standard deviation of respondents based on determining the requirements

		Mean	Std. Dev
5	I am sometimes unsure of how much information I need for the assignment.	3.314	0.990
6	I know the difference between "primary" and "secondary" sources.	3.824	0.888
7	When searching for information, I get confused because of the many different formats (print, electronic, etc.).	2.745	1.055
8	I am sure that I can use the information I find.	3.745	0.627
	GRAND MEAN & STD. DEV.	**3.407**	**0.890**

Table 3 shows that polytechnic students claimed it is easy to interpret the results of a search. with a mean score of 3.824 (SD = 0.888). This was followed by polytechnic students agreeing that they could confidently get their hands on the material (by printing, e-mailing, interlibrary loan, etc.) they needed. (Mean = 3.706, SD = 0.879). In

addition, polytechnic students knew how to broaden or narrow a search using Boolean operators (AND, NOT and OR) and truncation. (Mean = 3.235, SD = 0.815) However, polytechnic students struggled to use an index (e.g. catalogue, database, etc.) with a mean score of 3.059. In conclusion, the grand mean score for using information technologies was 3.436. it can be inferred that polytechnic students use the right information technologies to help find the content effectively for the group discussion assessment using 2.5 as the average benchmark.

Table 3. Mean and standard deviation of respondents based on using information technologies

		Mean	Std. Dev
9	I know how to broaden or narrow a search using Boolean operators (AND, NOT and OR) and truncation.	3.235	0.815
10	It is easy to interpret the results of a search.	3.745	0.771
11	I am unsure how to use an index (e.g. catalogue, database, etc.).	3.059	1.008
12	I can confidently get my hands on the material (by printing, e-mailing, interlibrary loan, etc.) I need.	3.706	0.879
	GRAND MEAN & STD. DEV.	**3.436**	**0.868**

Table 4 shows the mean and standard deviation of respondents based on locating & retrieve information. It was believed that polytechnic students understood the organisation of materials in libraries, with a mean score of 3.549 (SD = 0.730). This was followed by polytechnic students who were confident that they knew the difference between an abstract and an article, with a mean score of 3.373 (SD = 0.720). Conversely, the mean score for item number 15, students perceived that web search engines are unreliable with a mean score of 3.412. Overall, the grand mean score for determining the requirements was 3.313, and it can be inferred that polytechnic students were able to locate & retrieve information for their group discussion assessment using 2.5 as the average benchmark.

Table 4. Mean and standard deviation of respondents based on locate & retrieve information

		Mean	Std. Dev
13	I understand the organisation of materials in libraries.	3.549	0.730
15	Web search engines are unreliable.	3.412	0.942
16	I know the difference between an abstract and an article.	3.373	0720
	GRAND MEAN & STD. DEV.	**3.314**	**0.873**

Table 5 showed that polytechnic students could use many different types of media (print, video, photography, etc.) confidently as information for my topic, with a mean score of 3.882 (SD = 0.791). Polytechnic students who followed this were confident they could spot an inaccuracy, errors, etc., in the information from mass media, with a mean score of 3.451 (SD = 0.673). The grand mean score for reading and extracting information from mass media was 3.500. it can then be inferred that polytechnic students can read and extract information from mass media criteria that allow them to get the right content for their group discussion assessment using 2.5 as the average benchmark.

Table 5. Mean and standard deviation of respondents based on information from mass media

		Mean	Std. Dev
17	Sometimes I cannot figure out for whom the information is intended.	3.373	0.720
18	I can confidently use many different media types (print, video, photography, etc.) as information for my topic.	3.882	0.791
19	At times, the producer of the information is not transparent.	3.294	0.923
20	I can confidently spot an inaccuracy, errors, etc., in the information from mass media.	3.451	0.673
	GRAND MEAN & STD. DEV.	**3.500**	**0.777**

Table 6 showed that the grand mean score for evaluating information was 3.337. it can be inferred that polytechnic students were able to evaluate the information for their group discussion assessment using 2.5 as the average benchmark.

Table 6. Mean and standard deviation of respondents based on evaluating information

		Mean	Std. Dev
21	The information I find is so confusing that I do not know if I can use it.	3.235	1.031
22	I am not confident that the information I get is accurate.	3.235	0.815
23	The information I use is complete and reliable.	3.471	0.731
24	I am sure that the information I have answers my question or addresses my topic.	3.569	0.755
	GRAND MEAN & STD. DEV.	**3.377**	**0.833**

Table 7 showed that the grand mean score for organising and synthesising was 3.490; it can be inferred that polytechnic students could organise and synthesise information for their group discussion assessment using 2.5 as the average benchmark.

Table 7. Mean and standard deviation of respondents based on organize & synthesise

		Mean	Std. Dev
25	A lot of the information I find is irrelevant or unnecessary.	3.137	0.825
26	After collecting my information, it is easy to sort by similar content.	3.765	0.790
27	Sometimes my question changes depending on what information I find.	3.667	0.792
28	If my topical outline does not make sense, I get discouraged.	3.392	0.750
	GRAND MEAN & STD. DEV.	**3.490**	**0.789**

Table 8 showed that polytechnic students know to use the presentation of information skills successfully. The grand mean score for the presentation of information was found to be 3.451; it can then be inferred that polytechnic students are confident in presenting their information correctly for their group discussion assessment, using 2.5 as the average benchmark.

Table 8. Mean and standard deviation of respondents based on presentation of information

		Mean	Std. Dev
30	A lot of the information I find is irrelevant or unnecessary.	3.137	0.825
31	After collecting my information, it is easy to sort by similar content.	3.765	0.790
32	Sometimes my question changes depending on what information I find.	3.667	0.792
	GRAND MEAN & STD. DEV.	**3.490**	**0.789**

Table 9 showed the grand mean score for ethics & legality of information was found to be 3.490. it can then be inferred that polytechnic students possess ethics & legality of information criteria that allow them to read the right content for their group discussion assessment using 2.5 as the average benchmark.

Table 9. Mean and standard deviation of respondents based on ethics & legality of information

		Mean	Std. Dev
33	I am not sure how to record or cite all my sources.	3.137	0.825
34	I have questions about the privacy of the information I receive.	3.765	0.790
35	I can tell when information is biased.	3.667	0.792
36	I know that when the material is confidential, it should not be used.	3.392	0.750
	GRAND MEAN & STD. DEV.	**3.137**	**0.825**

Table 10 showed that polytechnic students felt the feedback was demoralising, with a mean score of 3.765 (SD = 0.790). They also felt that after the presentation of the information, the students were not sure how it was received. (Mean = 3.392, SD = 0.750) Polytechnic students who followed this scored a low mean score (Mean = 3.137, SD = 0.825) for item 37. While preparing a project, I am certain how others will receive it. This suggested that most students were afraid to learn or know about the feedback or evaluation; this also meant students were not ready to make a mistake or be penalised. However, students mentioned they were able to learn what processes would help find information in the future, with a mean score of 3.667.

Table 10. Mean and standard deviation of respondents based on evaluating & learning from experience

		Mean	Std. Dev
37	While preparing a project, I am confident about how others will receive it.	3.137	0.825
38	Feedback is demoralising to me.	3.765	0.790
39	I can learn what processes would help me find information in the future.	3.667	0.792
40	After the information was presented, I am unsure how it was received.	3.392	0.750
	GRAND MEAN & STD. DEV.	**3.490**	**0.789**

This PLC Programming & Simulator teaching aid module is an ongoing effort made to ensure that the practical evaluation for the Programmer Logic Controller course for students can be implemented according to the plan that has been set and can have a positive impact on learning. Fig. 3 demonstrates the conveyor control simulation after the program is set and moved through the control.

4.5 Hypothesis testing

Based on research question 2, a corresponding hypothesis was formulated, and the results of the tested hypothesis are shown in Table 11. The hypothesis was tested at a 0.05 level of significance. HO_1: There is no significant difference between male and female polytechnic students' information literacy skills in completing group discussion assessments. The data were analysed using t-test statistics to determine whether there was a significant difference between male and female polytechnic students' information literacy skills in completing group discussion assessments; the result is presented in Table 11.

Table 11. Difference between male and female polytechnic students' information literacy abilities in completing group discussion assessments

	N	X	SD	D	T	Remarks Sig. (2-tailed)
Female	28	130.07	11.49	23.68	18.37	0.021
Male	23	138.08	11.75			
TOTAL	51					

Table 11 showed a significant difference between male and female polytechnic students' information literacy abilities in completing group discussion assessments. This is reflected in the result: t (18.37) = 0.021, p < 0.05. That is, the result of a t-value of 0.021 significant value was less than 0.05 alpha values. Thus, the null hypothesis is rejected. This implies a significant difference between male and female polytechnic students' information literacy skills in completing group discussion assessments favouring males, with a mean score of 138.08.

5. Conclusion

This research examined gender influence on information literacy abilities possessed by semester one students to complete group discussion assessments in two selected polytechnics in Malaysia. The data gathered and analysed in this study indicated that students possessed various information abilities to complete group discussion assessments. Also, there was a significant difference between male and female information literacy skills possessed by semester one students to complete group discussion assessment in favour of males and could be considered to be similar to submission (Science, 2018) that females experience more difficulty finding information, felt less competent and comfortable using the resources. The study result contradicts with the information literacy skills of undergraduates in the Library and Information Science Department at the University of Maiduguri, which according to the results, gender has no bearing on the information literacy skills.

The findings suggest that polytechnic students are competent in reading and extracting information for their group discussion assessment. This also proves that students are aware of alternative resources to explore more. The only drawback of this study is that students are not ready to receive feedback on their research or the topics discussed in the assessment. There should be further investigation into such a phenomenon where students have clearly shown a good understanding of the task but are reluctant to receive or accept feedback. The research subjects for this study are millennials who crave quick and ongoing feedback. Millennials could be called the Instant Gratification generation. Therefore, this study could provide insight to the stakeholders, industry boards, and curriculum designers of the Malaysian Polytechnics Department to produce more K-based economy human capital in the nation.

References

Abdullah, S. (2010). Measuring the outcomes of information literacy: Perception vs evidence-based data. *The International Information & Library Review*, *42*(2), 98-104.

Abdullah, S., & Abd Majid, F. (2013). Reflection on language teaching practice in polytechnic: Identifying sources of teachers' beliefs. *Procedia-Social and Behavioral Sciences*, *90*, 813-822.

Abdullah, S., Ahmad Kassim, N., Mohd Saad, M. S., Tarmuchi, N. R., & Aripin, R. (2006). Developing information literacy measures for higher education.

Ahmad, A., Sirajuddin, P. T. S., & Mohamed, A. H. (2017). The Effectiveness of Training: Equipping and Enhancing ICT Knowledge and Skills among Polytechnic Lecturers in Producing Quality Highly Skilled Graduates. *Advanced Journal of Technical and Vocational Education*, *1*(3), 01-05.

Ali, R., Abu-Hassan, N., Daud, M. Y. M., & Jusoff, K. (2010). Information literacy skills of engineering students. *International Journal of Research and Reviews in Applied Sciences*, *5*(3), 264-270.

Allari, R. S., Hamdan, K., Albqoor, M. A., & Shaheen, A. (2022). Information literacy: assessment of undergraduate and graduate nursing students. *Reference Services Review*, *50*(2), 211-221.

American Library Association. (2000). Information literacy competency standards for higher education.

Association of College, Research Libraries, & American Library Association. (2000). *Information literacy competency standards for higher education*. ACRL.

Bawden, D. (2001). Information and digital literacies: a review of concepts. *Journal of documentation*.

Bruce, C. S., Gerber, R., & Candy, P. (1997). Information literacy: A phenomenography.

Chin, L. J., & Ibrahim, Y. (2015, June). Information Literacy for Sustainable Advancement: Malaysian Experience. The Congress of Southeast Asian Librarians (CONSAL).

Chomsky, N. (2014). *Aspects of the Theory of Syntax* (Vol. 11). MIT press.

Cummins, J. (1999). BICS and CALP: Clarifying the Distinction.

Doyle, C. S. (1994). *Information literacy in an information society: A concept for the information age*. Diane Publishing.

Hashim, H., Yunus, M. M., & Embi, M. A. (2018). Learning through mobile: Exploring the views of Polytechnic ESL learners. *TLEMC (Teaching and Learning English in Multicultural Contexts)*, *2*(1).

Husin, H. A., Ibrahim, Y., & Baharom, N. S. (2013). Media and information literacy: Malaysian experience.

Husin, H. A., Ibrahim, Y., & Baharom, N. S. (2013). Media and information literacy: Malaysian experience.

Hymes, D. (1972). On communicative competence. *sociolinguistics*, *269293*, 269-293.

Iqbal, M. J. (2013). *Transforming Malaysian economy from production base to knowledge base using quadruple helix research collaborations* (Doctoral dissertation, Universiti Teknologi Malaysia).

Kadli, J. H., & Kumbar, B. D. (2013). Library Resources, Services and Information Seeking Behaviour in Changing ICT Environment: A Literature Review. *Library Philosophy & Practice*.

Keer, G. (2010). Critical pedagogy and information literacy in community colleges. *Critical library instruction*, 149-160.

Komuniti, K. (2018). Politeknik Jambi, Indonesia 16 October 2018.

Krashen, S. (1992). The input hypothesis: An update. *Linguistics and language pedagogy: The state of the art*, 409-431.

Mandušić, D., & Blašković, L. (2013). Information Literacy, Theory and Practice in Education. *Romanian Journal for Multidimensional Education/Revista Romaneasca pentru Educatie Multidimensionala*, *5*(1).

Meskill, C., & Mossop, J. (2000). Technologies use with ESL learners in New York State: Preliminary report. *Journal of Educational Computing Research*, *22*(3), 265-284.

Nehari-Talet, A., Karadsheh, L., Alhawari, S., & Hunaiti, H. (2021). The Importance of Knowledge-Based Risk Processes to Risk Analysis. *International Journal of Knowledge Management (IJKM)*, *17*(1), 33-51.

Oakleaf, M. J. (2010). The value of academic libraries: A comprehensive research review and report.

Ode, E. O. (2017). Impact of gender on information literacy skills of students of library and information science department, university of maiduguri. *IP Indian Journal of Library Science and Information Technology*, *2*(2), 91-96.

Reed, V. A., & Spicer, L. (2003). The Relative Importance of Selected Communication Skills for Adolescents' Interactions With Their Teachers: High School Teachers' Opinions. *Language, Speech & Hearing Services in Schools*, *34*(4).

Shinew, D. M., & Walter, S. (2003). *Information literacy instruction for educators: Professional knowledge for an information age* (Vol. 22). Psychology Press.

Tajuddin, A. J. A., & Jauhar, A. (2015). *A Malaysian professional communication skills in English framework for English for occupational purposes courses* (Doctoral dissertation, University of Nottingham).

Thomas, W. P., & Collier, V. P. (1995). Language minority student achievement and program effectiveness. *California Association for Bilingual Education Newsletter*, *17*(5), 19-24.

Vygotsky, L. S. (2012). *The collected works of LS Vygotsky: The fundamentals of defectology (abnormal psychology and learning disabilities)*. Springer Science & Business Media.

Zurkowski, P. G. (1974). The Information Service Environment Relationships and Priorities. Related Paper No. 5.