INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES
HRMARS MANAGEMENT ACADEMIC RESEARCH SOCIETY EXPLORING INTELLECTUAL CAPITAL
www.hrmars.com
ISSN: 2222-6990

Investigating Productive Language Skills Across Disciplines

Sharifah Amani Syed Abdul Rahman, Noor Hanim Rahmat, D Rohayu Mohd Yunos, Syed Salleh Syed Abdul Rahman, Nor Eliza Alias, Mazlen Arepin

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v12-i6/13898 DOI:10.6007/IJARBSS/v12-i6/13898

Received: *16* April 2022, ***Revised:*** *18* May 2022, ***Accepted:*** *29* May 2022

Published Online: *12* June 2022

In-Text Citation: (Belaman et al., 2022)

To Cite this Article: Abdul Rahman, S. A. S., Rahmat, N. H., Yunos, D. R. M., Abdul Rahman, S. S. S., Alias, N. E., & Arepin, M. (2022). Investigating Productive Language Skills Across Disciplines. *International Journal of Academic Research in Business and Social Sciences. 12(6),* 1081 – 1092.

Vol. 12, No. 6, 2022, Pg. 1081 – 1092

http://hrmars.com/index.php/pages/detail/IJARBSS | **JOURNAL HOMEPAGE**

Full Terms & Conditions of access and use can be found at
http://hrmars.com/index.php/pages/detail/publication-ethics

INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES
HRMARS MANAGEMENT ACADEMIC RESEARCH SOCIETY EXPLORING INTELLECTUAL CAPITAL
www.hrmars.com
ISSN: 2222-6990

Investigating Productive Language Skills Across Disciplines

Sharifah Amani Syed Abdul Rahman[1], Noor Hanim Rahmat[2], D Rohayu Mohd Yunos[3], Syed Salleh Syed Abdul Rahman[4], Nor Eliza Alias[5], Mazlen Arepin[6]

[1,2,3]Akademi Pengajian Bahasa, Universiti Teknologi MARA Cawangan Johor, Kampus Pasir Gudang, [4]Novartis Pharmaceutical Corporation, Selangor, Malaysia, [5]School of Civil Engineering, Faculty of Engineering, Universiti Teknologi Malaysia, [6]Faculty of Education, Universiti Teknologi MARA Kampus Puncak Alam, Selangor, Malaysia

Email: shari348@uitm.edu.my, noorh763@uitm.edu.my, droha932@uitm.edu.my, syedsalleh86@gmail.com, noreliza@utm.my, jasmazlen@uitm.edu.my

Abstract

People use language to get/transmit information. Language enables knowledge and also experience to be transmitted into meaning. It is through this transformation that people come to understand their experiential world. Different disciplines have their own lingos. And recognising discipline specific ways of using language can help students develop a sense of how knowledge is organised. It also enables them to better read, write, evaluate, and improvise texts in the disciplines. The use of productive skills among language learner is known to be different among learners of different disciplines. This quantitative research is done to investigate how learners use productive, receptive and productive skills in the learning of English as a second language (ESL) across disciplines. The instrument used is a survey. 252 respondents were purposively chosen to answer the survey. The survey has 3 main sections. Section A has items on the demographic profile. Section B has 10 items on Receptive Skills and Section C has 20 items on Productive Skills. Generally, the social sciences and business showed higher mean for speaking and writing compared to their science and technology peers. This is in line with the findings by from past studies that show computing students reported the lowest overall strategy use. Findings from this study has interesting implications for teaching English as a second language (ESL) to learners form different disciplines. The findings in this study contributes to the teaching and learning of English as a foreign language among young adults. In addition to that, this study also contributes to the understanding of the use of productive skills among language learners.

Keywords: ESL, Disciplines, Strategy, Receptive Skills, Productive Skills.

Introduction

Background of Study

Language is used for communication and it has many functions. The three basic functions of language are informative, expressive and directive. People use language to get/transmit information. According to Fang (2012); Rahmat (2019), language enables experience to be transmitted into meaning. It is through this transformation that people come to understand their experiential world. Different disciplines have their own lingos. And recognising discipline specific ways of using language can help students develop a sense of how knowledge is organised. It also enables them to better read, write, evaluate, and renovate texts in the disciplines. In Malaysia, many students in higher institutions of learning use one language (their mother tongue) for day-to-day communication; and use another language (English) for academic language. According to Heineke and Neugebauer (2018), academic language differs across disciplines, and learners from different disciplines use language differently. Academic language refer to both the receptive and productive skills.

However, the study by Boyle et al (2020); Hussain (2019) noted that science instruction can often rely heavily on text and have burdensome reading demands that maybe a heavy load for non-language students. In higher institutions of learning in Malaysia, the burden gets doubled as the non-language students have to cope with information in English.
How are non-language students coping with dealing with language in their courses? This study is done to explore how learners from different disciplines cope with dealing with learning their course in English. Specifically this study is done to answer the following questions;

- How does the use Productive Speaking skills differ across disciplines?
- How does the use of Productive Writing skills differ across disciplines?

Literature Review

Language Skills

There are four main skills in learning a language and each skill has different functions. Table 1 shows two main skills in language learning. According to Brown (2000), Receptive skills are those used in understanding and they are gained through reading or listening. Productive skills involve producing language and they are gained through speaking or writing.

Table 1
Receptive and Productive Skills (source: Brown, 2000

	RECEPTIVE	PRODUCTIVE
SPOKEN	Listening	Speaking
WRITTEN	Reading	Writing

Past Studies

Past Studies in the use Different Needs Language Skills across Disciplines

Existing research has investigated the many skills required for learning a foreign language across various disciplines. This section provides a descriptive summary of the two reviewed studies' approaches and conclusions.

The study by Harrington (2014) investigated the word recognition skill and academic success across disciplines in an English-as-a-Lingua-Franca (ELF) University setting. A vocabulary level

test was carried out among 280 students from four academic disciplines (Humanities, IT, Business and Engineering). The results showed that word accuracy was a better predictor of academic performance than response time for majority of the disciplines, except for engineering. Furthermore, there was considerable variation in response times between the groups, in which, the Engineering group was relatively fast and accurate, when compared to business and humanities groups with less accuracy.

Next, the study by Peacock and Ho (2003) studied the various learning strategies to gain a better understanding of the cognitive, social, and affective processes involved in language learning. A survey of 1006 English for Academic purposes (EAP) students from eight disciplines (e.g., building, computing) was conducted, followed by interviews with 48 students to gain additional insights. According to the study findings, students majoring in English reported the highest overall frequency of learning strategy use (memory, cognitive, compensation, metacognitive, affective, and social), followed by students majoring in primary education, business, math, science, engineering, and construction. Computing students, however, reported the lowest overall strategy use.

Past Studies in Difficulties in Learning English for different types of students in Different Disciplines

There are some reported past studies on the comparison of language learning across different types of ESL learners. Firstly, Zakaria, et.al (2014) quantitative conducted study to investigate how learning writing differ across disciplines. The instrument used was a questionnaire with 4 sections. Section A had items on demographic profile. Section B had items on task environment. Section C had items on long term memory and section D had items on the writing process. Data was analysed using SPSS. Findings showed that for task environment-learners for the social sciences preferred to choose topics they liked. They also reported to check ideas as they wrote. On the other hand, for long term memory, planning was more evident among learners from the sciences discipline. Learners from social sciences focused more on adding details, sciences, and checking the overall essay.

Next, Said, et.al (2018) investigated ESL learners' attitude on learning ESL. Attitude is measured individually three components that makes up language attitude and they are affective, behavioural and cognitive. This is done by identifying a learner's positive or negative attitude based on the cumulative scores of the three components. 55 secondary school students from a national school in Malaysia from two classroom (science stream and social science stream) were chosen as the participants and they responded to a survey on attitude and motivation towards learning ESL. The research participants were found to display a positive English language attitude while conforming to the identified pattern of ESL learners' language attitude by ESL scholars. The study also managed to find no statistically significant difference between the two groups of learners. Findings of the study have resulted in pedagogical implications to be considered by English teachers when dealing with Malaysian students from different streams.

Conceptual Framework

This study is rooted from the language skills by Setiyadi (2016) and scaffolded onto Brown's (2000) categories of Receptive and Productive skills. In the context of this study, the Receptive skills refer to Reading. Productive skills include Speaking and Writing. The uses of the language

skills may or may not be the same for all three discipline; science & technology, social sciences and business.

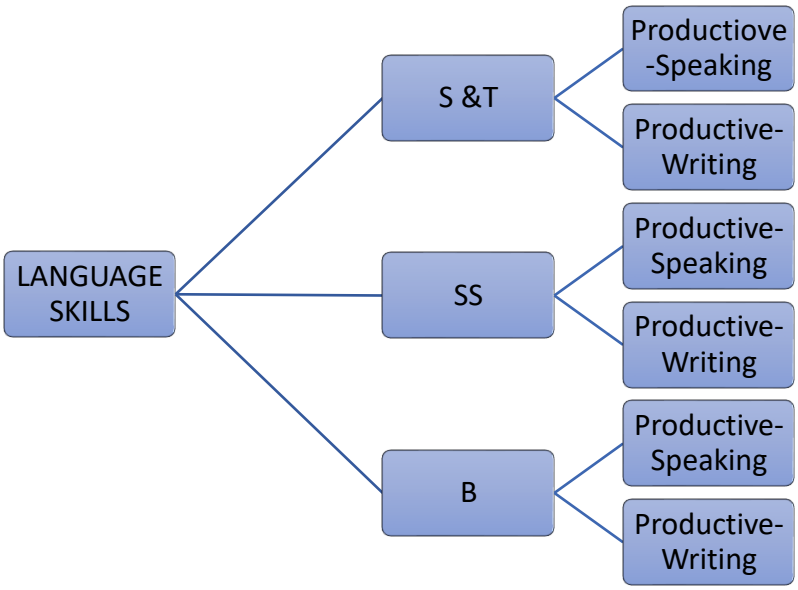

Figure 2- Conceptual Framework of the Study –
Using Receptive and Productive Skills across Clusters (Source: Setiyadi, 2016)

Methodology

Research Design

This quantitative research is done to investigate how learners use productive , receptive and productive skills in the learning of English as a second language. . The instrument used is a survey adapted from Setiyadi (2016). 252 respondents were purposively chosen to answer the survey. The survey has 3 main sections. With reference to Table 2, section A has items on the demographic profile. Section B has 10 items on Receptive Skills and Section C has 20 items on Productive Skills.

Table 2

Distribution of items in Survey

SECTION	LANGUAGE SKILL	VARIABLES	NO OF ITEMS
B	RECEPTIVE	READING	10
C	PRODUCTIVE	SPEAKING	10
		WRITING	10
			20

Table 3

Reliability Statistics

Reliability Statistics

Cronbach's Alpha	N of Items
.915	30

Table 3 presents the reliability statistics for the instrument. SPSS analysis revealed a Cronbach alpha of .915 thus showing a high internal reliability of the instrument used. Data is collected online via goggle form. Data is then analysed using SPSS version 26. Analysed data is presented in the form of percentages and mean scores to answer the 2 research questions

Findings

Findings for Demographic Profile

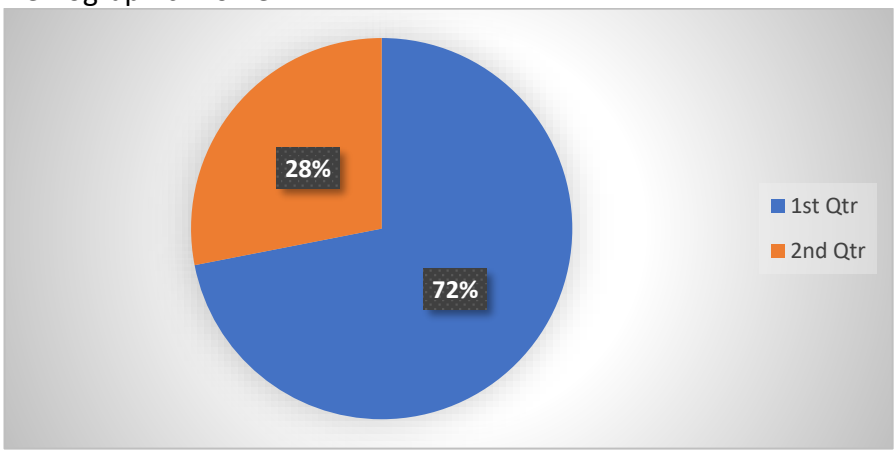

Figure 3- Percentage for Gender

This section contains the responses of those who took part in the survey. A total of 252 participants responded to the survey, with 56% of respondents being female and 44% being male (Figure 3).

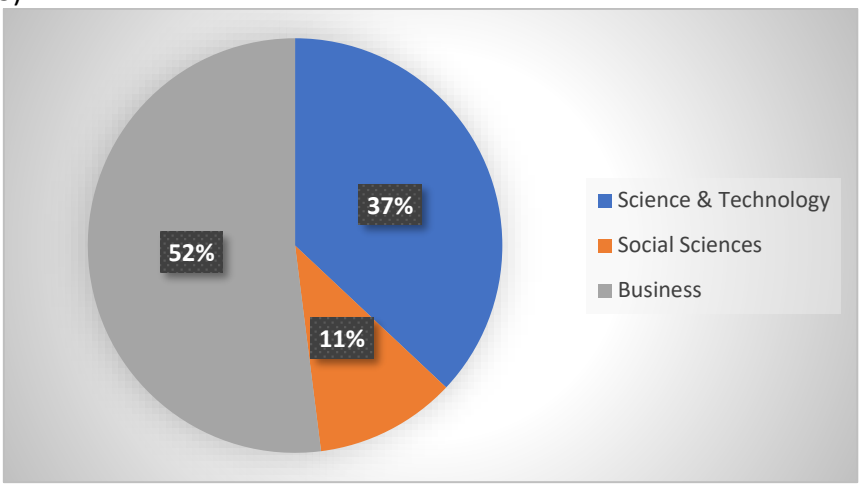

Figure 4- Percentage for Cluster

Figure 4 reveals that 52% of participants are from the business cluster, with the remaining from science and technology (37%) and the social sciences (11%) respectively.

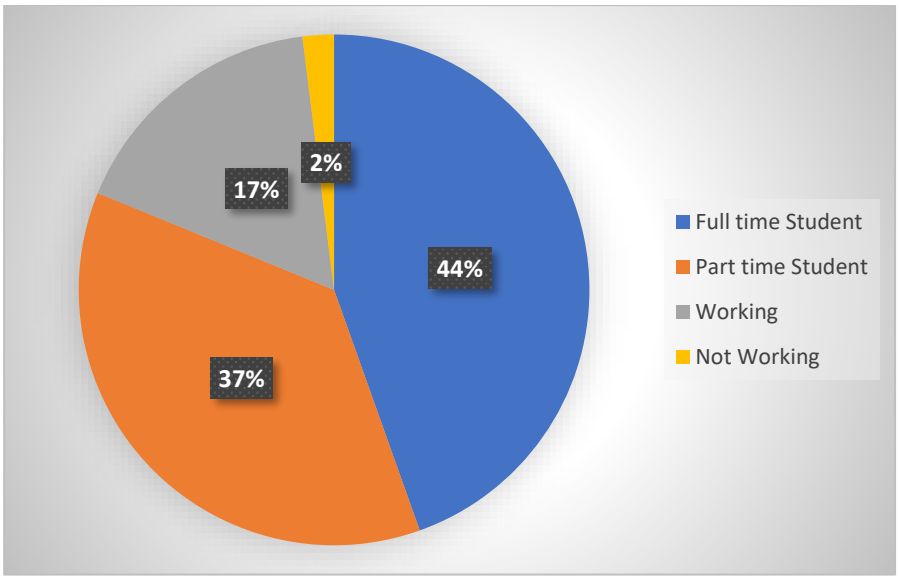

Figure 5- Percentage for Category

Figure 5 presents the percentage for category of students. 45% are full time student. 37% are part time students, while 17% are working adults and 2% are not working.

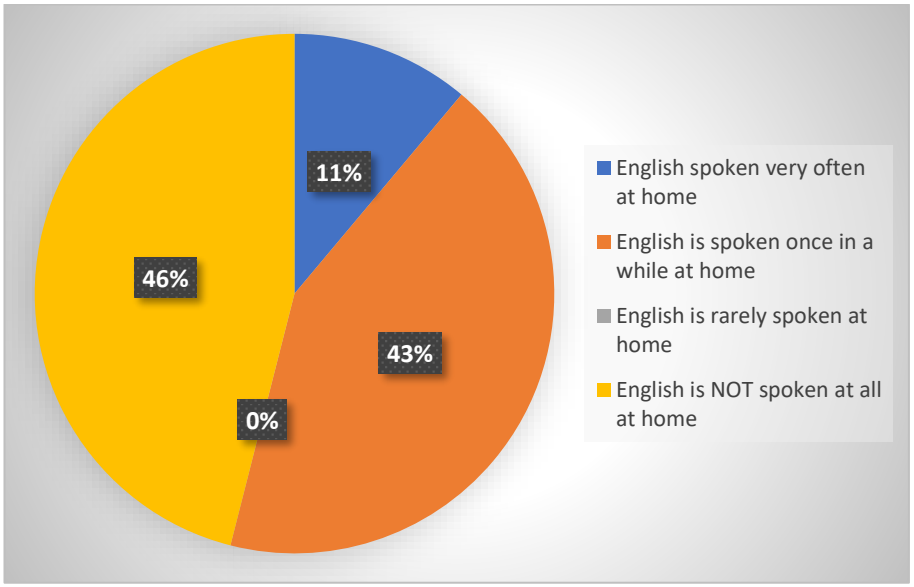

Figure 6-Percentage for Background

Figure 6 represents the percentage for the background of the learners. 38% rarely spoke English at home. 29% reported that English is not spoken at all in their home. 27% reported that English is spoken once in a while at home. Finally, only 7& reported that they spoke English often at home.

Findings for Productive Speaking Skills

This section presents data to answer research question 1: How does the use Productive Speaking skills differ across disciplines?

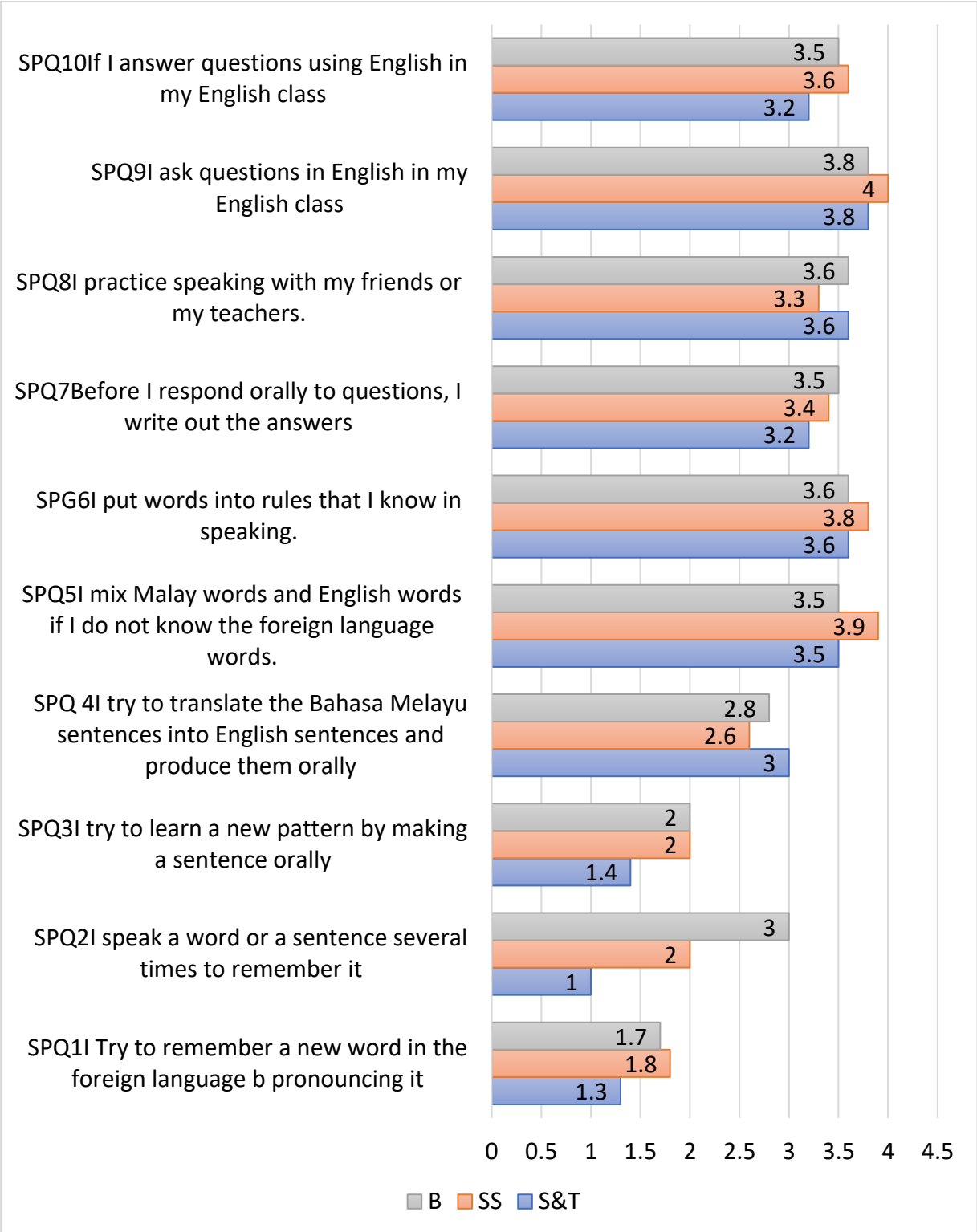

Figure 7- Mean for Conditional Knowledge – Speaking

The mean findings of assessing participants' conditional knowledge (speaking) influence on language learning are shown in Figure 7. All three clusters of participants who asked questions in English (in an English classroom) had the most influence in learning (mean for Social Sciences =4, mean for Business; Science & Technology= 3.8). For the science and technology cluster (mean-1.8), the least influential strategy is by remembering a word or a

sentence, while the remaining clusters were least influenced by speaking a new foreign word to memorize it.

Findings for Productive
Writing Skills

This section presents data to answer research question 2: How does the use of Productive writing skills differ across disciplines?

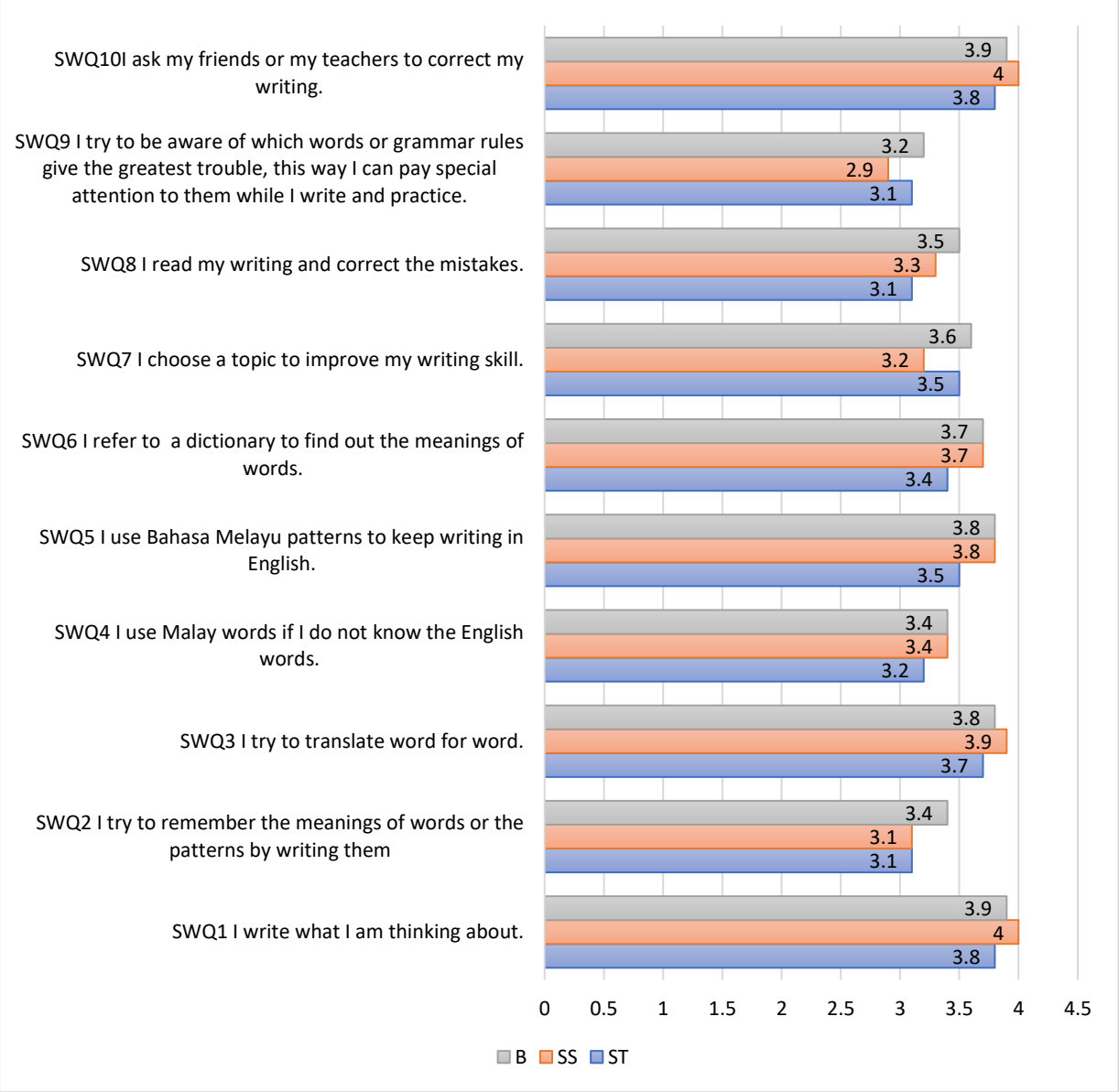

Figure 10- Mean for Procedural Knowledge (Writing)

Figure 10 shows the comparison of mean for procedural knowledge (writing). Two items has similar mean across Science & technology (mean =3.8) , Social Sciences (mean=4) and Business (mean=3.9) and the items are “write what I am thinking about” and “ask my friends or my teachers to correct my writing”. Next, for the item “try to translate word for word”, science and technology learners had a mean of 3.7, social science shad a mean od 3.9 whole business students had a mean of 3.8.

Conclusion

Summary of Findings and Discussion

In the context of productive speaking skills, the social science cluster showed they asked more questions to facilitate their learning compare to the other clusters. Science & Technology resort to translation from and into their mother tongue to understand better. This is in line with the study by Harrinton (2014) who revealed that learners felt that in order to understand better, they need to have word accuracy. In order to facilitate word accuracy, they may resort to measures like asking questions and even translation.

Similarly, in the context of productive writing, learners from the social sciences topped the mean scores for most strategies such as asking from friends, translation, and even converting oral thoughts to written thought. This finding is in accordance with the study by Peacock and Ho (2003) who also reported that students majoring in English reported the highest overall frequency of learning strategy use (memory, cognitive, compensation, metacognitive, affective, and social), followed by students majoring in primary education, business, math, science, engineering, and construction.

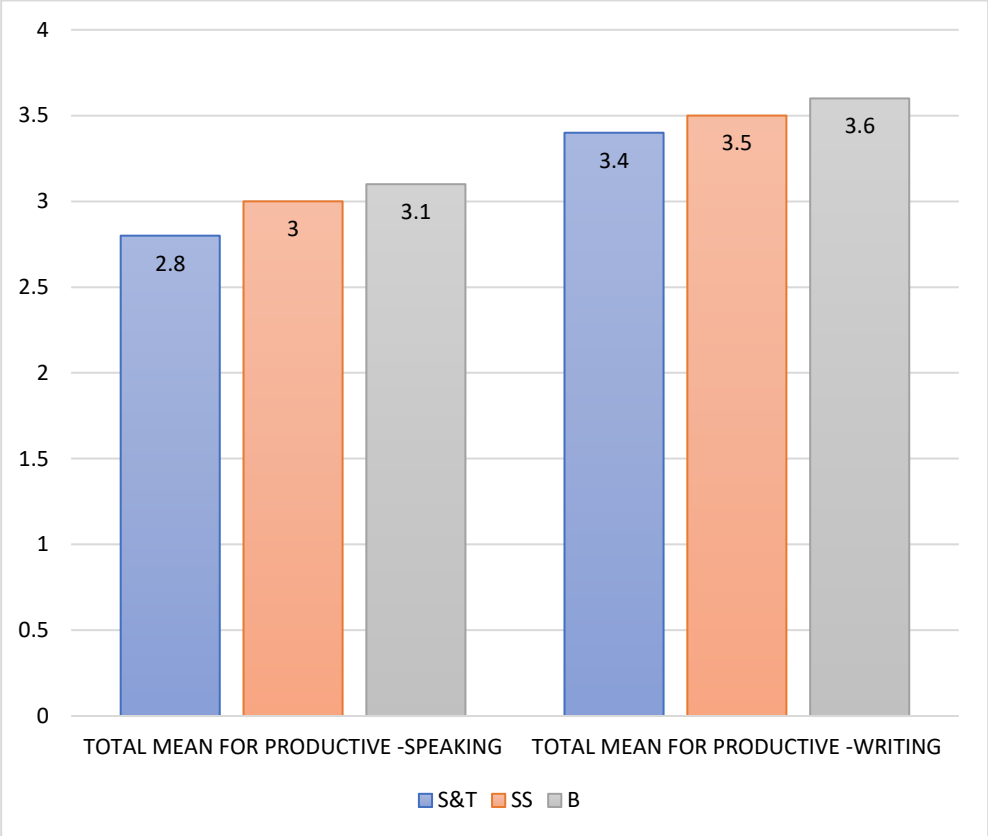

Figure 11 _Overall Mean for Productive Speaking and Writing

Figure 11 presents the overall mean for both productive skills of speaking and writing. Generally, the social sciences and business showed higher mean for speaking and writing compared to their science and technology peers. This is in line with the findings by Peacock and Ho (2013) who found that computing students reported the lowest overall strategy use.

Pedagogical Implications

Pedagogically, language teachers ought to include the teaching of how to use language strategies when they deal with students from science and technology compared to the students from social sciences and business management. Alternatively, they could include many interactional activities when it comes to students from social sciences and business. Teachers can provide a language-rich environment for language learners of all discipline (Rahmat,2018). Not only will they be participative, they also need the communication skills more when they go out into the working world in the future. Future research could look into ways to improve communication skills among the science and technology students.

References

Boyle, S., Rizzo, K. L., & Taylor, J. C. (2020). Reducing Language Barriers in Science for Students with Special Educational Needs, *Asia-Pacific Science Education*, *6*(2), 364-387. doi: https://doi.org/10.1163/23641177-BJA10006

Brown, H. D. (2000) Principles of Language Learning and Teaching (4th Edition). NY: Addison Wesley Longman, Inc.

Fang, Z. (2012) Language Correlates of Disciplinary Literacy. Top Lang Disorders, Vol 3291), pp 19-34. Retrieved from https://alliedhealth.ceconnection.com/files/TLD0112B-1337958964160.pdf

Harrington. (2014) - Word recognition skill and academic success across disciplines in an ELF university setting (GL): https://arts.unimelb.edu.au/__data/assets/pdf_file/0009/1770678/Harrington_Roche.pdf

Heineke, A., and Neugebauer, S. R. (2018) The Complexity of Language and Leanrning Deconstructing Teachers' Conceptions of Academic Language. Issues in Teacher Education, Vol 27(2). pp 73-89. Retrieved from https://www.itejournal.org/issues/fall-2018/09heineke&neugebauer.pdf

Hussain, I. Z. (2019) The Surprising Correlation between English Skills and Success in STEM. English Language Arts.. Retrieved from https://talentnook.com/blog/correlation-between-english-skills-and-stem-success

Peacock and Ho. (2003) - Student language learning strategies across eight disciplines. International Journal of Applied Linguistics, Vol 13(2), pp 179-200. Retrieved from https://doi.org/10.1111/1473-4192.00043

Rahmat, N. H. (2019) Cycle of Fear in Learning: The Case for Three Language Skills. American Journal of Social Sciences and Humanities, Vol 4(1), pp 151-162. Retrieved from http://dx.doi.org/10.20448/801.41.151.162

Rahmat, N. H. (2018) Educational Psychology: A Tool for Language Research. PEOPLE: International Journal of Social Sciences, Vol 4(2) pp 655-668. Retrieved from http://dx.doi.org/10.20319/pijss.2018.42.655668

Said, N. E. M., Saidon, M. A., Soh, T. M. T., Husnin, H., and Abd Rahman, M. J. (2018) English Language Attitude: A Case Study of Science Stream and Social Science Stream ESL Learners, Journal of Advanced Research in Dynamical and Control System, Vol 4(Special issue., pp 1600-1608. Retrieved from https://www.jardcs.org/backissues/abstract.php?archiveid=5117

Setiyadi, A. B. (2016) Language Learning Strategy Questionnaire (LLSQ) A Measurement to identify Students' Learning Strategies and Prepare the Success of Learning English in the

Indonesian Context (Empirical Evidence). Indonesia: Graha Ilmu. Retrieved from http://repository.lppm.unila.ac.id/8847/2/isi%20buku.pdf

Zakaria, N., Ibrahim, N., Rahmat, N. H., Noorezam, M., Aripin, N., & Rasdi, N. N. (2014) ESL Writing Strategies across Disciplines among Diploma Students. International Journal of Technical Research and Applications, Special issues 19 (Nov-Dec 2014), pp 57-60. Retrieved from https://www.ijtra.com/special-issue-view.php/esl-writing-strategies-across-disciplines-among-diploma-students.pdf?paper=esl-writing-strategies-across-disciplines-among-diploma-students.pdf