The Incorporation of Literature in the English Language Program for Engineering Students: Learner Interest and Perception

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Abstract

Literature has been an essential and popular component of language courses in the Malaysian English Second Language (ESL) context. Even so, the journey towards the inclusion of literature in language courses has been an evolving one, ensuing in many stages of change. As a result, the teaching and learning of literature was drawn back to a state of extinction from being an essential component of the language curriculum, only to resurge in a more fervent form. The introduction of the literature enhanced curriculum in the Malaysian ESL context has steered much discussion on the significance of teaching the subject as part of the English language syllabus in Malaysian primary, secondary and tertiary educational institutions. Although research on the teaching and learning of literature in Malaysian schools is rather abounding, not much

research has been undertaken to investigate its effectiveness in Malaysian higher educational institutions. This paper discusses the findings of a study undertaken to investigate young adult learners' perceptions on the inclusion of literature in the tertiary English language classroom. The focus of this paper is on perceptions, attitudes and the perceived needs of young adult technical learners towards the incorporation of literature in English programmes. The findings of the study, obtained via quantitative and qualitative approaches, provide insights that will help policy makers and educators in designing more appropriate programmes in relation to the incorporation of literature in ESL programmes for tertiary level young adult technical learners.

Introduction

It is widely recognized that literature has an essential association with life. Due to the ability of literature to hone creativity in language and imagination, its inclusion is essential in any system of education that promotes the importance of discovery as a vital feature of the learning process (O' Sullivan, 1991). The incorporation of literature in the curriculum of English Language Teaching (ELT) has been noteworthy over the last 20 years. Although there was a distinct reaction against the use of literary English in the 1960s and 1970s, the teaching of this subject continued to enjoy popularity. In the Malaysian English Second Language (ESL) context, literature has been and continues to be a popular component of language courses. Even so, its introduction in the Malaysian ESL context has steered much debate, specifically in relation to its significance as part of the English language syllabus in primary, secondary and tertiary educational institutions in Malaysia.

This paper discusses the findings of a study undertaken to investigate young adult learners' perceptions on the inclusion of literature in the tertiary English language classroom. The focus of this study is on the perceptions, attitudes and the perceived needs of young adult technical learners towards the incorporation of literature in English programmes at tertiary level.

Literature in Malaysian ELT

Literature was officially included in the Malaysian ELT syllabus in the year 2000 (Ganakumaran, Shahizah & Koo, 2003). This inclusion denotes the acknowledgement of the Ministry of Education, Malaysia, on the role and importance of literature in Malaysian ELT. The addition of literature in Malaysian ELT is to benefit students in three areas, namely language development, cultural enrichment and personal growth. In Malaysian ELT, literature is featured not only in primary and secondary English language education, but in tertiary English language education as well.

The inclusion of literature in the English language curriculum of Malaysian secondary schools provides the platform for the growth of literature in Malaysian ELT. One such programme stemming from this initiative is the Class Reader Programme (CRP). Through this programme, which was initiated in the year 1989, one class period is allocated to get students acquainted with reading literary texts. The CRP involves every school in Malaysia with the aim of helping students consolidate language skills taught in the ESL curriculum. The CRP also aims at preparing students for literary studies at the upper level, in addition to enabling them to proceed to higher levels of literary appreciation.

Unlike the CRP initiative in Malaysian secondary schools, tertiary institutions in Malaysia incorporate literature as a component of English language proficiency classes or as a subject for arts and language students to major in. Emulating Western education initiatives in incorporating the arts for sciences, the Ministry of Higher Education, Malaysia, in its National Higher Education Action Plan 2007-2010, outlined the introduction of holistic programmes that cut across disciplines, to expose students to subjects beyond their areas of study. As described in the action plan, students pursuing science based degrees, such as medicine and engineering, for instance, will be given the opportunity to experience courses covering literature and philosophy. Likewise, students in the humanities will be exposed to the essentials of science, technology and ICT. The relevance of a subject like literature to

science students is one factor that must be scrutinized upon intently if the integration of arts and sciences is to be implemented. Equally important is the mindset and preparedness of students to embrace this revolution in Malaysian higher education.

It is therefore vital to embark on research focused in the areas mentioned above, given the lack of research undertaken in this area. The body of research on literature in Malaysia has been focused upon the teaching and learning of the subject at secondary schools[1].   In a study conducted by Ganakumaran, Shahiza and Koo (2003), it was revealed that curriculum planners and teachers of literature at secondary level face challenges in the development and teaching of the subject. Findings from their research reveal holistic education, participant readiness, readability, cultural accessibility, societal understanding and postcolonialism as the challenges faced towards a successful acceptance of literature in the secondary ESL classroom. Also focused on literature at secondary level, a study conducted by Gurnam (2003) investigates the challenges faced by literature learners. Her research reveals several problems with regard to the use of literature in the language classroom namely literary texts that did not befit the interest of learners, linguistic difficulty and cultural alienation.

However, research in relation to the teaching and learning of literature at Malaysian tertiary level has mostly delved into approaches or methods that can be infused by educators to improve or enhance existing literature teaching methods. Too (2003), for instance, advocates the importance of songs as literary materials for tertiary language learners. Sivapalan's (2006) research, for instance, indicates the importance of incorporating multicultural young adult literature to young adult learners to promote better understanding of cultures and cultural sensitivity.

The researchers would like to note that while studies have been carried out to gauge the perception of secondary level language learners on the inclusion of literature in the English language syllabus, there has not been much research conducted on tertiary level language learners. There has also not been much research conducted with regard to the

perception of young adult technical learners on the infusion of literature in English programmes. One of the available studies carried out is the development of reading appreciation through young adult literature, in which Sivapalan et al. (2008) indicate that pre-university level young adult engineering students acknowledge the importance of literary texts in developing language skills, specifically reading skills. Their study further suggests that young adult literature in English as well as short stories can be used as innovative methods in developing appreciation for reading for engineering students.

At this juncture, the researchers would like to note that perception of tertiary learners on the inclusion of literature in English programmes is an area of research that needs to be tapped into further. As such, the researchers hope that this novel study on the perceptions, attitudes and the perceived needs of young adult learners towards the incorporation of literature in English programmes at tertiary level would provide insights that will help policy makers and educators in designing more appropriate programmes in relation to the incorporation of literature in ESL programmes for tertiary level young adult technical learners. For the purpose of this research, the term 'technical learners' will be used to describe the perception, attitudes and perceived needs of engineering and technology students.

Gauging young adult technical learners' views

Students of the private technical university, where this study was undertaken, are enrolled for undergraduate engineering and technology courses. These young adult students, who comprise of Malaysian as well as international students, are of mixed language proficiency and of diverse cultural and social backgrounds. The Malaysian respondents are made up of those who have either attended the Foundation Programme (pre-university) run by this university or those who sat for the Sijil Tinggi Pelajaran Malaysia (STPM) or Matriculation programme. The international respondents are made up of those who have sat for their High School Certificate or those who had left or transferred credits from undergraduate courses in universities in their respective countries to pursue their tertiary education in Malaysia.

Two compulsory English proficiency courses, English 1 and English 2, are offered to the students at foundation (pre-university) level. Students are required to enroll for 2 other compulsory English language courses - Academic Writing and Professional Communication Skills - while pursuing their undergraduate courses. Students are exposed to literature as small 'l' during the lecture component of the Foundation English 1 and 2 courses. Although prior knowledge of literature is not a prerequisite of the said courses, respondents have prior exposure to literature through secondary school (Malaysian respondents) and high school (international respondents). The literary genres used in both courses encompass short stories and the novella. Students are exposed to British, American as well as Asian literature during the literature lesson. Literature is tested in the coursework component of the English 1 and 2 courses. Literature is assessed as coursework through a reading comprehension test, a poster presentation and a drama presentation. Literature is not tested in the final examinations of both courses.

Methodology

The researchers employed an explanatory mixed method design[2] to gain a comprehensive insight of the research. A '71 item questionnaire' was administered to obtain quantitative input. The questionnaire was constructed to gauge the perceptions, attitudes and the perceived needs of tertiary young adult learners towards the incorporation of literature in English programmes at tertiary level. The questionnaire was constructed in accordance to the following dimensions: literature as part of learning English, literary genres and feelings and attitude towards literature classes (please refer to Appendix A for the items of each dimension). SPSS version 11.5 was used to run frequency analysis and cross tabulation of the data for this study. Focused semi structured open-ended interviews were conducted to gather qualitative input. The themes that emerged during the interview sessions were coded in accordance to the quantitative dimensions from the questionnaire. 20-30 minute interview sessions were conducted with 10 volunteers, who were respondents to the questionnaire administered. Table 1 indicates the profile of the 10 interviewees.

TABLE 1: INTERVIEWEE PROFILE

STUDENT	GENDER	PROGRAMME
A	MALE	ENGINEERING
B	MALE	ENGINEERING
C	FEMALE	ICT/BIS
D	MALE	ENGINEERING
E	FEMALE	ENGINEERING
F	FEMALE	ENGINEERING
G	MALE	ICT/BIS
H	MALE	ENGINEERING
I	FEMALE	ENGINEERING
J	FEMALE	ENGINEERING

The rationale for using focused semi structured open-ended interviews was to understand the respondents' point of view rather than make generalizations. As in all such interviews, the researchers set the focus of the interview (please refer to Appendix B for the interview questions).

Prior to the distribution of the questionnaires, a pilot study involving 40 students was carried out to determine the reliability of the instrument. The questionnaires were then disseminated to 300 young adult engineering and technology students pursuing undergraduate courses. The respondents indicated their agreement or disagreement to each statement on a 5-point likert scale that ranged from strongly disagree, score 1, to strongly agree, score 5. Of the 300 questionnaires sent out, 260 were returned, denoting an 86.7% response rate. Cronbach's alpha was used to measure the reliability coefficient that assesses the consistency of the entire scale. The alpha values for the dimensions are as follows: literature as part of learning English (0.87); literary genres used in the literature class (0.87); and feelings and attitude towards literature classes (0.80). According to Hair et al. (1998), the generally agreed upon lower limit for Cronbach's alpha is 0.70. As such, the alpha values obtained from the reliability analysis of the data of this study indicate that the scale is highly reliable.

The respondents (n=260) were young adult engineering and technology students aged between 19-21 years of age and consisted of 61.2% male and 38.8% female. The breakdown of the 260 respondents is as denoted in Table 2 below.

TABLE 2: BREAKDOWN OF RESPONDENTS

PROGRAMME	PERCENTAGE
Electric and Electronic Engineering	17.3%
Chemical Engineering	23.5%
Civil Engineering	16.5%
Mechanical Engineering	20.8%
Petroleum Engineering	15%
Information Communication Technology & Business Information Systems	6.9%

This proportion of gender grouping of the sample was as expected as the composition of male students pursuing engineering programmes in the undergraduate programme in the university in which this research was undertaken is higher than the composition of females. The majority of the respondents were Malaysians, who accounted for 93.1% of the 260 respondents. International students made up the balance, accounting for 6.9% of the respondents.

The composition of the race of respondents was made up of Malays, Chinese, Indians, the indigenous, as well as those hailing from Asian, African and Middle Eastern countries. The researchers focused upon young adult respondents as this age group makes up the largest number of young adult technical learners pursuing first year undergraduate technical courses in the university in which this research was carried out. The perceptions, attitudes and perceived needs of first year undergraduate technical learners were also sought due to their recent exposure to literature.

Perceptions, attitudes and the perceived needs of young adult technical learners towards the incorporation of literature in English programmes at the tertiary level

The sections that follow will discuss the perceptions, attitudes and the perceived needs of the respondents towards the incorporation of literature in English programmes at tertiary level.

Perceptions towards the incorporation of literature in English programmes at tertiary level

Young adult technical learners' views were gauged to identify the manner in which they perceive the incorporation of literature in English programmes at tertiary level. The perceptions of the respondents were gauged in terms of the following: necessity to learn literature; teaching of literature as a separate component in the tertiary English language programme; and literature as a compulsory subject for tertiary level English programmes.

Respondents' views were first gauged in terms of the necessity for technical learners to learn literature at foundation or pre-university English programmes as well as undergraduate English programmes. The findings indicate that 38.9% of the respondents positively view that it is necessary for them to learn literature in the foundation or pre-university English language programme as indicated in Figure 1 below. However, in terms of learning the subject at the undergraduate level English programme, the findings denote that 44.6% of the respondents perceive it as unnecessary, as indicated in Figure 2 below.
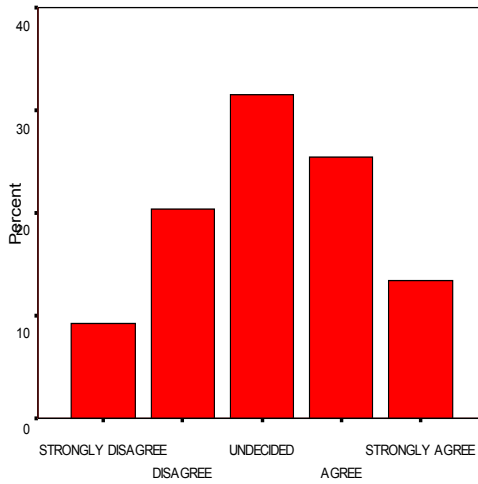
**FIGURE 1: Learning literature at the foundation or
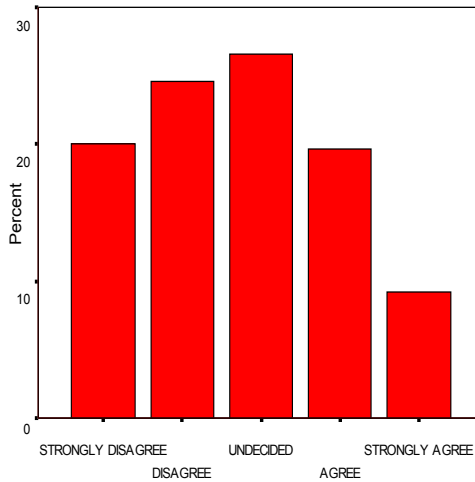pre-university level English programme**

**FIGURE 2: Learning literature at the undergraduate
level English programme**

39.6% of engineering students seem to agree that it is necessary
to learn literature at the foundation or pre-university level while 31.8%

disagree. However, a majority of technology students seem to be undecided, with 55.6% indicating that they were unable to make a decision as to the necessity for them to learn literature at the foundation or pre-university level. On the necessity for technical learners to learn literature at the undergraduate level, 45.5% engineering students seem to view the necessity for them to learn literature at the undergraduate level English programme as unnecessary, while 29.8% of them agree that they should learn literature at the undergraduate level English programme. 50% of technology learners were once again undecided, while 33.3% were disagreeable to learning literature at the undergraduate level English programme.

The findings suggest that the respondents' find learning literature as essential at the foundation or pre-university level and not at the undergraduate level. Such perceptions could be due to the fact that pre-university or foundation level language programmes are proficiency focused, in comparison to undergraduate English language programmes which are more academic in nature. Furthermore, literature with a small 'l' is an apt platform to assist foundation level language learners with their proficiency skills, specifically reading, as suggested by Sivapalan et al. (2008) and even writing, vocabulary and grammar. As literature is taught as small 'l' in the university in which this research was undertaken, there is a possibility that the technical students see the benefits of this subject to their language development. This benefit could be a further indication as to the reason respondents of this study perceive it as necessary to learn literature at the foundation level instead of the undergraduate level.

In addition to the necessity to learn literature at the foundation or undergraduate levels, the researchers were also interested to find out the perception of technical learners if literature should be taught as a subject on its own and not as a component of the foundation or pre-university level or undergraduate level English programme.

Quantitative findings indicate that 40.8% and 38.5% of technical learners disagree that literature should be taught as a subject on its own at foundation and undergraduate level English programmes respectively.

Perceptions of respondents were also gauged to find out if they perceived literature should be made compulsory for technical learners at pre-university or undergraduate level English programmes. 33.9% and 42.3% of respondents indicated that literature should not be made compulsory for technical learners at pre-university or undergraduate level English programmes respectively.

Qualitative data obtained via focused semi structured open-ended interviews provide further clarification on the perceptions of technical learners on the inclusion of literature in English programmes at tertiary level, as indicated in the excerpts below.

> *It is better to learn literature during foundation English programme, not undergrad. In foundation, we don't have many difficult subjects to take but in undergraduate, the subjects are heavy. (Interviewee B)*

> *Literature is not a difficult subject and it is also not an easy subject. I got C+ for my English 2 because of the literature assignment. Better to take it in the foundation because the CGPA is not taken to undergraduate. (Interviewee G)*

> *Literature…compulsory subject…no thanks. Too difficult and complicated because sometimes the words and language used, I'm not familiar with it. So it is hard to understand. (Interviewee A)*

> *It should not be a compulsory subject in the English programme. Technical students like me no need to study literature. No need in foundation. No need in undergrad. Maths, physics and engineering subjects more important to be good engineer. (Interviewee D)*

> *Right now, if literature is part of the English subject, I don't mind. Still ok. But if separate subject in addition to English, die man. Now also cannot understand symbols, if it is a separate subject, it will be worst…if compulsory, what to*

do? Must take. But must make it interesting for technical students. Then it will be ok. (Interviewee F)

What does this subject have to do with engineering and technology students? I'm not sure. But I guess it is important for all students to take for their future career. (Interviewee J)

The qualitative and quantitative findings both indicate that the respondents are not fully ready for the incorporation of literature in their English language programme curriculum at undergraduate level. The interview excerpt of Interviewee D denotes that technical learners pay more importance to their engineering and technology courses in comparison to language courses offered in the English language programme. Interviewee J, for instance, views technical courses as essential for their engineering career later in life. Interviewee B seems to perceive literature as a 'heavy' subject that could bring down grades. The interviewees are also of the view that the language used in literary texts makes it more challenging for them to understand the subject. The interviewees noted that if there was a decision to make the course compulsory, it would be best for the lecturers to make the course as interesting as possible, to sustain the interest of the technical learners, as recommended by Interviewee F. The relevance of literature to technical learners was also questioned by Interviewee D, as it was felt that technical students should only be focusing on subjects such as mathematics, physics and other technical subjects relevant to their fields of study. Such a perception could be due to the fact that the learners are not able to envisage the relationship between literature and their fields of study. This could denote the reason for them to have negative views of the subject being made compulsory or having to learn it as a subject on its own.

The quantitative and qualitative findings above are eye opening, especially in light of the Ministry of Higher Education's aspirations to introduce literature for science based students. It is therefore pertinent for educators, administrators and even policy makers to take note of the beliefs and views of technical learners before embarking on the design of

literature courses to make the literature learning experience meaningful and significant. The section that follows will discuss the next aim of the study, i.e. technical learners' attitudes towards the incorporation of literature in English programmes at tertiary level. The discussion will encompass the following: stance towards learning literature; and stance towards literature for technical content comprehension.

Attitudes towards the incorporation of literature in English programmes at tertiary level

As mentioned in the previous section, the researchers were interested to investigate the attitudes of technical learners in terms of their stance towards learning literature as well as their position towards literature for the understanding of technical content. Only 38% of the respondents indicated that literature is not relevant for them to take as technical students, as denoted in Figure 3.
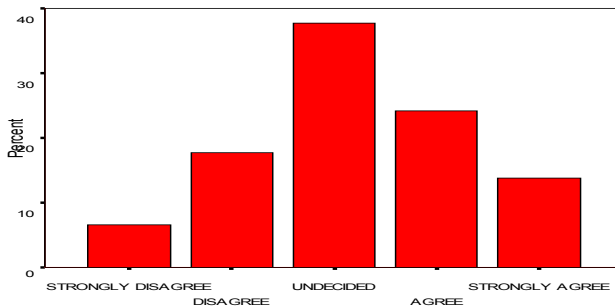

**FIGURE 3: Relevance of learning literature
for technical students**

It was further revealed that 38.4% of engineering respondents find literature as irrelevant for technical students. Respondents from ICT/ BIS fields of study on the other hand were undecided, accounting for 44.4% of the respondents from the technology programmes.

The importance technical learners place on literature, in relation to their technical courses was also sought. 60.4% of the respondents disagreed that literature is more important than their technical subjects.

The findings could indicate that the respondents either place equal importance or less importance on literature in relation to their technical subjects. Responses on the addition of literature to the curriculum of engineering and technology courses to achieve well rounded graduates were also identified. The findings suggest that 46.1% of technical learners find it is essential to add literature to the curriculum of engineering and technology courses to produce engineers and technologists who are well formed. On producing marketable technical graduates for the industry through the inclusion of literature in English programmes at tertiary level, the findings indicate that the majority of respondents (38.5%) were undecided. Figures 4 and 5 below show the breakdown of responses.
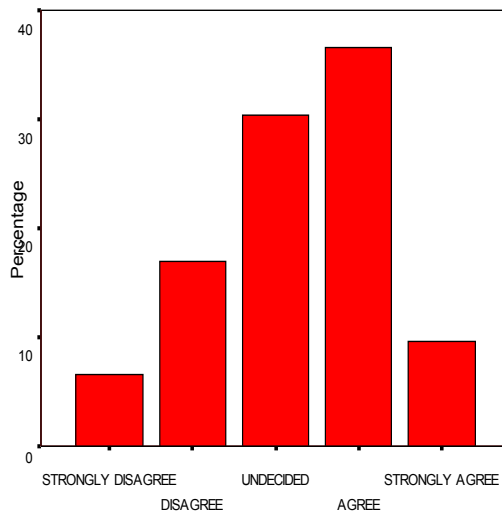

**FIGURE 4: Producing well rounded technical
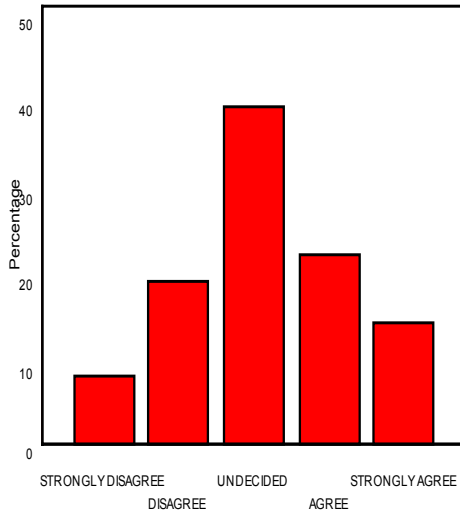graduates' through literature**

**FIGURE 5: Producing marketable technical
graduates through literature**

In relation to the stance of technical learners on literature for
the understanding of technical content, the findings from the analysis
indicate that the majority of respondents from the engineering
programmes (38.9%) seem to be undecided if exposure to literature
can help them understand issues in the engineering profession. 40.5%
of the engineering respondents were also undecided if there exists a
connection between issues discussed in engineering texts and literary
texts. Interview excerpts seem to echo similar sentiments.

*I don't know why we need to take this subject. Even in school
they made us take it but did not tell us why.I only found out
here why we should take the subject. In school easy. Teacher
gives answer. We memorize for SPM. But in university, it
is not the same. It is hard because the lecturer ask us for
the answer. Lucky I can understand what the lecturer said.
(Interviewee I)*

> *What is the connection between literature and engineering? I don't know. (Interviewee C)*

> *Can literature help me understand my engineering subjects? I'm not so sure. I never saw the connection when I was learning it in school or in the foundation level. (Interviewee E)*

> *If you ask me which is more important, definitely my technical subjects. I spend a lot of time reading the literary texts. I can't afford to waste time like this. My technical subjects need lot of reading too. (Interviewee J)*

> *I'm not sure. Both are important for me to be a better student and later a better worker… In the form (questionnaire) it said well rounded and marketable. Well rounded I think yes, but marketable I'm not sure. Engineers or technologists need their technical knowledge to be marketable. I'm not sure. (Interviewee H)*

As indicated in the excerpts above, technical learners' attitudes towards the incorporation of literature in their English programmes are varied. While some support the move, others seem to feel otherwise. It is nevertheless encouraging to find that some technical learners acknowledge the importance of non-technical areas of study, i.e. literature, towards developing their overall competencies. As indicated by Interviewees I, E and H, the issue of the relevance of the subject to their fields of study seems to be the main factor that hampers the technical learners' appreciation and interest for the subject. Failure to understand the relevance of literature for their future career development is probably the reason these learners are also unaware of the benefits literature provides in making them marketable in the workforce. At this juncture, the researchers would like to note that the manner in which the incorporation of literature in English programmes for technical learners is carried out must be scrutinized further to develop literature courses which help enhance the understanding of the learners technical courses.

Perceived needs towards the incorporation of literature in English programmes at tertiary level

This section will discuss the needs of technical learners towards the inclusion of literature in English programmes at tertiary level. Key areas that will be discussed in this section include the following: types of literary genres that enable better understanding of literature; incorporating technology in the tertiary literature classroom; and creating a learning environment that is conducive.

The type of literary genre used in the teaching of literature plays a pertinent role in sustaining the interest of learners in the subject. As indicated in the findings of this study, 53.5% of the engineering and technology respondents have indicated that a combination of classic and contemporary literary texts would be an ideal blend to promote their interest in literature. 51.6% of the respondents have also noted that it is necessary to include literary texts that are relevant to their fields of study to help them appreciate literature better. 58% of the respondents have also indicated the need for the inclusion of literary texts with themes relevant to their areas of study to help them appreciate their respective engineering and technology fields of study. The majority of the respondents (50.7%) also indicated that the type of literary genre used, i.e. poems, short stories or novels should be looked into to feed their interest to learn literature. 63.1% of the respondents noted that it was more interesting to read stories on teenagers or young adults. 59.2% of the respondents also indicated that it was easier to relate to texts with young adult characters. The respondents also indicate the need to incorporate technology in the tertiary literature classroom. A resounding 70% of the respondents indicated strong agreement to the inclusion of movies during literature lessons. 69.6% of the respondents also indicated the need for literature lessons to be made more interesting for technical students.

The qualitative findings, as projected through the excerpts of interviews below provide further clarification.

Use other alternatives, like movies and the internet. Books alone is boring for us. (Interviewee H)

By learning through music, songs and movies, we can get interested in literature. Not just reading the text. (Interviewee E)

Modern literature should be used more often compared to the classic one as the issues are more current and up to date. (Interviewee B)

Why not learn literature during the tutorial time, not the lecture? One hour sometimes not enough to learn everything. That's why some students not interested. Because they can't understand. They need more time to understand. (Interviewee A)

Delivery and content seem to be areas in which positive change should be enforced, as noted by all interviewees. As described in the excerpts above, the interviewees have noted the importance of breaking away from the traditional book centered literature lessons, to more interactive lessons through the incorporation of movies, music and even tasks which promote the use of the internet, as pointed out by Interviewees H and E. According to Interviewee B, more prominence could also be placed on contemporary texts in comparison to classic texts as learners have indicated that issues discussed in contemporary texts are more current. The learners have also indicated the need to look into the delivery mode of literature lessons. Interviewee A stated the need for more contact hours during literature lessons to facilitate better understanding.

The sections above have discussed quantitative and qualitative findings of the study on the perceptions, attitudes and the perceived needs of young adult learners towards the incorporation of literature in English programmes for technical learners. Implications for the incorporation of literature in English programmes for tertiary level technical students will be discussed in the section that follows.

Implications for the inclusion of literature in English programmes at tertiary level for technical learners

This study set out to gauge the perceptions, attitudes and the perceived needs of young adult technical learners towards the incorporation of literature in English programmes. Key perception areas that were focused upon were necessity to learn literature, teaching of literature as a separate component in the tertiary English language programme and literature as a compulsory subject for tertiary level English programmes. In relation to the attitudes of young adult technical learners, the main areas focused upon were learners' attitudes towards learning literature as well as their stance towards literature for the understanding of technical content. In investigating the perceived needs of the young adult technical learners, the key areas researchers looked into were types of literary genres that enable better understanding of literature, incorporating technology in the tertiary literature classroom as well as creating a learning environment that is conducive.

The quantitative and qualitative findings of the study suggest that a majority of the young adult technical learners rather take literature during their foundation or pre-university years instead of their undergraduate years. They perceive literature to be a heavy and difficult subject. As such, they prefer taking the subject during their pre-university or foundation years, when their technical subjects are more manageable, instead of sitting for it during their undergraduate years where the technical subjects tend to be more challenging. Although it would not be much of a problem to introduce the subject at pre-university level, there are several implications that need to be ironed out. Not all tertiary level technical learners go through pre-university or foundation studies. Although private universities offer such courses, public universities absorb students straight into the undergraduate courses. Given such a situation, there would be many technical students, especially those who sit for the STPM to gain entry into universities, would miss the opportunity to take literature.

The researchers would thus like to recommend to the relevant educational agencies and bodies to incorporate this subject as a

compulsory core or elective course in the curriculum of technical courses. Serious implications will come to front if there is improper planning and development of appropriate literature courses for science (technical) based students. As the Ministry of Higher Education aims to expose technical students to literature, it would therefore be worthwhile for the ministry to consider developing a framework for a literature course that tertiary institutions could incorporate into English programmes for their technical learners.

While the initiative of incorporating literature in English programmes of technical students is much lauded, the manner in which this bridging of the arts and the sciences is to be carried out requires much analysis. Technical education must prepare its graduates for the social, ethical and moral responsibilities they will have to face upon embarking on their future careers as engineers and technologists. However, as indicated through the findings of this study, the technical learners do not seem to be able to link the importance of literary studies to their respective fields of study. As such, one manner of bridging this gap is through the inclusion of literary texts that depict moral, ethical and social issues or dilemmas of the professions these learners would embark upon to give them a better understanding of situations they are bound to encounter later in their working life. In ensuring proper selection of texts, the quality, variety and themes present in the text should be given careful consideration.

At this juncture, the researchers would like to make several recommendations for the inclusion of literature in English programmes of adolescent technical learners. There should be an immediate need to conduct a needs analysis of the aspirations and hopes of all relevant parties before incorporating this subject into the English programmes of technical learners. The views of the Education Ministry, teachers and students must be taken into account to be able to develop a creditable course. In addition, reviews of the language and literature curriculum and syllabus design should also be conducted to match the programme objectives of engineering and technology courses and vice versa. Teaching methods and materials should also be monitored closely to ensure a successful implementation.

Conclusion

As revealed through the findings of this research, technical learners are somewhat optimistic of the incorporation of literature in English programmes offered to them. However, it is imperative to make the literature learning experience meaningful and relevant to them. The use of appropriate literary texts and the incorporation of technology in the literature classroom are few ways in which literature can be made more appealing to technical learners. It is important for educators, administrators and policy makers to take heed of the perceived needs of the technical learners as they are important stakeholders who contribute towards the success or failure of the literature courses.

While this study concentrates on the perceptions, attitudes and perceived needs of young adult technical learners, future research can probably be conducted to gauge the perception of educators on the inclusion of literature in tertiary level English programmes for technical learners. Studies can also be conducted to investigate learners and educators perceived needs to teach literature to technical learners at postgraduate level.

It is hoped that the findings of this study will give educators, administrators and policy makers an insight into improving the management and delivery of tertiary level English language programmes which infuse literature in the English language programme for technical learners.

Acknowledgements

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Notes

[1]   At present, the secondary school English language curriculum in Malaysian schools incorporates literature as small 'l' and as big 'L'. The teaching of literature as small 'l' is done through the Class Reader Programme in which literary texts encompassing genres such as poetry and prose are incorporated into the English subject taught from Forms 1-5. The teaching of big 'L' is done through the Literature elective i.e. through the Literature in English Programme (LEP) from Forms 4-5. Students are formally assessed through the Sijil Pelajaran Malaysia (SPM).

[2]   According to Creswell et al. (2003) using the explanatory mixed method model, qualitative input is gathered to explain and extend quantitative results.

Appendix A – Questionnaire dimensions

Perceptions

I enjoy learning literature.
I like reading literary texts.
It is necessary for a technical student to learn literature at the foundation/ pre-university English language course.
It is necessary for a technical student to learn literature at the undergraduate level English language course.
Literature should be taught as a subject on its own and not as a component of the foundation level English course.
Literature should be taught as a subject on its own and not as a component of the undergraduate level English course.
Literature is important for my academic achievement as a technical student.
It is better to learn literature through lectures.
It is better to learn literature through tutorials.
It is better to learn literature through CALL labs.
I can learn literature on my own.
Issues discussed in the literature class help me understand my technical subjects better.
Technical students need to learn literature to improve their language skills.
It is time consuming to read literary texts.
Literature should be a component of the syllabus for English courses taken by technical students in addition to grammar, reading, writing, listening and speaking activities.
Literature should only be taken by students majoring in engineering or technology courses.
Literature should only be taken by students majoring in arts or language courses.
Literature should be made compulsory for all technical students studying English at the pre-university level.

| Literature should be made compulsory for all technical students studying English at the undergraduate level. |
| Technical students need to be good in literature to improve their language skills. |
| Literature can help me improve my reading skills. |
| Literature can help me improve my writing skills. |
| Literature can help me improve my speaking skills. |
| Literature can help me improve my listening skills. |
| Literature can help me improve my grammar. |
| Literature can help me improve my vocabulary. |

Attitudes

| Classic literary texts like Shakespeare's works should be used in the literature class to promote technical students interest in literature. |
| A mixture of classic and modern texts should be used to promote technical students interest in literature. |
| The literary texts used in the English 1 and English 2 literature classes helped me to develop a sense of appreciation for literature. |
| I read literary texts for my English language lessons because I want to score high marks in my English class. |
| Reading literary texts with themes that are relevant to my field of study would help me appreciate literature better. |
| Reading literary texts with themes that are relevant to my field of study would help me appreciate my field of study better. |
| Stories on teenagers/young adults are more interesting to read than stories on adults. |
| It is easier to relate to the characters in young adult literary texts compared to texts with adult characters. |
| Texts with teenage characters help me understand myself better. |
| Texts with teenage issues and concerns should be taught to increase technical students' awareness of the importance of learning literature. |
| It is easier to understand short stories than poems. |

It is easier to understand short stories than novels.
The literary texts used in class must be culturally sensitive.
The type of genre (poem, short stories, novels) used in the literature class can affect technical students interest to learn literature.
Incorporating movies into literature lessons would help technical students gain interest in literature.

Perceived needs

I study hard for my technical subjects rather than literature.
Literature lessons should be made more interesting for technical students.
Literature is difficult because it requires deep interpretation.
I fear English language exams that contain questions pertaining to literature.
I read the literary texts before my literature lessons.
Literature is not relevant for me to take as a technical student.
Literature is more important than my technical subjects.
Literature is as important as my technical subjects.
My time is spent reading materials for my technical subjects rather than literature.
Literature can help me improve my reading habits.
I enjoy analyzing and interpreting literary texts.
Literature lessons motivate me to develop my English language skills.
Analyzing and interpreting literary texts helps me think critically.
There is a link between literature and the engineering career.
There is a link between literature and technology.
I will choose to read literary texts to improve my reading skills.
Literature helps improve critical thinking ability.
Literature helps me to think in a creative way.
Literature can help engineering students understand the world of an engineer.

Issues in engineering are more interesting than issues in literary texts.
There is no connection between issues discussed in literary texts and in engineering texts.
It is a waste of time for technical students to learn literature.
Incorporating literature to the curriculum of engineering and technology courses is important to achieve well roundedness.
I feel relaxed when I am in my literature lecture.
Literature can make technical students more marketable in the industry.

Appendix B – Semi-Structured Interview Guide

NAME OF INTERVIEWEE	:
DATE OF INTERVIEW	:
VENUE OF INTERVIEW	:
START TIME	:
END TIME	:

OPENING STATEMENT

1. Greet interviewee
2. State objectives of research
3. Explain the manner in which interview will be conducted. Ensure interviewee of confidentiality.

INTERVIEW QUESTIONS

1. Is literature difficult for you to understand? Why?
2. In your opinion, is there a relationship between literature and engineering?
3. In your opinion, is there a relationship between literature and technology?

4. Do you think literature should be made a component of foundation and undergraduate English language programmes for engineering students? Why?

5. Do you think literature should be made a component of foundation and undergraduate English language programmes for technology students? Why?

6. How can literature be made more interesting for engineering students?

7. How can literature be made more interesting for technology students?

8. How would you describe your experience learning literature when you took English 1 and English 2?

  (*Probe for: positive and negative experiences, difficulties, effectiveness, overall satisfaction*)

9. Would you register for a literature course if it was not made compulsory for you to take as an engineering or technology student by UTP? Why?

10. Is there anything else you would like to share?

Note: Probe all answers as needed. Questions not highlighted in BOLD are optional.

CLOSING STATEMENT

1. Thank interviewee for taking part in the interview