READY FOR THE WORKPLACE? ENGLISH LANGUAGE AND LITERACY SKILLS AMONG PUBLIC UNIVERSITY STUDENTS IN MALAYSIA

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Abstract

A new living landscape is emerging where economic, social, and technological transformations are altering every aspect of contemporary workplace settings. The ever-evolving new media technologies and the rising demands for high performance knowledge workers pose tremendous challenges to students who want to be seen as literate and ready to function fruitfully in the workplace. This article looks at final year students in public institutions of higher learning in Malaysia and their readiness to enter the global workplace in the digital age. The findings show that the students believe that they are ready where they are competent in several aspects of literacy skills like communication skills and working with multicultural groups. However, the students seem to be facing great difficulty in English language and leadership skills. By way of conclusion, this paper argues for serious attention and a framework for action that coordinates the efforts of the Government of Malaysia and other interested partners to improve literacy levels to ensure that Malaysian students graduating from public institutions of higher learning can thrive and contribute to the globalising workplace.

KEYWORDS: ENGLISH LANGUAGE, LITERACY, STUDENTS, HIGHER LEARNING

Introduction

Global economic competition, within economies based on the effective use of information and communication as well as the rapid emergence of the Internet as a powerful new technology for information and communication, are critical features in the workplace and in our everyday living today (Alvermann *et al.*, 2012; Kell & Vogl, 2007). The world of work, in particular, is undergoing fundamental transformation as networked, digital technologies provide increasingly greater access to larger amounts of information for successful performance in a globally competitive information economy (Naisbitt, 1994). The efficient use of information skills in the current competitive workplace indicates that the focus on English language and literacy skills becomes more important (Ambigapathy *et al.* 2013). Institutions of higher learning need to ensure that their graduates are proficient in the language and have the essential aptitude and competence to function productively as knowledge workers in high performance workplaces (Uchida, *et al.*, 1996)

The overwhelming information in the Internet which evolves rapidly within a short time presents many diverse documents and opinions on everyday work matters (Kalantzis & Cope, 2005; Kress,

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2003). Graduates joining the workforce need to synthesise information across different sources, to evaluate arguments on a variety of dimensions, to understand varying perspectives on an issue, and to assess the credibility of sources of information. The information-rich workplace requires graduates who can read, interpret, and evaluate a multitude of often-conflicting information and opinions regarding economic, social and political choices (Karchmer-Klein & Shinas, 2012; Ambigapathy, 2010).

Languages in an information-rich workplace impinge upon globalisation in bringing together the world's culture and economy (Coiro *et al.*, 2008). As English language is the second most widely spoken language in the world, it creates a greater impact on the local and global communities that are intricately interwoven in many ways. English has become the global defacto standard used in business, cultural and political exchange. According to Cope & Kalantzis (2000), English is becoming the language of choice of the marketplace and a universal medium of business communication worldwide—a common denominator in international affairs. Currently, it is evident that English is the language of international communication, but it is also evident that the dominance of English today is present in workplace settings and a lack of English language skills creates a sense of anxiety and insecurity (Ambigapathy *et al.*, 2007). This global evolution of the English language, specifically when most of the world's digital information is being recorded in English, has a huge effect on globalisation and English speaking graduates are at a definite advantage when it comes to carrying out works operations and communicating with the world as a whole.

In order to stay competitive in today's global economy, we need skilled and literate workers who can read, write, compute, solve problems, and communicate well (Jenkins *et al.*, 2006). Apart from proficient English language skills, students heading to the workplace must also acquire a range of other literacy skills to live, learn, and work successfully in an information-rich economy (Leu *et al.*, 2004; Singh *et al.*, 2002). In preparing for the workforce, students must also have cognitive abilities, such as logical thinking, problem solving, analysis, careful observation, and data management. Many employers from different industries contend that these abilities are highly valued in the workplace and vital to successful performance in the present digital age.

As societies around the world are embracing globalisation in the information age, Malaysia is aware of the vital need to be literate in English in order to access the wealth of data available and achieve a reasonable measure of success and stature in trade and industry. Like many other countries, Malaysia experiences turbulent moments and changes in literacy practices, demand that graduates rethink the nature of their work and the forms of collaboration and practices that will contribute to practices at the workplace. Teaching and learning in schools (Sharifah Maimunah Syed Zin, 2003). Mindful of the priorities needed to improve the problematic nature of literacy practices. It is imperative that we understand some of the patterns of English language skills and literacy practices held by Malaysian graduates as they enter an intricate and multifaceted workplace setting.

The uncertainty before us that needs immediate attention arises with a pertinent question: given the importance of English language and literacy skills, how ready are students from Malaysian institutions of higher learning to confront the knowledge-based globalised labour market and to participate in a democracy facing complex problems?

There are many views that compete to gain currency to persuade educationists and policy makers to take pathways that are able to produce graduates who are equipped with knowledge, skills and technological innovations necessary for successful social and economic participation in the global world (Ambigapathy & Kell, 2007; Kell *et al.*, 2013). Interestingly, the connection between language,

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literacy and the world of work has also emerged as a key controversial issue in academic and public debates in Malaysia in the past few years.

This article looks at final year students in public institutions of higher learning in Malaysia and their readiness to enter the global workplace in the digital age. This study reveals some of the patterns of English language and literacy skills among final year students so that a framework for action that coordinates the efforts of the Government of Malaysia and other interested partners to improve literacy levels can be developed to ensure that Malaysian students graduating from public institutions of higher learning can thrive and contribute to the future generations.

Project framework

It has been widely perceived that the task of defining 21st century literacy skills is complex and challenging. The word 'literacy', is so broad in scope as to have many possible meanings. Literacy today is interwoven into the texture of wider living experiences as it is connected to ways of talking, reading, writing, interacting, thinking, valuing, and believing (Baynham, 1995). It is linked to multimodal vehicles of information and meanings that are created from a variety of viewpoints that reflect the diversity of racial, social, cultural and linguistic backgrounds (Cope & Kalantzis, 2000).

Digital technologies have transformed how workers think, act, and communicate in the workplace. A learned and literate graduate has to be able to engage in the traditional print-based forms of reading and writing, but more importantly, to include the impact and use of information and communication technologies in the everyday work practices. Scholars have adopted the terms '*multiliteracies*' (New London Group), '*multimodality*' (Kress, 2003) and '*New Literacy Studies*' (Lankshear & Knobel, 2003; Coiro, Knobel, Lankshear, & Leu, 2008) to better understand this multi-faceted dimension of literacy in the present day.

Knowledge workers of the Information and Communication Age will not be able to participate effectively in global and local production of knowledge if they do not master the English Language. The world is also developing closer political and social relationships, where the command of English as a language of communication and international understanding is becoming significant for promoting peace, collaboration and friendly relations. As noted by Singh *et al.*, (2002), the emerging workforce needs to be able to listen, speak, read and write persuasively, critically interpret and analyse information in English, carry out complex negotiations and collaborations in English.

Sushames (2005, p. 46) makes the assertion that students in higher learning have to make sure that they are well-equipped with as much literacy skills as possible to prepare themselves for the unpredicted future workplace. Based on the discussion above, this work adopts a conception based on the four clusters in the 21st century literacy skills framework introduced in enGauge's 21st Century Skills: Literacy in the Digital Age (North Central Regional Educational Laboratory and Metiri Group, 2003).

This framework encompasses four clusters which are (i) digital-age literacy, (ii) effective communication, (iii) inventive thinking and (iv) high productivity. Each skill cluster is further broken down into representative skill sets. Following the works enGauge's 21st Century Skills, the specific skills that are integral to be a literate knowledge worker in the current global and competitive living and workplace domains are as follows:

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Digital-Age literacy skills

Simple reading, writing and calculating skills are inadequate today as the new workplace in the digital era requires students to attain proficiency in science, technology and culture as well as gain a thorough understanding of information in multimodal forms.

This cluster comprises the following skills:

- Basic, scientific, economic and technological literacies,
- Visual and Informational literacies,
- Multicultural literacy and global awareness.

The focus on English language literacy is seen as part of the basic literacy in the digital age literacy skills.

Effective communication literacy skills

Effective communication skills are essential for success in today's knowledge-based society as this involves participating in a team, serving clients and customers, negotiating and working with diverse groups of people.

This cluster comprises the following skills:

- Teaming, collaboration and interpersonal skills,
- Personal, social and civic responsibility;
- Interactive Communication.

Inventive thinking literacy skills

This cluster refers to intellectual capabilities and life skills in confronting complex situations and in understanding the consequences of doing so.

This cluster comprises the following skills:

- Adaptability and managing complexity,
- Self-Direction,
- Curiosity, creativity and risk taking,
- Higher-order thinking and sound reasoning.

High productivity literacy skills

This cluster of skills determines whether a person aims to generate fruitful output and outcomes in the work that is undertaken.

This cluster comprises the following skills:

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- Prioritizing, planning, and managing for results;
- Effective use of real-world tools;
- Ability to produce relevant, high-quality products.

The connections between higher education and the world of work is a frequently discussed issue of higher education and there have been vociferous claims of shortages of skills, oversupplies and mismatches between the competencies of graduates and the needs of the workplaces. The above framework which has been adapted from the enGauge 21st Century skills will provide helpful insights with regard to the types of work tasks and the extent to which the knowledge acquired during the course of study enhances the capacity of students to engage with the demands of the new workplace.

Methodology

Information on English Language and other literacy skills was acquired through the distribution of questionnaires among 1200 final year students in public institutions of higher learning from 2007 - 2011. The instrument used in this study was a questionnaire that consists of two sections. Section A solicited selected personal background information of subjects and section B consisted of statements related to students' views on their command of literacy skills. The questionnaire consisted of 74 questions, grouped in four clusters, namely digital-age literacy skills, effective communication literacy skills, inventive thinking literacy skills and high productivity literacy skills. The subjects' responses were analysed using descriptive statistics. The mean score related to the four clusters of skills were calculated to map trends of English language and literacy patterns among students in public institutions of higher learning. The answers were based on a 5-point scale, ranging from 1 to 5 namely; 1 equals as totally disagree, 2 equals as strongly disagree, 3 equals as agree, 4 equals as strongly agree and 5 equals as totally agree. The mean score was used to map English language and literacy skills among students in institutions of higher learning.

Findings and discussion

Digital-Age literacy skills

As noted earlier, this cluster of skills encompass basic literacy (including English Language), economic and technological literacies; visual and informational literacies, as well as Multicultural literacy and global awareness.

Table 1: Digital-Age literacy cluster skills

	Basic Literacy	Mean
1.	I speak, read and write in English fluently.	2.2
2.	I speak, read and write in 3 or more languages.	2.3
3.	I can do basic arithmetic computing.	2.4
4.	I can do basic mathematical problem solving.	2.9
5.	I can ask, find, or determine answers to questions derived from curiosity about everyday experiences.	3.1
6.	I can read and understand articles about science and talk about it.	3.2
7.	I am able to evaluate the source and arguments of the scientific information.	3.4

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8.	I can use technology in both social and personal context to produce better quality work.	2.6
9.	I can use communication tools to reach out to the world and communicate ideas in powerful ways.	2.4
10.	I can use technology to identify and solve complex problems in real-world contexts.	2.6
11.	I understand basic elements of visual design, technique, and media.	2.8
12.	I can comprehend representational, explanatory, abstract, and symbolic images.	2.8
13.	I am an effective visual communicator.	3.1
14.	I can identify and prioritize different sources of information, including text, people, video, audio, and database.	2.8
15.	I can evaluate information in terms of credibility and social, economic, political, legal, and ethical issues that may impact it.	2.6
16.	I can use retrieved information to accomplish a specific purpose.	2.8
17.	I appreciate and accept similarities and differences in beliefs, appearances, and lifestyles.	3.2
18.	I am sensitive to issues of bias, racism, prejudice, and stereotyping.	3.4
19.	I can communicate, interact, and work with individuals from other cultural groups.	3.4
20.	I am knowledgeable about the nations of the world (historically, politically, economically, technologically, socially, linguistically, and ecologically).	2.8
21.	I can recognise, analyse, and evaluate major trends in global relations and the interconnections of these trends with both their local and national communities.	2.7
22.	I participate in the global society by staying current with international news.	2.3
23.	I actively engage in public issues that advance public good.	2.6

Table 1 above shows the digital-age literacy skills among students in public institutions of higher learning. It is found that the students have a very low mean score in language proficiency where they strongly disagree that they can speak, read and write in English fluently (2.2). The students also note that to a small extent, they can speak, read and write in 3 or more languages (2.3). The students also appear to be less confident with technological literacy, suggesting that they are less self-assured that they can use communication tools to reach out to the world and communicate ideas in powerful ways (2.4). For statement 10, the students are less convinced that they can use technology to identify and solve complex problems in real-world contexts (2.6). The students appear positive about their competency in visual literacy. As for global awareness, the students appear less poised to participate in the global society by staying current with international news (2.3).

The strengths (Table 2) and weaknesses (Table 3) of the students were analysed based on the mean scores obtained in the study. For mean scores which were 3.0 or above, students were regarded as having strengths in the literacy skills whereas a mean score of below 3.0 means that students were regarded as weak in the literacy skills.

Table 2: Digital-Age literacy skills: Student strengths

No	Strengths (mean 3.0 and above)	Mean
Scientific Literacy		
1.	I can ask, find, or determine answers to questions derived from curiosity about everyday experiences.	3.1
2.	I can read and understand articles about science and talk about it.	3.2
3.	I am able to evaluate the source and arguments of the scientific information.	3.4
Visual Literacy		
4.	I am an effective visual communicator.	3.1
Multicultural Literacy		

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5.	I appreciate and accept similarities and differences in beliefs, appearances, and lifestyles.	3.2
6.	I am sensitive to issues of bias, racism, prejudice, and stereotyping.	3.4
7.	I can communicate, interact, and work with individuals from other cultural groups.	3.4

Table 3: Digital-Age literacy skills: Student weaknesses

No.	Basic Literacy (mean below 3.0)	Mean
1.	I speak, read and write in English fluently.	2.2
2.	I speak, read and write in 3 or more languages.	2.2
3.	I can do basic arithmetic computing.	2.4
4.	I can do basic mathematical problem solving.	2.9
Technological Literacy		
5.	I can use technology in both social and personal context to produce better quality work.	2.6
6.	I can use communication tools to reach out to the world and communicate ideas in powerful ways.	2.4
7.	I can use technology to identify and solve complex problems in real-world contexts.	2.6
Visual Literacy		
8.	I understand basic elements of visual design, technique, and media.	2.8
9.	I can comprehend representational, explanatory, abstract, and symbolic images.	2.8
Informational Literacy		
10.	I can identify and prioritize different sources of information, including text, people, video, audio, and database.	2.8
11.	I can evaluate information in terms of credibility and social, economic, political, legal, and ethical issues that may impact it.	2.6
12.	I can use retrieved information to accomplish a specific purpose.	2.8
Global Awareness		
13.	I am knowledgeable about the nations of the world (historically, politically, economically, technologically, socially, linguistically, and ecologically).	2.8
14.	I can recognise, analyse, and evaluate major trends in global relations and the interconnections of these trends with both their local and national communities.	2.7
15.	I participate in the global society by staying current with international news.	2.3
16.	I actively engage in public issues that advance public good.	2.6

It is encouraging to note that the students feel positive about certain aspects of scientific and multicultural literacy and this would certainly help them execute their workplace functions in competent and resourceful ways. However, the findings also reveal the weakness of the students in language matters, specifically in English language proficiency. The findings also suggest that the students have many difficulties with other aspects of digital age literacy, especially in evaluating information in terms of credibility; using technologies in delivering their ideas in powerful ways; as well as coping with global developments to make sense of trends in global relations and interconnectedness that might impinge upon the daily work operations.

Effective communication literacy skills

Table 4 below shows the analysis of the effective communication cluster skills which comprises of teaming, collaboration and interpersonal skills; personal, social and civic responsibility; and interactive communication.

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Table 4: Effective communication cluster skills

	Teaming and Collaboration	Mean
1.	I am willing and able to take on different roles and tasks within the group to accomplish a final product.	3.2
2.	I am open and honest with ideas, concerns, and values of my group members.	2.8
3.	I share personal understandings and resources with my group members.	3.2
4.	I think that working in groups is a waste of time.	2.1
Interpersonal Skills		
5.	I am aware of and able to manage my emotions during face-to-face and virtual interactions.	2.9
6.	I can manage my behaviour during social interactions.	2.7
7.	I manage conflict effectively by devising win-win solutions.	2.2
Personal Responsibility		
8.	I adhere to protocols and ethics when using technology.	2.8
9.	I practice responsible use of technology systems, information and technology that bring about public good.	2.6
10.	I understand the global implications of personal actions within the World Wide Web system.	2.4
11.	I can work without supervision.	2.5
Social and Civic Responsibility		
12.	I recognise the importance of citizens' access to and use of information in a democratic society.	2.8
13.	I actively engage in public discourse and raise public awareness on ethical issues raised by new, emerging technologies.	2.2
14.	I promote positive technological changes that advance the public good.	2.1
Interactive Communication		
15.	When selecting modes of interaction, I choose media and processes appropriate to purpose and audience.	2.8
16.	I can manage electronic communication efficiently and effectively.	3.2
17.	I listen well, seek mutual understanding, welcome full sharing of information, and consider others' views before commenting.	2.9
18.	I can use effective communication and persuasive strategies every day.	2.4

For interpersonal skills, in statement 28, the students strongly agree that they are aware of and able to manage emotions during face-to-face and virtual interactions (2.9). However, the students do not seem to have good ability to handle conflict effectively as they appear less certain that they can confront disputes and differences in a fruitful manner (2.2). Interestingly, the students also agree that they can use effective communication and persuasive strategies every day (2.4). In addition, the students strongly agree that they have the ability to manage electronic communication efficiently and effectively (3.2).

Table 5 and 6 reveal the strengths and weaknesses of communication skills among the students in public institutions.

Table 5: Effective communication literacy skills: Student strengths

No.	Teaming and Collaboration	Mean
1.	I am willing and able to take on different roles and tasks within the group to accomplish a final product.	3.2
2.	I share personal understandings and resources with my group members.	3.2
Interactive Communication		
3.	I can manage electronic communication efficiently and effectively.	3.2

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The strengths of communications literacy skills falls in several aspects like taking on different roles and tasks within the group and sharing personal understandings and resources with group members. Still, the study reveals that the students face an uphill task as they counter more weakness than strengths in preparing themselves for the knowledge-rich workplace.

Table 6: Effective communication literacy skills: Student weaknesses

No.	Teaming and Collaboration	Mean
1.	I am open and honest with ideas, concerns, and values of my group members.	2.8
Interpersonal Skills		
2.	I am aware of and able to manage my emotions during face-to-face and virtual interactions.	2.9
3.	I can manage my behaviour during social interactions.	2.7
4.	I manage conflict effectively by devising win-win solutions.	2.2
Personal Responsibility		
5.	I adhere to protocols and ethics when using technology.	2.8
6.	I practice responsible use of technology systems, information and technology that bring about public good.	2.6
7.	I understand the global implications of personal actions within the World Wide Web system.	2.4
8.	I can work without supervision.	2.5
Social and Civic Responsibility		
9.	I recognise the importance of citizens' access to and use of information in a democratic society.	2.8
10.	I actively engage in public discourse and raise public awareness on ethical issues raised by new, emerging technologies.	2.2
11.	I promote positive technological changes that advance the public good.	2.1
Interactive Communication		
12.	When selecting modes of interaction, I choose media and processes appropriate to purpose and audience.	2.8
13.	I listen well, seek mutual understanding, welcome full sharing of information, and consider others' views before commenting.	2.9
14.	I can use effective communication and persuasive strategies every day.	2.4

According to the findings of the study, the students seem to assert that they have difficulties to understand the global implications of personal actions within the World Wide Web system. Further, they note that they struggle to actively engage in public discourse and raise public awareness on ethical issues raised by new emerging technologies. This is an area that warrants attention as many organisations have specific policies and regulations with regard to content and interactive activity on the Internet. The arena of social media, for example, poses many challenges as it is common to find users post comments and videos on numerous matters that can create risks for their personal and professional career. Other troubling trends found in the findings are that the students feel that it can be hard to work without supervision and to use effective communication and persuasive strategies every day.

Inventive thinking literacy skills

Table 7 below presents the six skills set for the inventive thinking cluster. This cluster refers to intellectual capabilities and life skills in confronting complex situations and in understanding the consequences of doing so.

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Table 7: Inventive thinking cluster skills

	Adaptability / Managing Complexity	Mean
1.	I am positive about changes and can adapt to them quickly and calmly.	2.6
2.	I believe that problems can be solved using different strategies.	3.2
3.	I manage multiple goals and sub-goals in service of larger ones.	3.1
Self-Direction		
4.	I plan and set goals for my learning.	2.3
5.	I develop, focus and maintain my interest in my learning activities.	3.0
6.	I use what I have learnt to adapt to new situations.	3.2
Curiosity		
7.	I react positively to novel elements in the environment and often seek new experiences.	2.9
8.	I explore novel elements in the environment by moving toward, manipulating, or asking questions about those elements.	3.1
9.	I make an active attempt to learn more than is required.	2.8
10.	I seek help when needed.	2.2
Creativity		
11.	I always produce original and unique products.	2.8
12.	I am flexible and adaptable.	3.2
13.	I am passionate and committed to learning, yet analytical and objective.	3.4
Risk Taking		
14.	I am willing to tackle challenging tasks, even when success is uncertain.	2.8
15.	I only choose tasks involving reasonable or intermediate risk rather than excessive risk.	2.7
16.	I am willing to be incorrect and take on tasks that might result in errors.	2.2
Higher-Order Thinking and Sound Reasoning		
17.	I always identify the essential elements in a problem as well as the interaction between those elements.	2.6
18.	I create and apply criteria to gauge the strengths, limitations, and value of information, data, and solutions in productive ways.	3.1
19.	I build new solutions through novel combinations of existing information.	3.1

The study reveals that students agree that they will be able to use what they have learnt to adapt to new situations (3.2). The students, however, are less confident with their risk taking ability, where they disagree that they are willing to tackle challenging tasks, even when success is uncertain (2.8). Table 8 and 9 below reveal the strengths and weaknesses of inventive thinking skills among the students.

Table 8: Inventive thinking literacy skills: Student strengths

No.	Adaptability / Managing Complexity	Mean
1.	I believe that problems can be solved using different strategies.	3.2
2.	I manage multiple goals and sub-goals in service of larger ones.	3.1
Self-Direction		
3.	I develop, focus and maintain my interest in my learning activities.	3.0
4.	I use what I have learnt to adapt to new situations.	3.2
Curiosity		
5.	I explore novel elements in the environment by moving toward, manipulating, or asking questions about those elements.	3.1
Creativity		
6.	I am flexible and adaptable.	3.2
7.	I am passionate and committed to learning, yet analytical and objective.	3.4

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Higher-Order Thinking and Sound Reasoning		
8.	I create and apply criteria to gauge the strengths, limitations, and value of information, data, and solutions in productive ways.	3.1
9.	I build new solutions through novel combinations of existing information.	3.1

Table 9: Inventive thinking literacy skills: Student weaknesses

No.	Adaptability / Managing Complexity	Mean
1.	I am positive about changes and can adapt to them quickly and calmly.	2.6
Self-Direction		
2.	I plan and set goals for my learning.	2.3
Curiosity		
3.	I react positively to novel elements in the environment and often seek new experiences.	2.9
4.	I make an active attempt to learn more than is required.	2.8
5.	I seek help when needed.	2.2
Creativity		
6.	I always produce original and unique products.	2.8
Risk Taking		
7.	I am willing to tackle challenging tasks, even when success is uncertain.	2.8
8.	I only choose tasks involving reasonable or intermediate risk rather than excessive risk.	2.7
9.	I am willing to be incorrect and take on tasks that might result in errors.	2.2
Higher-Order Thinking and Sound Reasoning		
10.	I always identify the essential elements in a problem as well as the interaction between those elements.	2.6

The student strengths can be seen in the ways they perceive their inventive thinking literacy skills. Students assert that they can manage multiple goals and that they are able to maintain a few higher-order thinking and sound reasoning skills to deliver constructive outcomes in the workplace. The findings also indicate that they may need help in certain skills like planning and setting goals, making an active attempt to learn more than is required and seeking help when needed. The students also appear to be cautious about risk taking.

High productivity literacy skills

As noted in the discussion of the conceptual framework underpinning this study, this cluster of skills determines whether a person aims to generate fruitful output in the work that is undertaken. High productivity literacy skills encompasses prioritising, planning, and managing for results, effective use of real-world tools, and the ability to produce relevant, high-quality products. As the findings of the tables below explain, the students demonstrate strong and weak outlooks in different skills in this cluster of literacy skills.

Table 10: High productivity cluster skills

Prioritising, Planning and Managing for Results		Mean
1.	I can frame meaningful questions that provide clear direction to my goals.	2.8
2.	I use time and resources efficiently and effectively.	3.0
3.	I monitor and self-evaluate effectively throughout the implementation of my plans.	2.4
Effective Use of Real-World Tools		
4.	I understand the value of tools for a particular field (e.g.: hardware, software, networking, etc.).	3.4

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5.	I enhance my learning through the usage of general technology tools and those specific to a field of study.	3.1
6.	I document and write technical manuals to guide others.	2.0
Ability to Produce Relevant, High-Quality Products		
7.	I always ensure that the content of the product is accurate, carefully researched, and well-documented.	2.8
8.	I use a variety of media (text, video, audio) and technology tools to add value to my products.	2.9
9.	I integrate and apply technological, information, and visual literacies to generate “knowledge products”.	3.2
10.	I am willing to work hard and persevere to attain success.	3.1
11.	I think I am a good learner.	3.2
12.	I listen respectfully and objectively and offer constructive feedback.	2.4
13.	I am willing and able to take on different roles and tasks to accomplish shared ideas.	3.2
14.	I believe I have leadership qualities.	2.8

The study finds that the students strongly agree that they enhance their learning through the usage of general technology tools and those specific to a field of study (3.1). Further, they agree that they listen respectfully and objectively and offer constructive feedback (2.4). It is also encouraging to note that the students strongly agree that they are willing and able to take on different roles and tasks to accomplish shared ideas (3.2). However, the students seem less convinced that they have leadership qualities (2.8). The strengths and weaknesses in Literacy skills as deemed by the students are illustrated in Table 11 and Table 12 below.

Table 11: High productivity literacy skills: Student strengths

No.	Prioritising, Planning and Managing for Results	Mean
1.	I use time and resources efficiently and effectively.	3.0
Effective Use of Real-World Tools		
2.	I understand the value of tools for a particular field (e.g.: hardware, software, networking, etc.).	3.4
3.	I enhance my learning through the usage of general technology tools and those specific to a field of study.	3.1
Ability to Produce Relevant, High-Quality Products		
4.	I integrate and apply technological, information, and visual literacies to generate “knowledge products”.	3.2
5.	I am willing to work hard and persevere to attain success.	3.1
6.	I think I am a good learner.	3.2
7.	I am willing and able to take on different roles and tasks to accomplish shared ideas.	3.2

Table 12: High productivity literacy skills: Student weaknesses

No.	Weaknesses (mean below 3.0)	Mean
Prioritizing, Planning and Managing for Results		
1.	I can frame meaningful questions that provide clear direction to my goals.	2.8
2.	I monitor and self-evaluate effectively throughout the implementation of my plans.	2.4
Effective Use of Real-World Tools		
3.	I document and write technical manuals to guide others.	2.0
Ability to Produce Relevant, High-Quality Products		
4.	I always ensure that the content of the product is accurate, carefully researched, and well-documented.	2.8
5.	I use a variety of media (text, video, audio) and technology tools to add value to my products.	2.9

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6.	I listen respectfully and objectively and offer constructive feedback.	2.4
7.	I believe I have leadership qualities.	2.8

Discussion

On the whole, the study reveals that the students in public institutions express some readiness in acquiring information-rich related literacy skills for the new knowledge workplace in the coming years. The study shows that from the 74 statements presented in to the students, they assert that they bare good at 26 literacy skills and weak in 48 literacy skills. From the mean scores collected, it is found that the students are strong (with a mean score of 3.4 and above) in the following areas:

- Evaluating the source and arguments of scientific arguments.
- Sensitive to issues of bias, racism, prejudice and stereotyping.
- Communicating, interacting and working with individuals from other cultural groups.
- Passionate and committed to learning, yet analytical and objective.
- Understanding the value of tools for a particular field (hardware, software, and networking).

According to the study, the students are weak (with a mean score less than 2.5) in the following areas:

- Speaking, reading and writing in English fluently.
- Speaking, reading and writing in 3 or more languages.
- Managing conflict effectively by devising win-win solutions.
- Promoting positive technological changes that advance the public good.
- Seeking help when needed.
- Willing to be incorrect and take on tasks that might result in errors.
- Documenting and writing technical manuals to guide others.
- Listening carefully and objectively and offering constructive feedback.

The findings of this study highlight how students in public institutions are able to be active and engage with certain aspects of digital age literacy skills, effective communication skills, in inventive thinking literacy skills and in high productivity literacy skills. The students appear to be comfortable when communicating, interacting and working with individuals from other cultural groups as well as using technology in basic ways to access information, acquire knowledge, and disseminate new ideas. The students further attempt to manage interactions in a variety of contexts that can generate creative and fruitful routines and procedures. In these scenarios, students have the potential to be involved in diverse literacy practices that prepare them for the intricate knowledge-based workplace.

However, as witnessed in the analysis of findings, there are several areas of literacy that require serious attention. Clearly, the most important finding relates to English language skills where the students indicate that they have difficulties in speaking, reading and writing in English fluently. This is a troubling finding which will hinder the students' professional development in their future careers, especially if they cannot participate in the English language dominated marketplace, in international affairs and in the business communication worldwide. The dominance of English in the present workplace is evident and if the students are not proficient in reading, writing and speaking in English, they will confront difficulties in achieving personal growth and in functioning effectively in the globalising workplace. Other notable areas of literacy in inventive thinking literacy skills and high

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productivity literacy skills also have to be examined to ensure that the final year students can engage in rich learning experiences that bring them success in their professions.

Conclusion

Literacy requirements are continually evolving and becoming more demanding. The new complex workplace settings need knowledge workers who are fluent in English, competent in digital age literacies, effective communication skills, in inventive thinking literacy skills as well as in high productivity literacy skills. Apart from being proficient in English, the students need to prepare for the realities of the marketplace by being independent, lifewide and lifelong thinkers. This is about problem solving, teamwork, knowledge of the world, adaptability and comfort in a global world of technologies, conflict and complexity in heading for workplace realities.

This study was interested in English language and literacy skills among students in institutions of higher learning with a focus on their readiness to confront the knowledge-based globalised labour market and to participate in a democracy facing complex problems. Malaysia will need to deal with great changes in the local and global environment to pursue programmes that enhance the students' capability to compete globally, to strengthen national unity and to bring about a better distribution of income and wealth as well as a higher quality of life. Students pursuing higher education bearing degree scrolls, should be literate enough to confront the demands of work in this digital.

This paper has attempted to stimulate conversations about English language and literacy by presenting a framework that explores students' views on their readiness to engage in diverse work activities. The study has attempted to establish patterns of literacy among students in public institutions of higher learning, specifically in engaging with numerous skills under the four clusters of digital age literacy skills, effective communication literacy skills, inventive thinking literacy skills and high productivity literacy skills. The study brings out some positive features of the final year students in Malaysian public institutions of higher learning as it reveals that they are ready to step into the information-rich workplaces with certain facets of new literacy skills like communicative and cultural competence to shape understandings of their workplace. There are, however, some notable issues like the capacity to speak, read and write in English fluently; the ability to speak in three or more languages, leadership qualities and staying current of global news that remain as challenging facets of literacy that warrant critical attention and action. A monolingual student, and one who is less confident in conversing in English language would face tremendous isolation in the contemporary setting as knowledge workers communicate with one another on various aspects and engage in social, political and economic relationships. Staying current of global news is also a critical factor as global perspectives and experiences help pave the way in increasing awareness of and commitment to promoting interconnected cultures of learning and intellectual thinking.

In the contemporary global information era, the debate on literacy skills and practice and the directions in which it could develop to bring about social and intellectual advancement is an imperative one. The understanding of the changing contours in the learning environment surrounding us and its influence in the existing reading and writing practices, the home, primary and secondary schools and the higher education and the necessity to talk in terms of different literacies signal a challenging task for educators, policy-makers, managers of education and literacy scholars. It is crucial to provide essential tools for study that are linked effectively to meaningful and productive participation so that students can respond effectively to the dramatic changes occurring in the domains of personal life, working life and community life at both local and global levels.

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In this global world, we can no longer view ourselves as single-focus, stand-alone educators, administrators or curriculum experts. The diversities surrounding us and the significance of new technologies call for new approaches to learning and living to respond to the new demands of working and public life. This study has indicated that there are serious problems that need to be addressed, especially in bridging gaps between the literacy skills of students and the demands at the workplace settings. It is therefore crucial for institutions of higher learning to re-examine all aspects of higher learning so that they provide experiences where students can gain valuable skills and understanding so that they can make informed decisions about their futures. If we do not address changes at the institutional or policy level, we will be producing students who are unable to effectively and efficiently use skills and tools. Unable to engage in processes of interaction, expression and learning productively; we will be producing 'functionally illiterate' graduates.

Assuming that students' perceptions of their literacy strengths and weaknesses, it is important for stakeholders in higher education to unpack what the students are really saying and in turn put the anxieties, fears and opportunities into an educational framework that will build on student capabilities to take on the challenges of the workplace more confidently.

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