

School Resource Center and Students' Civilization in Digital Age

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Abstract: In the 21st century, the School Resource Centre (SRC) is essential as an innovative educational practice that supports teaching-learning in the digital age. Previous studies have highlighted the beneficial roles of an SRC in terms of collections, SRC programs, and the provision of a conducive learning environment to school communities. However, due to the meaningful impact of technology, SRCs need to transform their traditional roles to more modern roles in the digital age in order to bring knowledge that is alive, interesting and relevant to meet users' needs and demands, especially the millennials. The millennial generation is comprised of digital immigrants who are very competent in using technology devices but still lack information literacy skills and are marked by uncertainty because they face information overload due to the high dependency on the Internet and inability to solve real-life problems. In this study, the millennial generation was narrowed to secondary students aged between 13-17 years old. This paper aims to determine the type of activities held in SRCs that give impact on students' civilization and support them in developing life-long learning habits which will enable them to be knowledgeable and responsible citizens in a civilized society. A survey was distributed to secondary students, and findings show that there is a positive indication with a 4.21 mean value (with Likert scale ranging between 1 to 5) on civilization for the use of SRCs. Education itself is evolving through changes in the curricula and use of enhanced technology which have changed the way students access information and interact with others in the civilized society. It is hoped that other than becoming information literate and knowledgeable persons, students can also show evidence of moral and intellectual advancement by being humane, ethical and reasonable as well as have the capabilities of leading an improved life and social wellbeing.

Keywords: School Resource Centre, Student, Civilization, Digital, Knowledge

1. Introduction

A School Resource Centre (SRC) is a school's physical and digital learning space where reading, inquiry, research, thinking, imagination, and creativity are central to students' information-to-knowledge journey. The existence of SRCs is to provide quality materials and resources to school communities. Indirectly, it is also an added value to modern civilization in terms of contributing to the personal life, social, and cultural growth of students, especially millennials. This generation comprises those born from the years of 1981 till 1996, while anyone born from 1997 onwards are called post-millennials as reported by Pew Research Center, 2018. These millennial generations are still very much dependent on the Internet in their daily lives. In 21st century learning, the idea of civilization is popular with its mission of improving human existence through some strategies, notably the creation of a knowledge-based society. According to Targowski (2019), the concept of "civilization" is applied to a wide diversity of particulars: to the level of religious ideas, customs, technology, manners, and knowledge. In this study, the term civilization refers to the level of knowledge where an SRC acts as a knowledge hub which offers a variety of collections in a conducive learning space to support innovative educational practices of 21st century learning.

It is important to highlight the existence of SRCs in 21st century learning as issues such as hoaxes, information overload, dependency on the Internet and inability to solve real life problems evident in the society. The existence of technology changes students' information-seeking behavior as more students nowadays depend on the Internet to locate information for academic purposes. In the early quarter of 2020, the whole world faced a new global crisis which is the COVID-19 pandemic. This new influence on people's lives has brought about a huge impact on all industries, including the education sector with 1.5 billion students out of school and millions struggling to adapt to online learning, being independent learners, and being information literate. COVID-19 has forced people to reshape learning styles and approaches in education to be geared towards 21st century learning and teaching techniques as more students rely on information gained from social media i.e. Internet. Students need to be able to think critically as well as approach problem-solving needs differently using any related online information resources made available. However, studies have found that the greatest challenge towards students' digital learning remains their lack of digital and information literacy. Almost 50% of students have had negative experiences on the Internet, such as exposure to online pornography and violence alongside technical problems such as computer viruses as students seem to possess computer competencies but not information-seeking (cognitive) competencies (Shuhidan, 2013; Powell, 2017). Additionally, this study identified new negative factors such as physical contact and physical activities may prevent thinking, concentrating and memory skills. Other factors such as being depressed and isolated, increased laziness also contribute to the problem. Nevertheless, the Internet also encourages students to play physical and virtual games (e.g. Wii) (Issa & Isaias, 2016). This situation thus requires SRCs to rebrand or innovate their information services for crisis preparedness in the future. According to Shamila (2013), Teacher-Librarians need to guide students through various information-seeking strategies to help them find correct information for their academic purposes; this will increase in turn the level of students' knowledge or civilization.

The Malaysia Education Blueprint 2013 – 2025 was developed to transform Malaysia's education system to meet these challenges. The aim and the purpose of the education system are to equip students holistically, in order for them to succeed in the 21st century with all the opportunities and challenges that this new era presents. The school curriculum at both primary and secondary levels is revised to embed a balanced set of knowledge and skills such as creative thinking, innovation, problem-solving, and leadership. This curriculum is student-centered where students set their own learning styles, space and time that is more meaningful to them. Meaningful learning as explained by Ausubel (2017) is students' learning that is related to experiences with events or objects and effective commitment to relate new knowledge prior to learning. To provide for this, SRC as one of the available educational practices should offer such programs and activities that support meaningful learning experiences among students outside of the classroom to support the development of students' civilization.

2. Literature Review

Heidar (2014) explained that “searching various information resources is the routine way to identify and access the information needed to build knowledge in academic contexts and daily- life.” There is a significant amount of research aimed at how secondary students or adolescents use new trends in new technologies to search for information and the factors influencing their searching behavior related to learning processes (Graafland, 2018; Buchanan, & Tuckerman, 2016; Wu, & Cai, 2016; Pilerot, 2016; Kuhlthau, 2018). Most researchers have investigated search behaviours using electronic resources in order to interpret patterns in the learning process. However, demands on knowledge enhancement and growth within a learning environment require the acquisition of a set of skills specifically related to information-seeking needs and the development of information-seeking behavior as a means of overcoming this overwhelming experience. The prevailing notions of "civilization" began in the early twentieth century by Westerners who saw themselves as culture referees and had thus focused on reading and literacy as the markers of civilization. Aligned with the requirements of 21st-century skills, the SRC plays a major role by not only providing books, but also cultivating the culture of reading and providing quality programs such as information literacy courses for students in order for them to be holistic learners in a civilized society. Previous studies conducted across the world show that factors such as variety, easy access and updated collections in the SRC support students' performance (Yusuf, 2014; Gretes, 2013; Gildersleeves, 2012; and Afolabi, 2016). Besides that, a civilization is also considered to be a free mind with soft skills such as spiritual, intellectual, emotional, social and physical values. Teachers play an important role in integrating these values in their students.

According to the International Federation Library Associations (IFLA) 2015, the School Library which is also known as SRC (term used in Malaysia) is an essential component of schools for teaching and learning. The SRC focuses on optimally running its quality programs and activities. Information literacy is one of the most important programs held in SRCs because it is one of the programs that can help create lifelong readers and learners in the 21st century using various technologies (Novotny, 2017). Students in the digital age get more excited when using technology to dig for information they need either for academic purposes or for their personal life. Generally, a person who is born after the 1980s is known as a digital native. A digital native is confident with the digital age because they grew up using technology (Cut, 2017), therefore they feel the need to use the latest applications and gadgets. Bibiana, Llewellyn & Choo (2020) found that students who learn statistics through electronic books (e-books) produced higher scores compared to students who learn through traditional manual books. Powell (2017) mentioned that technology is one of the important factors in the development of information skills among students in the 21st century. Despite the benefits of using technology to support teaching and learning, students also claimed that their biggest challenges are Internet connectivity and understanding the content of the subject (Chung, Subramaniam & Laura, 2020). Therefore, it is the SRC's responsibility to offer the latest technology along with the proper content.

As suggested by Bahagian Teknologi Pendidikan or the Education Technology Division (2017), learning spaces that should be provided by SRC include open reading rooms, discussion rooms, learning rooms, computer access, Internet, wi-fi hotspots, casual reading spaces and so on. Not only that, they recommended that SRCs should provide fun learning spaces. In addition, SRCs need to provide good infrastructure such as good ventilation and lighting. All of these dimensions within the SRC will not run smoothly if there is no qualified and professional Teacher-Librarian who manages these dimensions. The Teacher-Librarian also plays roles that contribute towards the curriculum, more so as a mediator between

teachers and students. Kachel (2011) stated that over 21 state studies have confirmed that Teacher-Librarians and SRCs support students' education in terms of academic achievement, lifelong learning, 21st century skills, and reading. Alexander (2016) pointed out that librarians in this millennial age should go above and beyond because as Librarian or Teacher-Librarian, these professionals should act as a 'guru' who teaches teachers and students how to use technology, especially for classroom purposes.

Previous studies (Yusuf, 2014; Teravainen & Clark, 2017; William & Wavell, 2013) found that there is an effect between SRC roles and student achievement. A study conducted by William & Wavell (2013) to extend their previous research illustrated a framework on potential learning experiences to be gained from the use of SRCs. The indicator for potential learning experiences was categorized into three dimensions which are motivation, independent and interaction. Motivation can be defined as the attribute that moves people to do or not to do something and it involves a constellation of beliefs, perceptions, values, interests, and actions that are all closely related (Lai, 2014). Williams and Wavell (2013) believed that SRCs can trigger the motivation of students who have made a visit. Students will get motivated to learn in order to increase or improve their knowledge. They will assume a positive attitude or enthusiasm once they know the right way to search information effectively. In their findings, Williams and Wavell mentioned that SRCs also play a role in providing emotional support to individual students through the role of the student librarian who can attract this type of vulnerable students. One of the student librarians in the case study displayed signs of being in this category and the SRC provided this individual with the opportunity to gain confidence and self-esteem in a comfortable environment. Students are also shown to be willing to participate and enjoy working together. They also show other positive expressions such as enthusiasm, initiation of discussions and encouragement towards others. Yusuf (2014) stated that a school library plays an important role in the teaching and learning process for both teachers and students, specifically in the areas of literacy, technological skills, and access to resources and equipment. This will help students achieve increased motivation and higher assessment scores which ultimately translate into higher success rates that bolster students' self-esteem, confidence, independence and sense of responsibility in regards to their own learning. Hoffman (2016) elaborated on the elements that SRCs can do to support students' motivation such as the provision of engaging texts, choices of reading materials, and ample time to read. These elements help develop critical cognitive, social and physical elements that can grow someone's knowledge and skills. Motivation will also increase if students have the opportunity to choose what they want to learn and when they believe they have control over their learning.

3. Research Methodology

This study used the descriptive and quantitative approaches to identify the roles SRCs play in building students' civilization. Neuman (2011) defined exploratory research as "research in which the primary purpose is to examine a little understood issue or phenomenon to develop preliminary ideas and move toward refined research questions by focusing on the 'what' question." According to Neuman (2011), the main reason for using descriptive research is to "paint a picture" using words or numbers to present a profile which may include a graph or tables to illustrate the narrative. Online questionnaires were used for data collection, while SPSS version 28 was employed for the quantitative data analysis. The online questionnaires were distributed to one type of school in Malaysia, and 560 students responded to it. This type of school remains unidentified for ethical purposes and has been coded as AA schools. The respondents in research come from selected secondary schools in Malaysia and range from 13-17 years old. Convenience sampling is the most commonly used sampling method (Acharya, 2013). Convenience

sampling is a type of nonprobability or nonrandom sampling where members of the target population who meet certain practical criteria such as easy accessibility, geographical proximity, availability at a given time, or the willingness to participate are included for the purpose of the study (Etikan, 2016). Respondents are usually selected because they are at the right place at the right time. The aim of this study is to determine the use of SRCs that would give impact on students' civilization. The respondents for this research are considered to be exposed to and have experience of the phenomena under investigation (information-seeking processes in academic setting for research methodology classes).

4. Findings

This section discusses the findings from this study by explaining the demographic profile, crosstab analysis and descriptive analysis conducted to identify the use of SRCs towards students' civilization.

4.1 Common Method Variances

The data collection for this study is from a single source, i.e. all questions in independent and dependent variables are answered individually by respondents. Due to that, a common method bias analysis was conducted to measure the threat in the dataset. The Harman single factor test was executed and the results showed that when all items were constrained to one factor, the total variance explained was 44.7%. Common method biases are normally present when the total variance explained surpasses 50%. Based on the result, it can be safely assumed that the dataset is free from common method bias.

4.2 Demographics Profile

Table 1 presents the demographic profile of the respondents. Out of the 560 respondents, 325 were females and 235 were males. The respondents were aged between 13 to 17 years old, with a majority, i.e. 221 of them were 14 years old and the lowest, i.e. 48 of them were aged 16 years old.

Table 1. Demographic Profile

		Frequency	Percentage (%)
Gender	Male	235	42
	Female	325	58
Age	13 years old	70	13
	14 years old	221	39
	15 years old	87	16
	16 years old	48	9
	17 years old	134	24
Purpose ^a	Assignment	457	28.0
	Internet Access	299	18.3
	Discussion	140	8.6
	Reading	304	18.6
	Exam Preparation	268	16.4
	Relief Class	167	10.2
Assist ^a	Media's teacher	252	25.5
	Subject's teacher	290	29.3
	Friends	447	45.2

		Frequency	Percentage (%)
Frequency ^a	Every day	162	27.3
	Once a week	56	9.4
	Twice in a week	148	24.9
	Sometimes	228	38.4

a. Dichotomy group tabulated at value 1

A majority of the respondents' i.e. 457 answered that the purpose of them going to the SRC is to do assignments, followed by reading materials available in the SRC and also to access the Internet. With regards to assistance in seeking information for academic purposes, respondents relied more on friends at 447 respondents followed by subject teacher at 290 respondents and media teacher at 252 respondents. For the frequency of visiting the SRC, 228 respondents chose sometimes followed with 162 respondents who come every day, 148 respondents who come twice a week, and 56 respondents coming once a week.

4.3 Cross tabulation Analysis- Age and Gender toward purpose of using the SRC

A cross tabulation analysis on the respondents' age and gender with their purpose of using the SRC is shown in Table 2. The respondents were allowed to answer more than one selection for the measured variables. The analysis then took a dichotomy group with a value of 1 which indicated a respondent's agreement with every item measured. Out of all the dimensions measured, i.e. assignment, internet, entertainment, reading, preparation and relief, the highest was recorded by females at 273 for the assignment criteria. In measuring the purpose of using the SRC, respondents aged 14 years old had the highest number with 182 respondents using the SRC to do their assignments. Throughout all the dimensions measured, it can be concluded that females and those aged 14 are more dominant in the usage of SRCs compared to male responders and those of other ages.

Table 2. Cross tabulation analysis on age and gender with purpose of using the SRC

Purpose ^a	Gender				Total
	Male		Female		
	Frequency	Percentage (%)	Frequency	Percentage (%)	
Assignment	184	40.3	273	59.7	457
Internet Access	138	46.2	161	53.8	299
Discussion	71	50.7	69	49.3	140
Reading	130	42.8	174	57.2	304
Exam Preparation	94	35.1	174	64.9	268
Relief Class	67	40.1	100	59.9	167

Purpose ^a	Age										Total
	13 years		14 years		15 years		16 years		17 years		
	f	(%)									
Assignment	54	11.8	184	40.3	73	16.0	33	7.2	113	24.7	457
Internet Access	35	11.7	121	40.5	35	11.7	26	8.7	82	27.4	299
Discussion	19	13.6	53	37.9	21	15.0	15	10.7	32	22.9	140
Reading	40	13.2	101	33.2	55	18.1	31	10.2	77	25.3	304
Exam Preparation	35	13.1	96	35.8	40	14.9	23	8.6	74	27.6	268
Relief Class	11	6.6	59	35.3	21	12.6	22	13.2	54	32.3	167

5. Descriptive Analysis

A descriptive analysis of each variable used in this study is shown in Table 3. A Likert scale ranging between 1 to 5, i.e. 1 is strongly disagree and 5 is strongly agreed, was used. The results show that the mean value for civilization is 4.21, indicating that many respondents agreed to it.

Table 3. Descriptive analysis for each variable

Item	Mean	Std. Deviation	Skewness
Think positively with new knowledge	4.21	0.856	-0.957
Ability to identify the right information through available references	4.15	0.876	-0.769
Sharing information and knowledge ethically	4.21	0.827	-0.855
Value the importance of information in the learning process	4.20	0.852	-0.990
Appreciate the legacy of preserving knowledge of the value of life	4.11	0.896	-0.796
Comprehensively integrate information to solve problems in academic tasks	4.21	0.843	-0.864
Apply knowledge and practice wisdom in life	4.35	0.832	-1.208
Overall Average of Civilization	4.21	0.855	-0.920

6. Discussion and Conclusion

This study provides valuable insight regarding the relationship between SRC roles and students' civilization. Students who are grouped as millennials rely so much on the use of technology to support their learning. This however leads to many challenges due to their lack of knowledge in managing information overload, hoaxes and other ethical issues linked to the digital world. The existence of SRCs in every school with the objective of providing quality education for lifelong learning acts as a catalyst for self-learning. SRCs also help prepare students to become more civilised knowledge-based individuals. SRC provides reading materials in various formats and guides students to inculcate information literacy skills that are needed to access resource-based learning and deal with the real digital learning environment (Powell, 2017; Shamila, 2013). From the study conducted, the descriptive analysis showed that most students (457 respondents) particularly go to SRCs to do their assignments, and the highest frequency of visits to the SRC is sometimes at 282 respondents followed by every day at 162 respondents. A majority of respondents (447 respondents) also demonstrated that they search for information with assistance from their friends. A crosstab analysis conducted on age and gender with the respondents' purpose of visiting the SRC show that students aged 14 years frequent SRCs to complete their assignments, and a majority of them are females. This study's results are consistent with the Pew Research Center's report (2017) which found that millennials are the most likely generation to use libraries, especially library websites while females are more likely to visit libraries compared to males. Female students tend to go to SRCs to find materials needed to complete their assignments. Further analysis was carried out on the respondents regarding their purpose of using SRCs and the influence it has towards their civilization. As mentioned above, civilization in this study refers to the level of knowledge among students. From Table 3, it was found that the main contribution of SRCs towards civilization is by acting as knowledge hubs (mean value of 4.35) where students can gain knowledge. Meanwhile, the overall mean result is 4.21 for the value of civilization. This is a positive indication that SRCs do contribute towards students' civilization i.e. by increasing their level of knowledge. Therefore, SRCs must be upgraded based on the 21st century's learning methods. Transformation of the

SRC will help increase students' awareness on knowledge creation and encourage them to be creative and practice critical thinking by providing various materials and collections. The changing roles of SRCs meet the demand of school communities through the provision of quality SRC programs, application of the latest technology, and creation of conducive learning spaces. Library Media Teachers should be more approachable, cooperative and have the ability to explain and guide students in finding the right information from the right sources as most students visit SRCs to gain knowledge and complete their assignments.

In conclusion, research into the existence of SRCs in all schools in Malaysia is crucial as studies have shown that there is a positive indication towards students' civilization. As generally known, every school in Malaysia must have an SRC. Thus, it is hoped that these SRCs' roles can be highlighted as an innovative educational practice that supports teaching-learning in the digital age, especially for the millennial generations. These millennial generations rely so much on the web environment and friends for their learning process. Thus, teachers and Library Media Teachers should collaborate to empower students through proper guidance on strategies to deal with information ethically and become a responsible participant in the digital world in order to enhance their learning experience and in extension, become civilised citizens. This study adds to the body of knowledge on SRCs by providing evidence on the practical implications of SRCs' roles on students' civilization. The findings may also assist Malaysia's Education Ministry in aligning the education system in view of strengthening policies and standards on SRC implementation as transformation is needed to prepare students to be lifelong learners in the 21st century. A topic to be considered for future research on SRCs is an investigation on SRC programs' performance based on students' grades or scores as a better measure of student performance. Future studies may also be applied to all types of schools as a limitation this study faced was the absence of ethical approval from school management and the education division.

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