

## Keeping up with the Digital Natives: Improving the use of School Libraries in the Digital Era

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**Abstract:** Along with the information has become easily accessible from anywhere now a days, the use of school libraries has been decreased and marginalized by the easiness of search engines. This issue has a significant influence from the student's digital native background that indicated from their information behavior on working their assignments. By interview results from the teacher librarian and students at one of the international school in Jakarta, it is showed that the students generally did not use their school libraries mainly due to the inadequacy on educational and reference materials. This study introduces the concept of the synergic collaboration between teachers, school libraries and public libraries in order to meet their user's need.

**Key words:** Information service, digital natives, information behavior, teacher-librarian, school libraries

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### INTRODUCTION

The digital era has brought many changes in the way of people access the information. Along with the surging popularity of internet nowadays and the mass use of new mobile devices, information has become easily accessible from anywhere and anytime. Even the with the touch of our fingertips. The latest survey from APJII stated that internet users penetration in Indonesia are 51.8% (132.7 million people) from the total population of Indonesia. Still from that result there are 25.3% (31.3 million people) from the internet users use the web for information searching purpose. Still from the same survey, there are 67.8% (89.9 million people) from the internet users using smartphones. The result of this survey show that people tend to access information through the online resources from mobile devices rather than printed materials.

This phenomenon also changes the student's information behavior in their learning activities at school, especially on working their assignments. APJII also stated that the students are the second largest of the internet users in Indonesia (69.8%)<sup>1</sup> based on their profession. National Library of Indonesia also stated that more than 70% from public library users are students<sup>2</sup>.

Most of the young people which is called digital natives, much comfortable with ICT which increased the expectations of school library services. They usually use their school library mainly for homework assignments that have been imposed by their teachers. Even so, when these increased expectations failed to fulfill their

information needs and interests, students now relying heavily on search engines which are caused the decreased the use of school libraries. School libraries also known from many literatures have some issues on the limit number of staffs, collections and opening hours. This limitations leads the student's perception that school libraries can be substituted by the search engines. However, the rich information resources on the web presents a counter productive effect on student's construction and articulation of information based on their understanding. Therefore, it should not be an obstacle but as an opportunity for the school libraries for maintaining its role as the information center.

Based on the facts mentioned above, this study will discuss how to keeping up with the digital natives for improving the use of school libraries in the digital era.

### Literature review:

**The digital natives and their information behavior:** The term of digital natives was first coined and popularized by Marc Prensky in 2001. The term refers to young people who had been grew and accustomed with the digital devices in their daily life (Dingli and Seychell, 2015). The more popular terms that similar and used interchangeably to this population are Google Generation, Net Generation and The Millenials. One study (Rowlands *et al.*, 2008; Spring, 2010) has stated that although, the digital natives can demonstrate an apparent ease and familiarity with various digital devices, especially on information searching, they rely heavily on search engines, view

rather than read and do not possess the critical and analytical skills to assess the information that have been found from the web. These can be considered as their information behavior, particularly on the stage of information-seeking. Information-seeking can be defined as the purpose seeking of information as a consequence from the need to reach some goal, i.e., doing assignments or homework from school. In the course of seeking, the individual may interact with manual information systems such as library or information center or with ICT-based information systems (such as the web, databases or online sources). Digital native's information behavior is a complex process of interplays among factors like their cognitive status, identity formation, value negotiation and social interaction within the context. There are three types of radical change from digital age youth information behavior: type one: changing forms of seeking information and learning; type two: changing perspectives and type three: changing boundaries.

It is also stated (Rowlands *et al.*, 2008) that they have assumptions that everything is available on the web. These assumptions actually have no basis in fact at all. Essentially, the web is merely an additional tool in information searching rather than substitute for the libraries (Herring, 2014).

**The use of school library in the digital era:** The existence of school libraries in the digital age is increasingly marginalized by the power of the Google search engine. Within seconds, the students can access thousands and even millions, of search results with just a few keywords in their mobile devices. This phenomenon then led to a perception that all the information available on the web. Therefore, do not be surprised if the students in completing their assignments is more likely to rely heavily on Google instead of using library services. In addition, linked to their digital lifestyles, libraries are already considered obsolete and no longer relevant in this era (Herring, 2014). Even so, there is a suggestion (Spring, 2010) that Google is not a destructive technology and a serious threat to the library but rather a disruptive one that facilitates poor scholarship and bad behavior and does not encourage the discipline or structure that the students need in their study.

One study on the similar topic (Mokhtar and Majid, (2005) stated that the majority of the condition that caused the low use of school library is the students and teachers have not been visiting their libraries regularly. It is caused mainly due to inadequacy of library materials. Most of the teachers did not collaborate with school librarian in planning their lessons and other academic activities. From this point, we can considered these may

caused by false assumptions to the library, the inadequate intensity of library service promotion and/or the low level of information literacy skills, both from students and teachers.

## MATERIALS AND METHODS

This study uses the qualitative approach with Focus Group Discussion (FGD) technique at Surya International School Jakarta. We conducted the semi-structured and face-to-face interview as data collection techniques. FGD is a small group discussion, often consisting of 6-12 participants, guided by a facilitator or researcher to gain an understanding from their attitudes and perceptions that relevant to the topic (Gorman *et al.*, 2005). We use two ways of data recording from discussions which are using a tape recorder and make notes immediately after discussion. We choose this technique because it is useful for library service evaluation. It also allows the participants to express themselves in their own words in describing their behavior, beliefs, viewpoints and preferences (Beck and Manuel, 2008). The rest of this section describes the preliminary interview with teacher-librarian, the participants, the interview structure and the interview analysis.

**Preliminary interview with teacher-librarian:** Before the FGD session with the students, we interview the teacher-librarian to get the first impressions of the library itself, the characteristics of its users and the problems that occur on the school library services. The result of this preliminary interview session is used to construct the quality questions of the study Gorman *et al.* (2005). In order to acquire sufficient background to develop questions, we must immerse ourself in the study setting. From the gathering of this starting point, we use this interview as the 'springboards' to facilitate discussion and build the list of possible questions on the next session with the students as participants.

**Participants:** From the preliminary interview with the teacher librarian, we know the characteristic of the school library users and the low use of its service. It is not easy for us to come and interview the students directly because most of them are not comfortable talking to the strangers or outsiders. In order to enable us to collect data, we asked for help from the teacher-librarian to persuade them to willing us conduct the interview session in their leisure time at the library. We interviewed seven students from Middle High School in Surya International School Jakarta. The interesting point is all of the

participants have learned the library or literacy skills since grade 9. They have the library time or information literacy session on class once a week.

**Interview structure:** The interviews were loosely structured and began by asking the ice-breaker questions about how much they depend on the digital devices. On the next session, the session ask the students about their reasons and perspectives about using the Google rather than existing library materials. Last, we continue to ask about their experiences, feelings and opinions about the library. The interview session was conducted at the library room at Surya International School Jakarta when the students on their leisure time for study, doing assignments and waiting for another class session.

**Interview analysis:** The interview results were transcribed and interpreted with codings and link the data by making connections through relevant codes to construct the data display graphically. For the internal validity of this study, we used the triangulation by share the categories or themes with participants and ask them whether the conclusions are matched up with the reality. We also used the external validity to examine how the study can represent the problem in general and whether its results or conclusions can be applied to similar studies in the future.

## RESULTS AND DISCUSSION

Our interviews resulted in the identification of student's digital native background, the low use of school library, the false assumptions to the library and the information behavior. The remainder of this section describes each of the findings. Section A examines interviewee's digital natives background how they depend heavily to digital devices and internet connection. Section B looks at how the school library losing its main role as information center for students on their assignments. Section C examines the false assumptions to the library and using the search engines as the substitution. Section D looks at student's information behavior as the impact of their false perceptions to the library.

**Digital native background:** Most of the students are digital natives. This is indicated by their familiarity on using mobile devices and gadgets for their daily activities, both inside and outside the classroom. We found that they use the devices for three main purposes: online searching, communication and entertainment as explained by interviewee 1, 4 and 5:

- P1: We use cellphones and laptops every day
- P4: We use it for study and social media but mostly for communication
- P5: I bring it to the class. Never have been going to school without it

During the interview session, we have observed that cellphones and laptops are always attached on their hands. We also found that they were accessing Google to seek information for their assignments.

**Lack number of collections:** The lack number of collections is considered as one of the limitation that always exists on school libraries as expressed by interviewee 2 and 5:

- P2: Add the number of collections, at least the books that we have not bought yet
- P5: Maybe it's because of the lack number of collections so we rather search on Google instead

In order to overcome this weakness and limitation, school library must build, foster and maintain a good collaboration with public libraries on resource sharing (Smith, 2014). Not only that, the school library should always synchronize with the curriculum in order to stimulate the use of library materials by the students. It is also said that the collaboration is the key aspect of the teacher-librarian's role (Lo and Chiu, 2015; Lee and Klinger, 2011).

**False assumptions to the library:** The students with their digital native background, feel no longer needs to use the library as their expression for their dissatisfaction, because they think everything is available on the web (Rowlands *et al.*, 2008) as expressed by Interviewee (Dingli and Seychell, 2015; Herring, 2014):

- P1: We don't rely on it (library) anymore on assignments Searching information on those books must take a long time
- P2: On Google everything is available
- P3: It (library) doesn't help at all
- P5: Yeah, we don't need it (library) anymore

From these statements, we found this false assumptions are the impacts from the student's digital native background. The web is not a substitute for the library but rather as additional tools for information seeking (Herring, 2014). It can be considered that false assumption that have been made by students are caused by their digital native's background and lack number of library materials.

**Student's information behavior:** From the interview session, we found that there are two kinds of the student's information behavior on completing their assignments: copy-paste the information that they found on the web directly to their assignment study and lack of understanding of information architecture that leads to poor formulation of search strategies (Spring, 2010). This is explained by interviewee 4, 5 and 7:

- P5: We just copy-paste it because we don't have time to read it all at once
- P6: When search for a very specific topic, it's feel very hard to find. But, sometimes, it suddenly appears on my mind even it takes time on the process
- P7: All we need to do is just search and copy-paste to the study. That's all. We just do it by trial-and-error, gradually we can get what we looking for

From the interpretation above, these behavior can be considered as an impact from false assumption that everyting is available on the web and no longer use of library. Based on the typology of radical change on digital native information behavior, this behavior categorized to type one: changing forms and seeking information learning (Dresang and Koh, 2009). This is indicated by characteristics as follows: obtaining information through a variety of media sources, demonstrating a preference for graphic and visual information, multitasking, seeking information nonlinearly and nonsequentially and developing self-defined and controlled paths. In order to improving the use of school library in the digital era, librarians need to adapt the technologies to services (Herring, 2014) based on their information behavior.

**Low use of school library:** The school library losing its role as the information center for students on completing their assignments. The library just a quiet room for study, leisure time and place to stop-by or waiting for another class session. These is expressed by the interviewee 4, 5 and 7:

- P4: We used this room just for study, because it is quiet here
- P5: We came here because it is too noisy at the lounge
- P7: We prefer searching ebooks, we already have the textbooks

From the findings above, we found that the inadequate quantity and quality of collections are the one of the main factor of the low use of school library. Last, from the findings, we found that the low use of school library are caused from the student's information

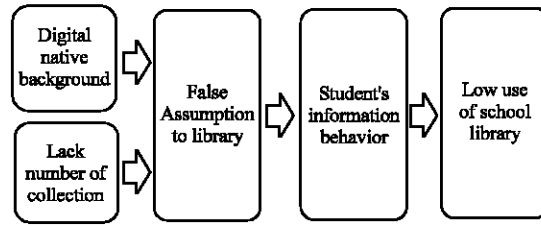


Fig. 1: Findings from interview session

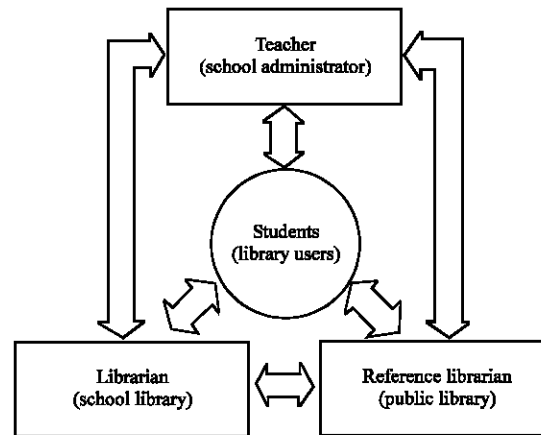


Fig. 2: Synergic collaboration

behavior. One study Pancheshnikov (2014) suggest that collection management course are among the most obvious ways of implementing variety of assignment types and directing students to address them as short research projects with the provision of teacher-librarian. Therefore, students not only improving the use of library materials but also upgrading their skill on information seeking through the web. These analysis result from the findings are described in Fig. 1.

From the Fig. 1, we found the two main factors that leads to the student's false assumption to the library are their digital native's background and lack number of library collections. The false assumptions then leads to the student's information behavior which are copy-paste and problems on keyword formulation. Their information behavior then caused the low use of school library for completing their assignments (Fig. 2).

**CONCLUSION**

Through this study, we concluded that to improving the use of school libraries for digital natives users, the teacher-librarian must build, foster and maintain the synergic collaboration with the teacher (Lee and Klinger, 2011) and the public libraries (Smith, 2014). At one point, the school library must have mutual cooperation with

teachers and school administrators to synchronize its collections with the curriculum and stimulate their students using library materials for the assignments. The teachers can also collaborate with school and public librarians to check and matched up the assignments with the availability the materials from library. At the other point, the school library must also have a good collaboration with the public libraries to overcome its limitation on number of staffs, collections and opening hours. Public libraries have been known for their abundant collections, the adequate number of librarians (especially on youth reference services and homework-help 18) and longer opening hours. On the other side, the students can have more alternatives and options on information sources rather relying heavily on search engines only. The school librarian also can be a mentor or consultant (Lo and Chiu, 2015; Lo *et al.*, 2014) in improving their searching skills and formulating the keywords on the web by conducting outreach programs for students 18. From this point, we found that school library must be more service-minded and it is vital to creativity and collaboration (Herring, 2014). The school librarian and teachers must make choices about how to best help students to learn and it is essential to know what the strengths 21st century students bring along within them, what information-seeking skills are already fairly well developed (Dresang and Koh, 2009).

From these results, finally we proposed the concept of synergic collaboration between school library, teachers/school administrator and public libraries. This concept is integrated and can not separate one another. Hopefully this concept can meet the student's information needs that suits with their digital lifestyles.

As a matter of fact, there are some collaborative barriers that could harm the effort such as lack of time, the lack of school librarian administrative support and the lack of understanding about the roles of school librarians and public librarians (Smith *et al.*, 2014). School libraries also have problems on limited access because of scheduling, school hours and school closures, even it is contradicted with the student's information needs and information professional's assistant. That is why we suggested the synergic collaboration between school librarian, teachers and public librarians. Therefore, the school librarian must always promote what services and contributions they can provide to the students and teachers based on the existing curriculum. We hope that this study will become the preliminary study for the next research on the same topic in the future, especially on the use of school libraries in the digital era.

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