

## The Utilization of iPusnas for Students Information Search at SMPTQ Pangeran Diponegoro Semarang

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**Abstract.** Digital library application presented by National Library of Republic Indonesia to introduce and fulfill the various information sources for citizens of Indonesia. It is called iPusnas. This application is important to all students as a digital library so that users can use library resources optimally. However, the studies on utilization of iPusnas is limited, especially in school libraries. The purpose of this research is to know the use of iPusnas for information searching students of SMPTQ Pangeran Diponegoro Semarang. This research discusses the use of iPusnas for students' information searching at SMPTQ Pangeran Diponegoro Semarang using qualitative methods. Data were collected through interviews, observations, and document studies. The results show that the use of iPusnas for students information searching at SMPTQ Pangeran Diponegoro Semarang is rare. The students know about how to use iPusnas from education which is held by library and information science lecturer and students. The use of iPusnas is also important to students for study resources and leisure. In addition, it was also found that students of SMPTQ Pangeran Diponegoro rarely use iPusnas in their daily life. These findings are expected to illustrate utilization of iPusnas for students information searching at SMPTQ Pangeran Diponegoro Semarang and become a reference for further development research about utilization of iPusnas for students in Indonesia.

**Keywords:** iPusnas, information searching, SMPTQ Pangeran Diponegoro

### 1 Introduction

Libraries have undergone a shift due to rapid technological developments. These technological developments have led to changes in users' information needs, characterized by the need for information from anywhere and at any time. Previously, when users needed information, they conducted conventional searches through physical libraries and printed resources. Now, the process of searching for information has been replaced by digital platforms that enable quick and efficient access to information by utilizing the internet and electronic search systems to access information in real-time. This shift not only speeds up the search process but also expands information accessibility and improves efficiency in data collection. Therefore, libraries are required to be able to meet users' information needs by adapting to technological developments, namely by providing digital libraries. As

explained by Sismanto, a digital library is a system that has various services and information objects that support access to these information objects through digital devices [1]. The hope is that digital libraries can facilitate the search for information within collections of information objects such as documents, images, and databases in digital format quickly, accurately, and precisely. Not only have users' information needs shifted, but library collections have also undergone a similar transformation. This is marked by the shift from physical collections to digital collections, such as e-books.

As a form of adaptation to technological developments, the National Library of the Republic of Indonesia has created an innovation, namely the national digital library application iPusnas. IPusnas is a social media-based digital library application that can access e-Bookstore and e-Pustaka, enabling users to build networks or communities, as well as serving as an e-Reader for reading ebooks [2]. Meanwhile, Fauzan & Suwantodefine iPusnas as an Android-based application developed by the National Library of the Republic of Indonesia to provide digital library services to the public [3]. This application is designed to make it easier for users to access various digital book collections in a practical and efficient manner. Through iPusnas, users can search for, borrow, and read digital books without having to visit a physical library, thereby supporting the improvement of literacy and access to information in the digital age. This is supported by the purpose of digital libraries, which offer users ease of access to electronic information sources anytime and anywhere, enabling the rapid, accurate, and precise dissemination of information, thereby supporting users' information needs in the digital age [4].

Based on this explanation, this study aims to determine the use of the iPusnas digital library application in information searching by students at SMPTQ Pangeran Diponegoro. This objective raises the question of the extent to which students at SMPTQ Pangeran Diponegoro utilize the iPusnas digital library application as a means of searching for information.

## **2 Methods**

The method used in this study is a qualitative method with a phenomenological approach. The qualitative approach is used to study objects in their natural conditions, with the researcher as the key instrument [5]. Meanwhile, according to Creswell, the phenomenological approach is used to develop an understanding or explain the meaning of an event experienced by an individual or group [6]. In line with that, this approach was chosen to explore the experiences, perceptions, and meanings given by students regarding the use of the iPusnas digital library application. The data collection methods used were observation and semi-structured interviews, which provided flexibility in exploring information with the

research subjects, students of SMPTQ Pangeran Diponegoro who had participated in the socialization activities of the iPusnas digital library application. Additionally, the data analysis technique used in this study is the Miles and Huberman, data analysis model, which consists of three stages: data reduction, data presentation, and conclusion drawing and verification [7].

### 3 Result and Discussion

The iPusnas digital library application is one of the digital innovations developed by the National Library of Indonesia with the aim of expanding public access to literacy through the use of information technology. Through the iPusnas digital library application, users can read and borrow collections online without having to visit a physical library. The presence of iPusnas is highly relevant in supporting educational needs in this digital era, including for students at SMPTQ Pangeran Diponegoro, who are beginning to be introduced to various digital literacy resources and online information search methods. This perspective aligns with UNESCO's emphasis on promoting digital transformation in education, where digital libraries are seen as an important component in supporting lifelong learning [8].

However, the reality at SMPTQ Pangeran Diponegoro shows that not all students are aware of the iPusnas digital library application. Most of them only became familiar with this digital library application after participating in the iPusnas utilization socialization activity held at SMPTQ Pangeran Diponegoro. Based on the interview results, almost all students admitted that they had only heard about the iPusnas digital library application for the first time from the presenters at the event. One student even honestly stated that before the socialization activity, she had no idea that the National Library of the Republic of Indonesia had a digital library. This situation reflects that the dissemination of information about the iPusnas digital library application in schools, especially junior high schools, is not yet widespread. This aligns with a study conducted by Rahmawati et al., which showed that more than half of university students were unaware of or had not used digital library collections before receiving training [9].

After the students of SMPTQ Pangeran Diponegoro began to familiarize themselves with and try using the iPusnas digital library application, an interesting usage pattern emerged. Many of them utilized the iPusnas digital library application to read popular novels, such as those written by Tere Liye. One student stated that she felt comfortable reading Tere Liye's novels, "*Yes, I just feel comfortable reading Tere Liye's novels.*" This is because the plot of these novels is closely related to teenage emotions and is easy to understand, making them a preferred form of entertainment during free time. Furthermore, the habit of reading through iPusnas also shows the students' involvement in the regular use of this digital library application. One of the

female students also said that she regularly opens the iPusnas digital library application every week. She explained that she does this to check the availability of the collections currently in her queue.

Upon further examination, the motivation of SMPTQ Pangeran Diponegoro students in using the iPusnas digital library application tends to be recreational rather than academic. This is an interesting finding because the iPusnas digital library application can already serve as a digital recreational tool, aligning with one of the five functions of a library, namely the cultural recreational function [10]. When library users obtain light and entertaining information that brings them a sense of freshness, joy, and happiness, the library has successfully fulfilled its cultural recreational function [11]. *"It's pretty good, because sometimes after school you're tired, right? So you need some entertainment. Well, iPusnas has a lot of books available. For kids who like to read books, it's appealing, right? They line up to read. Especially since buying the original books is expensive."* Said one of the students.

However, this enthusiasm does not always correlate with the intensity of use. Many students only use the iPusnas digital library app occasionally, or even just try it once, then never open it again, or even delete the app. Common reasons include limited storage capacity on their devices, the habit of conserving internet data, and a greater interest in other entertainment apps, such as Webtoon or Wattpad. One student who deleted the iPusnas digital library app the day after the iPusnas utilization socialization activity stated, *"To be honest, I really like to save data when using my phone, so after finishing, I used it briefly, maybe until I got home from school, and then deleted it the next day because I felt sorry for wasting storage space."*

In addition to device limitations and personal preferences, challenges related to the app's services also contribute to the low usage rate of iPusnas among students. The main issues frequently mentioned are waiting times and limited book collections. Some students expressed disappointment because the books they were looking for were unavailable or they had to wait too long to read the desired collection due to insufficient copies. *"Maybe they should increase the number of books. Sometimes the books we're looking for aren't available. And then there's the waiting time. Because a lot of people use it, right?"* complained one student. Another student even felt reluctant to continue using the iPusnas digital library app because they were worried they wouldn't be able to access the books they wanted on time. Issues like this pose a significant challenge for the administrators of the iPusnas digital library app because the availability of collections is an important aspect of the user experience. In the second example, another student mentioned that they were unable to obtain the novel they wanted to borrow, titled *Laut Bercerita*. This happened because the number of people interested in the novel and the number of copies available were not proportional, resulting in a long waiting time for borrowing.



**Fig. 1.** Screenshot of the list queued books

In addition to technical barriers and collection limitations, there are also barriers arising from external factors, particularly the Family Link settings set by parents. One student revealed that she was unable to download the iPusnas app because her device was under parental account supervision. The iPusnas digital library app is not yet included in the list of apps permitted for download, so its use requires prior parental approval. Such obstacles indicate that students' efforts to utilize digital information sources are not only influenced by the availability of technology and collections, but also by digital regulations implemented within the family environment. While parental supervision aims to protect children from inappropriate content, overly strict policies that do not consider educational needs can hinder access to legitimate and beneficial information sources, such as iPusnas. Therefore, there needs to be a balance between parental supervision and students' freedom to access educational applications so that their information literacy can develop optimally.

From a technical standpoint, most students did not encounter any issues, such as applications frequently crashing or errors occurring. However, there were some comments regarding the visual appearance, which was deemed unattractive. A female student mentioned that the digital book covers on iPusnas appear too simple and "*like templates*," thereby reducing interest in continuing to read. Unattractive visual design can be one of the barriers to increasing reading interest through digital platforms, especially among teenagers who are highly responsive to visual aspects. Visual aspects play an important role in attracting reading interest, especially among teenagers who are highly responsive to digital design. An attractive interface design not only enhances user comfort but also influences perceptions of the content [12]. When the appearance of digital book covers seems monotonous or generic, as mentioned by one iPusnas user, this can reduce motivation to read. Meanwhile,

Buckingham emphasizes that the digital generation has high expectations for visual quality. Therefore, it is important for platforms like iPusnas to pay attention to visual design to be more effective in promoting digital literacy among teenagers [13].

Although not yet fully optimized, some students have begun to envision the potential for feature development in this digital library app. Some have suggested adding features like a daily streak to encourage daily reading habits, as well as a “read together” feature that allows users to read books online with friends while interacting. Such feedback reflects students' hopes and interest in making iPusnas part of their daily activities, especially if the app is designed to be more interactive and enjoyable. This indicates that user experience (UX) depends not only on the app's basic functions but also on motivational and social elements that can foster long-term engagement. According to research in the field of digital literacy, features that are participatory and provide positive feedback can increase users' intrinsic motivation, especially among teenagers who tend to be responsive to game elements and social interaction in digital environments [14].

Based on the overall findings, it appears that the adoption process of iPusnas has not been optimal, especially in the early stages such as the knowledge and persuasion stages. Schools, as educational institutions, play a strategic role in disseminating information and guiding students to maximize the use of digital literacy technology. Students at SMPTQ Pangeran Diponegoro are more likely to use the application if they perceive it as beneficial and user-friendly. In general, iPusnas has significant potential in fostering a reading culture among students. However, this potential needs to be supported by more structured efforts, such as more widespread dissemination of information, the development of attractive and relevant features, expansion of the book collection, and the involvement of parents in the technology education process. If this ecosystem can be established comprehensively, iPusnas will not only function as a reading tool but also as a dynamic learning space for Indonesia's young generation.

#### **4 Conclusion**

The iPusnas digital library application is an innovation from the National Library of Indonesia that plays an important role in expanding access to literacy for the community, including among students at SMPTQ Pangeran Diponegoro. Despite its great potential in supporting digital literacy and lifelong learning, the use of iPusnas at the school still faces various challenges, such as a lack of initial information, limited collections, long queues, technical and external barriers (e.g., Family Link settings), and an unattractive visual design. Students' use of iPusnas tends to be recreational, indicating that the app can fulfill the cultural recreational functions of a library. However, to optimize its adoption, a more structured strategy is

needed through extensive outreach, development of interactive features, expansion of the collection, and collaboration with parents and schools. With a holistic approach, iPusnas can become an inclusive, engaging, and beneficial digital learning space for the younger generation.

## References

1. Sismanto. *Manajemen Perpustakaan Digital*. Cet. 1. Afifah Pustaka; 2007.
2. Supriyanto W, Muhsin A. *Teknologi Informasi Perpustakaan*. Yogyakarta: Kanisius; 2008.
3. Fauzan F, Suwanto SA. Analisis pemanfaatan aplikasi iPusnas berbasis android di Perpustakaan Nasional Republik Indonesia. *Jurnal Ilmu Perpustakaan*. 2018;7(4):11–20.
4. Widayanti Y. Pengelolaan perpustakaan digital. *LIBRARIA: Jurnal Perpustakaan*. 2015;3(1):125–37.
5. Sugiyono D. *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif, dan R&D*. Cet. 21. Bandung: Alfabeta; 2015.
6. Creswell JW. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage Publications; 2015.
7. Miles MB, Huberman AM. *An Expanded Sourcebook: Qualitative Data Analysis*. 2nd ed. London: SAGE Publications Asia-Pacific Pte. Ltd.; 1994.
8. UNESCO. What you need to know about digital learning and transformation of education [Internet]. Paris: UNESCO; 2024 Sep 17 [cited 2025 Jun 8]. Available from: <https://www.unesco.org/en/digital-education/need-know?hub=84636>
9. Rahmawati NA, Faudah L, Suryanta BP. Peningkatan Literasi Informasi dan Minat Baca Melalui Pelatihan Penelusuran E-Journal dan E-Book di Perpustakaan UPN Veteran. *UNILIB: Jurnal Perpustakaan*. 2019.
10. Qalyubi S, et al. *Dasar-dasar Ilmu Perpustakaan dan Informasi*. Yogyakarta: Jurusan Ilmu Perpustakaan dan Informasi Fakultas Adab UIN Sunan Kalijaga Yogyakarta; 2003.
11. Krismayani I. Mewujudkan Fungsi Perpustakaan di Daerah [Internet]. *ANUVA*. 2018 cited 2025 Jun 10;2(2):233–42. Available from: <https://ejournal2.undip.ac.id/index.php/anuva/article/view/2806>
12. Norman DA. *Emotional Design: Why We Love (or Hate) Everyday Things*. New York: Basic Books; 2004.
13. Buckingham D. *Beyond technology: Children's learning in the age of digital culture*. Cambridge: Polity Press; 2007.
14. Ryan RM, Deci EL. Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemp Educ Psychol*. 2000;25(1):54–67.