

Counseling on the Use of Semantic Scholar in Improving Digital Literacy of Students in Indonesia

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ABSTRACT

Penulis melakukan sosialisasi ini kepada mahasiswa dan dosen muda. Sosialisasi ini dilakukan pada saat penulis sedang mengajar dan diskusi informal antar rekan sekantor. Hasil dalam artikel ini menunjukkan penulis melakukan sosialisasi selama kurang lebih empat kali pertemuan dengan mahasiswa di tempat penulis mengajar dengan konsep sosialisasi penggunaan Perplexity AI sebanyak satu kali dan langsung praktik menulis jurnal dan framework skripsi dengan tiga kali evaluasi. Saat melakukan sosialisasi, penulis memaparkan beberapa keunggulan Perplexity AI, antara lain: 1. Kemampuan Search Engine yang Lebih Optimal: Google Search lebih optimal dalam melakukan pencarian dengan menggunakan kata kunci. Jika kita memasukkan kalimat yang panjang, Google sering kali tidak dapat menemukan hasil pencarian. Hal ini berbeda dengan Perplexity AI yang mampu memahami konteks tulisan yang kita input, baik berupa teks panjang atau hanya sekedar kata kunci. Siapa saja yang menggunakannya tentu akan dimudahkan. 2. Jawaban yang Lebih Akurat: Meskipun ChatGPT memiliki pemahaman bahasa yang luas, mereka mungkin tidak selalu memahami konteks secara mendalam. Hal ini menyebabkan jawaban yang diberikan kurang tepat atau tidak sesuai dengan apa yang dimaksud pengguna. Berbeda dengan Perplexity yang memiliki pemahaman konteks yang lebih baik sehingga jawaban yang diberikannya bisa lebih relevan dan akurat. 3. Chatbot dengan Kemampuan Canggih: AI ini dapat menanggapi setiap percakapan yang Anda lakukan, meskipun hanya sekedar "halo". Jawaban yang diberikan juga sangat ramah sehingga kita bisa merasa nyaman saat mengobrol dengan mesin pencari ini. Meskipun begitu, pengetahuannya sangat luas sehingga kita bisa menanyakan apa saja kepadanya, mulai dari pertanyaan yang sepele hingga pertanyaan yang sangat sulit. Ia akan berusaha menjawabnya seakurat mungkin lengkap dengan referensi. 4. Menampilkan Sumber Jawaban Secara Transparan: Setiap jawaban yang diberikannya biasanya diperoleh dari hasil pencarian Google. Meskipun begitu, AI Perplexity mampu merangkumnya untuk Anda. Jadi, Anda tidak perlu repot-repot mendapatkan inti dari jawabannya. Satu hal yang membuat AI ini sangat membantu adalah ia akan menampilkan sumber informasi untuk setiap jawaban. Bukan hanya satu sumber, setidaknya dua hingga lima sumber informasi dapat ditemukan. 5. Cepat dan Efisien: Tidak perlu menunggu lama untuk melihat jawaban dari Perplexity. Setelah Anda mengetik pertanyaan, jawaban akan langsung muncul di bawahnya. Meski begitu, kecepatan ini juga dipengaruhi oleh beberapa faktor. Semakin sulit dan kompleks pertanyaan yang Anda lemparkan, tentu saja proses menjawabnya juga akan semakin lama. Jadi, masalah kecepatan ini harus disesuaikan dengan variabel-variabel tersebut. Padahal, di antara kelebihan-kelebihan yang penulis sebutkan di atas, masih banyak kelebihan lain yang dimiliki oleh Perplexity AI seperti evaluasi kinerja, kemudahan penggunaan, dapat digunakan di PC atau smartphone, dan lain

sebagainya. Kelebihan yang dimiliki oleh Perplexity AI, menurut para peneliti adalah dapat meningkatkan kualitas penelitian mahasiswa, baik jurnal maupun skripsi.

The author conducted this socialization towards students and junior lecturers. This socialization was conducted during the author's teaching hours and informal discussions among colleagues in the office. The result in this article show the author conducted lasted for approximately four meetings with students at the author's teaching place with the concept of socializing the use of Perplexity AI once and directly practicing writing journals and thesis frameworks with three evaluations. When conducting socialization, the author explained a number of advantages of Perplexity AI, including: 1. More Optimal Search Engine Capabilities: Google Search is more optimal in searching using keywords. If we enter a long sentence, Google often cannot find search results. This is different from Perplexity AI which is able to understand the context of the writing we input, whether it is in the form of long text or just keywords. Anyone who uses it will certainly be facilitated. 2. More Accurate Answers: Although ChatGPT has a broad understanding of language, they may not always understand the context in depth. This causes answers that are less precise or not in accordance with what the user means. Unlike Perplexity which has a better understanding of context so that its answers can be more relevant and accurate. 3. Chatbot with Advanced Capabilities: This AI can respond to any conversation you make, even if it's just a "hello". The answers are also very friendly so that we can feel comfortable when chatting with this search engine. Even so, his knowledge is so broad that we can ask him anything, from trivial questions to very difficult questions. He will try to answer it as accurately as possible complete with references. 4. Displaying Answer Sources Transparently: Every answer it provides is usually obtained from Google search results. Even so, Perplexity AI is able to summarize it for you. So, you don't need to bother getting the gist of the answer. One thing that makes this AI so helpful is that it will display the source of information for each answer. Not just one source, at least two to five sources of information can be found. 5. Fast and Efficient: No need to wait long to see the answer from Perplexity. After you type the question, the answer will immediately appear below it. Even so, this speed is also influenced by several factors. The more difficult and complex the question you throw, of course the answering process will also be longer. So, this speed issue must be adjusted to these variables. In fact, among the advantages that the author mentioned above, there are still many other advantages possessed by Perplexity AI such as performance evaluation, ease of use, can be used on PC or smartphone, and so on. The advantages possessed by Perplexity AI, researchers are that it can improve the quality of student research, both journals and theses.



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INTRODUCTION

The root of the word literacy in Indonesian which is close to the idiom or word literacy is "alliteration", "transliteration", and also "literer" which means something related to the tradition of writing, and also "literator" or literary expert. In terms of language, literacy is an adopted word from the English word literacy which etymologically the term literacy comes from the Latin "litteratus" which means a person who learns. iteratus" which means a person who learns. According to (Sholihah 2016) literacy is an ability in a person to write and read. Meanwhile, Street defines literacy as personal self-development. The term literacy has expanded over time. Literacy is now not only interpreted as the

ability to write and read but as Aronof said, that "... has instead come to be considered synonymous with its hoped-for consequences".

Initially, literacy meant the ability to read and write in carrying out tasks related to the world of work and life outside of school. Then literacy meant being literate in information, technology, politics, critical thinking, and sensitive to the surrounding environment. So, it can be concluded that literacy is a person's ability to read and write. However, along with the development of the times, the meaning of literacy has become broader (Supriatna, Juhandi, and Rasipan 2022). Literacy can be interpreted as a person's ability to think critically, communicate, and develop themselves personally. Therefore, currently new terms have emerged in literacy, one of which is digital literacy. The concept of digital literacy began to emerge in the 90s which then became one of the crucial issues along with the increasing use of digital media. Paul Gilster - one of the figures who popularized the term digital literacy and published his book in 1997 entitled *Digital Literacy*, stated that digital literacy is the ability to empower technology and information, an ability to use digital devices effectively and efficiently in various contexts such as: academics, careers, and everyday life (Supriatna, Juhandi, and Rasipan 2022).

Digital literacy is a person's ability to apply digital component operating skills in order to obtain, sort information, be creative, assume critically, interact well, collaborate with others, and care about the safety of goods or electronic media and the developing ethical context. Digital literacy in the context of education influences the development of knowledge about learning materials in order to arouse curiosity and creativity (Setyaningsih et al. 2019). According to (Kurniawati, Zuhroh, and Malik 2021) conducted a study on digital literacy empowerment in schools in England which emphasized that students were given the opportunity to participate in selecting parts of learning, students were directed to increase independence and communicate with each other using digital. The study showed that SDL skills cannot be separated from digital literacy and can improve learning independence well.

(Stefany 2017) stated that digital literacy is basically a further and comprehensive development of classical literacy (e.g. reading and writing), audio-visual literacy (related to electronic media), digital literacy (related to digital technology), and more comprehensively, namely new media literacy (related to the internet and web 2.0). According to Devri Suherdi, digital literacy is a knowledge and skill to use digital media, including modern communication tools or internet networks in finding, working on, evaluating, using information, creating information and utilizing it, wisely, intelligently, carefully, precisely, and of course obeying the law and regulations in order to foster positive communication and interaction in everyday life. Feri Sulianta also stated that digital literacy is a unity of attitude, understanding, skills in handling and communicating information and using knowledge effectively in various media and formats.

Bawden stated that digital literacy involves the following aspects (Solahudin 2022) : a. Knowledge assembly, namely the ability to build information from various trusted sources; b. The ability to present information including critical thinking in understanding information with awareness of the validity and completeness of sources from the internet; c. The ability to read and understand material and information that is not sequential and dynamic; d. Awareness of the importance of conventional media and connecting it with networked media (the internet); e. Awareness of access to networks of people who can be used as sources of reference and assistance; f. Use of filters for incoming information; g. Feeling comfortable and having access to communicate and publish the internet.

To improve students' Digital Literacy, the author took the initiative to improve students' digital literacy by socializing the use of Semantic Scholar. The author's socialization of Semantic Scholar is included in one type of study in the scope of Digital Literacy according to (Solahudin 2022). The author conducted this socialization on students taught by the author during lecture hours.

METHOD

As explained in the introduction, this socialization was carried out during the courses that each author had. This socialization was carried out on campus as a place for the author to teach, namely the LP3I Polytechnic, STKIP PGRI Bengkalan, Muhammadiyah University of Palembang, Indraprasta PGRI University, and Hang Tuah University Pekanbaru:

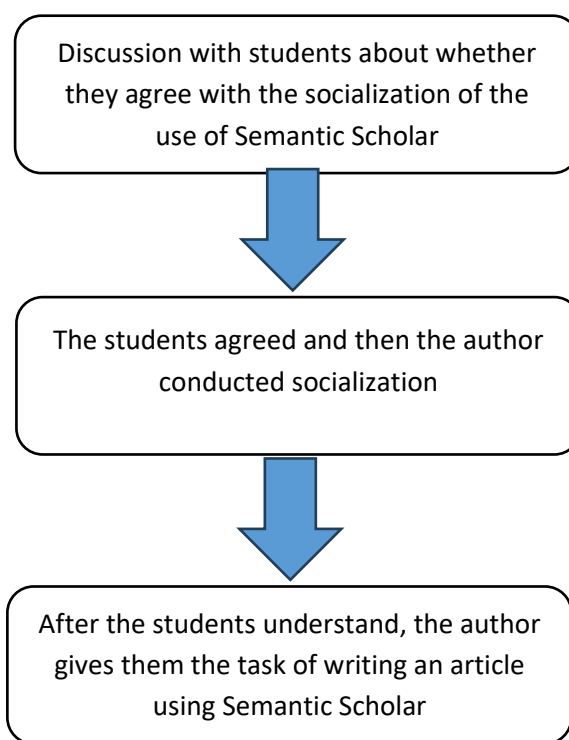


Figure 1. Stages of Socialization

RESULT AND DISCUSSION

Digital Literacy and Semantic Scholar

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To improve students' Digital Literacy, the author took the initiative to improve students' digital literacy by socializing the use of Semantic Scholar. The author's socialization of Semantic Scholar is included in one type of study in the scope of Digital Literacy according to (Solahudin 2022). The author conducted this socialization on students taught by the author during lecture hours. Semantic Scholar is a scientific search engine developed by the Allen Institute for AI. It is not just a search engine like Google, but a tool specifically designed to search, index, and connect scientific research. What makes Semantic Scholar so special is its ability to understand the context and meaning of each article it indexes.

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Basically, Semantic Scholar works by collecting and indexing various types of scientific publications, including journals, conference proceedings, and pre-publication papers. However, what sets Semantic Scholar apart from other search engines is its use of advanced natural language processing (NLP) technology. This allows Semantic Scholar to: 1). Identify Context: Semantic Scholar can understand the context in an article. For example, if you search for the word "cell" in the context of biology, the results will be different than if you search for it in the context of cellular technology. 2). Find Relationships: The intelligent algorithm behind Semantic Scholar can find relationships between different scientific articles. This means you can see connections between different studies that might not be immediately apparent. 3). Personalized Recommendations: Semantic Scholar can provide recommendations based on your interests and previous usage. This makes it easy for you to find the latest research that is relevant to your field.

The urgency of using Semantic Scholar is as follows : 1). Research Efficiency: With its unique ability to identify context and relationships, Semantic Scholar can save research time. Researchers no longer need to sort through hundreds of articles just to find the relevant ones. 2). Faster Innovation: With easier access to relevant research, innovation can happen faster. This can have a positive impact on various industries and disciplines. 3). Empowering Researchers: Semantic Scholar empowers researchers to explore various disciplines and gain a better understanding of their fields. 4). Open Access: One of the important aspects of Semantic Scholar is open access. This means that most of the content you find in it is freely accessible. This is a big step in democratizing access to knowledge. In addition, Semantic Scholar has several advantages compared to other platforms, namely: 1). Smarter AI-Based Search. 2). Automatic Paper Summary. 3). More Accurate Research Impact Analysis. 4). Focus on Quality Research. 5). Data Visualization and Research Connection. 6). Easy Access on Multiple Devices. 7). Easy Paper Management.

After explaining what Semantic Scholar is, what its functions are, and its advantages compared to other platforms. The author explains how to use Semantic Scholar as shown in the image below:

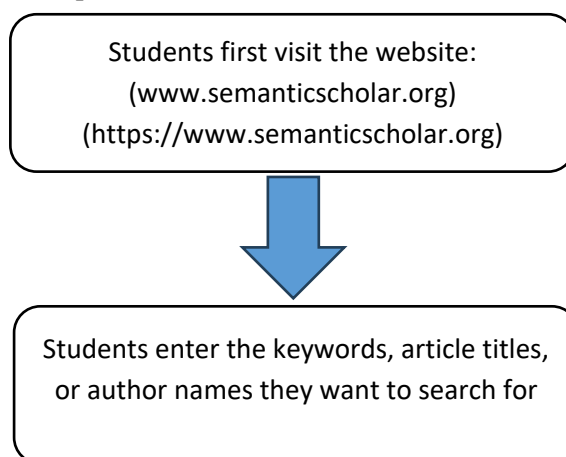


Figure 2. How to Use Semantic Scholar

The author has high hopes that the consultations conducted by the author with the students he teaches can be useful and become a charity for the author. The author believes that if students can utilize Semantic Scholar properly, it will increase students' Digital Literacy by reading, reviewing, and developing research in Semantic Scholar.

CONCLUSION

Based on the explanation above, it can be concluded The urgency of using Semantic Scholar is as follows : 1). Research Efficiency: With its unique ability to identify context and relationships, Semantic Scholar can save research time. Researchers no longer need to sort through hundreds of articles just to find the relevant ones. 2). Faster Innovation: With easier access to relevant research, innovation can happen faster. This can have a positive impact on various industries and disciplines. 3). Empowering Researchers: Semantic Scholar empowers researchers to explore various disciplines and gain a better understanding of their fields. 4). Open Access: One of the important aspects of Semantic Scholar is open access. This means that most of the content you find in it is freely accessible. This is a big step in democratizing access to knowledge. In addition, Semantic Scholar has several advantages compared to other platforms, namely: 1). Smarter AI-Based Search. 2). Automatic Paper Summary. 3). More Accurate Research Impact Analysis. 4). Focus on Quality Research. 5). Data Visualization and Research Connection. 6). Easy Access on Multiple Devices. 7). Easy Paper Management. The author has high hopes that the consultations conducted by the author with the students he teaches can be useful and become a charity for the author. The author believes that if students can utilize Semantic Scholar properly, it will increase students' Digital Literacy by reading, reviewing, and developing research in Semantic Scholar.

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