

STUDENTS' PERCEPTION TOWARDS SPARK DIGITAL PLATFORM IN ENGLISH LANGUAGE LEARNING

Persepsi Siswa Terhadap Platform Digital SPARK

Dalam Pembelajaran Bahasa Inggris

Jelita Sitorus, Rudi Hartono, Sri Wahyuni

English Education Master's Program/FBS

UNIVERSITAS NEGERI SEMARANG

Semarang, Indonesia

jelita@students.unnes.ac.id; rudi.hartono@mail.unnes.ac.id; sriwahyunifbs@mail.unnes.ac.id

Abstract

Digital learning has been integrated into English language learning. SPARK is a digital platform from National Geographic Learning that could enhance students' learning activities. On that account, this study aimed to investigate students' perceptions towards the SPARK digital platform. A qualitative approach was employed to scrutinize the perceptions of 44 students from a senior high school in Medan, North Sumatera Province, who consented to complete questionnaires and 3 students for in depth-interview. The mean age of the participants was 16 years, with 27 females and 20 males. Data were collected using a 13-item Self-Determination Theory (SDT) questionnaire and an 8-item Technology Acceptance Model (TAM) questionnaire. The result revealed a high level of students' perceptions regarding the use of the SPARK digital learning platform. Furthermore, the findings indicated that the SPARK digital platform can refine the quality of the students' learning. These research findings serve as a valuable guide for the English teachers in establishing and planning a strategy to improve the level of effective teaching learning process. This will enable the full implementation of the digital learning practice.

Keywords: perceptions, SPARK, digital platform

Introduction

The digital learning platform has been incorporated into English language learning as the 21st-century educational landscape is being reshaped by digital technologies (Abidin, 2023; Arifudin, 2025). Governments and companies invest heavily in digital learning platforms. They develop software, hardware and digital learning materials. Schools adopt these platforms to improve student learning outcomes. Digital Platform helps reduce the gap between urban and rural schools. Many countries use digital platforms for wider access for learning purposes. Traditional education, centred around physical classrooms, printed books, and face-to-face interaction, is challenged by the emergence of digital learning as the central component (Arifudin, 2025). The COVID-10 pandemic accelerated this transformation, leading to a radical shift from traditional modes to completely online foreign language

teaching (Saputra et al., 2022). Digital tools and online platforms are now mandatory (Abidin, 2023).

Digital learning uses technology to enhance the learning experiences of students, encompassing various tools from interactive software to online databases (Basak, 2018; Majid et al., 2025). E-learning, m-learning, and d-learning are often considered parts of digital learning. E-learning uses digital electronic tools and media, while m-learning uses personal portable electronic devices across multiple contexts (Kuhnel et al., 2018). Basak (2018) defines m-learning as "e-learning through mobile computational devices: palms, Windows CE machines, even digital cell phones". This enables students to interact with resources remotely from traditional learning environments. Within technology-driven learning environments, students are encouraged to actively participate in learning activities.

Digital platforms such as Learning Management Systems (LMS), gamified exercises, and simulations are reckoned as examples of effective tools in English Language Teaching (ELT). SPARK is a digital learning platform that supports English language teaching and learning by integrating instructional material, assignments, assessment tools, and communication features within a single system. This platform enables teachers to manage courses, distribute learning resources, and monitor students' progress, while also allowing students access digital content, complete interactive tasks, and engage in self-directed learning through an online environment. Thus, SPARK functions as a learning management system (LMS) that supports flexible and technology-enhanced instruction in English language teaching. Additionally, SPARK contributes to blend learning implementation by combining classroom instruction with online learning activities, thereby enhancing accessibility, engagement, and continuity of learning in digital education environments (National Geographic 2024, 2025, 2026).

The humanization of digital education is explored through Self-Determination Theory (SDT). Satisfying innate psychological needs competence, autonomy, and relatedness that enhances self-motivation and mental health (Ryan & Deci, 2000). Providing these psychological supports reveals human curiosity, vitality, and self-motivation (Ryan & Deci, 2000). Conversely, excessive control or lack of connectedness can lead to passivity and alienation (Ryan & Deci, 2000). The SPARK digital platforms are designed to catalyse intrinsic motivation. It is recognized that human nature is inherently curious and self-motivated when intuitive psychological needs for competence, autonomy, and relatedness are supported (Ryan & Deci, 2000).

The SPARK digital platform measures perceptions. It uses elements of the Technology Acceptance Model (TAM)

to assess perceived usefulness and ease of use, and features from the Unified Theory of Acceptance and Use of technology (UTAUT) to measure performance and effort expectancy (Lin et al., 2017; Majid et al., 2025). It also evaluates Learning Engagement, which includes student interest and motivation. Interaction is crucial, and digital features facilitate communication between students and teachers. The role of interaction is regarded as crucial, as communication between students and teachers is facilitated by specific digital features that reduce communication gap (Faizah et al., 2022; Majid et al., 2025).

Cramarenco et al. (2023) demonstrate that students' perceptions of digital learning are complex, encompassing positive, negative, and neutral categories. These categories are influenced by factors such as digital literacy, engagement, and satisfaction with the learning system. Notably, students who possess greater confidence in utilizing technology tend to have more positive experiences, while those who encounter difficulties with digital tools may experience reduced satisfaction or even frustration.

Similarly, online learning is generally viewed positively by students, as reported by Maskum et al. (2020). This perception is primarily attributed to the flexibility and accessibility of learning resources it offers. However, online learning does not present an entirely seamless experience. Students may encounter feelings of isolation due to limited motivation, encompassing cognitive, personal and emotional aspects.

Increased interaction and students' motivation are being fostered through these digital learning environments (Uzorka&Odebiyi,2025). More active engagement in language learning activities is encouraged through the use of interactive and game-based features. As a result, a more supportive and participatory ELT learning experience is offered to the students.

Research consistently demonstrates that the incorporation of digital tools into instructional practices leads to enhanced student engagement, motivation, and academic performance in educational settings. These positive outcomes are particularly evidenced when active learning methodologies are being integrated alongside digital instruction (Hardyanti et al. (2023). In English Language Teaching (ELT), improved learner participation is often supported through the use of such technologies. Increased motivation among students is also observed when digital tools are applied in ELT. Academic performance in ELT contexts is further strengthened through structured and interactive digital learning experiences.

According to Econ Market (2026), corporate training adoption has experienced a substantial increase, with 67% of Fortune 500 companies now providing digital English training programs. It shows that corporate training in English Language Teaching (ELT) is rapidly transformed, with digital learning solutions being increasingly adopted by major companies. This shift is being driven by the recognition that English proficiency is being prioritized to enhance communication globally. Greater focus is being placed on flexible, technology-supported ELT methods so that continued learning can be accommodated. Consequently, more investment is being made in digital ELT programs to strengthen employees' English proficiency. In response, the SPARK digital platform in English Language Teaching is being oriented as a potential pedagogical solution for the students' writing competence. Through this platform, interactive writing tasks and structured guided practice activities are prepared for students.

Responding to this issue, it is compulsory to investigate students' perception towards SPARK digital platform that is used during English Language Teaching in SMA Sutomo 1 Medan. This study is focused on students'

perceptions. The novelty of this study lies in its investigation of students' perceptions of the SPARK digital platform in English language learning in a comprehensive analysis. This study's primary focus is on unravelling how a digital learning platform influences students' in learning English. By evaluating these variables concurrently, the study offers an updated empirical perspective on technology-driven English learning within the context of English language teaching in senior high school.

In this study, the research question is How do students' perceptions towards the SPARK digital platform? This study's objective is to investigate students' perceptions towards the SPARK digital platform. This study theoretically contributes to the theories of digital learning and perceptions. It provides empirical evidence demonstrating how a digital platform influences students' during English language learning. The findings align with or extend existing theories on technology-enhanced language learning. Practically, this study enhances the understanding of students' perceptions of the SPARK digital platform on learning outcomes for students, teachers, and schools. Students' gain insight into how digital tools can foster confidence and writing skills. Teachers and school administrators can utilize the results to inform their decisions regarding the adoption or enhancement of digital platforms in English classrooms. This study pedagogically offers guidance for teaching strategies in English writing classes. It assists teachers in designing learning activities that integrate the SPARK digital platform to enhance students' self-efficacy and improve writing abilities. Additionally, it supports the development of more effective technology-based instructional practices in senior high schools English language teaching.

Methodology

To ensure a meticulous exploration of students' perception toward the SPARK digital platform, a comprehensive methodological framework was constructed. A fundamental aspect of this research is guided by Self-determination Theory (SDT) and Technology Acceptance Model (TAM).

A qualitative research design was employed for this study. This specific design is widely used in educational research for its ability to provide a more holistic perspective (Creswell, 2012). This study was framed as a qualitative case study that is systematically supported to facilitate triangulation. By integrating these paradigms, the descriptive depth of students' perceptions toward SPARK digital platform was successfully combined.

The study was conducted in SMA Sutomo 1 Medan, North Sumatera Province, specifically grade ten and eleven who employ the SPARK platform for English language learning. A purposive sampling technique was applied to ensure that the participants have experiences with the SPARK platform to provide insightful data. A total 44 students who consented to complete questionnaires and 3 students for in depth-interview. The mean age of the participants was 16 years, with 27 females and 20 males. All participants were provided with a clear explanation of the study's objectives, and voluntary informed consent was obtained prior to the data collection.

Data were gathered through three distinct instruments designed to capture behavioral, emotional and cognitive perspectives (Basak, 2018). Firstly, a structured questionnaire was developed, utilizing Likert scale from "strongly disagree to strongly agree" (Muslem et al., Majid et al., 2025). The items were adapted from established frameworks, including the Self-Determination Theory (SDT) the Technology Acceptance Model (TAM) to measure perceptions, perceived usefulness and ease of use (Lin et al.,

2017; Saputra et al., 2022). Secondly, a semi-structured interview was done to provide an in-depth understanding of the students' perceptions of internal states, such as their feelings or enjoyments or anxiety while interacting with the platform (Faizah et al., 2022). The interview was designed to be flexible. Allowing for the exploration of unexpected student reflections (Yolanda et al., 2025). Lastly, a classroom observation sheet was employed. This allowed for observing students' attentiveness, spontaneous responses to interactive assignments from the SPARK platform in navigating the digital interface.

The research procedure was done in three stages namely the preparation, the implementation, and the evaluation (Maisani et al., 2022). During the preparation phase, the digital tools was evaluated and the SPARK digital platform was integrated into English language learning. In the implementation phase, classroom observations were conducted to establish a baseline of the student interaction patterns. Following the observations, the questionnaire was distributed online via Google Forms. Next, the interview was done face-to-face to accommodate an in-depth result. In the evaluation phase, the data were analyzed for a comprehensive analysis.

The ethical treatment of participants remained a priority throughout the study. Confidentiality was strictly maintained by anonymized students' identities through the use of labels. Therefore, a safe and non-judgmental space was provided for students to express their honest opinions without fear of academic consequence. This commitment to ethical strictness ensured that the research contributed to a more humanized and inclusive digital educational system (Arifudin, 2025; Ryan & Deci, 2000).

Finding and Discussion

A systematic analysis was applied on the data interpretation from the students. It

was revealed by descriptive statistics that a high level of students' perceptions regarding the use of the SPARK digital learning platform. Furthermore, the findings indicated that the SPARK digital platform can refine the quality of the students' learning.

This data analysis was done by using JASV. Normality of 21-item-question is seen based on Cronbach Alpha score that is 0.936. It belongs to excellent or very high reliability. The class width formula is commonly explained by statistical expert Manikandan (2011) as in the formula (1) below.

$$\text{Interval Width} = \frac{\text{Highest Score} - \text{Lowest Score}}{\text{Number of Categories}} \quad (1)$$

In this study, the Likert scale used is range 1-4. The class width = $(4-1)/5=0.60$

So, the table of range and interpretation can be seen as follows.

Table 1. Students' Level of Interpretation toward SPARK

Range	Interpretation
1.00-1.60	Very low
1.61-2.20	Low
2.21-2.80	Moderate
2.81-3.40	High
3.41-4.00	Very High

The primary hypothesis of this study (H1) is that the SPARK digital platform presents a better positive impact on English language learning. The hypothesis is accepted. It was indicated by an analysis from Motivation and Intrinsic Engagement from SDT theory, that the SPARK digital platform achieved 2.90 which means students' level of perceptions toward SPARK is categorized high based on table interpretation given above. In addition, for SDT's questions, it can be seen that the mean is 2.90 which is regarded as a high level of students' perceptions toward the SPARK digital platform and the standard deviation is 5.784. The table can be seen as follows.

Table 2. Motivation and Intrinsic Engagement

Range	Frequency
1.00-1.60	1
1.61-2.20	1
2.21-2.80	8
2.81-3.40	30
3.41-4.00	4
Total	44
Mean	2.90
Standard deviation	5.784

This is also supported by students' statement:

Using SPARK in learning English (at English Lab) makes it easier, fun and interactive than learning English in the classroom as usual.

(Student A, April 21st, 2026)

I feel motivated and interested when using SPARK because the activities are interactive and not boring.

(Student B, April 21st, 2026)

These findings and statements represent how the SPARK digital platform helps students in boosting their motivation in learning English. A transition from traditional to students-centered is facilitated by the implementation of the SPARK digital platform. It was observed that one student is categorized as having very low perceptions of the SPARK digital platform, one student was categorized low, eight students were categorized moderate, thirty students were categorized high and four students were categorized very high. High levels of students' engagement and interest are stimulated by the interactive nature of the digital activities provided. An accessible and stimulating learning environment is created in the English Lab, which is contrasted with conventional classroom methods by the students. Furthermore, students' motivation is effectively assisted by the prioritization of interactive pedagogical tools. Thus, educational stagnation is avoided and a

proactive learning is fostered through this integrated digital approach.

The primary hypothesis of this study (H1) is that the SPARK digital platform presents a better positive impact on English language learning. Based on Technology Acceptance Model (TAM) theory, items questions that the SPARK digital platform achieved 2.94 which means students' level of perceptions toward SPARK is categorized high. For TAM's questions, it can be seen that the mean is 2.94 and the standard deviation is 3.879. The table can be seen as follows.

Table 3. Perceived Usefulness and Ease of Use

Range	Frequency
1.00-1.60	1
1.61-2.20	3
2.21-2.80	9
2.81-3.40	28
3.41-4.00	3
Total	44
Mean	2.94
Standard deviation	3.879

This is also supported by student B's statement:

I am very confident in using SPARK for English learning because it also provides reading, listening, and writing and a lot of exercises to be more competent in learning English. SPARK also provides a very clear instruction. It is very useful as we use it once a week. We practice every week. Practice makes perfect. I think SPARK is very helpful and it makes learning easier and more fun.

(Student C, April 21st 2026)

These findings indicate that a positive impact on English language learning has been perceived through the SPARK digital platform. Based on the Technology Acceptance Model (TAM), a mean score of 2.94 has been obtained, which is categorized as a high level of students' perception toward the platform. This result suggests that the SPARK is

generally accepted as a useful and user-friendly learning tool by students. However, a standard deviation 3.879 has been recorded, indicating that the differences in student responses have been observed and that the learning experience has not been perceived uniformly by all participants. A very low perception toward the SPARK digital platform was categorized for a single student, three students were categorized low, nine students were categorized moderate, twenty-eight were categorized high and three students were categorized very high. Most students were categorized with a high level of perceptions toward the SPARK digital platform.

It is revealed by the descriptive statistical analysis that a high level of positive students' perceptions toward the SPARK digital platform is maintained by the students. High mean scores were recorded for both motivation and intrinsic engagement (2.90) and perceived usefulness and ease of use (2.94). It shows that the SPARK digital platform is perceived as more effective and engaging than traditional. It was observed that the high level of behavioral and engagement reaching 68% (30 students) were fostered during English learning activities based on SDT items and based on TAM items, 28 students (63%). The humanization of the learning process is achieved when students perceive their academic assignments as sources of enjoyment. However, the transition to a fully digital environment is not without its complexities. It was found that 2 % (1 student) was categorized as very low and 2% (1 student) was categorized as having a low level of perceptions towards the SPARK digital platform. Meanwhile, based on TAM items, 1 student belongs to very low and three students were categorized as having a low level of perception. Overall, the findings of this study suggest that the SPARK digital platform has been positively perceived as a valuable tool for supporting English language learning.

Conclusions

In conclusion, the SPARK digital platform is recognized as a transformative change through unprecedented accessibility, personalization, and students' engagement. The SPARK digital platform has been perceived as an effective medium which enhances students' motivation. In this study, high positive perception toward the SPARK digital platform has been demonstrated by the students particularly, in relation to the usefulness and flexibility which is offered during English language learning. The integration of digital features such as interactive assignments, materials, and continuous practice has been regarded as helpful and beneficial for the improvement of language learning.

In accordance with Self-Determination Theory, the needs for autonomy, competence, and relatedness must be fulfilled so that motivation and intrinsic engagement can be fostered (Ryan & Deci, 2000). When these psychological supports are provided, higher levels of confidence, participation, and persistence can be encouraged among learners. This is in line with Technology Acceptance Model (TAM) Theory, when education is perceived as beneficial and easy to use, higher levels of acceptance and learning motivation are more likely to be achieved. Finally, the positive perceptions identified in this study suggest that the SPARK has successfully fulfilled important technological and pedagogical expectations among learners. It is hoped that this study can serve as a reference for future investigation into technology-enhanced language learning and that meaningful contributions to the educational needs of 21st students can continue to be supported.

References

Abidin, Z., Prananta, A. W., & Asmaddin. (2023). Digital learning for future science learning: A systematic literature review. *Jurnal Penelitian Pendidikan IPA*, 9(12), 1354–1360.

- <https://doi.org/10.29303/jppipa.v9i12.5665>
- Arifudin, O. (2025). Why digital learning is the key to the future of education. *International Journal of Education and Digital Learning*, 3(4), 201–210. <https://doi.org/10.47353/ijedl.v3i4.261>
- Basak, S. K., Wotto, M., & Bélanger, P. (2018). E-learning, m-learning and d-learning: Conceptual definition and comparative analysis. *E-Learning and Digital Media*, 15(4), 191–216. <https://doi.org/10.1177/2042753018785180>
- Cakrawati, L. M. (2017). Students' perceptions on the use of online learning platforms in EFL classroom. *English Language Teaching and Technology Journal (ELT-Tech Journal)*, 1(1), 22–30.
- Cramarencu, R. E., Burcă-Voicu, M. I., & Dabija, D. C. (2023). Student perceptions of online education and digital technologies during the COVID-19 pandemic: A systematic review. *Electronics*, 12(2), 319. <https://doi.org/10.3390/electronics12020319>
- Creswell, J. W. (2012). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications. https://spada.uns.ac.id/pluginfile.php/510378/mod_resource/content/1/Creswell.pdf
- Econ Market Research. (2026, April 10). *Digital English language learning market: Size, share, trends, growth and industry analysis (2026–2035)*. <https://www.econmarketresearch.com/industry-report/digital-english-language-learning-market>
- Faizah, H. N., Suwandi, & Pratama, H. (2022). EFL students' perception of interaction in online learning practices. *Lingua*, 19(2), 59–69. <https://doi.org/10.30957/lingua.v19i2.768>
- Hardiyanti, E., Fitriani, V., & Ashari, W. (2023). *The influence of digital tools on student engagement and academic outcomes across educational levels*. *Educia Journal*, 1(2), 57–66. <https://doi.org/10.71435/610408>
- Kuhnel, M., Seiler, L., Honal, A., & Ifenthaler, D. (2018). Mobile learning

- analytics in higher education: usability testing and evaluation of an app prototype. *Interactive Technology and Smart Education*, 15(4), 332–347. <https://doi.org/10.1108/ITSE-04-2018-0024>
- Lin, M.-H., Chen, H.-C., & Liu, K.-S. (2017). A study of the effects of digital learning on learning motivation and learning outcome. *EURASIA Journal of Mathematics, Science and Technology Education*, 13(7), 3553–3564. <https://doi.org/10.12973/eurasia.2017.00744a>
- Lee, J. S., Chen, J., & Drajiati, N. A. (2024). Informal digital learning of English and perceptions of using EIL materials: attitude toward varieties of English as a mediator. *Journal of Multilingual and Multicultural Development*, 45(5), 1762–1777. <https://doi.org/10.1080/01434632.2021.2021213>
- Manikandan, S. (2011). Frequency distribution. *Journal of Pharmacology & Pharmacotherapeutics*, 2(1), 54–56. <https://doi.org/10.4103/0976-500X.77120>
- Majid, F. F. D. N., Rahman, A., & Anwar, S. (2025). EFL student's perception on digital learning media technology: The case of secondary school in Indonesia. *English Language Teaching Methodology*, 5(2), 139–151. <https://doi.org/10.56983/eltm.v5i2.1862>
- Maskun, T. R., Suroto, & Rahmawati, F. (2020). Student perceptions of online learning. *International Journal of Multicultural and Multireligious Understanding*, 7(2), 67–73. <http://dx.doi.org/10.18415/ijmmu.v7i2.1416>
- Muslem, A., Fata, I. A., & Nur, L. M. (2022). Analyzing students' perceptions of English language learning through online learning implementation. *Jurnal Pendidikan Indonesia*, 11(3), 437–447. <https://doi.org/10.23887/jpiundi.ksha.v11i3.45764>
- National Geographic Learning. (2024). *Spark platform student learning features*. ELT National Geographic Learning. <https://s-help.eltngl.com/spark/primary-student/olp.html>
- National Geographic Learning. (2025). *Spark instructor guide and LMS integration system*. ELT National Geographic Learning. <https://s-help.eltngl.com/spark/>
- National Geographic Learning. (2026). *Spark success stories: Bringing learning to life with an online platform*. InFocus Blog. <https://infocus.eltngl.com/2026/02/04/spark-success-stories-bringing-learning-to-life-with-an-online-platform/>
- National Geographic Learning. (2023). *Digital resources and learning platform overview*. ELT National Geographic Learning. <https://s-www.eltngl.com/assets/html/digital-resources/>
- Phang, B. L., Sani, B. B., & Azmin, N. A. B. M. (2020). Investigating mentor teachers' roles in mentoring pre-service teachers' teaching practicum: A Malaysian study. *English Language Teaching, being. American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037110003-066X.55.1.68>
- Saputra, E., Saputra, D. B., Handrianto, C., & Agustinos, P. (2022). EFL students' perception towards online learning: What to consider? *Indonesian Journal of English Language Teaching and Applied Linguistics*, 7(1), 123–140. <https://doi.org/10.5539/elt.v13n11p1>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well
- Uzorka, A., & Odebiyi, O. A. (2023). *Impact of digital learning tools on student engagement and achievement*. *Journal of Digital Learning and Distance Education*, 1(2), 1436–1445. <https://www.rjupublisher.com/ojs/index.php/JDLDE>