Sự hài lòng của sinh viên đối với nền tảng tự học tiếng Anh trực tuyến Spark: Kết quả nghiên cứu từ sinh viên không chuyên tại Trường Đại học Quy Nhơn

TÓM TẮT

Nghiên cứu này nhằm khảo sát mức độ hài lòng của sinh viên không chuyên tiếng Anh tại Trường Đại học Quy Nhơn đối với nền tảng tự học tiếng Anh trực tuyến Spark. Mục tiêu là ghi nhận trải nghiệm thực tế của người học, xác định các yếu tố tác động đến mức độ hài lòng, và cung cấp dữ liệu tham khảo cho cải tiến dạy – học tiếng Anh không chuyên. Nghiên cứu áp dụng tiếp cận định lượng qua khảo sát trực tuyến; các mục đánh giá tập trung vào ba nhóm: tính tiện lợi, thiết kế bài tập, và tính năng hỗ trợ người học. Mẫu gồm 269 sinh viên không chuyên khóa 47. Dữ liệu được phân tích bằng thống kê mô tả (tần suất, tỷ lệ %) kết hợp giá trị trung bình (mean) và độ lệch chuẩn (SD) để phản ánh mức độ hài lòng và độ nhất quán. Kết quả cho thấy sinh viên đánh giá cao tính tiện lợi của Spark. Về thiết kế bài tập, người học ghi nhận phù hợp chương trình và trình độ, trình tự logic, đa dạng, hướng dẫn rõ ràng; tuy nhiên cơ chế phản hồi và gợi ý theo bước còn hạn chế. Ở nhóm hỗ trợ người học, Spark giúp ôn tập kiến thức, mở rộng và truy cập nhanh học liệu. Nền tảng cũng thúc đẩy học tập lấy người học làm trung tâm, song cơ hội tương tác và chia sẻ tri thức với giảng viên/bạn học còn thấp. Nhìn chung, Spark đáp ứng tốt nhu cầu tự học của sinh viên, đồng thời gợi ý nâng cấp phản hồi, gợi ý theo bước và tương tác nhằm tối ưu trải nghiệm và kết quả học tập.

Từ khóa: *nền tảng Spark, nền tảng tiếng Anh, nền tảng tự học, hài lòng của sinh viên, sinh viên không chuyên*

Student Satisfaction with the Spark Online English Self-Study Platform: Evidence from Non-English Majors at Quy Nhon University

ABSTRACT

This study investigates non-English-major students' satisfaction with the Spark online English self-study platform at Quy Nhon University. It aims to capture learners' experiences, identify factors shaping satisfaction, and inform improvements in non-English-major English instruction. A quantitative online survey was administered, with items grouped into three dimensions: convenience, exercise design, and learner-support features. The sample comprised 269 cohort-47 students. Data were analyzed using descriptive statistics (frequencies, percentages) and means with standard deviations (SD) to reflect both satisfaction levels and response consistency. Findings show consistently high satisfaction with convenience. For exercise design, learners positively rated curriculum alignment, level appropriateness, logical sequencing, task diversity, and instructional clarity; however, feedback mechanisms (instructor/automated) and hint-supported steps were perceived as insufficient. Regarding learner support, Spark facilitates in-class knowledge review, broadens access to practice resources, and enables time-saving retrieval of materials, making study easier. The platform also supports learner-centered learning (interest/engagement, consistent effort, self-directed learning, time management), yet opportunities for interaction and knowledge sharing with instructors and peers remain limited. Overall, Spark aligns well with students' self-study needs. To enhance impact, priorities include richer, timely feedback, granular task scaffolding, and lightweight interaction channels to strengthen collaboration and social presence.

Keywords: Spark platform, English platform, self-study platform, non-majors' satisfaction, non-majors

1. INTRODUCTION

Amid the advancement of educational technology and the promotion of student autonomy in learning, online platforms have emerged as indispensable tools for language instruction. These platforms not only support flexible learning environments but also empower students to take greater control of their learning processes. Recognizing this pedagogical shift, the Department of Foreign Languages at Quy Nhon University (QNU) has implemented targeted strategies to enhance students' access to technology-based English learning resources, particularly for non-English majors enrolled in General English courses. One significant improvement was the adoption of the *Voices Pre-intermediate* textbook, authored by Emily Bryson and Christien Lee and published by National Geographic Learning, into the curriculum of English 1 and English 2 during the 2022–2023 academic year. This textbook is complemented by the Spark online English self-study platform, which enhances students' out-of-class learning activities and practice.

The Spark offers exercises, including Reading, Grammar, Pronunciation, Listening, Vocabulary, Speaking and Writing. These activities are assigned by instructors with specific weekly deadlines based on the teaching schedule, ensuring that students complete tasks on time. Students access the Spark platform via the website learn.eltngl.com. They are required to complete assigned exercises on Spark as part of their coursework and as a prerequisite for the final examination, ensuring consistent engagement with the material throughout the semester.

Against this backdrop, the present study aims to examine the satisfaction of non-English majors with the Spark platform at QNU and to identify which platform features most effectively support out-of-class learning. The study is driven by the author's instructional commitment to promoting learner autonomy and maximizing the pedagogical value of digital tools in large, mixed-ability classes, while also responding to institutional demands for evidence-based enhancement of blended General English teaching. Accordingly, the study addresses the following questions: Research question 1 (RQ1): To what extent are students satisfied with Spark's convenience, exercise design, and learner-support features? Research

question 2 (RQ2): Which features of Spark most strongly facilitate sustained engagement and self-directed learning beyond classroom hours? Research question 3 (RQ3): What perceived limitations, if any, constrain students' learning experience on the platform?

The scope of the investigation is delimited to non-English majors from Cohort 47 at QNU who used *Voices Pre-intermediate* with Spark during the 2024–2025 academic year. By providing context-specific evidence from a Vietnamese higher-education setting, this study contributes practical insights for course design, platform integration, and assessment policies in blended General English courses. More broadly, it underscores a strategic shift toward learner autonomy, continuous engagement, and personalized learning pathways, aligning English language instruction with global trends in technology-enhanced education and equipping students with the digital literacy and language skills essential for academic and professional success in the 21st century.

2. THEORETICAL BACKGROUND
2.1. Social Cognitive Theory

This theory posits that students' attitudes and behaviors are shaped by external environmental factors[1]. In online higher education, this environment encompasses the platform, instructors, learners, and university-provided support systems. These elements influence students' cognition and attitudes, which, in turn, drive their engagement and satisfaction[2]. Accordingly, Social Cognitive Theory offers a lens to identify what determines engagement and satisfaction in online learning—specifically, how features of the learning environment shape students' perceptions, leading to their participation and overall satisfaction.

2.2. Student Satisfaction

Learners' satisfaction with online learning is a key indicator of success for both students and higher-education institutions[3]. Student satisfaction contributes to greater learning motivation, improved performance, and stronger loyalty to online education. It also serves as a key indicator of online learning service quality, supporting universities in enhancing their online course offerings[4]. Assessing student satisfaction should be grounded in learners' perspectives on all components of the online course[5]. It is therefore critical for universities to facilitating

student engagement in online learning to ensure students' satisfaction.

2.3. Student Engagement and Satisfaction

Student engagement is commonly understood as the extent to which learners demonstrate psychological, cognitive, emotional, and behavioral involvement in achieving learning outcomes[6]. It encompasses emotional, cognitive, and behavioral dimensions of engagement. When students engage in online learning, they invest time, energy, thought, effort, and—to a degree—emotion in their studies both inside and outside virtual classes. Engagement is evidenced by how they respond to course content, interact with peers, and communicate with instructors to achieve learning outcomes. Behavioral engagement refers to observable behaviors such as attendance, active involvement, and the degree of participation. Emotional engagement concerns learners' intangible states—interest, feelings, and emotions. Cognitive engagement reflects the mental effort students invest in learning[7]. A high level of engagement contributes to improved online learning outcomes and greater satisfaction with various aspects of the course—including instructional approaches, learning content and structure, interactions with instructors and teaching assistants, discussion activities, group work or assessments, and the overall online learning experience[3].

2.4. Factors Influencing Student Engagement and Satisfaction with Online Learning

Students' perceptions of online learning service quality are a critical determinant of their engagement and satisfaction with online learning[4]. A growing body of research underscores that students' attitudes toward computers and the internet are pivotal predictors of both engagement and satisfaction in online learning. Grounded in technology acceptance perspectives, students are more likely to adopt online learning when they perceive it as useful and effortless to use. Accordingly, learners need to view online learning as beneficial for knowledge acquisition—particularly in terms of flexibility, accessibility, interactivity, and ease of use—in order to participate actively and report higher satisfaction with the online learning experience[3]. Building on these established perspectives, it becomes essential to examine how such factors operate within specific online learning environments. In the

context of Vietnamese higher education, where technology-enhanced language learning is increasingly adopted, understanding student engagement and satisfaction remains particularly relevant. At Quy Nhon University, the Spark platform has been integrated into General English courses to support self-study and out-of-class practice for non-English majors. Investigating how students perceive Spark's usability, task design, and learning support features therefore provides valuable insights into the effectiveness of this platform in fostering meaningful engagement and overall satisfaction.

3. LITERATURE REVIEW
3.1. Online learning and the promotion of learner autonomy

It is critical for the 21st century knowledge society that the educational system cultivates autonomous, life-long learners capable of independently constructing knowledge and developing skills to effectively adapt to changing markets and compete in a challenging global environment (Serdyukova N. & Serdyukov P.[8]). Autonomous learning is believed to improve students' learning outcomes (Pratiwi, D. I., & Waluyo, B.[2]) https://jees.umsida.ac.id/index.php/jees/issue/view/112/3. The advancement of digital technologies has opened up new opportunities to foster learner autonomy, particularly in online learning environments. Numerous studies have highlighted the positive impact of digital tools on autonomous learning, especially in the context of language education. This was clearly demonstrated in Pratiwi's[9] study, which revealed that online platforms integrating multiple e-learning technologies effectively enhanced students' autonomy and improved their performance in practicing TOEFL Structure and Written Expression. The findings suggest that increased practice through these platforms promoted independent learning and led to higher achievement. Pratiwi also emphasized that technological advancements have reshaped language teaching, encouraging learners to adapt their skills and strategies to meet the demands of digital contexts.

In another study, Pratiwi et al.[10] found that digital classes incorporating tools such as Google Form, Quizizz, Quizlet, Kahoot!, and Socrative were more effective than traditional classes in terms of learning outcomes. Learner autonomy in listening, structure, and reading skills, encompassing self-reliance, information literacy, linguistic confidence, and learning strategy. Mahmud[11] notes a pedagogical shift from teacher-centered to student-centered learning, facilitated by digital tools that promote active engagement and self-regulation.

Clarke and Hermens[12], in their case study, revealed that online learning aligns well with learner-centered pedagogy. It enables students to regulate their own pace and engage in activities tailored to individual learning preferences. This flexibility empowers learners to assume responsibility for their progress, fostering independence and personal accountability.

Online learning offer significant advantages for students, especially those learning English as a foreign language. These environments provide abundant opportunities for independent learning beyond the classroom through websites, videos, online lectures, e-books, and interactive programs. Such resources not only motivate students to learn but also save time and effort, bring authentic English into the learning process, and foster autonomy and self-directed learning. As a result, students can develop their language skills more effectively and take greater responsibility for their own progress (Ahmed et al.[13]). Moreover, Ubaedillah and Pratiwi[14] showed that a variety of advantages are available in an online teaching environment, including the ability to study anywhere at any time, having more time to think and respond, and increased learning flexibility.

According to Sadaghian and Marandi[15], one of the affordances of technology for language learners is the creation of opportunities to use language in collaborative, authentic contexts. Such contexts are assumed to increase learners' autonomy by developing a capacity for reflection and analysis, which is central to the development of learner autonomy. Choi and Lee[16] emphasize, as for the EFL learners, using digital technology has become an important skill to be equipped with, in that it can bring them closer to the rich environment of the target language. Learners not only find and access reading content that fits individual purposes but also interact with authentic material, therefore, the reading can be an opportunity to connect themselves to the real world. In other words, using digital technology in EFL reading includes development in competencies based on basic reading literacy and information literacy that enables learners to find, read, and think critically about the information.

Social networking offers a distinctive opportunity for independent, flexible, and collaborative learning by providing students with personalized learning spaces and communication tools beyond the constraints of traditional course structures. Shifting part of the learning process into the open environment of social media is a practical approach to enhancing learner autonomy, while simultaneously immersing students in a vibrant and interactive community (Serdyukova N. & Serdyukov P.[1]).

The theoretical framework serves as the foundation for investigating the Spark online learning platform, which is currently utilized by non-English major students at QNU. The integration of Spark into teaching and learning practices reflects an instructional innovation led by the Faculty of Foreign Languages, aiming to foster learner autonomy, enhance digital literacy, and promote access to diverse learning resources within a blended learning environment.

3.2. Student Satisfaction with online learning

Student satisfaction is a critical construct in evaluating the effectiveness of online learning platforms, especially those aimed at fostering learner autonomy. In the context of higher education, satisfaction reflects not only the perceived quality of content delivery but also the extent to which platforms support learners' academic goals, engagement, and self-efficacy. According to Martin and Bolliger[10], satisfaction in online learning is influenced by factors such as course design, instructor presence, interaction, and technological usability. Their systematic review of 98 studies revealed that well-structured digital environments significantly enhance learner satisfaction by promoting autonomy and engagement.

Building on this perspective, Zhang, Kuek, and Wu[11] found that international students' satisfaction with online learning during the COVID-19 pandemic was positively influenced by well-designed course content, meaningful faculty-student engagement, and flexible learning arrangements. Nonetheless, the study also identified reduced interaction and technical difficulties as key barriers that hindered sustained engagement and diminished perceived learning quality. Complementing these findings, Wei and Chou[5] emphasized that students' perceptions and readiness for online learning play a crucial role in shaping both their academic performance and overall satisfaction. Their research underscores the importance of fostering digital self-efficacy and preparedness to enhance learning outcomes in virtual environments.

Aguirre, Cerbito, and Gayod[17] emphasized that students' satisfaction with online learning is strongly influenced by the quality of learning, technology, and learning-related issues. As students prioritize service over materials and facilities, institutions should leverage technology and automation to address evolving concerns, ensuring responsive support and maintaining quality learning throughout remote education.

Vietnamese scholarship has also contributed valuable insights into learner satisfaction with online education. Tran Cong Thanh[18] found that the quality of online learning services and students' self-efficacy were significantly associated with their level of engagement, which in turn contributed to overall satisfaction. While both factors influenced behavioural, cognitive, and emotional engagement, only behavioural and cognitive dimensions showed a statistically significant relationship with student satisfaction.

Le Phuoc Thanh[19] and colleagues conducted a study to identify the key determinants of student satisfaction with online learning during the COVID-19 pandemic. The findings revealed that factors such as technological infrastructure, communication quality, course content, learning outcomes, and student motivation exerted a significantly positive influence on students' satisfaction with online education. These results underscore the importance of designing online learning environments that prioritize both technical support and pedagogical engagement to enhance the overall student experience.

Taken together, the findings indicate that student satisfaction in online learning is shaped by a multifaceted interaction of pedagogical design, technological infrastructure, and learner psychology. In both global and Vietnamese contexts, satisfaction is consistently linked to course quality, instructor engagement, and learner autonomy. Although existing evidence supports the effectiveness of online learning for fostering learner autonomy and improving learning outcomes, much of the literature remains largely

descriptive and lacks systematic analysis of platform-specific dimensions within authentic course contexts. Specifically, there is a dearth of clearly defined evaluations and measures of convenience/usability, program structure, and exercise design in relation to alignment with intended learning outcomes, learner proficiency, logical sequencing, and variety. Likewise, feedback mechanisms, learner-support features, a learner-centered orientation, and the extent of peer interaction are often discussed only in general terms rather than tested empirically. These limitations underscore the need for focused investigations tied to a specific platform and an actual course setting. These insights provide a robust foundation for evaluating platforms like SPARK, where alignment between design and student expectations is essential for meaningful learning outcomes.

4. THE SPARK ONLINE ENGLISH SELF-STUDY PLATFORM AT QUY NHƠN UNIVERSITY

The Spark online self-study platform is currently adopted at Quy Nhon University (QNU) to support technology-enhanced English learning for non-English majors. Officially introduced into the curriculum in the 2022–2023 academic year, Spark —developed by National Geographic Learning—is aligned with the *Voices – Pre-intermediate* textbook and is integrated into the English 1 and English 2 courses across two consecutive semesters. Designed to extend classroom instruction, the platform provides a structured environment in which students review, consolidate, and practice lesson content independently.

Spark offers a comprehensive suite of exercises covering major language skills—Reading, Grammar, Pronunciation, Listening, Vocabulary, Speaking, and Writing. Each online module corresponds to the relevant unit in the *Voices* textbook, ensuring tight alignment between in-class teaching and out-of-class practice. After attending lessons, students are required to complete assigned Spark tasks at home according to the weekly teaching schedule. This arrangement reinforces key concepts, supports repeated exposure to language input, and encourages regular, self-directed engagement with course materials.

Importantly, Spark assignments are compulsory and contribute to one graded component of the course assessment. Embedding graded online tasks is intended to promote accountability, sustain continuous

learning over both semesters, and foster greater learner autonomy.

5. METHODOLOGY
5.1. Participants

This study involved 269 first-year non-English-major undergraduates randomly selected from six intact General English classes in cohort 47 at QNU. At the time of the survey, all participants had completed English 1 and English 2 during the 2024–2025 academic year, which constituted their first official exposure to Spark online exercises. First-year students were purposefully targeted because General English is a foundational component of the curriculum: although they are not English majors, they are expected to possess essential linguistic knowledge and skills for a meaningful evaluation of the platform. Conducting data collection immediately after the two first-year courses also enabled us to assess not only students' satisfaction with the Spark self-study platform but also whether Spark was genuinely supportive and sufficiently developed for autonomous learning at this early stage of study.

Participant characteristics

Most participants came from provinces in the South Central Coast (e.g., Bình Định, Phú Yên, Quảng Ngãi) and the Central Highlands (e.g., Gia Lai, Đắk Lắk, Kon Tum), reflecting the typical regional demographic profile of QNU's student population. The cohort included both male and female students, with a slightly higher proportion of females, which is typical in General English courses at QNU.

Sampling method

Participants were randomly selected from six General English classes to minimize instructor- and class-specific bias. The final sample size (n = 269) reflects the number of eligible students who consented and completed the online questionnaire.

Inclusion criteria

Inclusion criteria were: (i) non-English majors in cohort 47; (ii) completion of English 1 and English 2 in academic year 2024–2025 (first year); (iii) first official exposure to Spark assignments during these courses; and (iv) platform access.

Ethical considerations

Participation was voluntary and based on informed consent. The survey was anonymous, and no personally identifying information was collected. Students were informed that they could withdraw at any time without penalty and that responses would be used solely for research

and quality improvement purposes. The study adhered to QNU's research ethics guidelines.

5.2 Research design

This study employed a cross-sectional, single-site quantitative descriptive design at QNU, with the individual learner (first-year non-English majors, cohort 47) as the unit of analysis. The design captures current satisfaction levels across constructs aligned to the research questions: (RQ1) satisfaction with convenience and exercise design/learner support features; (RQ2) features that facilitate sustained engagement and self-directed learning beyond class; (RQ3) perceived limitations. A 5-point Likert scale enabled frequencies/percentages plus mean and standard deviation, reflecting both central tendency and dispersion. This design suits large introductory cohorts and informs immediate platform/course enhancement.

5.3 Research method

A structured online questionnaire comprised: (i) personal information; and (ii) satisfaction scales for convenience, exercise design, and learner support/learner-centered features (Likert 1–5). The instrument was explicitly mapped to the RQs:

RQ1 → items on convenience (usability, fast speed, suitability, stability, technical support); exercise design (curriculum alignment, level appropriateness, logical progression, diversity) and learner support features.

RQ2 → review support, additional resources, time-saving access, learning made easier) and learner-centered facets (interest/engagement, consistent effort, self-directed learning, time management).

RQ3 → difficulties/limitations (limited hints, insufficient instructor/automated feedback, restricted interaction/knowledge sharing, assessment clarity/fairness).

Ethics

The link was shared via Zalo to six General English classes; students received instructions, gave informed consent, and completed the survey anonymously. Participation was voluntary with the right to withdraw; no identifying data were collected; the study complied with QNU's research ethics guidelines.

5.4 Data collection and data analysis

A structured questionnaire was used to collect data from 269 non-English-major students. The instrument comprised two parts:

personal information and items measuring students' satisfaction with the Spark online English self-study platform. The satisfaction section was organized into four constructs and explicitly mapped to the study's research questions. Items assessing convenience and exercise design were aligned with RQ1, which examines satisfaction with Spark's convenience exercise design and learner support features. Items on review support, access to additional resources, time-saving functions, and making learning easier were linked to RQ2, as these features contribute to students' engagement and sustained self-directed learning beyond classroom hours. Questions addressing difficulties, limited interaction, unclear instructions, or insufficient feedback provided evidence for RQ3, which explores perceived constraints in the learning experience.

To ensure accessibility and encourage participation, the survey was distributed via Zalo—a widely used communication platform in Vietnam. When the questionnaire link was shared in each class group, clear instructions were provided to guide students in completing the survey accurately. Completed responses were automatically recorded through the online system.

Data analysis

The dataset was cleaned, consolidated, and analyzed using descriptive statistics to observe trends for each construct. In addition to frequency and percentage, we computed the mean and standard deviation for all multi-item indicators to provide a more complete and precise picture of students' satisfaction across convenience, exercise design, learner-support and learner-centered features. Findings were then interpreted in relation to the research questions and the existing literature, from which several pedagogical implications were derived to optimize the Spark platform and improve the overall learning experience.

6. FINDINGS AND DISCUSSIONS

The first part of the questionnaire was designed for students to indicate their academic major and cohort. At Quy Nhon University, students from cohort 47 had completed the General English course and experienced practice activities through the Spark self-study platform, which is provided by National Geographic Learning. As a result, they were able to form concrete perceptions of the platform's convenience, the relevance and clarity of exercises, the effectiveness of learner support

features, and the extent to which the platform embodied learner-centered principles.

6.1. Students' satisfaction with the convenience of the Spark online English self-study platform

To address the first research question regarding students' satisfaction with Spark's convenience-related features, the collected data were analyzed, and the results are presented in Figure 1. The figure illustrates what the participants percept about the convenience of the Spark online self-study platform. It can be clearly seen that a strong positive perception of the platform among students. For *usability*, 95.1% of respondents agreed (52.4%) or strongly agreed (42.7%), while only 0.3% strongly disagreed. This high percentage demonstrates that students can easily operate and adjust commands on the platform, ensuring seamless access to learning resources. This supports Martin and Bolliger's[11] view on the importance of technological usability.

Similarly, *fast speed* was rated highly, with 90.3% agreement (50.9% and 39.4%), and minimal disagreement (3.7%). Regarding *suitability for students*, 93.6% expressed agreement (51.3% and 42.3%), confirming the platform's alignment with learners' needs. *System stability* also received favorable ratings, with 91.0% agreeing or strongly agreeing (50.9% and 40.1%). Finally, *technical support availability* was positively perceived by 92.5% of respondents (51.3% and 41.2%), suggesting effective assistance mechanisms.
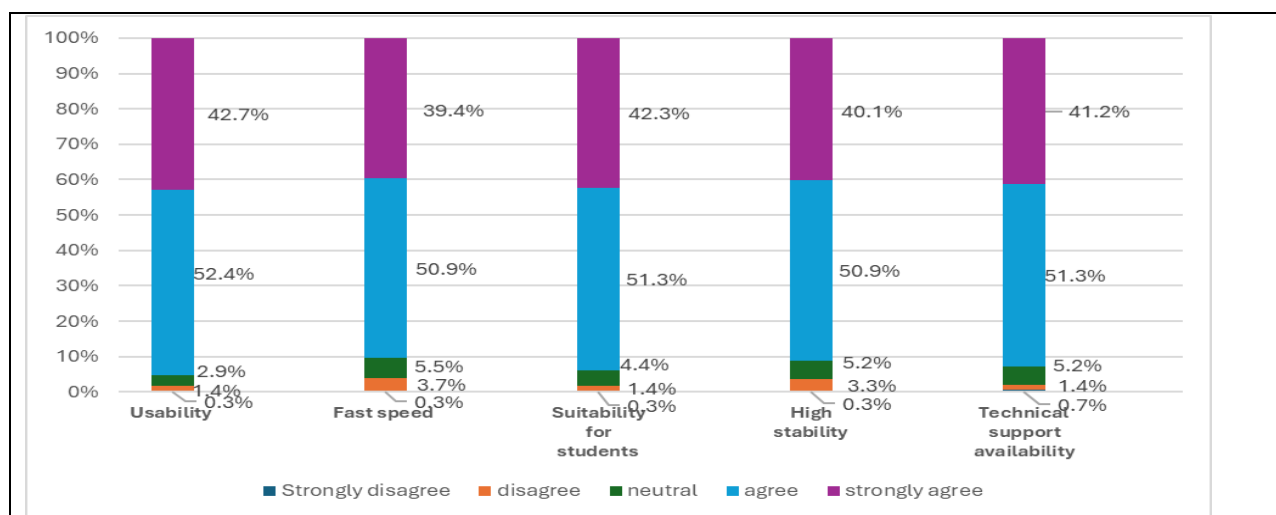

Figure 1: Students' satisfaction with the convenience of the Spark online English self-study platform

In addition to the percentage results presented above, Table 1 below reports the corresponding mean and standard-deviation values for all five convenience indicators. All five convenience indicators achieved high mean scores (M = 4.25–4.36) with low standard deviations (SD = 0.65–0.75), confirming both strong satisfaction and a high level of consistency among respondents.

Table 1. Mean and standard deviation for convenience indicators

Indicator	Mean	SD
Usability	4.36	0.65
Fast speed	4.25	0.75
Suitability for students	4.36	0.65
High stability	4.27	0.74
Technical support availability	4.31	0.70

Such features make it highly convenient for students to access the platform, fostering a sense of comfort and engagement. A fast, stable, and suitable system enhances user satisfaction and encourages consistent participation in self-directed learning activities. These findings collectively indicate a consistently high level of student satisfaction with the Spark platform, particularly in terms of *usability, fast speed suitability for students, high stability, and technical support availability*, thereby affirming its effectiveness and suitability as a digital learning environment aligned with learners' expectations and academic needs. The results

align with Pratiwi[2]'s assertion that e-learning technologies promote autonomous learning and better outcomes by providing flexible digital environments that support independent strategy use and academic achievement.

6.2. Students' satisfaction with the exercises provided on the Spark online English self-study platform

To examine students' satisfaction with Spark's exercise design (RQ1), we analyzed items on curriculum alignment, level appropriateness, logical sequencing, diversity, and instructional clarity; the results are summarized in Table 2.

The data in the table reveal high student satisfaction with most aspects of exercises on the Spark Platform. *Curriculum alignment* (94.7% agree/strongly agree), *level appropriateness* (88%), *logical progression* (92.1%), *diversity* (93.2%) and *instructional clarity* (88.7%), and received overwhelmingly positive ratings. These high satisfaction rates suggest that the exercises on Spark are well-structured. The strong agreement on *curriculum alignment* and *logical progression* indicates that students find the content relevant and coherently organized. High ratings for *diversity* and *instructional clarity* reflect Spark's ability to engage learners and support independent study, while *level appropriateness* ensures tasks are suitably challenging without being overwhelming. This is consistent with Choi and Lee[9], who emphasize that well-designed activities enables learners to access relevant and authentic content -echoing students' strong satisfaction with Spark's exercise structure.

Table 2. Students' satisfaction with the exercises on the Spark online English self-study platform

Scale / Exercises	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	Number of students	Percentage	Number of students	percentage	Number of students	percentage	Number of students	Percentage	Number of students	percentage
Curriculum alignment	2	0.7	6	2.2	6	2.2	169	62.8	86	31.9
Level appropriateness	3	1.1	12	4.4	17	6.3	149	55.3%	88	32.7
Logical progression	2	0.7	8	2.9	11	4.0	158	58.7	90	33.4
Diversity	1	0.3	4	1.4	13	4.8	160	59.4	91	33.8
Instructional clarity	5	1.8	11	4	14	5.2	150	55.7	89	33
Hint-supported steps	24	8.9	149	55.3	8	2.9	48	17.8	40	14.8
Instructor feedback	43	15.9	162	60.2	5	1.8	33	12.2	26	9.6
Automated feedback	43	15.9	170	63.1	4	1.4	28	10.4	24	8.9
Fair and reasonable assessment	18	6.6	52	19.3	25	9.2	106	39.4	68	25.2

To supplement the percentage results, mean and standard-deviation values were computed for all exercise-related indicators in Table 3. High-performing items such as curriculum alignment, diversity, logical progression, and instructional clarity yielded high mean scores (M = 4.14–4.25) with relatively low standard deviations (SD = 0.65–0.83), reaffirming consistent satisfaction among respondents. In contrast, hint-supported steps, instructor feedback, and automated feedback showed markedly lower means (M = 2.33–2.74) and higher variability, indicating persistent gaps in guidance and corrective support.

Table 3. Mean and standard deviation for exercise-related indicators

Indicator	Mean	SD
Curriculum alignment	4.23	0.67
Level appropriateness	4.14	0.81
Logical progression	4.21	0.72
Diversity	4.25	0.65
Instructional clarity	4.14	0.83
Hint-supported steps	2.74	1.27
Instructor feedback	2.39	1.18
Automated feedback	2.33	1.13
Fair and reasonable assessment	3.57	1.24

However, the proportion of students disagreeing with *hint-supported steps* is relatively high at 64.2%, indicating that learners face difficulties when completing exercises and strongly need detailed, step-by-step guidance. Regarding feedback mechanisms, both *instructor feedback* and *automated feedback* received over 75% disagreement, highlighting a serious lack of interaction and corrective input for students to improve their work. Additionally, *fair and reasonable assessment* achieved moderate approval (64.6%), yet nearly 26% of respondents remained neutral or disagreed.

The survey results confirm a high level of student satisfaction with the overall exercise design on the Spark platform. Nevertheless, areas such as hint-supported steps, feedback mechanisms, and assessment clarity require further enhancement to better facilitate learner progress and promote more effective, interactive learning experiences. Providing structured hints may reduce confusion during task completion, while timely feedback can help learners identify strengths and address weaknesses. Additionally, a fair assessment system is essential for fostering learner trust and sustaining motivation throughout the learning process.

6.3. Students' satisfaction regarding learner support features in the Spark online English self-study platform

To address the research question regarding Spark's learner support features (RQ2), the relevant data were analyzed, and the results are summarized in Figure 2. As shown in the figure, students expressed strong overall satisfaction with the platform's learner support features. For *reviewing in-class knowledge*, 61.3% agreed and 34.2% strongly agreed, indicating that most students find this function helpful for reinforcing lessons. Similarly, 59.8% agreed and 35.3% strongly agreed that the platform provides *additional practice resources*. This is particularly significant because students often face an overwhelming amount of online materials, making it difficult to choose relevant exercises. By offering curated resources aligned with the curriculum, the platform reduces confusion. This enables focused practice, which can improve learning outcomes. Regarding *time-saving access to materials*, 56.8% agreed and 35.3% strongly agreed. However, neutrality was slightly higher (5.5%), suggesting room for optimization. Finally, 91.4% of respondents confirmed that the platform makes learning easier, highlighting its role in supporting autonomous learning. These findings are consistent with those reported by Sadaghian and Marandi[8]. They state that one of the major advantages of digital technology in reading is the massive amount of reading resources it offers. Ahmed et al.[6] show resources such as websites, videos, online lectures, e-books, and interactive programs not only motivate students to learn but also save time and effort, bring authentic English into the learning process, and foster autonomy and self-directed learning. As a result, students can develop their language skills more effectively and take greater responsibility for their own progress.
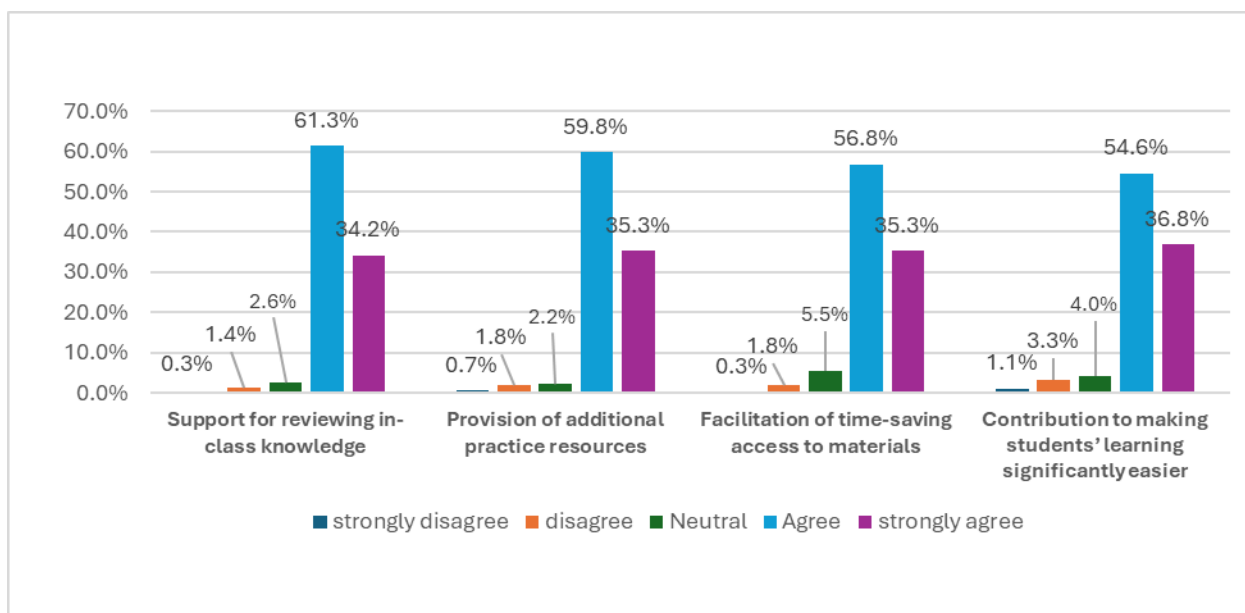
Figure 2: Students' satisfaction regarding learner support features in the Spark online English self-study platform

To supplement the percentage trends, mean and standard-deviation values were examined in Table 4. All four indicators showed high mean scores (M = 4.23–4.28) with relatively low SD values (0.62–0.77), reflecting strong consensus among respondents. These results further confirm that Spark's learner-support features effectively reinforce in-class knowledge, expand practice opportunities, and make independent learning more manageable.

Table 4. Mean and standard deviation for learner support features

Indicator	Mean	SD
Support for reviewing in-class knowledge	4.28	0.62
Provision of additional practice resources	4.27	0.67
Facilitation of time-saving access to materials	4.25	0.67
Contribution to making students' learning significantly easier	4.23	0.77

Therefore, the Spark platform at QNU can serve as a valuable tool to help students access digital resources, enhance independent learning habits, and build confidence in using English in real-world contexts.

6.4. Students' satisfaction regarding learner-centered aspects of the Spark online English self-study platform

To address the research question concerning Spark's learner-centered features and their contribution to engagement and self-directed learning (RQ2), the relevant items were analyzed, and the key findings are summarized in Figure 3. As shown in the data, students expressed strong overall satisfaction with Spark's learner-centered functions. For *enhancing interest and engagement*, 57.6% agreed and 33.4% strongly agreed, confirming its role in motivating learners. Similarly, *supporting learners in making consistent effort in the subject* received strong approval, with 55.7%

agreeing and 35.3% strongly agreeing, showing that the platform supports learners in strengthening their effort and commitment to the subject. *Fostering learners' awareness of self-directed learning* was also well-rated (56.1% agree, 34.2% strongly agree), emphasizing Spark's contribution to autonomy. However, *opportunities for interaction and knowledge sharing* scored significantly lower, with only 28.9% agreeing and 18.2% strongly agreeing, while 37.9% disagreed. According to Martin and Bolliger[11], satisfaction in online learning is influenced by factors such as instructor presence and interaction. This gap indicates limited collaborative features, which may hinder peer and instructor engagement. Finally, 56.5% agreed and 31.9% strongly agreed that the platform helps *manage study time effectively*. This aligns with Ubaedillah and Pratiwi's[7] theory, which emphasizes that online platforms offer flexible access, allowing learners

to study anytime, reflect deeply, and manage time efficiently—especially beneficial for students with busy schedules.
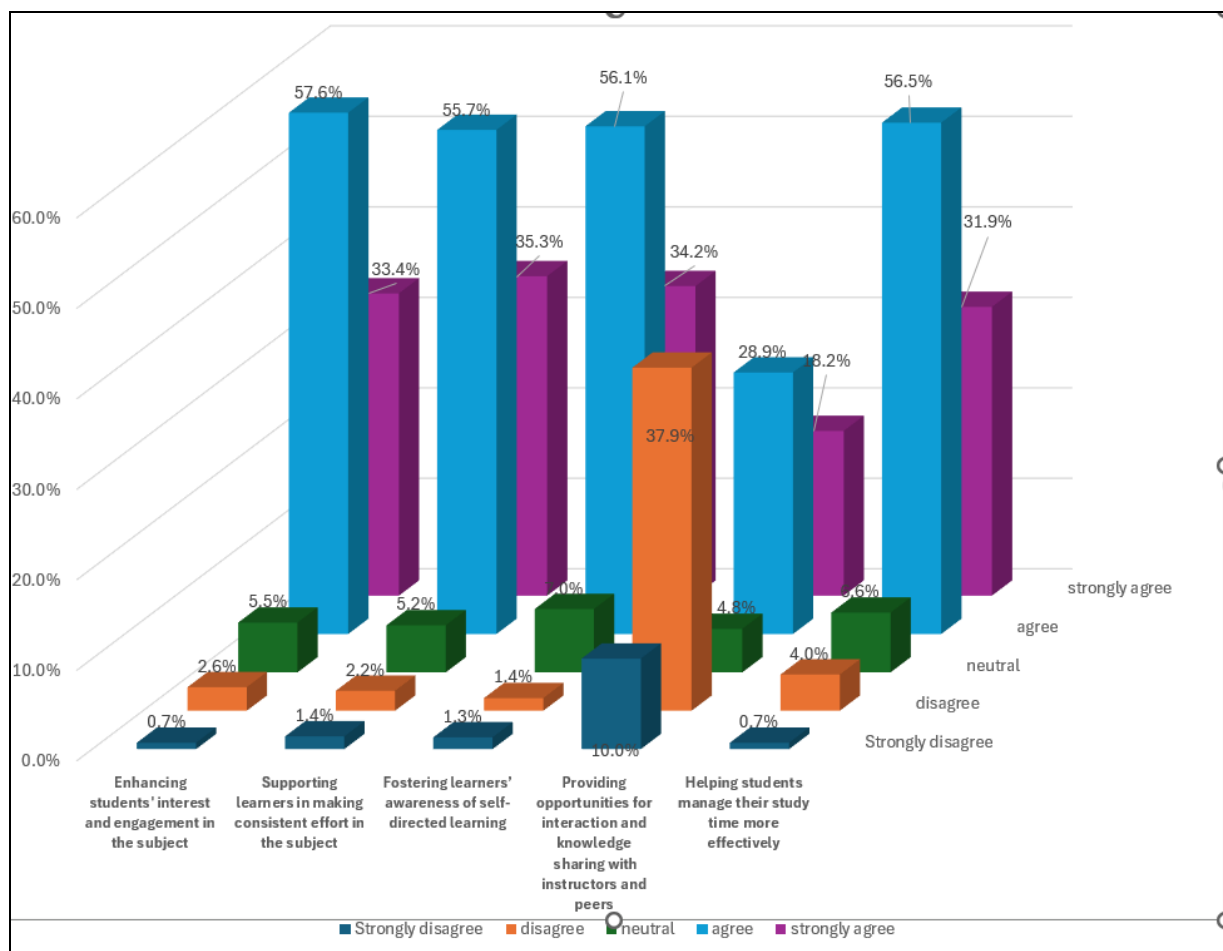

Figure 3: Students' satisfaction regarding learner-centered aspects of the Spark online English self-study platform

To supplement these percentage trends, mean and standard-deviation values were also examined in Table 5. All indicators related to motivation, consistent effort, self-directed learning, and time management achieved high mean scores (M = 4.15–4.21) with relatively low SD values (0.72–0.77), confirming strong agreement and consistent satisfaction among respondents. In contrast, interaction and knowledge-sharing opportunities showed a much lower mean (M = 3.07) and the highest SD (1.34), highlighting a clear weakness in Spark's learner-centered design.

Table 5. Mean and standard deviation for learner-centered indicators

Indicator	Mean	SD
1. Enhancing students' interest and engagement in the subject	4.20	0.72
2. Supporting learners in making consistent effort in the subject	4.21	0.76
3. Fostering learners' awareness of self-directed learning	4.21	0.73
4. Providing opportunities for interaction and knowledge sharing with instructors and peers	3.07	1.34
5. Helping students manage their study time more effectively	4.15	0.77

Therefore, the Spark platform at QNU can serve as a valuable tool to help students access digital resources, enhance independent learning habits, and build confidence in using English in real-world contexts.

6.5 Perceived limitations of the Spark online English self-study platform

To address the third research question—*what perceived limitations constrain students' learning experience on the platform*—we examined items that received comparatively lower satisfaction scores and/or greater dispersion. The analysis indicates four salient constraints: (i) task guidance (hint-supported steps), (ii) feedback mechanisms (instructor and automated feedback), (iii) interaction/knowledge sharing, and (iv) assessment clarity.

(i) Task guidance (hint-supported steps)
Despite generally positive views of exercise design (Section 6.2), *hint-supported steps* elicited the weakest ratings: 64.2% of students disagreed/strongly disagreed and the indicator posted a low mean with high variability ($M = 2.74$; $SD = 1.27$). This suggests many learners lack the step-by-step scaffolding needed to complete tasks confidently in self-study settings.

(ii) Feedback mechanisms
Both *instructor feedback* and *automated feedback* recorded the lowest satisfaction among exercise-related indicators (disagreement > 75%), with correspondingly low means and wide dispersion (instructor feedback: $M = 2.39$, $SD = 1.18$; automated feedback: $M = 2.33$, $SD = 1.13$). Limited, delayed, or generic feedback likely reduces opportunities for error correction and strategy adjustment.

(iii) Interaction and knowledge sharing
Learner-centered results (Section 6.4) reveal a marked shortfall in *opportunities for interaction and knowledge sharing with instructors and peers*: only 47.1% agreed/strongly agreed while 37.9% disagreed. The mean was the lowest in the learner-centered set and exhibited the greatest variability ($M = 3.07$; $SD = 1.34$), indicating substantial divergence across classes/cohorts. Insufficient collaborative affordances may reduce social presence and hinder sustained engagement.

(iv) Assessment clarity/fairness
Fair and reasonable assessment showed a mid-range profile (approval 64.6%; $M = 3.57$; $SD = 1.24$). Although not as weak as guidance/feedback/interaction, the sizable neutral/disagreeing segment (~ 26%) signals that criteria, rubrics, or alignment between task demands and grading require clearer communication.

Implications
Taken together, these findings indicate that Spark's principal constraints lie less in *content* or *technical performance* and more in *process supports* that sustain autonomous work—namely, granular guidance, timely and actionable feedback, and meaningful interaction. Targeted improvements could include: (1) embedding optional, step-by-step hints with worked examples; (2) enhancing automated feedback to reference specific errors and strategies; (3) integrating lightweight Q&A/peer-discussion threads tied to tasks and scheduling instructor touchpoints; and (4) clarifying rubrics, criteria, and exemplars to strengthen perceptions of fairness and transparency.

Brief conclusion (RQ3)
While Spark performs strongly on usability and the overall structure of exercises, perceived limitations in guided support, feedback, interaction, and assessment clarity constrain the learning experience for a non-trivial share of students. Addressing these gaps is likely to raise engagement and satisfaction further, particularly for first-year non-English majors undertaking self-study beyond class hours.

7. CONCLUSIONS AND RECOMMENDATIONS

The Spark online self-learning platform demonstrates several notable strengths, meeting the expectations of modern digital learning and aligning well with students' needs. First, the system is highly valued for being easy to use, fast, suitable to learners, stable, and supported by technical assistance, ensuring a seamless learning experience with minimal disruptions. Moreover, students report strong satisfaction with the quality of exercises provided on Spark, reflected in aspects such as alignment with the curriculum, appropriateness for learners' proficiency levels, logical organization, and diversity of tasks, all of which contribute to improved knowledge acquisition. Beyond delivering learning content, Spark adds significant value by fostering essential learning skills. Specifically, the platform enhances interest and engagement, supports learners in maintaining consistent effort in the subject, promotes awareness of self-directed learning, and enables effective study time management. These advantages indicate that Spark is not merely a supportive tool but a comprehensive learning environment that cultivates proactive and sustainable learning habits among students. These conclusions synthesize findings from

Sections 6.1–6.4, where high agreement rates and high means with low standard deviations confirmed consistently positive satisfaction across convenience, exercise design, and learner support/learner-centered features.

In addition, the study highlights Spark's role in fostering learner autonomy in English learning. Students reported that the platform enables them to review in-class knowledge independently, access supplementary resources beyond scheduled lessons, and manage study time more effectively. These features encourage consistent effort, goal setting, and progress monitoring, thereby cultivating self-directed learning habits. By supporting autonomy, Spark empowers non-English majors to take greater responsibility for their learning beyond classroom hours, reinforcing engagement and sustained participation.

Despite its strengths, Spark still faces challenges that limit its potential as a fully interactive learning environment. Specifically, the analysis in Sections 6.2 and 6.4 (summarized in 6.5) showed the lowest satisfaction for *hint-supported steps* and for both *instructor* and *automated* feedback, as well as weaker perceptions of *interaction and knowledge sharing*, with *assessment clarity/fairness* only at a mid-range level. The lack of effective communication channels and collaborative tools reduces opportunities for peer interaction and instructor engagement, which are essential for social learning and timely feedback. Similarly, feedback mechanisms within exercises remain underdeveloped, leaving students without adequate guidance to correct mistakes or improve performance. The absence of detailed hints in complex tasks further increases cognitive load, making learning less efficient. In addition, perceptions of assessment fairness and transparency were mixed, indicating a need to clarify criteria and rubrics.

To address these issues, Spark should integrate interactive features such as discussion forums, real-time messaging, and virtual office hours to strengthen collaboration. Enhancing feedback systems with personalized, constructive responses and incorporating step-by-step hints for challenging exercises would provide clearer learning pathways. Complementarily, embedding richer automated feedback (e.g., error-specific explanations and strategy prompts) can support immediate correction during self-study.

Additionally, refining assessment practices to ensure fairness and transparency will build trust and confidence among learners.

Taken together, these recommendations directly target the limitations identified for RQ3 and, if implemented, are likely to further strengthen the positive outcomes evidenced for RQ1–RQ2 (engagement, autonomy, and sustained participation). These improvements would transform Spark into a more engaging, supportive, and effective platform.

REFERENCES

1. A. Bandura, *Social Foundations of Thought and Action*, Englewood Cliffs, New Jersey, **1986**, 23-28.
2. P. C. Sun, R. J. Tsai, G. Finger, Y. Y. Chen, D. Yeh, *What Drives a Successful E-Learning? An Empirical Investigation of the Critical Factors Influencing Learner Satisfaction*, Computers and Education, **2008**, *50* (4), 1183-1202.
3. F. Martin, D. U. Bolliger, *Developing an Online Learner Satisfaction Framework in Higher Education through a Systematic Review of Research*, International Journal of Educational Technology in Higher Education, 2022, *19* (1), 1-21.
4. L. Pham, Y. B. Limbu, T. K. Bui, H. T. Nguyen, H. T. Pham, *Does E-learning Service Quality Influence E-Learning Student Satisfaction and Loyalty? Evidence from Vietnam*, International Journal of Educational Technology in Higher Education, 2019, *16* (1), 1-26.
5. Wei H. and Chou C. *Online learning performance and satisfaction: do perceptions and readiness matter?*, Open and Distance Learning Association of Australia, Inc., Taylor & Francis Group, United Kingdom, **2020.**
6. S. Gunuc, A. Kuzu, *Student Engagement Scale: Development, Reliability and Validity*, Assessment and Evaluation in Higher Education, 2015, *40* (4), 587-610.
7. M. D. Dixson, *Measuring Student Engagement in the online Course: The Online Student Engagement Scale (OSE)*, Online Learning, 2015, *19* (4).
8. Serdyukova N. and Serdyukov P., *Student Autonomy in Online Learning*, In Proceedings of the 5th International Conference on Computer Supported Education, Aachen, Germany, **2013**.
9. Pratiwi, D. I., Atmaja, D. S., and Prasetya, H. W. *Multiple e-learning technologies on practicing TOEFL structure and written expression*, Journal of English Educators Society*, **2021,** *6*(1), 105-115.
10. Pratiwi, D. I., and Waluyo, B. *Autonomous learning and the use of digital technologies in online English classrooms in higher education*, Contemporary Educational Technology, **2023**, *15*(2), 1-16.
11. Mahmud, M. M., Technology and language–what works and what does not: *A meta-analysis of blended learning research*. The Journal of AsiaTEFL, **2018**, *15*(2), 365-382.
12. Clarke, T., and Hermens, A., *Corporate developments and strategic alliance in e-learning*, Education and Training, **2001**, *43* (4), 256-267.

13. Ahmed, S. T. S., Qasem, B. T. A., and Pawar, S. V. *Computer-assisted language instruction in South Yemeni context: A study of teachers' attitudes, ICT uses and challenges*. International Journal of Language Education, **2020**, *4*(1), 59-73.

14. Ubaedillah, U., Pratiwi, D. I., Huda, S. T., and Kurniawan, D. A., An exploratory study of English teachers: *The use of social media for teaching English on distance learning*, Indonesian Journal of English Language Teaching and Applied Linguistics, **2021**, *5*(2), 361-372.

15. Sadaghian, S., and Marandi, S., Fostering language learner autonomy through interdependence: The power of Wikis. *Turkish Online Journal of Distance Education,* **2021**, *22*(1), 194-208.

16. Choi, H., & Lee, C. H., *Learner autonomy in EFL reading with digital technology at secondary school*

level. The Journal of Asia TEFL, **2020**, *7* (4), 1323-1345.

17. Aguirre, R. F.,, Cerbito A. F., and Gayod D. H. *Online learning experiences and satisfaction of students on the transition to remote learning*, Ioer Internatioonal Multidisciplinary Research Journal, **2022**, *4* (1), 144-154.

18. T.C. Thanh. *Factors Influencing University Student Satisfaction with Online Learning in Vietnam*, VNU Journal of Science: Education Research, **2024**, *40* (2), 104-115.

19. L. P. Thanh, T.N.Q. Trang, N.N. Minh, H.V. Hai. *Key Determinants of Student Satisfaction in Online Learning During COVID-19: Evidence From Vietnamese Students*, Human Behavior and Emerging Technologies, Hindawi, New Jersey, **2024**.

Appendix: Questionnaire

An investigation of non-majors' satisfaction with the Spark online English self-study platform at Quy Nhon university

1. Students' satisfaction with the convenience of the Spark online English self-study platform

1. Usability
☐ strongly disagree ☐ disagree ☐ neutral
☐ agree ☐ strongly agree

2. Fast speed
☐ strongly disagree ☐ disagree ☐ neutral
☐ agree ☐ strongly agree

3. Suitability for students
☐ strongly disagree ☐ disagree ☐ neutral
☐ agree ☐ strongly agree

4. High stability
☐ strongly disagree ☐ disagree ☐ neutral
☐ agree ☐ strongly agree

5. Technical support availability
☐ strongly disagree ☐ disagree ☐ neutral
☐ agree ☐ strongly agree

2. Students' satisfaction with the exercises provided on the Spark online English self-study platform

1. Curriculum alignment
☐ strongly disagree ☐ disagree ☐ neutral
☐ agree ☐ strongly agree

2. Level appropriateness
☐ strongly disagree ☐ disagree ☐ neutral
☐ agree ☐ strongly agree

3. Logical progression
☐ strongly disagree ☐ disagree ☐ neutral
☐ agree ☐ strongly agree

4. Diversity

☐ strongly disagree ☐ disagree ☐ neutral
☐ agree ☐ strongly agree

5. Instructional clairty
☐ strongly disagree ☐ disagree ☐ neutral
☐ agree ☐ strongly agree

6. Hint-supported steps
☐ strongly disagree ☐ disagree ☐ neutral
☐ agree ☐ strongly agree

7. Instructor feedback
☐ strongly disagree ☐ disagree ☐ neutral
☐ agree ☐ strongly agree

8. Automated feedback
☐ strongly disagree ☐ disagree ☐ neutral
☐ agree ☐ strongly agree

9. Fair and reasonable assessment
☐ strongly disagree ☐ disagree ☐ neutral
☐ agree ☐ strongly agree

3. Students' satisfaction regarding learner support features in the Spark online English self-study platform

1. Support for reviewing in-class knowledge
☐ strongly disagree ☐ disagree ☐ neutral
☐ agree ☐ strongly agree

2. Provision of additional practice resources
☐ strongly disagree ☐ disagree ☐ neutral
☐ agree ☐ strongly agree

3. Facilitation of time-saving access to materials
☐ strongly disagree ☐ disagree ☐ neutral
☐ agree ☐ strongly agree

4. Contribution to making students' learning significantly easier
☐ strongly disagree ☐ disagree ☐ neutral
☐ agree ☐ strongly agree

4. Students' satisfaction regarding learner-centered aspects of the Spark online English self-study platform

1. Enhancing students' interest and engagement in the subject
☐ strongly disagree ☐ disagree ☐ neutral
☐ agree ☐ strongly agree

2. Supporting learners in making consistent effort in the subject

☐ strongly disagree ☐ disagree   ☐ neutral
☐ agree   ☐ strongly agree

3. Fostering learners' awareness of self-directed learning

☐ strongly disagree ☐ disagree   ☐ neutral
☐ agree   ☐ strongly agree

4. Providing opportunities for interaction and knowledge sharing with instructors and peers

☐ strongly disagree ☐ disagree   ☐ neutral
☐ agree   ☐ strongly agree

5. Helping students manage their study time more effectively

☐ strongly disagree ☐ disagree   ☐ neutral
☐ agree   ☐ strongly agree