## Analysis of Student Satisfaction with the Google Site-Based Platform as a Media for Implementing Independent Study Tests in the Chemistry **Education Study Program at Medan State University**

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#### **ABSTRAK**

Penelitian ini bertujuan untuk melihat respond kepuasan mahasiswa terhadap platform kajian mandiri berbasis Google Site yang digunakan sebagai media pelaksanaan ujian di Program Studi Pendidikan Kimia Universitas Negeri Medan. Metode penelitian yang digunakan adalah deksriptif kualitatif dengan sampel 107 responden. Hasil penelitian yang dilakukan terhadap 107 mahasiswa menunjukkan bahwa 64,5% mahasiswa menyatakan akses platform sangat mudah, 53,3% menyukai desainnya, dan 55,1% puas dengan informasi pendaftaran dan pelaksanaan ujian. Fitur simulasi juga mendapat tanggapan positif, dengan 68% menyatakan media mudah diakses, 56% merasa terbantu dengan adanya media, dan 64% merasa lebih siap mengikuti ujian setelah melakukan simulasi. Berdasarkan hasil penelitian, menunjukkan bahwa respond kepuasaan terhadap platform menunjukkan hasil yang sangat baik dalam memberikan kontribusi terhadap kesiapan mahasiswa, meskipun masih membutuhkan pengembangan lebih lanjut untuk meningkatkan kualitas layanan pelaksanaan ujian mandiri yang efektif bagi mahasiswa.

Keyword: Platform Kajian Mandiri; Kepuasan Mahasiswa; Google Site

#### **ABSTRACT**

This study aims to evaluate student satisfaction with the self-study platform based on Google Sites, which is used as a medium for conducting exams in the Chemistry Education Program at Universitas Negeri Medan. The research method employed is descriptive qualitative, with a sample of 107 respondents. The results of the study show that 64.5% of students stated that the platform was very easy to access, 53.3% liked its design, and 55.1% were satisfied with the registration information and exam implementation. The simulation feature also received positive feedback, with 68% stating that the platform was easy to access, 56% feeling helped by the platform, and 64% feeling more prepared to take the exam after completing the simulation. Based on the research findings, the level of satisfaction with the platform indicates very positive results in contributing to student readiness, although further development is still needed to improve the quality of the independent exam implementation services for students.

Keyword: Independent Learning Platform; Student Satisfaction; Google Site

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### INTRODUCTION

Independent study tests are an important requirement for the proposal seminar in the Chemistry Education Program at Universitas Negeri Medan. This test is conducted to evaluate and ensure students' understanding of chemistry material before they begin their research in schools or field settings. The test aims to ensure that students in the Chemistry Education Program have mastered the fundamental chemistry knowledge required to conduct research and are ready to face challenges in their studies. The implementation of independent study tests in the Chemistry Education Program at Medan State University is one of the distinguishing strengths of this program compared to others. This program is designed to ensure that students

have adequate knowledge and are ready to integrate and apply the chemistry knowledge they have learned in the context of research. This step is crucial because the quality of research to be conducted in the field greatly depends on students' initial understanding and abilities as a foundation for making informed decisions. Therefore, the independent study test serves as a reminder of students' foundational chemistry knowledge. (Silitonga, dkk. 2022)

The implementation of the independent study test uses the Google Sites platform, which is an internet-based website media that can be used to support the exam process. Google Sites provides information that can be easily and quickly accessed by users (Adzkiya et al., 2021). The use of Google Sites as a media for implementation is very user-friendly, with unlimited capacity and can be easily searched using Google search engines, integrating various information such as text, images, videos, presentations, attachments, and more (Rasapta et al., 2022). According to Sari et al. (2022), the use of Google Sites has received a positive response with a percentage of 94%, which makes the learning process more efficient. The implementation of this independent study test is closely related to supporting the vision and mission of the Chemistry Education Program, which aims to develop the program into a more advanced and character-driven institution. To achieve this goal, the Chemistry Education Program continues to strive to improve the quality of teaching and research for students, as well as equip them with the skills needed to succeed in education and research fields. Through the independent study test, students are expected to not only have a strong theoretical understanding but also to apply their knowledge in research that benefits society and the educational world.

To ensure the optimal implementation of the independent study test, Google Sites also provides a simulation menu as part of the preparation before the actual exam. This simulation aims to familiarize students with the test format and the types of questions they will face during the independent study test. Additionally, this simulation provides students with an opportunity to practice in an environment similar to the actual exam, which helps reduce anxiety and boosts confidence. The simulation not only trains technical skills but also provides a positive emotional experience, which is important in preparing for the pressures of an exam (Sianipar & Munthe, 2024). This independent study test simulation not only teaches the test format but also gives students the opportunity to develop time management skills. Time management plays a significant role in achieving optimal learning outcomes (Apriyanti & Syahid, 2021). In the actual exam, the limited time becomes a challenge for students. Therefore, by practising through simulations, students can learn to manage time more effectively, allowing them to answer all questions quickly and accurately. This skill is crucial because, in the actual exam, students must make the best use of their time without rushing while ensuring that every question is answered correctly. After participating in the simulation, students then proceed to take the actual independent study test. This process provides a comprehensive evaluation of their understanding and preparedness. With the independent study test, students are expected not only to be ready for the proposal seminar but also to be well-prepared for more complex research stages in the field. The implementation of this independent study test has become an essential part of maintaining the quality standards of education in the Chemistry Education Program at Universitas Negeri Medan and supports the program's vision of producing competent and character-driven educators and researchers.

#### 2. RESEARCH METHOD

This study employs a qualitative descriptive research design aimed at analyzing student satisfaction with the Google Sites-based platform used for conducting independent study exams in the Chemistry Education Program at Universitas Negeri Medan. Qualitative descriptive research is a methodological approach that provides a systematic and factual description of the research object, with an emphasis on describing the data obtained without excessive interpretation (Hall & Liebenberg, 2024; Mardianto et al., 2022). The research process consists of three phases: (1) the preparation phase, which includes the development of research instruments; (2) the implementation phase, which involves data collection through the distribution of satisfaction questionnaires to 107 students; and (3) the evaluation phase, which analyzes student satisfaction with the Google Sites-based platform used for conducting the independent study exams.

The respondents in this study were 107 seventh-semester students who had taken the independent study course in the Chemistry Education Program at Universitas Negeri Medan. The instrument used was a closed-ended questionnaire with a Likert scale consisting of four criteria. The questionnaire contained 8 positively worded questions, including: (1) How easy can you find the information you need on the independent study exam platform?; (2) What is your opinion regarding the appearance and design of the independent study exam platform?; (3) How would you assess the information regarding registration and exam implementation on the independent study exam platform?; (4) How satisfied are you overall with the information available on the platform?; (5) Is the simulation menu easy to access and use?; (6) Do you agree that the simulation feature helps you prepare for the exam?; (7) Do you feel more prepared or trained after participating in this simulation?; and (8) Does the exam simulation provide helpful feedback for your preparation?

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The data analysis technique used in this study was qualitative descriptive analysis. Descriptive analysis is a method used to process data in numerical form, utilizing formulas to calculate the total scores of the assessments as percentages (Dewi et al., 2022). The percentage of student satisfaction was calculated using the following formula:

Percentage = 
$$\frac{Number \ of \ Score}{Maximum \ Number \ of \ Scores} \times 100\%$$
 (1)

#### 3. RESULTS AND DISCUSSION

#### A. Data Description

The current condition of the independent review test implementation compared to the previous one has changed a lot. Especially from the registration system, implementation, and announcement of exam results. In previous conditions, the implementation of the independent study test did not have a systematic flow of exam registration and a standardized test schedule that could be accessed by students, as well as the absence of a menu of chemistry learning materials that were tested so that obtaining information about the independent study test was very difficult to obtain. Meanwhile, the current condition, the implementation of the exam has been managed in one system using a Google Site that provides information starting from the registration process, the implementation of the exam, to the announcement of student graduation. The use of google sites in the implementation of independent study exams is based on many studies that suggest the effectiveness and convenience of Google Sites in learning activities, such as research conducted by (Saputra et al, 2022; Aulia et al, 2021; Napitu et al, 2023) After carrying out the self-study test implementation activities using the google site platform. Furthermore, a survey questionnaire was distributed to students of the Chemistry Education study program at Medan State University to assess their level of satisfaction with the self-study test platform using Google Sites, as shown in Table 1.

# B. Results Satisfaction level of students on the self-study test platform Table 1. Results Satisfaction level of students

No	Questions	Response	Total (%)
1	How easy can you find the information you need on the	Very Easy	69(64,5%)
	independent study exam platform?	Easy	36(33,6%)
		Difficult	2(1,9%)
		Very Difficult	0%
2	What do you think of the look and design of the self-assessment	Very	57 (53,3%)
	test platform?	Interesting	
		Interesting	46 (43%)
		Less	4 (3,7%)
		Attractive	
		Not	0%
		Interesting	
3	What do you think of the registration and exam information on the	Very Clear	59 (55,1%)
	self-study test platform?	Clear	44 (41,1%)
		Less Clear	4 (3,7%)
		Not Clear	0%
4	How satisfied are you overall with the information on the self-	Very Satisfied	62 (57,9%)
	assessment test platform?	Satisfied	43 (40,2%)
		Less Satisfied	2 (1,9%)
		Not Satisfied	0%
5	Is the simulation menu easy to access and use?	Very Easy	73 (68%)
		Easy	34 (32%)
		Difficult	0%
		Very Difficult	0%
6	Do you agree that the simulation feature helps you with test	Totally agree	60 (56%)
	preparation?	Agree	40 (44%)
		Moderate	0%
		Agree	
		Disagree	0%
7	Do you feel better prepared or better trained after participating in	Highly trained	68 (64%)
	this simulation?	Moderately	39 (36%)
		trained	

No	Questions	Response	Total (%)
		Not very	0%
		trained	
		Not trained at	0%
		all	
8	Did the exam simulation provide useful feedback for preparation?	Helpful	62 (58%)
		Moderately	45 (42%)
		Helpful	
		Not Very	0%
		Helpful	
		Not Helpful at	0%
		All	

The results of the acquisition of the level of satisfaction that has been given by students to the self-study platform using Google site show very good results. In the first survey instrument, Satisfaction with the ease of access to the self-study platform from 107 incoming responses showed that 69 out of 107 students stated that access was very easy with a percentage of 64.5%. This is in line with previous research (Khasanah & Muflihah, 2021), which states that the use of Google Sites as learning media can make it easier for students to access learning. Furthermore, in the second survey instrument, namely, satisfaction with the appearance and design of the self-study test platform, the response results show that 57 out of 107 students who participated in voting stated that the display was very attractive with the acquisition of 53.3%, although 4 students stated that the display was less attractive, this will be input for further platform development.

In the third survey instrument, namely, satisfaction with registration information and exam implementation on the self-study test platform shows that 59 out of 107 responses that have been entered show that the ease of information is at a percentage of 55.1%, this is a very good response to continuing to be improved so that exam implementation information services can continue to run optimally. Meanwhile, the survey instrument for satisfaction with the overall menu on the self-study platform obtained a result of 57.9% with 62 people stating that they were very satisfied with the menu that had been provided on the platform from registration to checking the passing of the self-study test. This is in line with previous research (Islanda & Darmawan, 2022), which states that students give a positive response to the use of Google Sites as learning media because they have a complete site menu including Home, Learning Objectives, Materials, Videos, Simulations, and Evaluation menus, while for the addition of simulation features obtained a positive response with the acquisition of an assessment of the ease of access to simulations by 68%, and as many as 56% of students agreed that the simulation feature was very helpful in preparing for the self-study test. This is also evidenced by feedback from 64% of students who stated that they were very ready to take the exam after taking the simulation on the platform. This is certainly a positive response to the presence of an independent study test platform with simulation features that provide good feedback for students. The survey results showed that 58% of students agreed that the simulation feature was very useful. Previous research (Nasrum & Subawo, 2022) also stated that evaluation instruments in the form of school exam practice questions that can be accessed via smartphones greatly facilitate students in learning. Simulation questions are also a means of habituation in answering web-based questions. In addition, the author also recorded testimonials on the self-study platform by leaders, mentors, colleagues, and also students to provide suggestions for improving the quality of the selfstudy platform for consideration and study to be implemented in the future. This is done to improve the quality of the self-study platform as an information system for conducting self-study tests within the chemistry education study program at Medan State University.

#### 4. CONCLUSION

Based on the results of the research conducted, it is concluded that implementing the self-study test using Google Sites as a requirement for a proposal seminar at the Chemistry Education Study Program at Medan State University obtained a very good response. This can be seen from the data on student responses to the self-study platform, where overall, the level of student satisfaction shows positive results, with almost all evaluation instruments obtaining a very good response percentage. Nevertheless, it is important to continue to conduct regular evaluations and follow up on suggestions and problems that arise, in order to improve the quality of the self-study platform as a medium for implementing self-study tests in the chemistry education study program at Medan State University.

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