Jurnal Nasional Holistic Science
Vol. 4, No. 3, Desember 2024, pp. 417 ~ 420

Analysis of Student Satisfaction with the Digital System for Using the Chemistry Department Room at State University of Medan

Dimas Ridho[1], Alfira Julian Pratiwi[2], Ekin Dwi Arif Kurniawan[3], Mutia Ardila[4], Rafidah Almira Samosir[5], M Rosyadi Izzuddin Nur[6]
[1,2,3,4,5,6]Program Studi Pendidikan Kimia, Universitas Negeri Medan, Indonesia
Email: dimas@unimed.ac.id; alfirajulian@unimed.ac.id; ekindwiak@unimed.ac.id; mutiaardilaa@unimed.ac.id; rafidah@unimed.ac.id; izzuddinrosyadi@gmail.com

ABSTRAK

Penelitian ini bertujuan untuk mengetahui kepuasan mahasiswa terhadap system digital penggunaan ruangan Jurusan Kimia Universitas Negeri Medan. Metode penelitian yang digunakan adalah deksriptif kualitatif. Hasil penelitian yang dilakukan terhadap 25 mahasiswa menunjukkan pada aspek pencatatan penggunaan ruangan mengalami peningkatan kepuasan baik sebesar 7.7%, pada aspek rekap penggunaan ruangan mengalami peningkatan kepuasan menjadi sangat baik dengan presentase 53.8%, pada aspek melihat ketersediaan ruangan mengalami peningkatan kepuasan menjadi sangat baik dengan presentase 46.2%, pada aspek melihat jadwal dosen mengalami peningkatan kepuasan menjadi sangat baik dengan presentase 53.8%. Berdasarkan hasil penelitian, menunjukkan bahwa respond kepuasaan terhadap sistem digital menunjukkan peningkata kepuasan untuk meningkatkan kualitas penggunaan ruangan Jurusa Kimia Universitas Negeri Medan.

Keyword: **Sistem Digital; Kepuasan Mahasiswa; Penggunaan Ruangan**

ABSTRACT

This study aims to determine student satisfaction with the digital system of room usage at the Chemistry Department, State University of Medan. The research method used is descriptive qualitative. The results of the study conducted on 25 students showed that in the aspect of recording room usage, there was an increase in satisfaction of 7.7%, in the aspect of room usage recapitulation, there was an increase in satisfaction to very good with a percentage of 53.8%, in the aspect of viewing room availability, there was an increase in satisfaction to very good with a percentage of 46.2%, in the aspect of viewing lecturers' schedules, there was an increase in satisfaction to very good with a percentage of 53.8%. Based on the results of the study, it shows that the response to satisfaction with the digital system shows an increase in satisfaction to improve the quality of room usage at the Chemistry Department, State University of Medan.

Keyword: Digital System; Student Satisfaction; Room Usage

Corresponding Author:
Dimas Ridho,
Universitas Negeri Medan,
Jl. William Iskandar Ps. V, Kenangan Baru, Kec. Percut Sei Tuan, Kabupaten Deli Serdang, Sumatera Utara 20221, Indonesia
Email: dimas@unimed.ac.id

1. INTRODUCTION

Chemistry department rooms are often used for various activities such as lectures, practicums, research, and seminars. Efficient management is needed to ensure that all these activities can take place without any obstacles (Utami et al., 2023). The implementation of a digital system in room management can improve efficiency and transparency. A web-based information system allows for better schedule management, reduces conflicts over room use, and facilitates access to information for all users (Irfan, 2021). Effective room management can improve the quality of education by ensuring that all academic and research activities can be carried out according to schedule without any disruption. This has a direct impact on student and lecturer achievement and satisfaction. Creating an inclusive and technology-based learning environment is essential to preparing students for an increasingly technology-centric future. (Subroto et al., 2023)

Several universities have implemented digital systems for room management and reported increased efficiency and user satisfaction. For example, National University's use of a web-based application for room rentals has shown positive results (Suryadi et al., 2022). Digital space management systems reduce administrative burdens by automating many manual processes such as room reservations, schedule verification, and room usage reporting (Rahmawati et al., 2024) Implementing an efficient space management system can also reduce university operational costs by optimizing the use of existing facilities and reducing the need for additional space construction (Pakaya et al., 2022).

Some of the challenges faced in implementing a digital space management system include resistance to change, limited technology infrastructure, and the need to customize the system to suit the specific needs of the chemistry department. Students have the right to receive learning in a classroom that is used effectively (Murib et al., 2020). It is important to continue to develop and update the space management system to remain relevant and able to cope with changing needs and technological developments. There are many factors in the design and facilities of campus classrooms that can affect student behavior (Pratama & Setiawan, 2019).

Digital systems for classroom management have shown significant benefits in reducing scheduling conflicts and increasing regularity in room usage (Liperda et. al., 2021). For example, the use of simulation software can help manage room borrowing more efficiently, as shown in a study at Pertamina University that used ProModel to reduce conflicts between room borrowings (Hermawan et al, 2019). The effectiveness of room use is also influenced by management and policies that support the flexibility of room use for various purposes, be it regular lectures, practicums, or other student activities (Rustan et al, 2021). Overall, the effectiveness of room use in the Chemistry Department requires an integrated approach involving digital technology, good management, and innovative learning methods that can reduce dependence on physical space and improve the quality of education.

2. RESEARCH METHOD

This study uses a qualitative descriptive research design that aims to analyze student satisfaction with the digital system for using the Chemistry Department room at Medan State University. Descriptive research is a research method that attempts to describe the object or subject being studied objectively, and aims to describe facts systematically and the characteristics of the object and frequency being studied precisely. The findings of descriptive research are deep, broad and detailed. Broad because descriptive research is conducted not only on the problem but also other variables related to the problem. The implementation of descriptive research is structured, systematic and controlled because researchers start with a clear subject and conduct research on a population or sample of the subject to describe it accurately (Zellatifanny & Mudjiyanto, 2018).

The respondents in this study were 25 students as class leaders in their respective classes from each class in the Chemistry Department of Medan State University. The instrument used was a closed questionnaire with a Likert scale consisting of five criteria. The questionnaire contained 4 questions formulated positively, including:

1. What do you think about the use of the Chemistry Department room through manual recording in books and digital systems?;
2. What do you think about seeing the summary data on the use of the Chemistry Department room through the recording book and digital system?;
3. What do you think about seeing the availability of the Chemistry Department room through the room control book and digital system?;
4. What do you think about seeing the lecturer schedule in the Chemistry Department through the room control book and digital system?.

The data analysis technique used in this study is qualitative descriptive analysis with the following data.

Table 1. Results students satisfaction

Questions	Manual System	Digital System	Response
Student opinion on viewing summary data on the use of Chemistry Department rooms through the recording books and digital systems	19.2%	34.6%	Very good
Opinion on viewing summary data on the use of Chemistry Department rooms through recording books and digital systems	19.2%	53.8%	Very good
Student opinion on the availability of Chemistry Department rooms through the room control book and digital system	26.9%	46.2%	Very good
Student opinion on viewing lecturers' schedules in the Chemistry Department through the room control book and digital system	23.1%	53.8%	Very good

The data shows that in terms of recording the use of space, student satisfaction with the manual system has a percentage of 19.2% and the digital system 34.6%, in terms of recapitulation of the use of space, student satisfaction with the manual system has a percentage of 19.2% and the digital system 53.8%, in terms of viewing the availability of space, student satisfaction with the manual system has a percentage of 26.9% and the digital system 46.2%, and in terms of viewing the lecturer's schedule, student satisfaction with the manual system has a percentage of 23.1% and the digital system 53.8%.

3. RESULTS AND DISCUSSION

Effectiveness of the use of the Chemistry Department building space at the State University of Medan using a digital system, describes the data on student satisfaction responses to the administration of the use of the Chemistry Department room at the State University of Medan which has been carried out including aspects; administration, data recap, room availability and lecturer schedules.

Based on a satisfaction survey conducted on 25 students as class representatives regarding the use of the Chemistry Department room, in the aspect of recording room usage, there was an increase in satisfaction of 15.4%, in the aspect of room usage recapitulation, there was an increase in satisfaction to very good with a percentage of 34.6%, in the aspect of viewing room availability, there was an increase in satisfaction to very good with a percentage of 19.3%, and in the aspect of viewing lecturer schedules, there was an increase in satisfaction to very good with a percentage of 30,7%. With the increase in student satisfaction with the use of the room, an effective learning process can be built from the maximum utilization of learning facilities and infrastructure as well as good lecturer performance in managing the class (Ismi & Komariah, 2020). The results of this survey can be used to introduce reforms and corrective measures to improve student satisfaction in the future (Kanwar & Sanjeeva, 2022). This is because the implementation of activities to record data entering/leaving the room manually is a method that takes a lot of energy and time Johny & Yuama, M. A. (2017).

4. CONCLUSION

Based on the results of the evaluation and monitoring that have been carried out, it can be concluded that the effectiveness of the administration of the use of the Chemistry Department building space using a digital system has achieved the expected goals. The administration of the use of the Chemistry Department building space is now more effective based on the surveys and testimonials that have been carried out. Periodic evaluations need to be carried out to always meet student needs.

REFERENCES

Hermawan, A., Ikawati, M., Kristina, S., & Meiyanto, E. (2021). Efektivitas hybrid e-learning mata kuliah kimia klinik dan bioanalisis di Fakultas Farmasi Universitas Gadjah Mada. *JMPF (Jurnal Manajemen dan Pelayanan Farmasi)*, *9*(3), 164–173.

Irfan. (2021). Aplikasi peminjaman ruang rapat berbasis web dengan menggunakan metode first in first out (FIFO) [Skripsi]. Yogyakarta: STMIK Akakom Yogyakarta.

Ismi, F. M., & Komariah, A. (2020). Management of classroom: Utilization of learning facilities and teacher performance on learning effectiveness. *Proceedings of 4th International Conference on Research of Educational Administration and Management, *526*, 216–220.

Johny, & Yuama, M. A. (2017). Pencatat data masuk/keluar ruangan dengan alat up counter berbasis PPI 8255. *Jupiter (Jurnal Penerapan Ilmu-ilmu Komputer)*, *3*(1), 1–12.

Kanwar, A., & Sanjeeva, M. (2022). Student satisfaction survey: A key for quality improvement in the higher education institution. *Journal of Innovation and Entrepreneurship*, *11*(27).

Liperda, R. I., Fatahayu, N. R., Khairunnisa, E. V., Logika, M. A., Habitullah, M., & Fridiyanti, R. (2021). Simulasi sistem penggunaan ruangan di Gedung Griya Legita Universitas Pertamina. *JISI (Jurnal Integrasi Sistem Industri)*, *8*(2), 65–75.

Murib, B. R., Supriyanto, A., & Sunandar, A. (2020). Efektivitas pemanfaatan ruang kelas sebagai sarana perkuliahan. *JAMP (Jurnal Administrasi dan Manajemen Pendidikan)*, *3*(2), 141–151.

Pakaya, N. S., Bahson, A., & Mahmud, M. (2022). Pengaruh penggunaan sistem informasi akademik terpadu (SIAT) terhadap aktivitas belajar mahasiswa. *Damhil Education*, *2*(1), 42–48.

Pratama, Y. A., & Setiawan, W. (2019). Pengaruh desain dan fasilitas ruang kelas kampus UMS terhadap perilaku mahasiswa. *SINEKTIAK (Jurnal Arsitektur)*, *16*(1), 26–36.

Rahmawati, S., Juledi, A. P., & Sihombing, V. (2024). Implementasi sistem informasi manajemen dalam perguruan tinggi: Studi kasus tentang efisiensi operasional dan pelayanan mahasiswa. *JIKOMSI (Jurnal Ilmu Komputer dan Sistem Informasi)*, *7*(1), 75–77.

Rustan, R. Y., Srywahyuni, Suciyanti, N., Yusri, A., & Gafur, A. (2022). Penataan ruang kelas yang sesuai dengan aktivitas belajar kasus: Ruang aktivitas perkuliahan. *Jurnal Lepa-lepa Open*, *1*(6), 1280–1285.

Subroto, D. E., Supriandi, Wirawan, R., & Rukmana, A. Y. (2023). Implementasi teknologi dalam pembelajaran di era digital: Tantangan dan peluang bagi dunia pendidikan di Indonesia. *Jurnal Pendidikan West Science*, *1*(7), 473–480.

Suryadi, Fitri, I., & Nurhayati. (2022). Rancang bangun aplikasi peminjaman ruangan pertemuan di Universitas Nasional berbasis web. *JTIK (Jurnal Teknologi Informasi dan Komunikasi)*, *6*(3), 357–365.

Utami, G. S. A., Dewi, N. N., & Mahendra, Y. R. (2023). Sistem peminjaman ruangan Fakultas Teknologi Informasi dan Sains Data Universitas Sebelas Maret berbasis web. *SANTI (Jurnal Sistem Informasi dan Informasi)*, *3*(1), 38–51.

Zellatifanny, C. M., & Mudjiyanto, B. (2018). The type of descriptive research in communication. *Jurnal Diakom*, *1*(2), 83–90.