Microsoft teams 365 and online learning: The student's perception

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Abstract: This study aims to determine the effectiveness of online learning using Microsoft Teams 365. The entire population in this study was used as a research sample, namely all students of the Chemistry Education study program, Indonesian Christian University, Jakarta. Perception data was collected using a questionnaire with dimensions of understanding the material, appearance and accessibility of Microsoft Teams 365. From the results of data processing, it was found that more than 50% of students' perceptions of Microsoft Teams 365 were good in all indicators of understanding the material and appearance. On the use dimension with connectivity and accessibility indicators more than 50% of students' perceptions of the Microsoft 365 team are good, but on the quota-saving indicator 42% of students do not agree.

Keywords: Microsoft teams, E-learning, Cemistry

1. Introduction

The industrial revolution 5.0 is a challenge as well as an opportunity for universities to improve their graduates. To improve the quality of graduates through the improvement of science and technology, the government has even set national higher education standards, where one of the educational standards is the standard of learning infrastructure (Kemdikbud, 2020). Learning before the COVID-19 pandemic was offline (Purba, 2017) and after that, until now online learning (Novira et al. 2021). The standard of offline learning facilities and infrastructure is different from online (Wulandari et al. 2020; Krismadinata et al. 2020). Online learning requires effective and efficient learning media to improve student achievement (Hodges et al. 2020; Mayer, 2019; Dong et al. 2018).

Various learning media provided by the Indonesian government or which can be accessed for free such as Edmodo (Pardede, 2017), nearpod (Delacruz, 2014; Hakami, 2020), google classroom (Sudarsana et al. 2019), google meet, even evaluation media such as

kahoot (Purba et al. 2019), quizizz (Purba et al. 2021; Harefa et al. 2020), online crossword puzzles (Sababalat et al. 2021). However, many schools and even universities use learning media that is subject to fees, such as zoom (Limbong et al. 2021), Macromedia flash (Nurfajriani & Nasution, 2015), Microsoft Teams 365 (Wijayanto et al. 2021).

Microsoft Teams 365 is a virtual learning medium that accommodates collaborative learning (Poston et al. 2020). This learning media has the advantage that it unites conversations, meetings, files, and applications in one system (Widiyarso & Sutama, 2021), economical internet quota (Rais, 2021), modern features (Fahri, 2020) while the weakness is that educators and students must prepare email addresses with school or college domains (Novita & Husuhan, 2020).

One of the universities that utilize Microsoft Teams 365 is the Indonesian Christian University (UKI). The chemistry education study program at the UKI Faculty of Teacher Training and Education utilizes Microsoft Teams 365 for online learning during the COVID-19 pandemic. Chemistry learning using Microsoft Teams 365 turns difficult learning into easy (Yuniati, 2020; Wea & Kuki, 2020; Tataurov & Shyshkina, 2020).

The features in Microsoft Teams 365 are complete and interesting to use during online learning (Amirullah & Maesaroh, 2020). Meetings on learning with Microsoft Teams 365 can be recorded and video recordings can be saved and downloaded and shared (Pradja & Baist, 2019). With the various advantages and disadvantages this media, it is important to analyze the effectiveness of online learning by using Microsoft teams 365.

2. Methods

This research is a descriptive research with a quantitative approach. The population in this study were all students of Chemistry Education Faculty of Teacher Training and Education (FKIP) UKI who were still actively using Microsoft Teams 365, as many as 48 people. The entire population in this study was used as a research sample, this side technique is called a saturated sample (Muhson, 2006). The data collection technique in this study was using a questionnaire on the satisfaction of using Microsoft Teams 365, which was compiled in a google form with detailed indicators as presented in the Table 1.

Table 1
Indicators of Student Perception of the Use of Microsoft Teams 365

Material Presentation	Display	Use
Suitability	Features	Connectivity
Structured	Attractiveness	Accessibility
Easy to understand	Interactive	Save quota

The research instrument after being validated by an expert validator obtained a statement that is feasible to use to collect data in research by following the Likert scale with detailed scores as presented in Table 2. The data analysis technique in this study is descriptive analysis by calculating the percentage score of each statement on the questionnaire.

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Table 2

Likert Scale

Score	Category
5	Strongly Disagree
4	Disagree
3	Less Disagree
2	Agree
1	Strongly Agree

3. Results and Discussion

The description of research data regarding student perceptions of the use of Microsoft Teams 365 as an online learning medium, using a questionnaire instrument is presented in Table 3.

Table 3

Data Description

Statement	Respondence Total				
	1	2	3	4	5
Microsoft Teams 365 is perfect for delivering material	0	0	1	31	16
By using Microsoft Teams 365, the delivery of content is highly structured	0	0	6	34	8
Microsoft Teams 365 makes it easier to understand the learning material	0	0	10	33	5
The features in Microsoft Teams 365 are very complete	0	0	5	36	7
Microsoft Teams 365 view, very interesting	0	1	13	29	5
Online learning using Microsoft Teams 365, encourages me to be active in learning.	0	0	3	37	8
Microsoft Teams 365 supports all types of android and laptops	0	0	4	30	14
Microsoft Teams 365 is easy to connect to WIFI or Mobile Data	0	0	3	34	11
Microsoft Teams 365 Save Internet Quota	1	2	20	18	7

Analysis of each dimension and indicator is carried out by calculating the percentage of choices for each assessment indicator. The results of the analysis of students' perceptions of the presentation of material using Microsoft Teams 365 are presented in Fig 1.

The results of the analysis of students' perceptions of the presentation of lecture material using Microsoft Teams 365 during the Covid-19 pandemic condition were in good category because 65% of students agreed that Microsoft Teams 365 was very suitable to be used to deliver lecture material. 71% of students agree with the statement using Microsoft Teams 365, the delivery of the material is very structured and 69% of students agree with the statement Using Microsoft Teams 365 makes it easier to understand the learning material

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presented. The positive perception of students towards the use of Microsoft Teams 365 when viewed from the indicators of presentation of the material according to its advantages, namely being able to share screens and available whiteboards to deliver lecture material. Students rated their collaborative skills as good to very good and felt that the project was effective in developing these skills (Buchal & Songsore, 2019). The results of the analysis of student perceptions of dimension the appearance of Microsoft Teams 365 are presented in Fig 2.
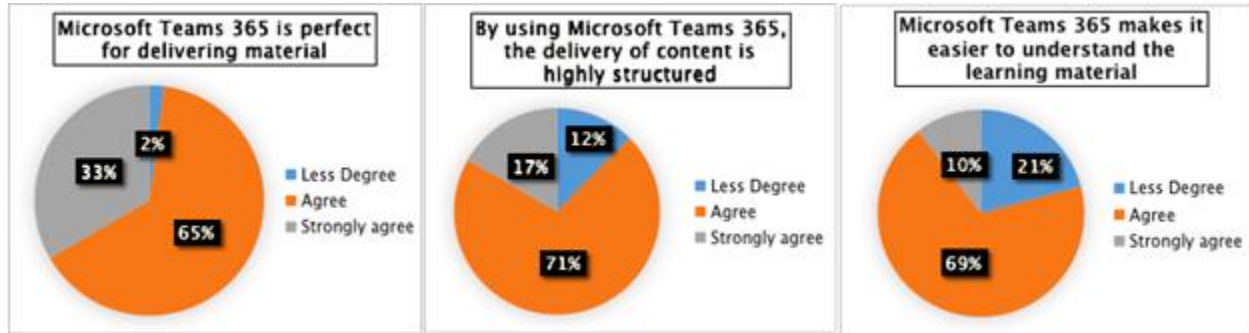

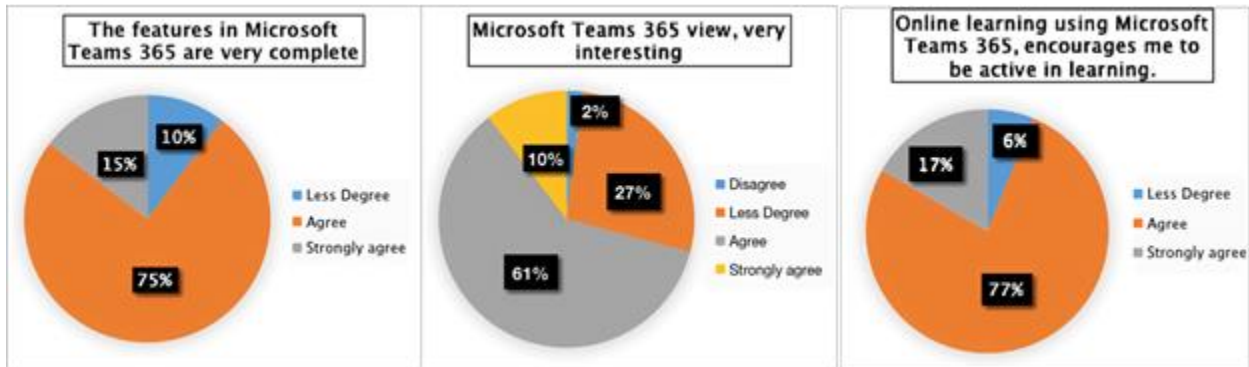**Fig 1.** Student perceptions of presenting material using Microsoft Teams 365

Fig 2. Student perception of the appearance of Microsoft Teams 365

Referring to Figure 2 above, the results obtained, 75% of students agree that the features in Microsoft Teams 365 are very complete, 61% agree that the features in Microsoft Teams 365 are very interesting and 77% agree and even 17% strongly agree with the statement Online learning using Microsoft Teams 365, encourages me to be active in learning. According to research results, Microsoft Teams 365 has many features that allow learning more effectively and efficiently (Hubbard & Balley, 2018), have amazing features (Yen & Nhi, 2021).

The results of data analysis on student perceptions of dimension the use of Microsoft Teams 365 are presented in Fig 3. The statement that Microsoft Teams 365 supports all types of Android and laptops, 63% answered agree and even 29% answered strongly agree by students as respondents. 71% of students agree and 23% strongly agree that Microsoft Teams 365 is easy to connect to WIFI or Cellular Data. For the Microsoft Teams 365 statement that saves internet quota, 2% strongly disagree, 4% disagree, 42% disagree, 37% agree and only 15% of students strongly agree. Microsoft Teams 365 as an internal communication tool is a

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digital tool that you may find easy to use (Vauhkonen, 2020). Student perceptions regarding the use of Microsoft Teams 365 which are less cost-effective because students of the Chemistry Education Study Program FKIP UKI are scholarship students living in UKI dormitories.
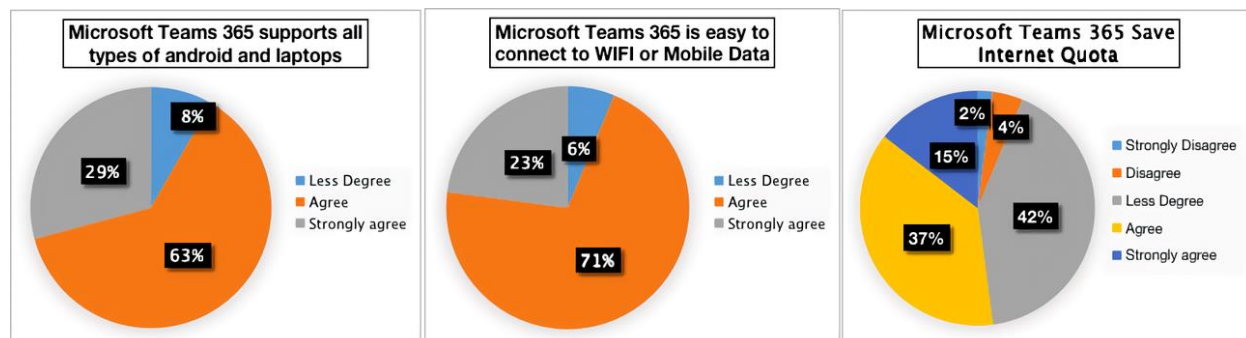

Fig 3. Student perceptions of the accessibility of microsoft teams 365

4. Conclusion

Students' perceptions of understanding the material by using Microsoft Teams 365, the appearance and accessibility of Microsoft Teams 365 are good, it's just that they are less efficient on internet quota.

Acknowledgment

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