

## MEASUREMENT OF STUDENTS' SATISFACTION IN ONLINE COURSES AT DONG THAP UNIVERSITY

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### Abstract

*In current higher education, online teaching implementation to diversify teaching activities can be considered as an essential and urgent need. Accordingly, this study is conducted to measure students' satisfaction in online courses organized at Dong Thap University. The data used in this study is feedback from 917 full-time students who experienced online learning in the first semester, academic year 2021-2022 in the University. By using descriptive statistics and analysis of variances, this study presents students' online-teaching satisfaction through four main categories: (1) Course design, (2) Technology, (3) Interaction, and (4) Instructors. Specifically, most indicators used to measure students' satisfaction reached an average value of above 4.0 (on a 5-level scale), indicating that students basically accepted and satisfied with online teaching. In addition, some indications show that first-year students tended to have more satisfaction than all other ones in terms of four key factors being investigated. The research findings serve as an important information channel for Dong Thap University to take its reference for online teaching improvement and training quality enhancement.*

**Keywords:** *Course design, interaction, online teaching, students' satisfaction, technology.*

# ĐO LƯỜNG MỨC ĐỘ HÀI LÒNG CỦA SINH VIÊN VỀ CÁC KHÓA HỌC TRỰC TUYẾN TẠI TRƯỜNG ĐẠI HỌC ĐỒNG THÁP

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## Lịch sử bài báo

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## Tóm tắt

Việc sử dụng hình thức dạy học trực tuyến nhằm đa dạng hóa các hình thức dạy học có thể xem là một nhu cầu cần thiết trong giáo dục đại học. Nghiên cứu này được thực hiện nhằm đo lường mức độ hài lòng của người học đối với các khóa học trực tuyến tại Trường Đại học Đồng Tháp. Dữ liệu được sử dụng trong nghiên cứu này là kết quả phản hồi của 917 sinh viên hệ chính quy đã trải nghiệm học tập trực tuyến vào kỳ 1, năm học 2021-2022. Bằng các phương pháp thống kê mô tả và phân tích phương sai, nghiên cứu đã chỉ ra mức độ hài lòng của người học đối với hoạt động dạy học trực tuyến thông qua bốn yếu tố chính như (1) Thiết kế khóa học, (2) Công nghệ, (3) Tương tác và (4) Giảng viên. Cụ thể, phần lớn các chỉ báo được sử dụng để đo lường mức độ hài lòng của người học đều đạt giá trị trung bình trên 4.0 (theo thang đo 5 mức) cho thấy người học về cơ bản đã chấp nhận và hài lòng với hoạt động dạy học trực tuyến. Ngoài ra, có dấu hiệu cho thấy các sinh viên năm thứ nhất có xu hướng hài lòng cao hơn các sinh viên năm thứ hai, thứ ba và thứ tư với bốn yếu tố chính đang được xem xét. Kết quả nghiên cứu này là một kênh thông tin quan trọng để Trường Đại học Đồng Tháp tham khảo nhằm cải tiến hoạt động dạy học trực tuyến, góp phần nâng cao chất lượng đào tạo.

**Từ khóa:** Công nghệ, dạy học trực tuyến, sự hài lòng của sinh viên, thiết kế khóa học, tương tác.

## 1. Introduction

Over the past two decades, online learning has become more popular as more education institutions adopt this form of teaching to meet students' various learning needs (Williams, 2022). Many higher education institutions have accordingly invested large budgets and other resources in online learning tools and equipment, especially internet connection system (Cheung & Huang, 2005). This form of learning promises high potentialities of providing students with high-quality learning experiences if intended courses are prepared based on students' value systems, along with their social and cultural contexts (Levin & Wadmany, 2006). However, compared to face-to-face learning, online learning faces more challenges (Hettiarachchi et al., 2021) especially, students' technical difficulties in attending lectures (Yeung & Yau, 2022), their concentration in lectures (Richardson et al., 2017), and the limited opportunities for collaboration leading to the feeling of isolation (Eom & Ashill, 2016). Among them, one of the main technical difficulties that students face in an online learning environment is poor internet connection, which makes them unable to regularly participate in online teaching sessions simultaneously (Chung et al., 2020). In addition, students' online learning experiences are significantly affected by software and hardware issues in their learning devices (Chung et al., 2020). Furthermore, the main barriers affecting the implementation of online learning include time constraints, poor technical skills, inadequate infrastructure, lack of educational institutions' strategy and support, negative attitudes of all involved (O' Doherty et al., 2018). Therefore, it is obvious that the effective implementation of online teaching activities depends on different conditions, especially information technology infrastructure, the professional capacity of the teaching staff, especially the teaching organization of each educational institution. This study is conducted to measure students' satisfaction with online teaching activities organized in Dong Thap University. Research findings will serve as a useful information channel for the University to improve its online teaching activities and training quality.

## 2. Literature review

Students' satisfaction is the degree to which students perceive that their learning needs, objectives, and desires have been completely met (Sanchez-Franco, 2009) and is considered as one of the indications of effectiveness in educational activities (Eom et al., 2006; Zeng & Wang, 2021). Yunusa and Umar (2021) classified the factors that determine student satisfaction into four categories of communication motivation, e-learning environment, organization, personality, and situation. In addition, Moore et al. (2003) argue that online training includes four basic elements in all teaching and learning situations, namely teachers, students, system of knowledge transmission and learning contents. Among them, the factors related to teachers play the most important role in the online learning environment when it comes to student satisfaction. They include the communication between teachers with students, the preparation of teaching contents and teaching methods, and professionalism in teaching activities. In addition, two other factors that are also important in determining student satisfaction in online teaching are technology and interaction (Bolliger & Martindale, 2004; Kuo et al., 2013). That is, students have essential needs to get accessed to reliable devices during the learning process, especially opportunities to participate in discussions so that they feel that they are involved and want to participate in an online course (Bolliger & Martindale, 2004). The study by Thurmond et al. (2002) shows that course design, assessment, and timely feedback on student assignments in online courses have an impact on student satisfaction. Selim (2007) classified three main groups of factors affecting the success of online learning, including teachers with such characteristics as personal competence in using technology, teaching style and attitude; students with their personal awareness, control of learning time and technology skills; technology and other assisting elements such as transmission lines, security, video, etc. Enres et al. (2009) suggested that student satisfaction is determined by five factors including student satisfaction with the instructor's practice, learning practice, course materials, student-student interaction, and course implementation tools. In addition, Musa et al. (2012) showed that Internet browsing speed and teachers' participation in group

discussions are the most important factors in the online learning process. In contrast, some reasons why online learning fails are the lack of technical support, student anxiety about the teaching-learning system and the ease in use of the system. Moreover, teachers' attitude, the flexibility of the online learning system, the quality of the lesson and course design, the diversified assessment system all have an influence on student satisfaction in online learning process (Soong et al., 2001). Student satisfaction is one of the five main pillars of online teaching, along with teachers' satisfaction, accessibility, learning effectiveness, and cost-effectiveness (Wang, 2006), and is considered as indispensable and the issue must be considered while the work of evaluating the effectiveness of specific courses (Sahin & Shelley, 2008). Based on an overview of previous studies, this study identifies four main categories so as to measure student satisfaction with online teaching activities,

including (1) Course design, (2) Technology, (3) Interaction and (4) Teachers.

### 3. Methodology

#### 3.1. Instrument descriptive

In this research project, the actual level of students' satisfaction with the University's online teaching activities is measured by their responses to four investigated key factors subdivided into 25 items, including (1) Course Design with 6 subsequent items coded as Des1, Des2, Des3, Des4, Des5, Des6 respectively; (2) Technology with 6 subsequent items coded as Tech1, Tech2, Tech3, Tech4, Tech5, Tech6; (3) Interaction with 07 items coded as Int1, Int2, Int3, Int4, Int5, Int6, Int7 and finally (4) Lecturer with 06 items coded as Lec1, Lec2, Lec3, Lec4, Lec5 và Lec6. The determination of using the above-mentioned factors to measure students' satisfaction level is applied by inheriting the previous authors' studies shown below.

**Table 1. Used factors for measuring student satisfaction about online teaching activities**

Factors	Sources
Course Design	Vu & Nguyen (2013), Pham (2020), Yawson & Yamoah (2020), Shee & Wang (2008); Wang (2018); Zaili et al. (2019); Nguyen et al. (2021); Baraković & Skopin-Kapov (2017).
Technology	Bolliger (2004), Bui & Tran (2021); Pham (2020), Shee & Wang (2008).
Interaction	Bolliger (2004), Pham et al. (2021), Yawson & Yamoah (2020), (B. Landrum et al. (2021), Pham (2018).
Lecturer	Bolliger (2004), Pham (2020), Le & Tran (2021); Zaili et al. (2019), Nguyen et al. (2021).

In addition, another factor with 06 items coded as Sat1, Sat2, Sat3, Sat4, Sat5, Sat6 was used to measure the students' satisfaction with online teaching activities. Once again, all observed variables are measured on a 5-point Likert scale with 1 meaning Complete disagreement, 2 - Disagreement, 3 - Confusion 4 - Agreement and 5 - Complete agreement respectively. The determination of introducing these above items will be considered on the results of EFA (which will be presented in the later section) so as to ensure the appropriateness of the determined factors and organization values as well as the meanings of measuring students' satisfaction level reflected in each factor.

#### 3.2. Description of the research sample

The respondents in this study are 917 full-time

students who participated in online teaching activities at Dong Thap University in semester 1, academic year 2021-2022. Among them, male students are 263 (accounting for 26.68%) and females are 654 (accounting for 71.32%). In terms of their university study time, 499 students are first-year (accounting for 54.42%); 247 second-year (accounting for 26.94%); 128 third-year (13.96%), and 43 fourth-year (4.69%). Regarding the number of devices used in online learning process, most respondents use one device regularly and a minority of others use a relay of one and two devices at the same time during the learning process with a ratio of 49.7% and 43.2% respectively. Other student groups, which make up 6,3% and 0,8%, are those who use a combination of two devices and use more than two

devices. Additionally, the electronic devices used by these students include laptops, smartphones, desktop computers and tablets. Specifically, the main electronic devices used by students are smartphones and laptops with the respective rates of 51,08% and 45,36%, while desktops and tables were used by a small number of students, about 3.9% and 1.1% respectively. Furthermore, most students use Wi-Fi or 3G/4G transmission for internet access with the rate of 75.39% and 25.41%, while very few of them (2.4%) use direct connection (via computer ports). The use of electronic devices and internet connection modes, which usually pose risks of failure or interruption due to the stability of how well the devices operate and how continuously the internet transmission stays, can affect the effectiveness of this learning form and students' satisfaction in the learning process.

### 3.3. Data analysis

The collected data are statistically analyzed by the application of the specialized statistical software SPSS (version 22.0). In which, the mean values and standard deviation are used to describe the significance of each observed variable based on students' feedback data. The indication of students' response levels is recorded based on the mean values, namely: complete disagreement (1.00 - 1.85), disagreement (1.81 - 2, 60), confusion (2.61 - 3.40), agreement (3.41 - 4.20) and complete agreement (4.20 - 5.00). Cronbach's Alpha coefficient is used to evaluate the reliability of the scales. The analysis results show that the Cronbach's Alpha values of the scales from 0.825 to 0.918, which are all greater than 0.6. This shows that the scales have satisfactory reliability (Hair et al., 2019) and stay at a high level. In addition, the study uses the ANOVA analysis method to test the differences in the feedback from students' (in their year I, II, III, IV in university time) towards the components of online teaching activities. Finally, some terms are used frequently in the study and are

abbreviated as M (mean), SD (standard deviation).

### 4. Findings and discussions

The results of EFA for 24 items show that 23 items have converged on 04 factors, while those items (Inter7) did not converge on any factors, so they would be removed. Specifically, the first factor with 06 items such as Lec1, Lec6, Lec2, Lec5, Lec3 and Lec4 showed a factor loading system from 0.696 to 0.793; the second factor with 06 items such as Des1, Des4, Des3, Des2, Des6 and Des5 showed the factor loading system from 0.656 to 0.768; the third factor with 06 items such as Inter1, Inter2, Inter6, Inter5, Inter3 and Inter4 with showed factor loading from 0.598 to 0.768; and the fourth factor with 6 items such as Tech6, Tech1, Tech4, Tech5, Tech2 and Tech3 showed a numerical factor loading system from 0.593 to 0.764. Thus, it can be seen that except for 1 item (Inter7) that does not focus on any factors, the remaining items have converged on four factors Design, Technology, Interaction and Lecturer course that have been chosen to measure students' satisfaction with online teaching activities. The detailed results of students' satisfaction with online teaching activities can be detailed through the analysis, and evaluation below.

In general, the students' mean rating for all items related to online teaching activities categorized in the four main groups as Course Design, Technology, Interaction and Teachers reach from 3.31 to 4.32, showing that students have high appreciation for online teaching activities. In particular, the highest mean values fall in items related to Teachers, while the lowest values are for items related to Technology. Thus, most of the items under consideration correspond to the level of students' satisfaction (agreement and complete agreement). The results of students' feedback for each given category are shown in Table 2.

**Table 2. Description of the items and their analysis results**

Variables	Items	M	SD
<i>Course design</i>			
Des1	The courses are appropriately structured	4.10	0.671
Des2	The courses are friendly with users (students)	4.06	0.693
Des3	The courses provided students with essential information	4.06	0.685

Variables	Items	M	SD
Des4	Teaching materials are constantly updated by teachers	4.14	0.694
Des5	Teaching materials are compatible with students' ability	4.16	0.595
Des6	Teaching materials suit students' learning demands	4.11	0.629
<b>Technology</b>			
Tech1	Students have an easy access to online learning websites	4.03	0.802
Tech2	Students have an easy access to online learning courses	3.98	0.765
Tech3	The online teaching system operates stably and without interruption	3.31	0.976
Tech4	The online teaching system is compatible with electronic devices	4.00	0.740
Tech5	Students can have an easy interaction with teachers and friends	3.94	0.769
Tech6	Students can submit quizzes, tests to teachers via online courses	3.93	0.794
<b>Interaction</b>			
Inter1	Any arising problems are handled by teachers with enthusiasm	4.14	0.699
Inter2	Students' questions are solved quickly	4.11	0.682
Inter3	Students are given opportunities to give constructive ideas	4.24	0.604
Inter4	Students are given opportunities to have discussions with friends	4.24	0.581
Inter5	Students are given opportunities to give comments on friends' ideas	4.21	0.568
Inter6	Students have an easy access to online learning materials	4.16	0.625
<b>Lecturer</b>			
Lec1	Teachers have good professional knowledge	4.32	0.601
Lec2	Teachers use a variety of teaching methods	4.17	0.660
Lec3	Teachers are enthusiastic and friendly with students	4.18	0.705
Lec4	Teachers pay close attention to students' progress	4.13	0.675
Lec5	Teachers encourage students to ask questions during online learning	4.32	0.590
Lec6	Teachers announce the assessment results to students at prompt time	4.09	0.706

Source: authors' collected data, 2022

### Course design category

The items related to Course design have the mean values of over 4.0, corresponding to the level of "agreement" (level 4). Among them, the highest mean value belongs to the item "Learning materials are compatible with the teaching contents" with  $M = 4.16$ ,  $SD = 0.595$ . Meanwhile, the lowest mean values fall into the two items "Courses are designed to be friendly with students" with  $M = 4.06$ ,  $SD = 0.693$  and "The courses provide students with all necessary information" with  $M = 4.06$ ,  $SD = 0.685$ .

### Technology category

This category contains many items with a mean value below 4.0 among the factors related to online teaching and under our investigation. In which, the lowest mean value is the item "The online teaching system operates stably and without interruption" (Tech3) with  $M = 3.31$ ,  $SD = 0.796$ . Meanwhile, achieving the highest mean value is the item "Students have an easy access to online learning websites" (Tech1) with  $M = 4.03$ ,  $SD = 0.802$ . Therefore, except for Tech3 item, which has not clearly shown the

students' satisfaction level (the level of confusion), the remaining items all show the satisfaction of the students, and all correspond to the level of 4 (agreement) out of 5 levels.

**Interaction category**

The items in this category all have mean values above 4.0 and are the second highest mean average of the four investigated categories. Among them, the highest mean values belong to two items "Teachers create opportunities for learners to express their opinions in the teaching process" with  $M = 4.24$ ,  $SD = 0.604$  and "Students are given opportunities to have discussions in the teaching process" with  $M = 4.24$ ,  $SD = 0.581$ . These are the two items that received the highest level of students' satisfaction (complete agreement). Meanwhile, the item with the lowest mean value in this category "Learning materials on courses are attractive to learners" with  $M = 3.87$ ,  $SD = 0.747$  shows students' satisfaction (level 4 on a 5-point scale).

**Teacher category**

This category contains the items with the highest mean value of the four investigating categories with

mean values above 4.0. Specifically, the two items with the highest mean value are "Teachers have good professional knowledge" with  $M = 4.32$ ,  $SD = 0.601$  and "Teachers encourage students to ask questions during online learning" with  $M = 4.32$ ,  $SD = 0.590$ . Additionally, these two factors receive the highest level of students' satisfaction (corresponding to complete agreement). Meanwhile, the item with the lowest mean value is "Teachers announce the assessment results to students at prompt time" with  $M = 4.09$ ,  $SD = 0.706$ . Thus, items about teachers in the process of online teaching receive satisfactory feedback from students (corresponding to level 4 and level 5).

**Students' general feedback on online teaching activities**

The statistics in Table 3 show that the overall feedback by students for online teaching activities reaches the mean value of 3.53 to 4.01, all corresponding to the level of agreement. This shows that the overall feedback results of students' online teaching activities tend to be lower than the component categories related to online teaching activities such as Course Design, Technology, Interactions, and Instructors.

**Table 3. Students' general feedback on online teaching activities**

	Items	M	SD
Sat1	You can take online courses easily	4.01	0.784
Sat2	It's interesting to take online courses	3.95	0.831
Sat3	Online learning is as effective as in classroom learning	3.53	1.067
Sat4	Online learning activities meet your expectations	3.65	0.969
Sat5	You are content with your learning results in online learning	3.84	0.887
Sat6	You are in favor of online learning organized in the future	3.62	1.061

*Source: Authors' collected data, 2022*

To put it in short, it can be inferred that students do not totally accept online teaching form as they make comparison with the "traditional" teaching mode despite their positive feedbacks to the factors related to the organization of online teaching activities with their ratings at agreement and complete agreement level. Specifically, the highest mean value is the item "You can take online courses easily" with  $M = 4.01$  and  $SD = 0.784$ , while the lowest mean value is the item. "Online learning is as effective as in classroom learning" with  $M = 3.53$  and  $SD = 1.607$ . This shows

that participating in online teaching activities does not bring many difficulties for students, but it cannot be confirmed that students have completely supported the effectiveness of this form of teaching compared to offline teaching activities.

**The differences on students' satisfaction with the investigating categories among the student groups (first-year to four-year).**

Levene statistic results in Table 4 show that there is a homogeneity of variance among student

groups (years I, II, III, IV) for Teacher category because of the Sig. = 0.119 > 0.05. Meanwhile, there is no uniformity of variance among student groups for Course design, Technology, and Interaction because Sig values of these categories are all less than 0.05 (0.002, 0.011 and 0.015 respectively). Besides, the results of ANOVA analysis for the

Teacher category have Sig. = 0.001 < 0.05 and Robust Test results for Course Design, Technology, and Interaction with the Sig. < 0.05 (0.023, 0.000 and 0.009 respectively), shows that there is a statistically significant difference in mean values between groups of students for all four categories under investigation.

**Table 4. Testing on the difference between mean values for each category**

	Test of Homogeneity of Variances				ANOVA (Sig.)	Robust Tests (Sig.)
	Levene Statistic	df1	df2	Sig.		
Course design	5.010	3	913	0.002		0.023
Technology	3.706	3	913	0.011		0.000
Interaction	4.719	3	913	0.003		0.004
Lecturer	1.959	3	913	0.119	0.001	

*Source: Authors' collected data, 2022*

Statistics results in Table 5 show the difference in mean value of student group for each category. **Specifically**, the mean value of first-year students is higher than these of second-year, third-year and

fourth-year students for categories related to online teaching, while there is no statistically significant difference in mean values between the second, third and fourth year groups.

**Table 5. Testing on the difference between mean values for each student group**

	Student groups		Mean Difference (I-J)	Std. Error	95% Confidence Interval	
	(I)	(J)			Lower Bound	Upper Bound
Course design	1	2	0.129*	0.041	0.049	0.210
	1	3	0.226*	0.046	0.136	0.315
Technology	1	2	0.141*	0.058	0.027	0.255
	1	3	0.147*	0.041	0.066	0.228
Interaction	1	2	0.167*	0.084	0.001	0.332
	1	4	0.166*	0.042	0.082	0.249
Lecturer	1	2	0.166*	0.059	-0.281	-0.048
	2	3	-0.164*			

*Source: Authors' collected data, 2022*

For the **Course design** category, there is a statistically significant difference in mean between freshmen and sophomores. More specifically, first-year students' mean values are higher than these of second-year students with a mean difference of 0.129. For the **technology** category there is also a difference in mean values between first-year students, second-year and third-year students.

Specifically, first-year students' values are higher than these of second-year and third-year students in term of mean value with a mean difference of 0.226 and 0.141, respectively. For the **interaction** category, there is a difference in the mean value between freshmen and sophomores. With the first-year students' values being higher than these of second-year students with a mean difference



of 0.139. For the **teacher** category, there is a statistically significant difference between first-year and second-year students; and also the difference between sophomore and third year students. Specifically, freshmen’s feedback bears a higher mean value than these of sophomores with a mean difference of 0.166, while sophomores’ feedbacks have a lower mean value than third-year students with an average difference is 0.164.

The results of the correlation analysis in Table 6 showed that all four factors selected in this study – Course Design, Technology, Interaction, Lecturer were linearly correlated with each other with 99% reliability and correlation coefficient values ranging from 0.569 to 0.735. Consequently, the above factors all have a mutual influence in the process of online teaching, in which the strongest correlation is between Lecturer and Interaction factors.

**Table 6. Correlations**

		Course design	Technology	Interaction	Teacher
Course design	Pearson Correlation	1			
	Sig. (2-tailed)				
Technology	Pearson Correlation	0.574**	1		
	Sig. (2-tailed)	0.000			
Interaction	Pearson Correlation	0.641**	0.644**	1	
	Sig. (2-tailed)	0.000	0.000		
Lecturer	Pearson Correlation	0.584**	0.569**	<b>0.735**</b>	1
	Sig. (2-tailed)	0.000	0.000	0.000	

What should be done to promote the classroom interaction, a teaching-learning element that is easily forgotten or underestimated in online classes because neither teachers nor students have the conditions to “meet”, “see each other” (if only, they just see faces). In traditional teaching manner, lecturers do play a leading role by exploiting materials and textbooks and organizing teaching activities, disseminating, and sharing knowledge to students. Similarly, in the online learning environment, teachers should be more proactive in organizing teaching activities to improve interaction by implementing several possible measures or adaptation. Firstly, teachers should design teaching activities and learning tasks in such a way that they are suitable to the online environment, reduce slides and presentations to avoid “sending students to sleeping mode” but create activities and questions instead, to engage students’ participation at various angles and levels. Teachers can enhance the liveliness of the lecture by showing students a short clip, asking them to answer some related questions, or having a video case discussion. Secondly, teachers can enhance interaction by investing more appropriately in teaching technology and equipment. It is necessary to ensure that the

teaching environment is well soundproofed to avoid noise interference, minimize sounds that are not related to the lessons so that students are not distracted or losing their attention. Moreover, the internet transmission line must be strong and stable so that the learning tasks are implemented smoothly and properly. If possible, teachers use computers with wide screens, with pen touch screens to allow them to write, edit and make comments directly on students’ work. Finally, it is the teachers who are supposed to change themselves flexibly to suit the online environment where unexpected incidents often occur. Teachers should be patient because many students have problems logging into the system, entering class late or being “kicked out” due to their technical failure. It is necessary for teachers to have sympathy for students in the context that many of them do not have conditions to study online, even many first-year students have not used computers proficiently, leading to delayed or unsuccessful implementation of learning tasks. Teachers also consult with their colleagues, petitioning and receiving the approvals from the heads of departments, deans of faculty,... so that some testing and assessment requirements can be eased or reduced so as to relieve pressure on students.

Before the Covid-19 pandemic took place, most teachers and students at educational institutions were familiar with the traditional teaching manner, so the complete shift to online teaching during the period of social distancing affected by the pandemic has brought many challenges for higher education institutions, including Dong Thap University. To prepare for online teaching, the University had already invested in information technology infrastructure and organized many training courses for lecturers and students on how to operate an online learning system. Specifically, lecturers were instructed on how to compose lectures, post lectures on the online teaching system, how to organize teaching activities, while students were showed how to log into the system as well as perform interactions in their online learning process. In addition, the University has assigned IT staff, who are proficient in the online teaching system, ready to give support to lecturers and students in the teaching process. Despite such careful preparation, the organization of online teaching activities in the early stages faced many difficulties as many lecturers and students could not adapt and implement teaching activities effectively. However, in this context, many lecturers actively changed their teaching and learning operations to meet the urgent requirements imposed by the University and society by using a combination of other online teaching platforms such as Zoom, Google Meet, Microsoft Team, ... for teaching activities. Moreover, some lecturers set up Zalo groups to interact, deliver e-learning materials and promptly answer students' enquiries and questions, as well as remind and encourage students to overcome learning difficulties.

The results of descriptive statistical analysis for each item in every factor show that online teaching activities in Dong Thap University initially received positive feedback from students with the average value for items being quite high, from 3.31 to 4.32 respectively the degree of *agreement* (level 4) and *strongly agree* (level 5) on the conversion scale based on the mean. In particular, items related to the teacher factor all achieved an average value from 4.09 to 4.32, especially 02 items "*Teachers have good professional knowledge*" (Lec2) and "*Teachers encourage students to ask questions during online learning*" (Lec5) reached the highest average value of all items under consideration, and a score of 4.32

corresponds to a very agreeable level (level 5) on the conversion scale. This shows that the teacher's ability to organize teaching activities has radically met the requirements of online teaching activities and brought satisfaction to students. In addition, items related to interactive factors in the online teaching process also achieved a high average value, with a value from 4.11 to 4.24, of which 3 items achieved an average value above 4.20 corresponding to a very agreeable rating (level 5) on the conversion scale, including *Students are given opportunities to give contributive ideas* (Inter3), "*Students are given opportunities to have discussions with friends*" (Inter4), and "*Students are given opportunities to give comments on friends' ideas*" (Inter5). This also shows that the interactions in online teaching activities have been well organized by teachers and bring satisfaction to students. In fact, on participating in online teaching activities, the authors find, from lecturers' perspective, that online teaching manner brings many interesting things to teachers and learners. Because they have not met each other in real life but through the lessons, teachers and students could exchange and interact with each other. Up to now, the society has overcome the crisis period caused by the Covid-19 pandemic and teaching activities have basically returned to face-to-face teaching as before, but many higher education institutions, including Dong Thap University, are still maintaining online teaching in some training, or fostering programs because of the benefits that online teaching has brought to teachers and students in such teaching manner.

## 5. Conclusions

The research findings show that the students are generally satisfied with the categories related to the organization of online teaching activities, namely Design of courses, Technology-related elements, Interaction during learning process, and teaching staff capacity. In addition, the general feedback shows that students basically have a positive attitude to this form of teaching although the effectiveness of teaching activities does not completely meet their expectations. This might come from the fact that this form of teaching is quite unfamiliar to students, leading to their hesitation to accept this form of teaching in comparison to offline teaching. This

research findings serve as an important information channel for Dong Thap University to take its reference for the improvement of online teaching activities, thus contributing to improving its training quality./.

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