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TRẢI NGHIỆM SINH VIÊN TẠI TRƯỜNG ĐẠI HỌC NGOẠI THƯƠNG
- THỰC TRẠNG VÀ ĐỀ XUẤT

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Tóm tắt

Trải nghiệm của sinh viên đóng vai trò quan trọng trong việc cải thiện mức độ hài lòng của sinh viên trong quãng thời gian tại cơ sở giáo dục. Nghiên cứu này tập trung vào việc phân tích các trải nghiệm của sinh viên tại Trường Đại học Ngoại thương và cách cải thiện để nâng cao sự hài lòng của sinh viên. Nghiên cứu chia trải nghiệm của sinh viên thành 4 giai đoạn tương đương với lộ trình của sinh viên tại trường đại học, bao gồm: trải nghiệm khi đăng ký nhập học, trải nghiệm học tập, trải nghiệm ngoài học tập và trải nghiệm khi tốt nghiệp. Từ 373 mẫu khảo sát được, nghiên cứu thực hiện các phân tích thống kê để xác định những vấn đề hiện có với trải nghiệm của sinh viên, và từ đó đề ra các phương án giải quyết thông qua sử dụng công nghệ và phân tích dữ liệu.

Từ khóa: Trải nghiệm sinh viên, lộ trình sinh viên, FTU.

STUDENT EXPERIENCE IN FOREIGN TRADE UNIVERSITY
– SITUATION AND IMPLICATIONS

Abstract

Student experience is believed to play important role in increasing the level of satisfaction one might feel about their time as students in an educational institution. This paper is concerned with identifying what is student experience in Foreign Trade University and how it can be enhanced in order to improve the level of student satisfaction. Student experience is accessed through elements in student experiences journey including application experience, academic experience, campus experience, and graduate experience. Based on a sample of 373, a statistical analysis is conducted to figure some issues with the status quo, and solutions are approached based on the technological and data analysis implications.

Keywords: Student experience, student journey, FTU.

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1. Introduction

The autonomy mechanism of higher education institutions, both financially and academically, induces universities and colleges to pay more attention to nurturing their “customers”: the students. In order to recruit, educate and prepare this cohort for the future labor market as well as the future citizens, educators and institutional administrators have to understand their characteristics and styles. Those insights further suggest they build specific strategies to satisfy their key stakeholder - the students. Student satisfaction can be defined as a short-term attitude resulting from a subjective evaluation of students’ educational participation, services and facilities offered by the institutions. Hence, the experience of individuals heavily influenced the level of satisfaction one might feel about their time spent as students in higher education.

Foreign Trade University piloted its financial autonomy project in 2005, was approved by the government to continue its scheme in the 2015 - 2017 period and has officially adopted the financial autonomy state in the 2017 - 2018 school year. The scheme has urged Foreign Trade University towards a more modern and student-oriented approach, in which it highlights the relevance and practicality of education as well as placing concern on living up to students’ needs inside the scope of the university campus (Bùi and Phạm, 2017). This is clearly stressed in its strategic goal to 2030 as “*utilizing all the resources in order to improve operations and satisfy students*”, teaching and non-teaching staffs’ needs, as well as ensuring the sustainability improvement of Foreign Trade University” (“*Sứ mạng, tầm nhìn, các giá trị cốt lõi và chiến lược phát triển trường đến năm 2030*”, 2019). To measure the efficiency and effectiveness of this implementation, the university has to closely monitor student experience on a regular basis. Therefore, this paper aims to find out FTU’s student experiences, and suggest some implications to improve student experiences during the time they study in the university.

2. Literature review

2.1. Student experience

Dated back to 1992 when Harvey, Burrow and Green coined the term as a critical think-about in assessing quality in pedagogy, the concept was initially restricted to learning and teaching experience (Baranova *et al.*, 2011). Today, student experience has expanded to embrace students’ interaction with administrative and support services, specifically “*experience of higher education teaching, learning and assessment and their experience of other university ancillary service aspects*” (Douglas *et al.*, 2008). Braid and Gordon (2009) say student experience “*encompasses many aspects of academic and intellectual development; social and emotional life; and the growth and refinement of cultural, political, sporting and artistic interests.*” Gartner, Inc. states in its annual report “Top Technology Trends Impacting Higher Education in 2021” that student experience concerns the entire interaction between students and their educational institutions, from interest identification and recruitment through graduation and engagement as alumni (Morgan *et al.*, 2012).

2.2. Classifications

Benckendorff *et al.* (2009) group the characteristics into four categories, namely institutional dimensions, student dimension, sector dimension and external dimensions - each concentrates on how certain actors interact, and how trends and changes within those boundaries may affect the

environment and the experience of students during their time at the institutions. Similarly, Tribal Group, the market leader in educational consulting, divides student experience into three elements: academic and intellectual development, social/emotional activities and networking, and welfare and support services. Examining through a chronological order, Rob Jones (2017) introduces a framework that accommodates all factors of the student environment throughout the student life cycle at higher education, following a four-phase process: the pre-university phase, transition into student life, engagement during university times as a student, and preparing for life after graduation.

2.3. Measurement methods

Student experience is typically measured through a mixture of three different approaches: online surveys; qualitative research methods (interviews, focus groups, and photo essays); data mining from social media and learning management systems). Online surveys generally belong to three categories: national surveys administered by either a government, a publication, or a consultant; surveys to groups of institutions like consortia or state systems; or bespoke surveys that are specific to one institution (Felix, 2019). Despite the various classification of student experience, most surveys on this topic mainly focus on the learning experience of students, as in the case of the the Quality Indicator of Learning and Teaching (Australia), the National Student Survey (UK) or the National Survey of Student Engagement (US).

2.4. Student experiences journey

PwC (2018) defines student experience as *“the end-to-end sequence of all the interactions that a student experiences throughout their relationship with a University – from the first time they hear about it at high-school, to completing their studies, graduating, continuing their learning, and keeping in touch as an alumnus”*. Universities and colleges use student journey as a tool to locate students’ touchpoints - where and how students might interact with them - and try to provide the best service all along the journey between students and the institutions.

The point of designing a student journey mapping is to build a student-centric organization, placing students at the core of the service delivery process since their very first touchpoint with the institutions. With this approach, every individual is closely monitored and recorded so as to draw a whole picture to enrich understanding of the university and suggest additional support and tailored service from the university as well as faculty members.

In this paper, the experience of higher education students would be examined along with the overall journey, from admission to graduation. There will be four segments to be considered, respectively and is shortly illustrated in Figure 1:

- Application experience, covering the interactions between potential students and the institution, up to the point of arrival;
- Academic experience, students’ interactions with the institution associated with their studies, excluding for these purposes teaching and learning processes;
- Campus experience, student life including activities away from the actual campus rather than directly connected with the study;
- Graduate experience, the institution’s role is assisting students’ transition to employment.

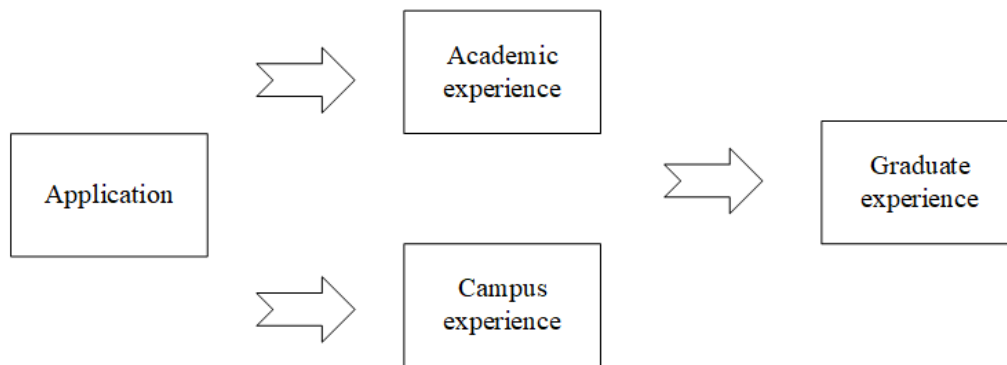


Figure 1. The student experience journey

Source: Compile by author (2021)

3. Research methodology

3.1. The research process

The study in this article will be meticulously carried out in an eight-step process, beginning with a literature review, and concluding with a conclusion and suggestions. The research model is based on the student experience journey stated in Figure 1.

The procedure is depicted in the diagram below.

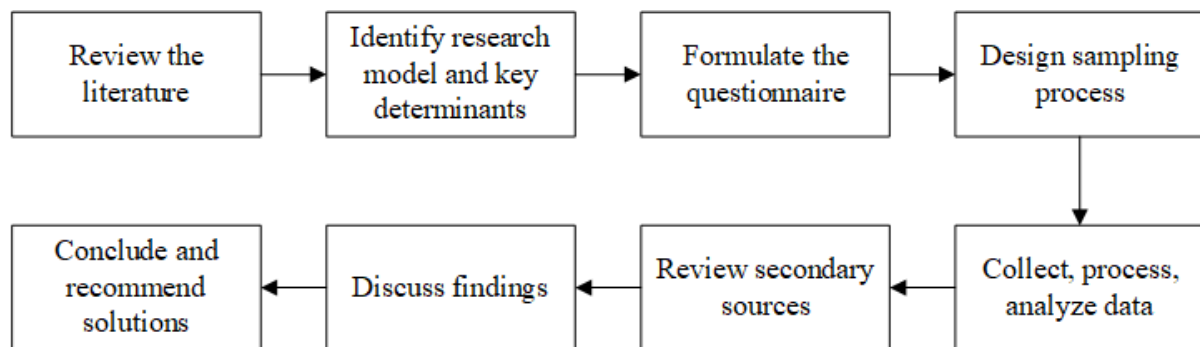


Figure 2. The Research Process Flowchart

Source: Compiled by the author (2021)

3.2. Sampling design

The sampling process is designated to address the first research question of the study: Identify the possible student experience issues of Foreign Trade University participants.

3.2.1. Target population

This paper explores the perceived opinions on how well services are delivered in Foreign Trade University at the time the audience is engaging under the identity of university students and students prospects. The target audience for the survey is current university students who have not graduated, from first-year to fourth-year (born in 1999 to 2002). Those students have undergone certain stages of the student journey and encountered several services offered by the institutions.

3.2.2. Sampling size

According to the Admission Proposal for the school year 2021 - 2022, Foreign Trade University currently has 15,000 students in its formal university programs (updated to 31/12/2020). Krejcie & Morgan (1970) calculates that the required sample for the population of 10,000 to 25,000 people ranges from 370 to 378 respondents to meet a confidence level of 5%. Therefore, the sample size of this research is expected to fall within that range.

3.2.3. Questionnaire design

As mentioned above, the survey deals with figuring out student experience in four dimensions of the student journey map as illustrated in Table 3.2

Table 1. Summary of sections in the questionnaire

Section	Detail
The application experience	Three questions Opinions on how students interact with the university when they participate in the admission process
The academic experience	Six questions Opinions on different aspects of the learning process, including curriculum, teaching quality, assessment and feedback, learning materials and resources, and the digital learning environment
The campus experience	Four questions Opinions on the support services provided by the university, i.e extra-curricular activities, facilities and support departments
The graduate experience	Six questions Opinions on university's effort in career guidance and raising employability for students embedded in courses, events and support center

Source: Compiled by author (2021)

3.2.4. Data collection and processing

In this research, questionnaires are distributed to the respondents who are between their first and last year and are currently studying at Foreign Trade University. Any responses coming from students in other universities or students outside the range of academic experience (either graduates or high school students) are considered invalid and have to be omitted from the final data before the analysis stage.

Due to the restrictions during the COVID-19 pandemic in Vietnam, it is advised against gathering at school and delivering questionnaires to other schoolmates. The problem has a drastic impact on the sample structure and sample size of this research. Nevertheless, with the help of social media and online tools, it becomes much easier and more convenient for people to get informed and communicate through online platforms. The questionnaire was digitized in

Google Forms format and can be shared and accessed to an unlimited number of people via applications such as Facebook, Messengers, Zalo, Viber, etc. Then, from June 10th to June 30th, the online survey was distributed and completed on several virtual platforms, including public social networks, community groups, and private chat rooms. The survey received 376 answers in total during this duration. However, 3 out of them were eliminated due to results from the screening question, where participants claimed that they are either non-Foreign Trade University students or have already graduated from the school. Finally, the sample for analysis use is 373, exceeding the minimum size of the sample for the confidential level of 5%.

Cleaning works with categorizing briefly the data collected according to question parts of the designated questionnaires. This puts data in groups with similar attributes for further techniques. In the organizing step, some formulas are performed to summarize the data sets. This transforms the spreadsheet of different rows records into a clearer set of numerical amounts classified by certain attributes and prepares inputs for later use of data representation.

4. Finding and analysis

4.1 Respondent demographics

Table 2 summarizes the demographic characteristics of respondents participating in this questionnaire. The author conducted the research in 373 respondents ranging from first-year to fourth-year students of four different major groups of FTU: economics, business management, finance & banking - accounting, linguistics.

Table 2. Respondent demographic profile

		Frequency	Percentage (%)
Batch	First-year	59	15,8
	Second-year	103	27,6
	Third-year	135	36,2
	Fourth-year	76	20,4
Faculty	Economics	148	39,7
	Business Management	94	25,2
	Financial & Banking - Accounting	75	20,1
	Linguistics	56	15,0

Source: Compiled by author (2021)

4.2. Application experience

Data collected shows that Foreign Trade University has a wide range of channels, both offline and online, to reach their potential students, and most students reach information about the school recruitment program through more than one channel among those (Figure 3).

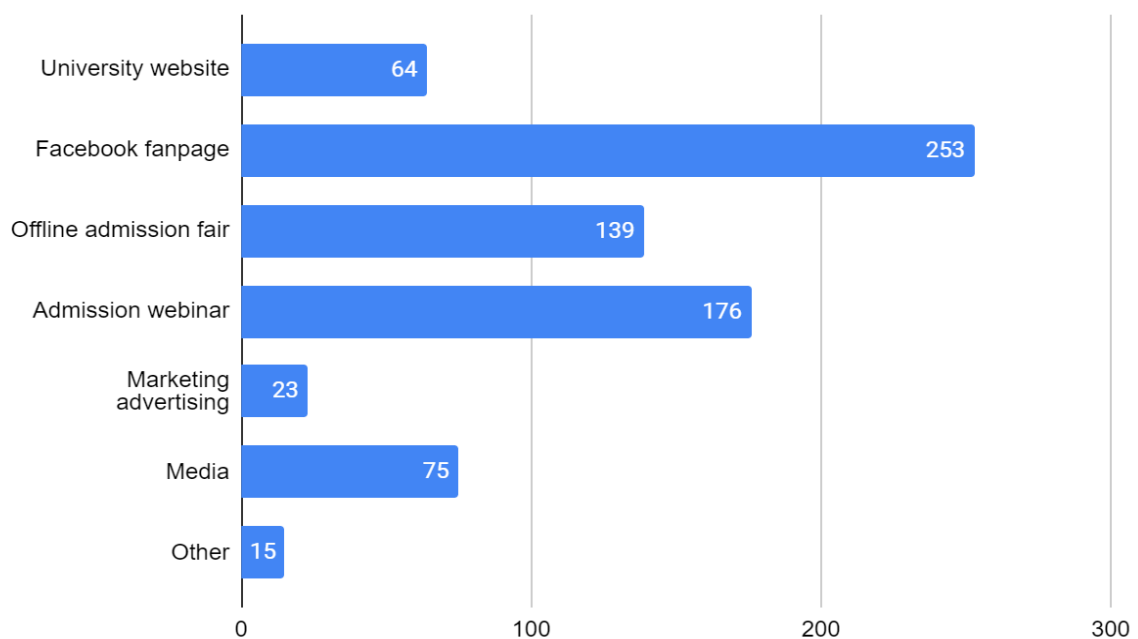


Figure 3. Sources of information for university admission

Source: Compiled by author (2021)

Nevertheless, most students have not reached the full information they need on the existing resources and have to resort to support for in-detail questions, including hotline, live chat, offline events/online webinars Q&A, private groups, alumni help, etc. (Figure 5). One problem in common with this method is that it is time-consuming when a question is being asked several times, and it is scattered as many departments or many people are involved in this process.

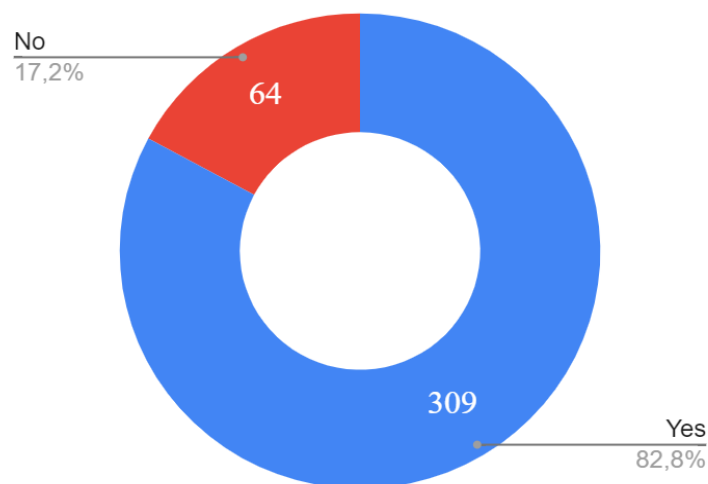


Figure 4. Request for more information besides public resources

Source: Compiled by author (2021)

4.3. Academic experience

Curriculum design

The distribution of student opinions on the design of the program curriculum is demonstrated in Figure 5.

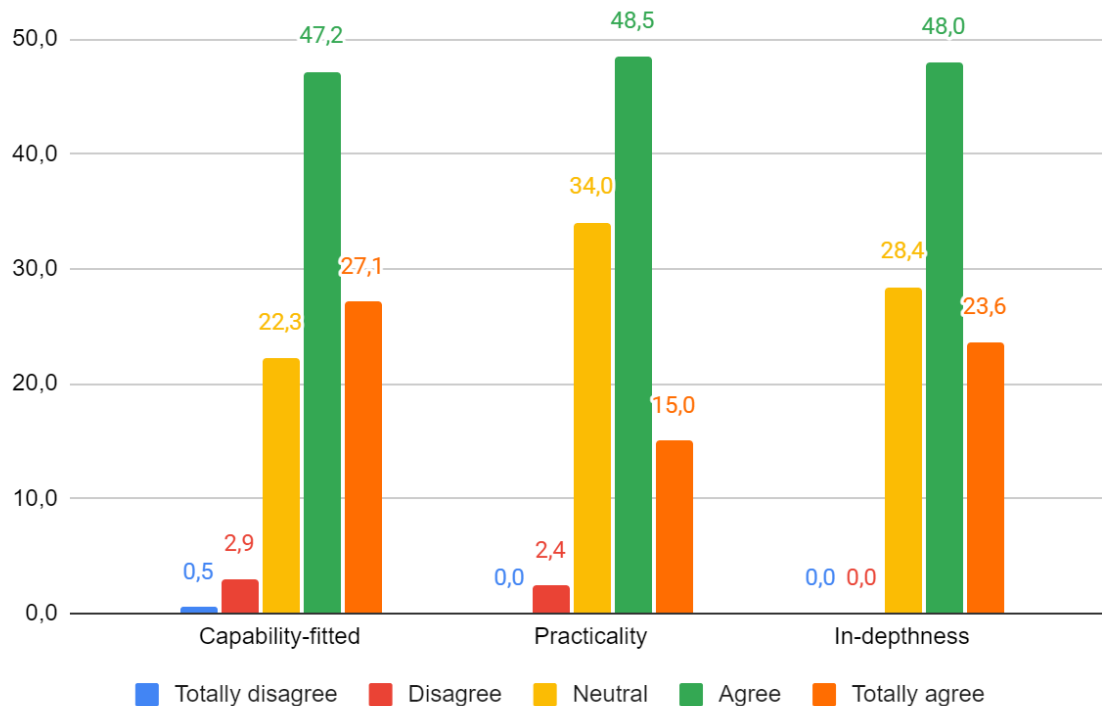


Figure 5. Curriculum design in the academic experience

Source: Compiled by author (2021)

If putting the ratings on a scale of 1 to 5, with “totally disagreed” equivalent to 1 and “totally agreed” equal to 5, an average point of rating can be calculated. Students rate capability-fitness and in-depths of the program on a 4.0 point out of 5.0, meanwhile practicality receives the lowest point of 3.8/4.0. This shows that this characteristic needs much improvement as it lags behind the expectations of students the most.

Course registration

The course registration index deals with how students experience the process of enrolling for new courses at university. With this index, students are asked to review whether they are satisfied with their experience during the process.

Foreign Trade University controls this process by setting specific time periods for students in different batches and different majors to pick which subject and which timetable they want to study, with senior students having a priority to register before juniors. This method allows students to create a flexible timetable according to their preferences. However, there are some problems that may intervene the process, namely:

- Operations failure during registration time due to overloading in the number of visitors;
- Inaccuracies that either let some accounts stay active during their registration schedules or active during others' schedules.

This may result in junior year students occupying slots in senior class while senior students fail to register, affecting their graduation progress; or students signing up for courses that are not suitable for their level of knowledge.

- Supply of slots in a subject in short compared to demand;
- The personal timetable is not synchronized with registration results.

As observed in the bar chart (Figure 6), the demand-supply balance of course slots yields the lowest number of satisfied-and-above responses, as well as the highest number of dissatisfied-and-below answers (Figure 7).

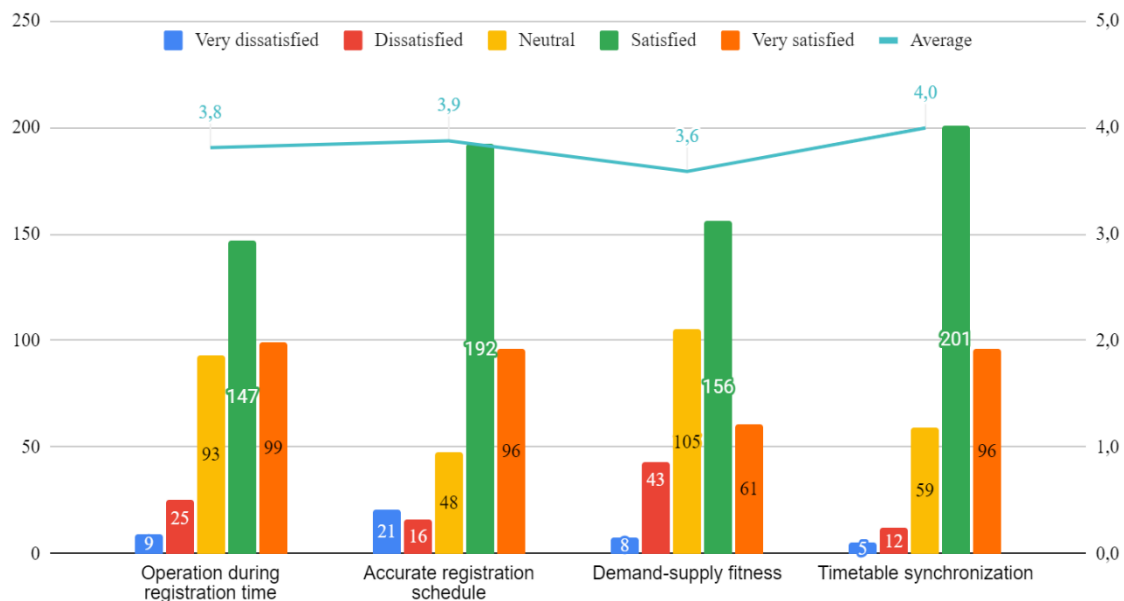


Figure 6. Course registration in the academic experience

Source: Compiled by author (2021)

There seems to be an unbalance between the perceived supply and actual demand of course slots at the time of student registration, as it scores lowest among the four characteristics. In case supply falls short of demand, students have to sign up for a form requiring another class of the subject they want to enroll in, or else wait for their next registration turn. On the other hand, if supply is greater than demand, some classes will have to be canceled since the number of enrollment cannot occupy the minimum classroom capacity. Both cases cost time and effort of students, administrators and teachers as well. Hence, should there be a scheme predicting the perceived supply and demand of students in every course, the time and effort spent on the executive process can be saved to a certain extent.

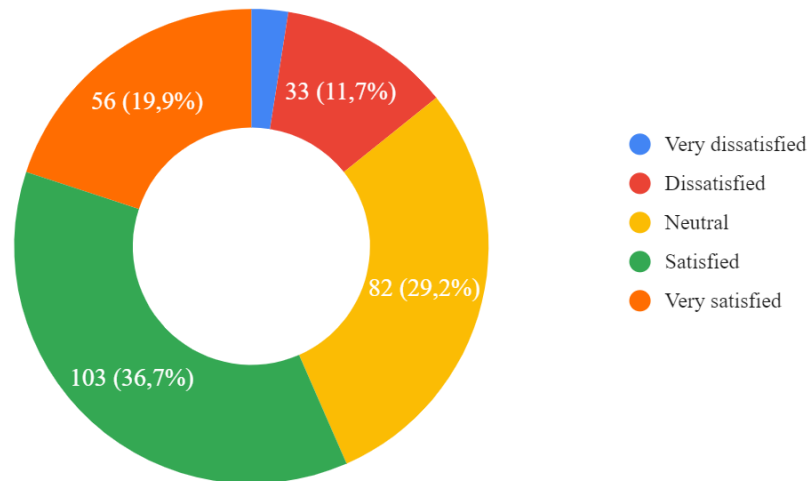


Figure 7. The difference of demand and supply in course registration

Source: Compiled by author (2021)

4.4. Campus experience

Student support departments

The student experience on support service offered by functional departments is measured by putting their rating on a scale of 5, with 1 as the lowest and 5 as the highest point. After that, the total score is summed up and divided by the number of responses to calculate the average point. Not all students have interaction with all the departments in the list, so the number of responses may differ.

As demonstrated in the column chart of Figure 8, there are only two departments with a score below 4.0 (good) - the Department of Academic Affairs and the Department of Student Affairs. Yet those two are the most frequently interacted with students, concerning issues closely related to students. Specifically, the Department of Academic Affairs deals with academic administration, course distribution and other teaching and learning operations (Department of Academic Affairs, 2016). Meanwhile, the other department caters to student administration, student policy implementation, and political propaganda towards students (Department of Student Affairs, 2016). As they are the most frequent touchpoint with students, improving student experience at those places is critical to improving the overall student experience regarding support service.

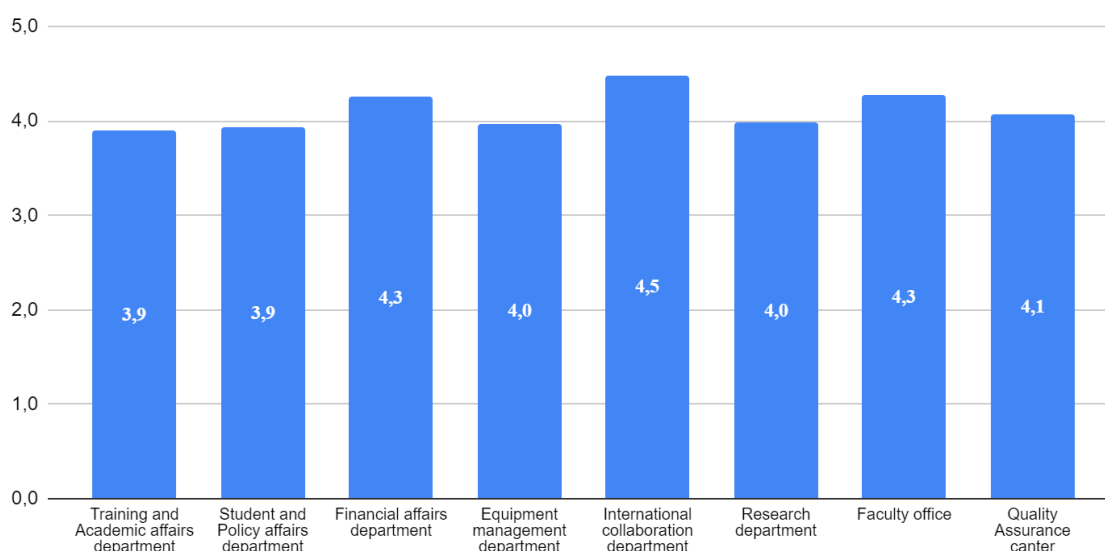


Figure 8. Students service ratings for support departments

Source: Compiled by author (2021)

Regarding the ways to improve service in those departments, interviews with small groups of students provide some key explanations. First, these two departments, due to their direct relevance to student issues, suffered from a high volume of visits in peak periods of the year (mainly examination time, school opening, beginning of terms). The number of service staff falls short in case of an overwhelming amount of cases and paperwork to deal with. Second, online touchpoints means (fan page, live chat) supports insufficiently to the offline service and even though the school developed its own mobile applications to digitize the service work, online requirements have to queue a long time, even longer than offline operation, in order to be processed. In other words, the school has its tools yet has not made the best use out of them.

4.5. Graduate experience

Career support

The university and faculty at Foreign Trade University organize various types of career guidance activities towards its students, including:

- forums, webinars and workshops on career consultation;
- career fairs;
- enterprise field trips;
- competitions and contests to develop specific skills;
- connecting students with companies via internships.

Most students rate those activities as “helpful” to “very helpful” in providing them soft skills or motivating them to dig deeper in certain hard skills that might support them in future careers, accounting for 85% of the responses (Figure 10).

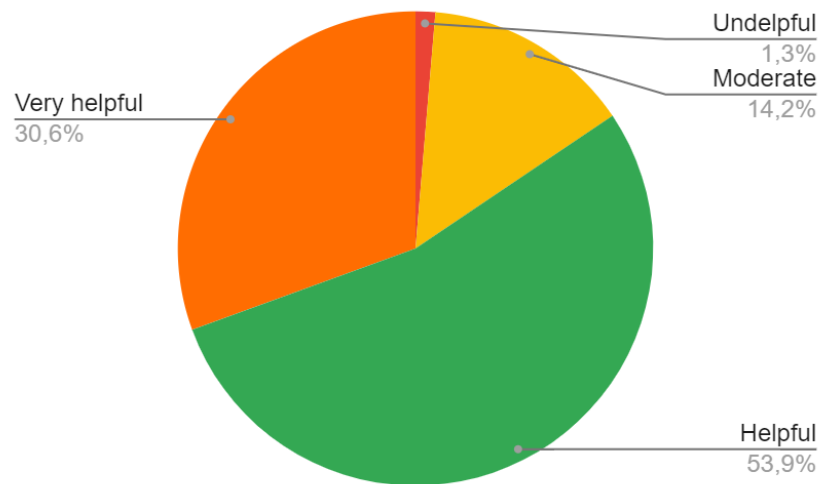


Figure 9. Student ratings on career support activities

Source: Compiled by author (2021)

However, regarding students who are lost or uncertain in their preferences and career path, they yearn for more assistance in job guidance and selection for individuals in the future (276 out of 373 answers). Most of them are in the second-and-third-year of university (Figure 4.8), who have a high demand of defining one or some job preferences or interests for preparation to join the labor market in the future. They claim that while there are activities providing information about certain industries, participants lack on-job experience or insider understanding to evaluate their choices are fitness to certain occupations.

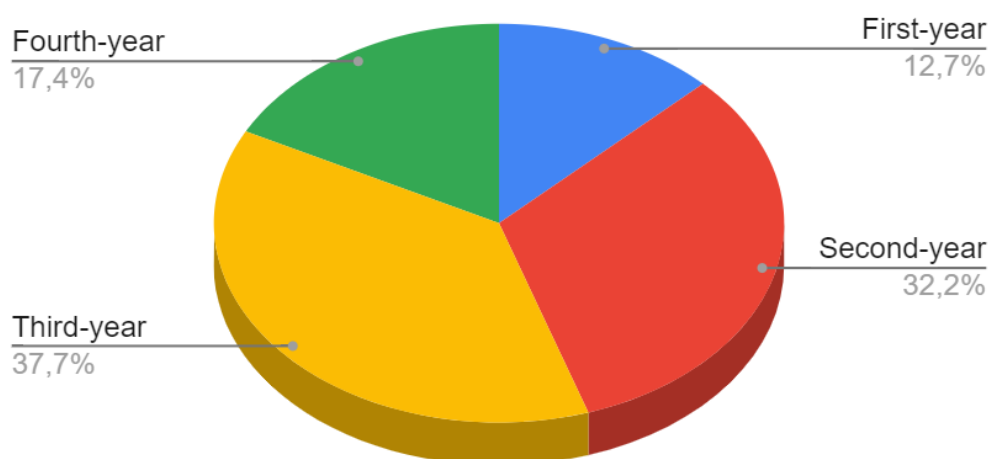


Figure 10. Needs for detailed career guidance

Source: Compiled by author (2021)

In brief, each step of the student journey shows evidence of existing areas of improvement regarding student experience during their life cycle. The application arrives first in the student

experience journey, signaling what students feel when enrolling as a future student of Foreign Trade University. After getting into university, the student experience is divided into three main sets of touchpoints. including interaction in the classroom environment, campus support and career preparation respectively.

In the very first stage of application, student prospects can find information about the admission process from a lot of sources but most of them just cover the basic piece, often exclusive of in-depth details and the why-how set of questions, and require them to seek personal support from either public or private channels. Over the years, a list of to-be-asked questions should be developed and put into use in order to minimize the time student leads spent on waiting for the responses to their questions, and automate the student service process during the peak time of admission.

Secondly comes the experience within the academic-related issues. Areas for further improvements arise in the fields of course registration and curriculum design. The former concern lies in how to allocate courses in shape with the actual demand of students and lead students in choosing courses that are suitable with their competency. The latter one raises problems in adopting the curriculum on a regular basis to match with student competency as well as balance student demand, industry demand and the university's own learning philosophy and desired outcomes.

The third phase associates with students' perspective on the efficiency and effectiveness of public service, categorizing it into service delivered by administrative departments and offerings of public asset use.

Lastly, students also encounter some issues when they are in need of career support. Much as the university provides assistance for their students under diverse forms of activities, students demand specific guidance in increasing their employability and choosing suitable jobs. This requirement calls for the establishment of a recommender program that is able to estimate their skills and knowledge and can be applied university-wide.

5. Implications to improve student experiences in Foreign Trade University

5.1. Building a FAQ list

Regarding the formation of a most frequently-asked question list to support functional departments in communicating with leads and students, Big data analytics can join to develop automatic chatbots to deliver proper responses to popular inquiries.

Automatic Question Answering systems provide the platform for automatically answering questions asked by humans in natural language using either a pre-structured database or a collection of natural language documents (Chali *et al.*, 2011; Ansari *et al.*, 2016; Lende and Raghuwanshi, 2016). In order to develop a question answering system, all data sets related should be gathered to extract the key themes and keywords accordingly. After that, methods of question and answer retrieval are conducted, together with calculation of similarity and threshold (Feng *et al.*, 2018). All the data obtained is later ingested in a machine learning process of training, testing and validating to enhance the accuracy of the answers. The results can be used in an artificial-intelligence-based chatbot to communicate with students and respond to their issues instead of school staff, and through the review and feedback of students to improve its quality and precision rate.

For Foreign Trade University, they have already created some sets of frequently asked questions, which might be enough for the first machine learning round. Additional data can be supplied continuously until the chatbot itself is able to cover most of the repetitive tasks done by administrative and teaching staff. In this way, it saves time and effort for students as well as staff, and shifting from personal contact on some specific days and queuing in line to simultaneous interaction from the distance would surely improve the student experience in service offerings.

5.2. Allocating course based on demand forecasting

The imbalance between the supply and demand of course registration reserves can be resolved by integrating a demand forecasting tool in the student portal website. Demand forecasting is a function of demand planning that uses historical data to estimate future customers and demand for a product or service (Armstrong and Green, 2017). Being able to predict as close demand as possible not only optimizes the allocation of resources and proposes effective demand planning strategies but also saves time for students and administration staff on dealing with small-size issues each time the demand exceeds or falls short of supply remarkably.

5.3. Personalizing learning experience

One solution to the current problem of the mismatch between course content and student capability is the customization of students' learning paths. Chatti *et al.* (2010) and Miliband (2006) refers to it as the product of self-organization or learning and customized instruction that considers individual needs and goals, making choices to create individual student profiles which map out their preferences, relative strengths, and weaknesses, and optimal learning contexts (cited in Bienkowski *et al.*, 2012). It should be tailored to and continuously modified to an individual learner's conditions, abilities, preferences, background knowledge, interests, and goals and adaptable to the learner's evolving skills and knowledge (Sharples, 2000). Being able to customize their own learning schedule, based on the status quo of needs, wants and competency allows students to gradually proceed with the learning process in their own way, while student feedback on course curriculum sets ways for teachers to improve on course design to adapt to learners' needs.

The primary ingredient of personalized learning is a large amount of student data. The system requires inputs related to personal learning data, including students' activities and behavior, learning sequences, assessment and feedback, strength and weaknesses, etc. Big Data, in turn, uses data to teach and train and to facilitate active learning and learning innovation, and develop machine learning-based systems that can automate the process real-time in the future to constantly generate results and provide chances for instant update of learning materials and curriculum, provide constant feedback to students and timely intervention to support at-risk individuals.

In order to generate more and more learning data to develop a matching personalization learning program, Foreign Trade University should find ways to collect more digital footprints of its students for profiling. This can be executed by moving offline content to virtual platforms, incorporating the online classrooms with university data warehouses, and encouraging online interaction of students.

5.4. Developing recommender system

Guidelines for students in terms of choosing their courses or the jobs can be developed through a personal recommendation system. A recommendation system is used to provide effective and meaningful content (item) to the user which is active on the platform (Gatzoura and Sanchez-Marre, 2015). It depends on filtering techniques to identify users' interests and need, then comes up with similar suggestions that might relate to them. The recommendation system processes data under unsupervised machine learning, in other words, clustering, to figure out the hidden cluster and unknown patterns.

Course recommendation system in Foreign Trade University can take a student's past records and assessment and compare that with students of the same level and background to suggest what courses in the program they should take next that fit with their capability. Optional courses can also be chosen upon individuals' interests. A similar idea applies to the job recommendation system as well. From past records, a skill estimation of the students is developed and signals which career suits with their levels. Besides, personal interest and desire is taken into account as well to see whether they are competent enough, and what gap in knowledge/skill/attitude should be closed in order to be eligible for the job. The recommendation systems provide guidelines as well as information for the student to plan for their future learning and career timely and effectively.

In order to implement the system successfully, inputs of other analysis on student performance and skill estimation needs to be present. After that, the university has to build a platform where students can view and self-analyze their data, and using their feedback to train the model for better accuracy and reliability.

6. Conclusion

To begin with, the findings of the study have demonstrated the current state of student experience delivery in Foreign Trade University through the lens of students' perspectives. These include issues in the diversity of information available during the application process, accuracy and relatedness in course distribution and curriculum design, the efficiency of public student services, and the need for personalized career guidance for undergraduates. Based on the current state, the paper also suggests some solutions that incorporate the use of technology and data analysis in university operations, namely building FAQ list to automate service processes, forecasting demand to allocate academic resources, personalize the learning experience with, and develop recommendation systems to support students in planning for their study as well as future careers.

Findings on the status quo of the student experience from a student's perspective are crucial since students, now equivalent to 'customers' of the institutions, demand high-quality service in all aspects of the journey, inclusive yet not limited to teaching and learning experience. As the recipients and beneficiaries of student service, their perception and feedback should be catered for during related decision-making processes.

The research topic of student experience is still a new research field in Vietnam. This topic, though introducing a new approach to breaking down and analyzing student experience in higher education, faces some limitations. With regard to scope, restrictions in resources of time, finance and effort get the research to concentrate on just a particular location. With regard to generalizability, the focus on a specific target directs the research to dig deeper into one

institution's characteristics. Those distinctive features make it difficult to generalize the findings of the research to apply in other institutions. Further research can take a philosophical approach instead of an applied one, extend the boundaries of current research, change the population for other viewpoints, or examine each stage in the student experience journey for in-depth insights.

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