Archives of Business Research - Vol.5, No.12

Publication Date: Dec. 25, 2017 **DOI**: 10.14738/abr.512.4016.





Model of Academic Service Quality at School of Management and Informatics in Bandung, Indonesia.

Mardjito Mardjito

School School of Management and Informatics Mardira Indonesia, Bandung, Indonesia;

Komarudin Komarudin

School School of Management and Informatics Mardira Indonesia, Bandung, Indonesia;

ABSTRACT

The globalization era and the rapid technological developments lead to the high demand of qualified human resources. Thus, educational institutions must produce qualified and highly competitive graduates. . Otherwise, there will be a gap between the human resources with the market needs. The excellent academic service quality for the students is important to reach the goal. The expected services are curriculum service, Teaching and Learning Process, the supporting facilities and infrastructure for Teaching and Learning Process and the supporting system of academic service support. However, the laboratories equipments have not supported the market needs. This study aims to to describe the policy of academic service quality, implementation, monitoring and model of academic service quality improvement in a School of Management and Informatics in Bandung. Moreover, this research uses qualitative naturalistic approach with descriptive method and case study. This study collects the data through interview, observation and document study. Data analysis is done through data display process, data reduction, and data verification through triangulation process. The results show that the curriculum policy has not used the concept of link and match. Theoretically, problems does not exist in the Teaching and Learning process. However, in reality the Teaching and Learning process has not met the users need yet. Furthermore, the there are no monitoring activities both in learning-teaching activities and the practice

Keywords: Academic; Service Quality.

INTRODUCTION

Both government and the private institutions agree that the quality of education is the best way to raise the dignity of the nation. To produce a high-quality education, the institutions must follow the National Education Standards, which involves the standard of facilities and infrastructure, standards of content and the excellent academic services for the students.

Generally, the services in the universities concerns on both academic services and administrative services. Academic service is a service given to the students; starts from registration to the graduation. The academic services include services provided by lecturers in the classroom or in the laboratory, in the Teaching and Learning Process, and the individual teaching methods and media supported by the adequate learning facilities and infrastructure, the Semester Learning Activities or syllabus, the study contracts, presences and the monitoring activities. The administrative services are services provided by the administrative staffs in supporting the academic services such as technical service administration, student administration, administration of the Teaching and Learning Process, cover letter for internship, and many others. Thus, the success of educational institutions is largely determined

by the academic services for the students. However, they must be supported by a work-oriented curriculum (the link and match concept).

Many companies offer job opportunities but the fresh graduates cannot fulfill the qualifications. This condition leads to the high-rate of unemployment. According to Sub Commission III (2009) there are several aspects that cause the high unemployment rate: 1) Non-conformity between education outcomes with the needs of the world of work, 2) The imbalance of demand and supply and the low-quality of Human Resources, and 3) Limited employment opportunities so that the job seekers accept job offerings that are not in accordance with their educational qualifications. Furthermore, the Chairman of the Committee on Certification of Labor of the Chamber of Commerce and Industry (2014) said that the gap occurred because the supply of labor provided by educational institutions is not fully absorbed by the industries. Many workers do not have the job competence in a particular field. This condition shows that the quality of education is still low and they cannot read the market needs. The fresh graduates only rely on their diplomas. They do not have certificate of specific competency.

The academic service has not been optimally maintained. There are some problems related with the Teaching and Learning Process, infrastructure, human resources, and curriculum. Thus, the expected output does not match the market needs. This research is necessary to build the academic service paradigm embodied in the academic service model. The result is expected to create the output with competency. This research tries to describe the quality of academic services policy, the implementation of academic service quality, monitoring system, and model of service quality improvement.

RESEARCH METHODS

Qualitative research is a research procedure that produces descriptive data in written or verbal about the observed people and behavior [1]. The research was conducted in a School of Management and Informatics in Bandung. The subject of the research is a key informant who can provide depth information. In this study, the informants are the vice chairman I, II and III, the chairman of the department, the head of the study program, head of academic administration and students as the key instruments to explore information regarding academic service quality policy, implementation of academic service quality, monitoring of academic services and the obstacles in implementing the academic services and improving the quality of academic services in the future.

In qualitative research the data were obtained through interviews with the respondents, while other evidences was obtained by observation and documentation activities. Therefore, in this research, the required data are: 1) Documents as manual of Academic Regulation, form of BAP and form of Teaching; 2) interviews. In researching the Quality Management of Academic Services, the types of data and informants needed as the data sources are (a) Vice Chairman I, (b) Vice Chair II, (c) head of study program, (d) lecturers and laboratory staff, (e) head of academic administration and (f) Forum Group Discussion (FGD) for students from various departments.

Based on the instrument, there are some steps of data processing. Firstly, data from interviews and FGD changed into transcript form. Secondly, the data from the document were analyzed and tabulated based on the group and then analyzed based on the research question. The next steps of data processing consisted of four groups. First, the analysis and data processing related to the academic services quality policy of School of Management and Informatics. Second, the analysis and data processing related to the implementation of academic quality of

School of Management and Informatics Mardira Indonesia. Third, the monitoring of the academic services quality in School of Management and Informatics Mardira Indonesia. Fourth, drawing the conclusions from the analysis of interview, FGD, observation, and documents related to research questions. Data processing is grouped into 3 such as data reduction, data display, and conclusions and verification.

DISCUSSION

Academic Service Quality Policy

The curriculum quality policy in a School of Management and Informatics is the 2010 curriculum, where the core curriculum is about 60% and the institutional curriculum is around 40%. However, the curriculum changes whether it refers to APTIKOM and institutions have not been implemented until 2017. Supposedly, the changes should be done, at least once in 4 years. Based on the content, some programming-based courses have not been fully updated and followed the technological developments and market needs.

Based on the findings, there has been no changes in curriculum from 2010 until now. There has been no change on the subjects' names and contents. The overall structure of curriculum in a School of Management and Informatics refers to the Kep. Minister of Education No. 232/U/2000 in which the core curriculum is nationally accepted. According to [2] about the signs of the implementation of the personality development course in the universities, the distribution of courses are identified in several groups: MPK (personality development course), MKK (scientific and skills course), MKB (craftsmanship course), MPB (work attitude course), and MBB (social studies course).

The learning process is an interactive activity between educators and learners are supported by means of learning. Teaching and Learning Process activities in a School of Management and Informatics involve many components, from human resources, supporting facilities, as well as curriculum. Based on the results of the study of the academic regulations of one School of Management and Informatics in Bandung as follows:

Teaching and Learning Process of regular class starts from 08.00 - 12.00 on the weekdays. The evening class starts at 17.10 - 19.20. The learning activities do not use the package system but the Credit Units Semester (SKS). The number of meetings for theoretical and practicum within a semester is 14 meetings, besides the mid-term exam and final exam. An academic year consists of two semesters, the odd and even semesters.

The Diploma III students must complete 120 credits SKS while Strata I student must have 144 SKS. This policy is according to the Policy of Minister of Education and Culture RI No. 49 of 2014 about the National Standard that students must take at least 108 credits for Diploma III and 144 credits for Diploma IV and undergraduate programs.

In each semester there are evaluations to measure the students' ability in absorbing the materials. The evaluations are: 1) Formative assessments as quiz, task, report, and mid-term exam; 2) Summative assessment as final exam and practicum. Some regulations to follow mid-term exam or final exam, students must follow Teaching and Learning Process and practicum, at least 75%. The weight of the assessment for Teaching and Learning Process theory, mid-term exam 40%, final exam 40%, and task/quiz 20%. However, the percentage of assessments submitted by lecturers varies are different with the academic guidebooks. As suggested by the FGD that for the final assessment the lecturer gives 20% for taks, 10% attendance, 30% mid-term exam, and 40% last term exam. Furthermore, FGD adds that there are lecturers who give the assessment percentage for mid-term exam 30%, last term exam 40% and the rests are

tasks and attendance. This condition shows that several lecturers have different perspectives in giving the final score. They do not refer to the book of academic rules.

The successful in Teaching and Learning Activities cannot be separated from the human resources, curriculum, facilities and infrastructure. For educational institutions, in particular the school of informatics, the supporting facilities are fundamental for teaching and learning process. In reality, the supporting facilities for Teaching and Learning Activities are 4 classes of computer lab - each class has the capacity for 30 students. In terms of quantity, the labs can fulfill the students' needs. Furthermore, the Teaching and Learning Activities can follow the industry development and the users demands. However, the the practicum materials are not in-line with the needs in the field. Some lecturers lab managers, and students have realized the conditions mentioned above. However, Vice chairman 1 made all these policies.

The administration services as registration, payment, checking the score at the School of Management and Informatics are still done offline. Even though it can be done online, it has not implemented optimally. The online administration services are only given to certain lecturers or students. Therefore, the students have to come to the campus.

The Quality of the Implementation of Academic Service

According to [3] academic services that are also known as curricular services are academic regulations, lectures, curriculum, academic guidance/counseling, practicum, final assignment, evaluation, including lecture tools such as libraries, OHPs, laboratories, and the others. The better the academic services provided to the students, the better the output. It means the fresh graduates are easier to get the job based on their educational background [4]. Therefore, it is important to provide qualified academic services [5,6].

There are no improvement on Curriculum policy since the educational institutions still use 2010 curriculum. As a consequence, the students competence cannot meet the concept of link and match. The curriculum implemented in Teaching and Learning Process is not in accordance with the vision and mission that has been declared.

In regard to the implementation of the curriculum, the theory and practice are appropriate. This finding is in accordance with the statement of the head of the study program.

With regard to curriculum implementation, the data involves the implementation of theory and practice within the Teaching and Learning Process. Implementation of theory and practic are in accordance with the curriculum. Moreover, the facilities and infrastructure are adequate enough because the classrooms are supported by air conditioning and infocus. (Head of the Study Program, September 2017).

Here are the description of Teaching and Learning Process. At the first meeting, the lecturers provide syllabus and materials that will be learned on the semester. The lecturers also give handout, module and compulsory textbook that will be used for lectures. The lecturers also make agreements with the students about the systems of mid-term exam, last term exam, and the tasks. There are particular ways of calculating the final scores, for example 20% tasks, 10% attendance, 30% mid-term exam, and 40% final exam.

From the students, it is found that there is no understanding about the assessment component of mid-term exam, final exam, task, and attendance. They just assume about the component of assessment. This situation happen because the students do not have the academic manual which describes the assessment system. Furthermore, the lecturers have various perception about the perpercentage of the assessment.

From the situation, it can be concluded that academic guidance has not been fully used as a reference by a large number of lecturers, especially the adjunct lecturers. Consequently, the information about the assessment percentage are different. Furthermore, the students do not own the academic manual. In addition, the academic manual does not exist within the website. The students or lecturers cannot download the academic manual.

Furthermore, it is found that all students (unanimous) agree that the lecturers are accurate enough in teaching. They follow the schedule efficiently. When the lecturers cannot come in time, they will give additional time as the substitute. This condition is supported by a theory from [7]. They point out that one of the main dimensions of Service quality is Reliability. It is the ability to deliver the promised service. In this field it is related with the educational process. The reliability in the polytechnics is reflected by the commitment of lecturers at the beginning of the course on the rate of attendance and in giving the material.

Moreover, the next data is about the lecturers' way in delivering and using the material and media for the Teaching and Learning Process. The FGD stated various opinions. There are lecturers who present the material in the easy way. The others are hard to understand. If the lecturer deliver the material well, the student will get the idea properly and vice versa. Besides, there are many lecturers who give the opportunities for presentation. However, sometimes the lecturers do not give feedbacks for the students at the end of the presentation. This is a problem since the students do not fully understand the theme of the presentation. They take the sources from the internet and most of the materials are new to them. The media used in the class is the infocus, although some lecturers still use the OHP. In addition, some lecturers cannot explain the lessons interestingly. The media in the class is also less interesting so that the students are sleepy (FGD IF, September 2017)

The data above illustrates how the lecturer convey the materials and use the media. Most lecturers use the technology to assist them in transferring the knowledge to students. The whiteboard is used to clarify the material in the slides. Furthermore, the data says that there are some lecturers who order the students to do the presentation by searching the materials from the internet. However, by the time the presentation is finished, the lecturers do not give comments or feedbacks to the speakers. The students realize that they are lack of understanding about the materials. They do not know and understand what are being presented in front of the class. In addition, they are a little bit dissatisfied since the lecturers do not give any comments about their performance.

It can be concluded that the overall teaching methods and media used can be understood by students. But it takes extra hours for lecturers to review the materials of presentation by the students. Since the materials are mostly downloaded from the internet, those materials are up to date enough. This is in line with the FGD statement that the lecturers in presenting the material take the source from the internet. However, the materials are not compiled with the opinion of the lecturers themselves even though they also mention the sources. At the same time, the students explore the internet and get the same materials as presented by the lecturers. They find that the lecturers does not edit and add anything. This fact makes the students have lacks of good motivation.

Furthermore, the teaching media used by lecturers greatly influences the students' motivation in absorbing the materials. The visual teaching material will grab students' attention and also enhance their motivation in following the lesson. This is in harmony with the FGD that states that there are lecturers whose teaching way is not interesting and the media is less attention-

grabbing. It makes the students sleepy. Thus the teaching method and the visual teaching media can increase students' motivation in following Teaching and Learning Process.

Associated with the suitability of the syllabus with the material given by the lecturers, the data found that some of the materials are not in accordance with the syllabus. As the FGD stated:

MK - Some of the lecture materials are appropriate and some are not. Sometimes the students do not know what material that will be studied (FGD IF, September 2017)

It can be said that half of the materials submitted in one semester are appropriate enough. It would be easier for the students to attend the lectures. Moreover, if the lecturers have given the syllabus and the material at the beginning of the meeting, the students will know the subject on each meeting. Furthermore, MK mentions lecturers rarely provide opportunities for consultation time outside of college hours.

The findings related with the facilities of Teaching and Learning Process are sufficient because the classroom condition is quite good and equipped with AC and infocus. The supporting facilities for practicum are in accordance with the student ratio. Therefore, there is no queue for using the computers. MK mentions that the computer laboratory can accommodate the students, with a capacity of 30 computers.

With regard to the academic administration services, it is found that the students are not satisfied because of the completing the registration and payment and checking the scores are done offline. They must come directly to the campus and cannot online. This condition will disrupt the students' convenience during vacations.

Monitoring the Quality of Academic Service

The implementation of a program is successful if it is in accordance with the plan. Monitoring is important in order to know the suitability of the program. Monitoring aims to obtain facts, data, and information about the implementation of the program, whether the process of implementation is suitable with the planned. Furthermore, the findings from the monitoring are used for the evaluation process. Thus, monitoring emphasizes on the process of implementation than the results.

In relation with the monitoring of academic services, the data that will be discussed are monitoring the Teaching and Learning Process in theory and practicum. Furthermore, the monitoring is related to the lecturers' activities and the supporting facilities for Teaching and Learning Process.

Monitoring the implementation of the curriculum is rarely done. In fact, it almost has never been done for the last 10 years, either by the head of the study program or the vice chairman for the academic affairs. Evaluation should be done at the end of each semester. Some questions from the monitoring are: Is it necessary to add content? Is the curriculum still in accordance with the development of the world of work? Monitoring activities should be conducted by the head of each department and the results will be discussed with the other lecturers, especially lecturers in the special expertise course.

The monitoring activities in both theory and practicum are not conducted specifically. There are no officers that come to the class to know how the Teaching and Learning Process is done by the lecturer. So far, monitoring the Teaching and Learning Process is conducted by signing a list of teaching attendance. This is closely related to the payment. It does not have any connections with monitoring the Teaching and Learning Process. The monitoring only gets

some information about the frequency of lecturers' attendance in a month. After that, the frequency of lecturers' attendance is calculated for the honorarium. Although CCTV exists in the computer lab, it is not functioned for monitoring the practicum. It is for security only.

The Perspective of the Development of Academic Service

The good academic service leads to students' satisfaction. In addition, it will create the worldwide graduates. To make it happen, the involvement of various components is fundamental. The important components are policy, human resources and infrastructure.

Learning is the development of knowledge, skills or attitudes in which a person interacts with information and the environment. The environment is the learning place, i.e physical facilities, psychological aspect, learning methods, media and technology [8]. Thus, it is necessary to provide the adequate supporting facilities for Teaching and Learning Process. Previous research proved the important of service quality in education [9,10,11,12,13,14,15].

The Model of Academic Service Quality Development

Increasing the national's level of education is the government's goal. Every citizen deserves to obtain a high-quality education in accordance with his talents and interests. Therefore, improving the quality of education is one of the main issues in the development of national education, in addition to the relevance of education with the world of work, as well as the accountability.

The efforts in improving the quality of human resources cannot be separated from the role of educational development. Therefore, the development of education must be able to respond to all occuring situation and can anticipate the future. Furthermore, the educational development should be able to take advantage of various opportunities. To some extent, the education sector has a fundamental role in creating the strong and remarkable human resources. In order to create qualified human resources, the high-quality education must exist. Morover, the education sector must involve various components, starts from the human resources, facilities, the Teaching and Learning Process and curriculum.

The quality of educational institutions is strongly influenced by various inputs of educational systems such as students, lecturers, and facilities. These three factors are interdependent and influence each other in creating a successful teaching and learning process, so as to produce qualified educational institutions [16]. Thus, the institution must provide high-quality education services to the students, whether it is the Teaching and Learning Process conducted by the lecturer and the facilities; and the up to date curriculum to follow the development of industry.

Generally, the main goal of the Implementation Model of Academic Service Quality in Increasing Students' Competence is to improve the quality of service. The findings in the Academic Service Quality research are used as references to develop the Model of Academic Service Quality. This model is adopted from the research framework. It ranges from input, process, output, and outcome.

In the 'input' stage, the is a Competency Analysis required by the Industry / User, Academic Service Quality Objective, and Management Policies in Actualizing the Academic Service Quality. The entire aspects becomes an input formulation for the 'process' stage. The 'process' stage begins with the academic service related with the curriculum, theory and practicum, supporting facilities for Teaching and Learning Process, and administrative. To actualize a

good academic Service, it is necessary to consider the required competencies on the Industry or stakeholders.

The 'process' stage explains the process of academic service quality of the academic service quality policy, the implementation of academic service quality, academic service quality monitoring and the obstacles in implementing the academic services. All components must refer to the quality of academic services. Hence, the outcomes will produce a qualified and competitive institutions and graduates.

The Model of Academic Service Quality requires systematic steps of planning, implementation, and evaluation. The first step is making plan to actualize the excellent academic services quality. Planning the academic service quality starts from the objective conditions of the current academic services quality. Furthermore, it is also important to analyze the competencies required by the industry or users. This step will build a relationship (link and match) with the industry or users of graduates. In addition, this step should be supported by the leadership policy that must be support the improvement of the academic services quality. At this stage, the expected academic services quality will be found, in terms of facilities and infrastructure, the Teaching and Learning Process to be implemented, and human resources. In addition, the future condition must be analyzed by using SWOT analysis.

The next stage is implementing the plan by involving several components that match the job desk. This stage carries out three management functions such as organizing, actuating and controlling. The leaders must be able to organize the existing resources: 1) lecturers, and laboratory staffs; 2) supporting facilities and infrastructure of theory and practice within the Teaching and Learning Process; 3) administrative staff; and 4) curriculum. The organizing stage will maintain the quality of academic services. Therefore, it is necessary to establish a cooperation with the Industrial World and the World of Work or the users.

Furthermore, there is actuating stage. This stage is related with the implementation of the activities such as: 1) building the communication between the financial field, BAAK, leaders and with the other related fields – thus, it will be easy to make the decisions for the students; 2) establishing a trustful academic service by motivating the human resources; and 3) implementing a quality assurance system for academic service activities.

The last step is controlling the every undertaken activity. In this case controlling activities related to the quality of academic services, starts from academic service quality policy, the implementation of academic service quality, the obstacles and the solution, and the monitoring and evaluation.

If the planning steps and implementation are completed properly, the high-quality academic services will happen. Moreover, it produces highly competent and globally competitive graduates.

CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS

1. The Quality of Academic Service Policy

The existing curriculum quality policy has not fully referred to the link and match concept. Moreover, the institution has not made any curriculum changes for 10 years. The implementation of theory and practice in the Teaching and Learning Process is in accordance with academic regulations.

2. Implementation of Academic Service Quality

All the lecturers have performed their teaching duties well both on the theory as well as practicum. Although there are some lecturers who have not fully utilized the technology to assist their Teaching and Learning Activities. The computer facilities for the practicum are in accordance with the standards. However, the information systems that supports the academic services are still done manually.

3. Monitoring of Academic Services Quality

There is no classroom monitoring activity undertaken by an officer in theory and practicum within the Teaching and Learning Activities. The monitoring on the lecturers' attendance list is done by the administration staff.

4. Development of Academic Service Quality Improvement Ahead

The development of academic service quality in the future refers to [17] on the National Education Standards. The curriculum refers to Indonesian National Work Competence Standards and the academic service quality standards. Implementation of the monitoring is carried out continuously and followed up from the monitoring results. It ranges from enhancing and reaffirming the academic regulation and building good communication between the sectors that supports academic activities, and making the partnership with industry or users to actualize the link and match concept.

There are some actions that should be taken according to the implications of findings related to the theory and practicum within the Learning and Teaching Process, supporting facilities for practicum, and supporting information systems for administrative services. The actions are: 1) The institution should provide some trainings to the lecturers in utilizing technology for the Teaching and Learning Process; 2) The institution should increase the number of computers; 3) The institution should hire an officer to monitor and evaluate the activities of Teaching and Learning Process; 4) The institution must cooperate with the industry, especially the upper middle industry; 5) The institution must develop the academic information system comprehensively; and 6) The institution must reaffirm the relevant Standard Operating Procedure of the academic services.

Based on the findings and discussions regarding the quality of academic services, some aspects needs to be followed up so that there will be some improvements in the future. The parts that need to be followed up are:

- 1. The curriculum policy should be reviewed at least once a semester with regard to the needs of the user whether the content is relevant or not for the next two or three years. Therefore, it is necessary to have a special unit that handles the curriculum. It starts from the analysis of users' needs to conclude the required competencies. Finally, it should be implemented in the theory and practicum within Teaching and Learning Process.
- 2. Regarding the implementation of theory and practicum within Teaching and Learning Process, the lecturers should combine the materials with images and visulas. Moreover, the tasks assigned to students are discussed together in class. When the lecturer take the source of teaching materials from the internet, they should have a compilation with the other sources and combine it with their personal opinions.
- 3. There is a need to establish a monitoring team for supervising the implementation of the curriculum within the Teaching and Learning Process. The main goal is improving the students' soft skill ability for responding the global competition.
- 4. Enhance the cooperation with industry or users.

5. For the future research, it is advisable to explore the student competencies needed in the world of work.

References

Bogdan, R., & Taylor, S. J. (1990). Looking at the bright side: A positive approach to qualitative policy and evaluation research. Qualitative Sociology, 13(2), p. 183-192.

Undang-Undang Sistem Pendidikan Nasional No. 20 Tahun 2003.

Tampubolon. (2001). Manajemen Pendidikan. Jakarta: Gramedia Pustaka Utama.

Machmud, S., & Sidharta, I. (2016). Entrepreneurial Motivation and Business Performance of SMEs in the SUCI Clothing Center, Bandung, Indonesia. DLSU Business & Economics Review, 25(2), p. 63-78.

Mulyawan, A., & Sidharta, I. (2014). Determinan Kualitas Layanan Akademik Di STMIK Mardira Indonesia Bandung. Jurnal Computech & Bisnis, 8(1), p. 13-24.

Juhana, D., & Mulyawan, A. (2015). Pengaruh Kualitas Layanan Jasa Pendidikan Terhadap Kepuasan Mahasiswa Di STMIK Mardira Indonesia Bandung. Jurnal Ekonomi, Bisnis & Entrepreneurship, 9(1), p. 1-15.

Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Refinement and reassessment of the SERVQUAL scale. Journal of retailing, 67(4), p. 420-450.

Mulyawan, A., & Sidharta, I. (2013). Analisis Deskriptif Pemasaran Jasa Di STMIK Mardira Indonesia Bandung. Jurnal Computech & Bisnis, 7(1), p. 42-55.

Çerri, S. (2012). Assessing the quality of higher education services using a modified SERVQUAL scale. Annales Universitatis Apulensis: Series Oeconomica, 14(2), p. 664-679.

Dado, J., Taborecka-Petrovicova, J., Riznic, D., & Rajic, T. (2011). An empirical investigation into the construct of higher education service quality. International Review of Management and Marketing, 1(3), p. 30-42.

Doherty, G. D. (2008). On quality in education. Quality Assurance in Education, 16(3), p. 255-265.

Gruber, T., Fuß, S., Voss, R., & Gläser-Zikuda, M. (2010). Examining student satisfaction with higher education services: Using a new measurement tool. International Journal of Public Sector Management, 23(2), p. 105-123.

Manik, E., & Sidharta, I. (2017). The impact of academic service quality on student satisfaction. MPRA Paper 80878.

Shekarchizadeh, A., Rasli, A., & Hon-Tat, H. (2011). SERVQUAL in Malaysian universities: perspectives of international students. Business Process Management Journal, 17(1), p. 67-81.

Tondeur, J., van Braak, J., Sang, G., Voogt, J., Fisser, P., & Ottenbreit-Leftwich, A. (2012). Preparing pre-service teachers to integrate technology in education: A synthesis of qualitative evidence. Computers & Education, 59(1), p. 134-144.

Direktorat Jenderal Pendidikan Tinggi. 2004.Strategi Jangka Panjang Pendidikan Tinggi 2003-2010 (HELTS): Menuju Sinergi Kebijakan Nasional. Jakarta: Direktorat Jenderal Pendidikan Tinggi. Depdiknas.

Peraturan Menteri No 49.(2014). Tentang Standar Nasional Pendidikan Tinggi.