# EVALUATION OF GENERAL STUDY PROGRAM USING THE CIPP MODEL AT THE WALISONGO STATE ISLAMIC UNIVERSITY SEMARANG

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# Abstract

Departing from the challenges and opportunities faced by the Faculty of Science and Technology (FST) UIN Walisongo, this study aims to know and evaluate the context of general study programs at UIN Walisongo, available inputs, learning processes and aspects of Tridharma University on general study programs, and products produced by UIN Walisongo's general study program. Some previous studies revealed the alignment of Islamic values and general competence to be an absolute challenge faced by State Islamic Religious Colleges (PTKIN) in developing a general study program. This research uses descriptive qualitative methods, using CIPP evaluation models (Context, Input, Process, and Product). The research locus is at the Faculty of Science and Technology UIN Walisongo Semarang. Regarding the evaluation results obtained from the data excavation method, it is obtained that CIPP supports the results of the questionnaire, indeed FST UIN Walisongo as a general study program in UIN Walisongo has a mature context, supportive input factors, and optimal processes to produce an excellent output/products. This general study research proves that implementing the Unity of Science paradigm or Wahdatul Ulum in UIN Semarang is going well.

**Keywords**: CIPP, general study, evaluation program

# INTRODUCTION

The history of the development of science in Islam is quite fascinating. This is because of religious and general science's harmonious and dialogical relationship. These two disciplines complement each other (Mas'ud, 2007). Based on the views of Prof. Abdurrahman Mas'ud, the existence of general study program at PTKIN (State Islamic University) is always worth studying. There is no denial in the importance of scientific integration and interconnection. The goal is to build a new civilization for humans and to pursue various

forms of advancement in science and technology.

In Indonesia, the responsibility for advanced religious studies is held by state and private religious universities. Meanwhile, according to Azyumardi Azra, PTAI (Islamic Religious University) has double expectations, social and academic expectations. Social expectation assesses that PTAI can answer the response of Muslims toward times, while academic expectation requires PTAI to be the source of development of Islamic knowledge (Azra, 1999).

The transformation of IAIN into UIN also resulted in various changes. One of these changes is experienced by the academic community in terms of their perspectives and attitudes in developing academic culture, including managing various types of major and study program that were also built in the context of the transformation to UIN. UIN develops majors and study programs of religious and general science. With this, it is hoped that UIN will produce students who have the intellectual aspects (general science) and religious knowledge to be applied in everyday life (Abdullah, 2014).

The development of Islamic higher education with the change of several IAIN into UIN, as well as the opening of general study programs at IAIN, bring out new hope for paradigmatic alternative to the development of social science in Indonesia (Hadziq, 2019). contribution is expected can PTKIN's encourage the progress of Muslims and the Indonesian nation in general. Therefore, it is necessary to conduct a research and take strategic steps in making PTKIN development policies based on a solid vision and mission in developing well-structured Islamic education comprehensively. In this regard, management of PTKIN is the main aspect in supporting the improvement of PTKIN quality. The administrator of PTKIN should always improve their competence by referring to PTKIN's policy, objective, duty and function.

Public interest in studying at UIN in the past decade has increased by 164%. Interest in "Religious Study Programs" (Adab, Da'wah, Syari'ah, Ushuluddin, and Tarbiyah) increased by 154%, and "General Study Programs" (Science, Medicine, and Social Sciences Humanities) increased by 176% (Center for Research and Development of Religious and Religious-related Education, 2013).

Reflecting on the research result of the Center for Research and Development (2012) showed that UIN is a prospective university in developing and maintaining civilization because all fields of science and religion are simultaneously studied seriously and in-depth (Center for Research and Development of Religious and Religious-Education, related 2012). However. comprehensive research has yet to explain and evaluate the achievements of general study programs at UIN.

Center for Research and Development for Religious Education, Ministry of Religious Affairs (2018) evaluated study programs but only limited to religious studies programs with a rare category of enthusiasts. The result showed that general study programs at UIN have resulted in a decline in interest in several religious study programs. In contrast, interest in general study programs is very high (Center for Research and Development of Religious and Religious-related Education, 2018). This finding provides a correction to the previous result which showed that general study programs and religious study programs experienced an increase in the number of enthusiasts.

The general study programs at UIN are interesting to be studied, for several reasons, including: 1). Regarding the time of appearance, the general study program is a new category, compared to the religious study program which became the identity of PTKIN before transforming into university; 2). From the formal side, the general study programs are a requirement for PTKIN with institutional status (IAIN) to become a university (UIN); 3). More than the formal aspect, the general study program at UIN is a challenge for the Muslim academic community to fully implement the scientific and Islamic work ethic, where substantively, the general study program at PTKIN is intended to implement the integration of knowledge and eliminate the dichotomy of science in Muslim society.

The purpose of this paper is to find out the process and results of the general study program evaluation using the CIPP model (Context, Input, Process, Product) at the Faculty of Science and Technology (FST) UIN Walisongo

# **Literature Review**

Center for Research and Development of Religious Education, in its research: "Mapping the Capacity of Six UIN" Syarif Hidayatullah, Jakarta; Alauddin Makassar, Sunan Gunung Diati, Bandung; Sunan Yogyakarta; Maulana Kalijaga, Malik Ibrahim, Malang; Sultan Syarif Kasim, Riau, draws the following conclusions: UIN has good prospects in maintaining and developing Islamic civilization, the study of science and religion can seriously be found at UIN. The six UINs that have been mentioned earlier, have a basic structure in the vision, system, and management pattern of today's universities. The transformation of IAIN into UIN in no less than ten years brought a very significant change in the scientific paradigm. Finally, this fact was realized through the research "Mapping the Capacity of Six UINs". The transformation of UIN can be seen from the aspects of ontology, epistemology, and axiology development that began to prioritize the "General study program" apart from the "Religious (Islamic) study program", even other aspects, namely the transformation of UIN, which also develops physical and institutional developments.

Nurudin in his research related to the capacity of the religious study program and the general study program at STAIN. Nurudin described that STAIN Pontianak offered a religious study program and STAIN Curup which began to develop a general study program. Nuruddin's research uses descriptive qualitative methods. The results stated that STAIN Pontianak has the potential to develop a religious study program because it is supported by various parties. STAIN Curup, which develops general study programs, also shows good results, characterized by an increasing number of students in general study programs and even graduates who can be absorbed in the formal sector. The alignment of Islamic values and general competence is an absolute challenge faced by STAIN in developing general study programs (Nurudin, 2014).

Kartimi and Mulyani in their research revealed that the change of several IAIN to UIN provided an opportunity for the opening of general study programs at IAIN Syekh Nuriati Cirebon, giving rise to new hopes for the alternative paradigmatic social science development in Indonesia. Some of the phases of development that IAIN goes through to become UIN scientifically are the process of integrating Islamic science (Islamic Studies) and general science (science, social, and humanities). This is undoubtedly an excellent ideal for the entire IAIN academic community, Sheikh Nurjati Cirebon, an ideal that is still long and continues to grow. Self-development is carried out by opening new study programs, departments, and faculties, and the widest opportunities for developing disciplines (Kartimi & Mulyani, 2016).

# RESEARCH METHOD

This research was conducted at the Faculty of Science and Technology (FST) UIN Walisongo, in the 9 study programs, including: 1) Mathematics Education; 2) Chemistry Education; 3) Physics Education; 4) Biology Education; 5) Mathematics; 6) Chemical; 7) Physics: 8) Biology; 9) Information Technology (IT). This general study program evaluation research uses the CIPP (Context, Input, Process, Product) type model. Evaluation is part of development (Syarif, 2013). This research used a mixed method approach that combines or associates qualitative and quantitative forms (Miles & Huberman, 1994). Mixed methods research focuses on data collection and analysis and combines quantitative and qualitative data (Creswell, 2014).

The methods used in collecting data are (Creswell, 1998): 1) Observation method: this method is carried out by using instruments in the form of observation sheets and questionnaire when evaluating the Faculty of Science and Technology UIN Walisongo using the CIPP method; 2) Interview method: before interviewing the research subject, researchers prepared a framework of questions to evaluate the Faculty of Science and Technology UIN Walisongo using the CIPP method. This method is used to clarify the result of observation so that problems can be seen in depth and detail; 3) Discussion and documentation method: this method is used to find data about variables in the form of notes, books, newspapers, magazines, agendas, etc; 4) Focus Group Discussion (FGD): this method is to discuss more deeply related to research.

Stufflebeam (1971) describes the focus of monitoring and evaluation in the CIPP model: 1) The context assessment includes the institution's profile, the background of the opening of Faculty of Science and Technology at UIN Walisongo, geographic-demographic factors, and the basis for its existence. The information collected is used as a basis for program considerations; 2) The input assessment includes the quality of student input, the attractiveness of study program, as well as student service. The data collected during the assessment is used as a decisionmaker; 3) Process assessment includes curriculum, study program's lecturers and management unit. The data collected during

the assessment is used as a decision-maker; 4) Product assessment includes the achievement of *Tridharma* and quality of student output. Assessment is conducted to evaluate the implementation. The data collected during the assessment is used as a decision-maker.

According to Stufflebeam, to obtain valid information about functionality of the program, data collection technique may be self-made or procedural (Stufflebeam, 2002). Thus, to collect data, two separate procedures are developed by researchers who were inspired by the CIPP model, which are questionnaire and interview.

#### DISCUSSION

The data obtained from observation result of this study sample are described in tabular form. The questionnaire consists of 23 statements, which describe the context, input, process, and output of the General Study Program at UIN Walisongo. This questionnaire was compiled based on a grid of observation sheets. The choice items are: strongly agree, agree, neutral, disagree, and strongly disagree which can only be answered according to the actual situation in the field.

Questionnaires were shown to various parties who were directly involved with the Faculty of Science and Engineering (FST) UIN Walisongo Semarang, including Lecturers, Teaching Staffs, Students, Alumni, and Users that include Schools/Principals and Agencies. They were asked to assess the context, input, process and result obtained from the existence of FST at UIN Walisongo Semarang. After the observation is complete, then the results are processed by tabulating the data that have been observed by the researchers, which are later described in tabular form to see the evaluation results based on the CIPP evaluation model at FST UIN Walisongo Semarang.

From the observation results that have been taken at FST UIN Walisongo Semarang, the following data is presented in tabular form which has been analyzed using the SPSS 21 application.

Table 1. Validity Test Result

| validity Test Result |        |          |             |  |  |
|----------------------|--------|----------|-------------|--|--|
| Evaluat              | Num    | Composi  | Item Number |  |  |
| ion                  | ber of | tion of  | of Valid    |  |  |
|                      | item   | Item     | Statement   |  |  |
|                      |        | Validity |             |  |  |
| Context              | 4      | 4 item   | 1,2,3,4     |  |  |
|                      |        | accepted |             |  |  |

| Input   | 3  | 3 item   | 5,6,7          |
|---------|----|----------|----------------|
|         |    | accepted |                |
| Process | 12 | 12 item  | 8,9,10,11,12,  |
|         |    | accepted | 13,14          |
|         |    | _        | 15, 16 17, 18, |
|         |    |          | 19             |
| Output  | 4  | 4 item   | 20, 21, 22, 23 |
|         |    | accepted |                |

From the validity analysis table, it can be shown that 23 items are valid, including 4 items in the context evaluation, 3 items in the input evaluation, 12 items in the process evaluation, and 4 items in the product evaluation. Since all items are valid, it can be concluded that the item details are very good.

Table 2. Reliability Test Result

| Cronbach's Alpha | N of Items |
|------------------|------------|
| 9,77             | 23         |

The result of the reliability test shows that Cronbach's Alpha Value is more than 6%, which is 9,77%, therefore it is also categorized as very good.

The result of the questionnaire from the context evaluation are as follows.

Table 3
Descriptive Percentage on Context Aspect

| Bescriptive I electricage on Context I ispect |      |      |      |      |  |
|---|------|------|------|------|--|
| The Indicator                                 |      |      |      |      |  |
| in Statement                                  |      |      |      |      |  |
| Item  | 1    | 2    | 3    | 4    |  |
| Strongly Agree                                |      |      |      |      |  |
| Percentage                                    | 89,6 | 79,8 | 79,9 | 81,2 |  |

The data is analyzed using the Descriptive Percentage method. percentage with score above 50% is included "Strongly Agree" the category. Descriptively, it can be explained that FST UIN Walisongo Semarang is considered to have the context of establishing a study program to specific study program environment. Thus, FST UIN Walisongo is allowed to plan decisions and determine the needs to be achieved by study program.

The results of the questionnaire from the input evaluation are as follows.

Table 4.
Descriptive Percentage on Input Aspect

| The Indicator in |      |      |      |
|------------------|------|------|------|
| Statement Item   | 5    | 6    | 7    |
| Strongly Agree   |      |      |      |
| Percentage       | 85,8 | 71,1 | 85,3 |

Since the data is analyzed using the Descriptive Percentage method. The percentage with score above 50% is included in the "Strongly Agree" category. Descriptively, it can be explained that UIN Walisongo can make plans and strategies to meet the needs, managing existing resources, and taking alternative steps related to policies using input factors.

The results of the questionnaire from the process evaluation are as follows.

Table 5
Descriptive Percentage on Process Aspect

| Descriptive Percentage on Process Aspect |                              |  |  |  |
|--|------------------------------|--|--|--|
| The Indicator in Statement Item          | Strongly Agree<br>Percentage |  |  |  |
| 8  | 78,5                         |  |  |  |
| 9  | 81,3                         |  |  |  |
| 10                                       | 83,1                         |  |  |  |
| 11                                       | 85,1                         |  |  |  |
| 12                                       | 80,5                         |  |  |  |
| 13                                       | 83,6                         |  |  |  |
| 14                                       | 83,3                         |  |  |  |
| 15                                       | 82,2                         |  |  |  |
| 16                                       | 81,1                         |  |  |  |
| 17                                       | 84,8                         |  |  |  |
| 18                                       | 82,2                         |  |  |  |
| 19                                       | 79,1                         |  |  |  |

The data is analyzed using the Descriptive Percentage method. The percentage with score above 50% is included in the "Strongly Agree" category. Descriptively, it can be explained that FST UIN Walisongo Semarang is considered capable of implementing the design that has been prepared.

The results of the questionnaire from the product evaluation are as follows.

Table 6
Descriptive Percentage on Product Aspect

| Descriptive refeemage on Froduct Aspect |      |      |      |      |  |
|---|------|------|------|------|--|
| The Indicator in                        |      |      |      |      |  |
| Statement Item                          | 20   | 21   | 22   | 23   |  |
| Strongly Agree                          |      |      |      |      |  |
| Percentage                              | 82,7 | 81,9 | 79,3 | 78,8 |  |

Since the data is analyzed by using Descriptive Percentage method, the percentage with score above 50% is included in the "Strongly Agree" category. Descriptively, it can be explained that FST UIN Walisongo Semarang is considered successful in achieving the goals that have been set.

IAIN Walisongo was officially changed to Walisongo State Islamic University (UIN) Semarang since December 19, 2014. This is also recorded in the Presidential Regulation of Republic of Indonesia Number 13 of 2014 concerning on the change of IAIN Walisongo to UIN Walisongo which was stipulated by President Susilo Bambang Yudhoyono. In the Presidential Regulation, it is written that the change of IAIN Walisongo to UIN is to meet the demands of science and technology development, and the process of integrating Islamic religious knowledge with other sciences as well as realizing the quality of human resources.

UIN Walisongo is an Islamic University that has just existed in Indonesia compared to other Islamic Universities. UIN walisongo has a commitment to carrying out the movement of Islamization knowledge just like other UINs. It is reflected in the efforts of UIN Walisongo to build and develop its scientific paradigm. UIN Walisongo, as a new university, has different characteristics. For example, UIN Sunan Kalijaga (SUKA) develops its scientific paradigm through Science Interconnection, with the symbol of Amin Abdullah's spider web, UIN Malang with its Tree of Knowledge, and UIN Walisongo with its own paradigm frame.

UIN Walisongo designed the "Unity of Science" with the "Intan Berlian Ilmu (Diamond of Science)" model to develop its scientific integration. The model was initiated by Dr. H. Abdul Muhaya M.A and Dr. H. Muhyar Fanani (Fanani, 2015).

This paradigm means that all knowledge is a unity that originates and ends from Allah through His revelations, directly or indirectly. In this context, revelation becomes central and very important. All knowledge must communicate and lead to one goal: leading the learners to know and get closer to Allah (Fanani, 2015).

This unity of science paradigm contains the idea of having a dialogue between rational and religious sciences in a unified and harmonious system. Religion and Science are related to each other. This relationship is conflict (opposite), independence (each standalone), dialogue (communicate) and integration (united and synergized). In this context, unity of science wants to promote this integrative dialogue (Supena, 2015).

UIN Walisongo applies three strategic models to implement unity of science: the Humanization of Islamic sciences, modern sciences' spiritualization, and local wisdom's revitalization.

In an attempt to realize the humanization of Islamic sciences, UIN Walisongo indeed has steps, one of which is to humanize the names of faculty. UIN Walisongo provides a Faculty of Tarbiyah and Teacher Training. *Tarbiyah* is like the science of the sky, and teacher training is the science of the earth. So the two are combined. In addition, there is also the Faculty of Da'wah and Communication and other faculties. Humanization is also felt to always strengthen Faith, Islam and Ihsan. If a new thought emerges, it is necessary to first see whether it strengthens or shallows Iman, Islam and Ihsan. If it turns out to be shallowing all three, it must be rejected. On the other hand, if it strengthens all those three, it can be applied.

The strategy for developing the paradigm of the unity of science through the humanization of Islamic sciences is expected to be low-profile and close to the problems that are being experienced by humans (Fanani, 2015). Humanization can be very relevant to Islamic sciences to deal with current problems. Another expression states that humanization means revitalization of Islamic science in providing solution to the problem of modern life.

# **Context Evaluation**

According to Stufflebeam (2002), context evaluation is defined as a primary assessment, opportunity, and problem that can be solved in a particular environment (Stufflebeam, 2002). The context evaluation in this study is analyzing vision, mission, and goal of FST broadly, which cannot be separated from the history and foundation of the establishment of FST at UIN Walisongo Semarang. The result of this study is in line with Stufflebeam (2002), that the existence of vision, mission, goal as well as the history and foundation of the establishment of FST UIN Walisongo can be the spearhead of the basic

assessment that must be fulfilled. Therefore, this context evaluation can be used as the foundation or basis for planning decisions and determining the needs to be achieved by FST UIN Walisongo Semarang.

Based on the result of field research, it was found that FST UIN Walisongo Semarang was officially established along with the institutional change (conversion) Walisongo State Islamic Institute (IAIN) into Walisongo State Islamic University (UIN). Historically and formally juridical, it began with the issuance of Regulation of Minister of Religious Affairs of Indonesia Number 54 of 2015 Concerning on the Organization and Work Procedure of the State Islamic University of Walisongo Semarang and the Regulation of Minister of Religious Affairs of Indonesia Number 57 of 2015 Concerning on the Statute of State Islamic University of Walisongo Semarang. These two regulations from the Minister of Religious Affairs underlie the establishment of Faculty of Science and Technology UIN Walisongo. The inauguration of this faculty is conducted simultaneously with the inauguration of UIN Walisongo Semarang by the Minister of Religious Affairs of Indonesia, Lukman Hakim Saifudin, on November 4, 2015.

The purpose of FST UIN Walisongo Program is to produce graduates in Mathematics and Natural Sciences education, science and technology who are superior, have insight into the unity of science, and have noble character. They also need to be able to produce research and scientific works based on the unity of science and have insight into local wisdom as well as produce community service works in field of Mathematics and Natural science Sciences education, and technology which are responsive, innovative, and tend to give solution in overcoming problems in society.

FST UIN Walisongo seeks to provide essential competencies in Islamic sciences as a characteristic of PTKIN, as well as becoming a basis for development of fields of study developed in existing departments. The combination of religious and general knowledge makes the distinction between general study programs at PTKIN and other universities. This is also one of the fundamental values that is highlighted in the context of the FST UIN Walisongo.

This context evaluation is essential for innovation and improvement in educational institutions and systems, according to numerous research (Asadi et al., 2016). Since it focuses on the local context, evaluation's primary goal is to ensure that planning is effective and moving in the right direction (Macalister & Nation, 2019).

UIN Walisongo as PTKIN has a strategic role in integrating science and religion. This integration is the basis for considering the change in status from academy to institute and from institute to university. For this reason, each PTKI interprets and realizes the form of integration as referred in various ways, including integration points in the vision, mission, and/or goal of the university. For example, the vision of UIN Syarif Hidayatullah, Jakarta: "To become a worldclass university with excellence in integrating science, Islam and Indonesian values." UIN Alauddin Makassar's mission is: "Organizing educational, research, and community service activities that reflect the ability to integrate the values of Islamic teachings with science, technology, and art."

# **Input Evaluation**

According to Stufflebeam, input evaluation includes available and existing resources to achieve the goal and fulfil the needs (Stufflebeam, 2002). In general, the input evaluation in this study includes the quality of student input and the attractiveness of the study programs at FST UIN Walisongo. According to numerous studies, the primary goal of input assessment is to evaluate and identify various program methods accomplish various objectives and to give information that aids in the deployment of particular techniques. As a result, attention must be paid to the people, resources, processes, and choices that determine the new objective. The next stage is asking how a goal may be accomplished effectively and efficiently (Stufflebeam, 1968).

Input evaluation aids in decisionmaking by identifying the accessible sources, the options considered, and the plans and tactics used to attain the objectives. This assessment assists in controlling choices, identifying resources, deciding on alternatives, applying plans and strategies to meet needs, and establishing work procedures. The input evaluation in the research that has been carried out found that the Quality of Student Input and Attractiveness of the Study Program are in the very good category. It is elaborated into 3 (three) statements. Input is always maximized carefully in determining strategies to produce effective steps.

The findings from the study indicate that students who are interested in continuing their studies at FST UIN Walisongo are because of the uniqueness or special attraction of the study program concerned, such as: having a vision of Unity of Science with implementing science and Islam, explaining that science is one from Allah SWT, has a graduate profile to produce Muslim scientist, aside from the graduate learning outcomes (CPL) taught by the same study program at public universities or Higher Education (DIKTI). It also has many religious CPL, has been accredited A and B, and has joined in Indonesian study program consortium. Indeed, the uniqueness of the study program is supported by the public's interest in choosing general/science education that integrates Islamic education.

Infrastructure facilities, such as classrooms, learning resources, learning tools, and libraries are also critical as an existing input factor. Based on research, the infrastructure at FST is very equipped, which is represented by the basic and development laboratory. The infrastructure itself is very much needed to implement effective and efficient learning. Another important input factor is funding. Sources of cost and funding must be clear from early age whether they are only charged from tuition or UKT (Single Tuition Fee) or from other sources. Regarding to research that has been carried out, FST UIN Walisongo only withdraws payments from UKT which is paid every semester.

The quality of student input at FST UIN Walisongo is based on the policy of recruitment and selection system prospective students (including the quality of academic achievement and reputation as well as talent at former education levels, regional equity, financial ability, and gender). The implementation effectiveness of recruitment and selection system for prospective students aims to bring out quality prospective students. It is measured by the number of applicants, the proportion of applicants to the capacity and the proportion of those who accepted and enrolled.

The quantity of student input enrolled in the general study program, especially FST UIN Walisongo, did not affect the decrease in the number of students enrolling in the religious study program at UIN Walisongo.

The interest of applicants at the Faculty of Science and Technology UIN Walisongo has increased yearly in the last three years (2015-2018). The comparison of accepted students with applicants in 2015 was 1: 8,61, in 2016 was 1: 14,66, in 2017 was 1: 15,16, and in 2018 was 1: 17,08.

The State Islamic University (UIN) Walisongo Semarang always holds an Introduction to Academic and Student Culture (PBAK) as a welcoming event for new student. The event presents the Dean or Dean's representative from each faculty as the presenter.

The first material discusses the Faculty and Lecture System at FST UIN Walisongo. At that event, the profile of FST graduates was explained. It was said that the Semester Credit System (SKS) that the FST study program could take was 144 credits. The most extended study period is 14 years which is divided into three courses: a general course, a study program's compulsory course, and an elective course.

UIN Walisongo Semarang implements a new curriculum, namely Unity of Science which implements independent learning or independent campus as well as implement the industrial era 4.0.

In addition, UIN Walisongo Semarang is the first State Islamic Religious University (PTKIN) in Indonesia that has implemented an independent campus learning curriculum in 2020. The new curriculum states that students are given the opportunity to attend lectures at other universities which has collaboration with UIN Walisongo Semarang, such as Brawijaya University (UB) Malang, Gajah Mada University (UGM), Bandung Institute of Technology (ITB), University of Indonesia (UI), and others.

FST implements a cross-linked system where students who take part in this program will be recognized by the study program concerned. Thus, students can graduate on time for a maximum of eight semesters.

There are three types of final assignments that students can take in graduation, including: 1) Thesis; 2) The final project which is not a thesis, such as scientific

works and technological design works; 3) Recognition of student's works in national or international championships.

# **Process Evaluation**

Process evaluation is used to detect or predict the procedure or implementation design during the implementation, to provide information for program decisions and as a recording or archive of procedures that have occurred. In process evaluation of research that has been carried out, the curriculum, lecturers in study program, study program management unit, and student service are classified in the very good category. In process evaluation, it is elaborated into 12 (twelve) statements.

According to Stufflebeam, process evaluation can be revealed by providing this questions: is of the program implementation in accordance with schedule? program Will those involved in implementation be able to handle activities during the program? Are the facilities and infrastructure provided utilized to the fullest? and what obstacles were encountered during implementation? (Stufflebeam, program 1971).

Support from Faculty of Science and Technology has been very good in planning, implementing, and developing the curriculum for management of study program. This is shown by providing facilities, organizing activities, and funding assistance.

The curriculum design of FST UIN Walisongo is structured in courses, syllabus, Lecture Program Unit (SAP), as well as the teaching and learning process.

In integrating science and Islam, FST UIN Walisongo includes several Islamic courses apart from the main courses of study program. Several Islamic courses are compulsory for FST UIN Walisongo students, namely Arabic course which has two credits, Al-Qur'an Studies and Hadith Studies which each have two credits.

A syllabus is a learning plan for a course that outlines certain competency standards to indicate competency achievement for assessment. Therefore, from the existing syllabus it can be seen whether a syllabus reflects its scientific integration since the syllabus is a plan used as a reference to achieve specific goals, especially in the teaching and learning process.

The syllabus at FST UIN Walisongo has included verses from Quran that are in accordance with the science and technology being studied. Even though it is only at the verse level, the syllabus at FST UIN Walisongo has indicated the use of Islamic perspective in science and technology.

To implement the curriculum in lectures adequately, the syllabus needs to be elaborated or developed into a Lecture Program Unit (SAP). SAP will describe the details of teaching and learning process in each meeting. SAP contains several components competency standard. such as basic competency, competency indicator, lecture material and their descriptions, learning experience (learning strategy), learning media/tool, assessment system, and reference. As with the scientific integration listed in the syllabus, the integration in SAP at FST UIN Walisongo has also included verses from Qur'an. In compiling the SAP, lecturer included the verses of Quran that are in accordance with the topics discussed. This verse has indicated the use of Islamic perspective in science and technology.

The teaching and learning process is the phase where students will get a learning experience through the learning strategies presented by the lecturer along with references used. Several attempts have been made in each learning process to integrate Islam and science. To give an Islamic vibe, the learning process at FST UIN Walisongo always begin with a prayer together. In addition, the entire lecture schedule that is prepared is very considerate of prayer times so that the student prayer schedule is not disturbed. However, this is only a very simple effort because the textbooks used at FST UIN Walisongo have not included verses of Quran that are in accordance with science and technology.

The learning process uses an active learning strategy that places lecturer as facilitator and student as the learning subject which requires student to learn creatively and independently. Learning does not only occur in the classroom. However, it needs to be developed with learning models outside the classroom by utilizing all learning resources in the surrounding environment, such as library, laboratory, nature, and the community.

Students are also equipped with cognitive, affective, and psychomotor competencies to have intellectual behavior in

each study program. This has been able to be realized by the faculty inside and outside the classroom.

Professional lecturer carries academic activities in the classroom through the learning process: a) student-centered; b) learning that requires students to think critically, creatively, collaboratively, and communicatively; c) emphasizing skills; d) using adequate references with internet support; e) using various innovative, creative, effective, and fun active learning methods (PAIKEM): f) utilizing contextual and ICTmedia: utilize e-learning based http://elearning.walisongo.ac.id/ effectively with good facility to support the learning process; g) integrating the unity of sciences with three techniques: the humanization of Islamic/religious sciences; spiritualization of science and technology; and revitalization of local wisdom.

Academic activities outside the classroom include: a) student discussions either independently or with lecturer outside of lecture hours; b) Field Work Lectures (KKL) according to the needs of each study program; c) Development of training for student Olympiads; d) Coursework project tasks; e) Field Experience Practice (PPL), which teaching includes project in partner school/madrasa of FST according to their respective study programs; f) Job Training (KP) for non-educational study program in institution/agency/service/company that are partner of FST; g) Community Service (KKN) in villages/urban villages that are the target of the LP2M UIN Walisongo program, regular and independent. h) Various academic activities of the Student Executive Council (DEMA), Student Senate (SEMA), Student Association (HMJ), Student Activity Unit (UKM) within FST such as seminar, workshop, training, student newspaper publishing, student magazines/bulletins.

The number ratio of lecturers and students at the Faculty of Science and Technology is very sufficient and is in accordance with the expertise of each lecturer (1: 20,32). Considering the ratio, it can be said that the faculty can carry out the *Tridharma* University. The number of qualifications and career development of lecturers at Faculty of Science and Technology is very adequate, as proven that 100% of lecturers at this faculty have taken master and doctoral degree (Very

Good category). The efforts made by the Faculty in developing the qualification and career of lecturers have been very good.

Attempts made by the faculty in developing qualifications and career of lecturers have been very good, which is by providing the opportunity to carry out further studies (S3) for 18 lecturers. As many as four lecturers of the Faculty of Science and Technology UIN Walisongo are continuing their doctoral degree through the MORA doctoral scholarship, which consists of one lecturer at the Industrial Ecology Program in Institute of Environmental Sciences (CML) Leiden University, Netherlands, one lecturer at the School of Mathematics, University Birmingham, UK, one lecturer at the Department of Electrical and Mechanical Engineering Nagoya Institute of Technology (NiTech), Japan, and one lecturer received a scholarship from the Department of Physics in Osmania University, India. In addition, 14 lecturers are currently studying for doctoral degrees, including two lecturers at Gajah Mada University (UGM) Yogyakarta, lecturers at Semarang State University (UNNES), one lecturer at Yogyakarta State University (UNY), one lecturer at Bandung Institute of Technology (ITB), two lecturers at Institute of Technology Surabaya (ITS), and one lecturer at Diponegoro University (UNDIP). In particular, the form of career development for Lecturers that the Faculty of Science and Technology carries out is that the Head of Faculty regularly gives a warning letter every two years to administer and apply for credit points to be promoted. Later, another form of career development is by allowing lecturers to attend seminars, workshops, training, and workshops both locally, nationally, and internationally.

To support academic and administrative implementation, FST is supported by 32 information systems with bandwidth as much as 1.200 Mpbs. Several portals that are directly related to student service and learning process include: WALI-(Academic SIAdik Portal Information System), DIGITAL LIBRARY Portal, E-JOURNAL Portal UIN Walisongo, Library CATALOG Portal. Online International Journal Portal for lecturers and students, SIA Portal for student access, such as FRS, KRS, transcripts and student data searches, Financial Portal, and e-learning system portal.

The Faculty of Science Technology of UIN Walisongo is supported by excellent and adequate infrastructure. It has two lecture buildings that consist of 16 classes and one hall. All classes are equipped with LCD and an integrated laboratory which includes laboratories of biology, chemistry, mathematics, and information physics, technology. The biology laboratory consists of the biochemical biology laboratory, the general laboratory, and the structure laboratory. Chemistry has an organic and biochemical laboratory, a basic and inorganic chemistry laboratory, and an analytical laboratory. The Mathematics Laboratory consists of a modelling laboratory, a computational laboratory, and a workshop laboratory. Physics has a computational laboratory, an electronics and optics laboratory, and a basic physics laboratory. Information technology has a computer laboratory. To support educational activities, FST is equipped with a microteaching laboratory. It also has a mosque with an area of 900 m<sup>2</sup>. This mosque is also shared by the Faculty of Ushuluddin and Humanities, Faculty of Science and Technology, UIN Walisongo Semarang in 2020 and the Faculty of Tarbiah and Teacher Training.

Periodic infrastructure improvements are continuously improved in terms of quality and quantity to support the quality of lecture facilities. Several improvements to the development plans are: a). Adding an office space of 4.113 m<sup>2</sup> for administrative service, combined with head of faculty and lecturer room which will be built on campus 3. b). Adding student facilities, such as sports field (futsal and volleyball) and an art room (performance room). c). The existence of CCTV in strategic spots for campus security and by 2020 it was planned to install CCTV in every class to control lectures. d). Adding a parking lot area of 800 m<sup>2</sup> by 2020. e). Installing audio monitoring control in all classes targeted by 2020 to deliver information directly in each class. FST is experiencing difficulties in providing adequate existing infrastructure, such as: a). This faculty has two buildings which means that the lecture buildings have not been centralized. This makes it difficult for FST to organize and optimize the maintenance of existing buildings, and requires a larger budget to carry out its maintenance. b). The number of

cleaning personnel is still limited which results in the lack of proper maintenance of building facilities.

As additional information obtained by the researcher, there is the Material Book Development as a supporting factor that must be provided during the teaching and learning process takes place at FST UIN Walisongo.

The characteristics of the material book are designed for independent learning systems, which are intact and systematic, contain objectives, materials or activities, and evaluations, are presented communicatively (two-way), as well as strived to be able to replace some of the lecturer's roles. The scope of discussion in the material book is focused and measurable, and emphasizes the user learning activities. Thus, to overcome the two existing problems, as well as to make learning process become more meaningful, the lecture material book at FST UIN Walisongo that was developed also needs to embed learning principles with growth mindset, equipped with a link to daily life and religious value. The steps for material book development at FST UIN Walisongo can be seen in the following picture:

Picture 1.
The Development of Material Book at FST UIN Walisongo

| Initial data collection (Front analysis)   | $\rightarrow$ | Product<br>design   | $\rightarrow$ | Design<br>validation                        |
|--|---------------|---------------------|---------------|---|
| Step I<br>examinati<br>on (small<br>group) | $\rightarrow$ | Product<br>revision | $\rightarrow$ | Step II<br>examinati<br>on (large<br>group) |
| Revision and completion                    | $\rightarrow$ | Final<br>design     | $\rightarrow$ | Diseminati<br>on                            |

Source: tim proceses

# **Product Evaluation**

A product evaluation assesses outcomes and outputs, short and long term, intended and unintended, which not only tracks but also focuses on the fulfilment (or not) of objectives (Stufflebeam, 2003).

Product evaluation is an assessment to measure success in achieving the goal that have been set (Robinson, 2002). The data generated will determine whether the program is continued, modified, or terminated. In product evaluation, the data includes the

Achievement of *Tridharma* and the Quality of Student Output which belong to the very good category.

One of the activities to realize the *Tridharma* University, FST performs community service activities. It focuses on service based on the unity of science and develops local wisdom, aiming to lead to civilizational values and benefit humanity. The service carried out by FST is aimed at the general public (civilian) and at the world of education (school/madrasah) formally and informally.

FST has a role in developing education and science according to the demands of the times. The service that lecturers and students of FST have carried out has quantitatively met the adequacy. It is indicated by the amount of service that comes from grant funds or independent.

The importance of services to integrate existing sciences is one of the reasons behind the services at FST. The benefits for life are maximized through the integration of science in the services performed. The ability of lecturers and students is very good in empowering the community towards an independent society.

Most student of FST UIN Walisongo can complete their studies very well. One indicator is that the average Grade Point Average (GPA) obtained during the study is more than 3,0. In addition, the time taken also shows on time which ranges from 4-6 years.

# **CLOSING**

This general study program research shows that the implementation of the Unity of Science, also known as Wahdatul Ulum, paradigm at UIN Semarang is facing no major issues. Moreover, the results of the CIPP evaluation in the general study program at UIN Walisongo were analyzed using Descriptive Percentage method by obtaining a percentage with a score above 50% belonging to the "Very Good" category. Therefore, it indicates how efficiently this evaluation has elaborated the study program at the State Islamic University (UIN) Walisongo Semarang.

Evaluation of CIPP at the Faculty of Science and Technology UIN Walisongo Semarang includes Context, Input, Process, and Product. Context: Grand Design Strategic Plan at UIN 22 years, FST has 10 study programs with the paradigm of Unity of science, UIN Vision and Mission on a national and international scale. Input: There are six stages for the UIN entrance examination: SNMPTN, SBMTN UTBK, SPAN PTKIN, UM PTKIN, Independent pathway, and achievement pathway. Process: Every course at FST has verification, at FST and lecturers make syllabus and SAP, learning at FST adheres to the IQF curriculum and an independent campus, at UIN with the paradigm of Unity of science. Product: FST emphasizes theses. non-thesis assignments and championships at national and international levels. FST students focus on dedication to the unity of knowledge and develop local wisdom aimed at the values of civilization to benefit humanity.

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