

**THE EVALUATION OF BIOLOGY EDUCATION STUDY PROGRAM OF
TARBIYAH AND TEACHING FACULTY OF UIN ALAUDDIN MAKASSAR
(Evaluation Study of CIPP Model toward the Program Accountability)**

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ABSTRACT

The research aims to evaluate the program implementation as the program accountability and the related policy in order to improve the service quality based formative oriented (decision taking) and summative oriented (accountability) on Biology Education Study Program of Tarbiyah and Teaching Science Faculty of UIN Alauddin Makassar. The evaluation implementation used mixed-method of CIPP evaluation model with the analysis unit on the program implementation process toward each activity unit which its analysis result concerned with the program effectiveness and accountability. Based on the research findings, there were several priorities on every stage such as: a) context: determining the development focus of research area and community service, academic monitoring system development, b) input: optimal soft-skill building of the students through extracurricular activities, the result of curriculum review needed reinforcement from biology education association of national level especially for the learning outcome/the graduate competency standard, c) process: needed orientation, training/workshop for the lecturers discussing about the process and the students' learning outcome based on the assessment standard of the higher education national standard, and d) the products needed to be considered: a) the students' low achievement because the activities had not fully facilitated the students to get high achievement and develop their interest and talent through the intra- and extra-organizations, the tracer study had not optimally run yet and needed the alumni role reinforcement by strengthening the Alumni Association of study program.

Keywords: Evaluation of CIPP Model, Program Accountability

INTRODUCTION

1. Background

The studies about program evaluation in the education area are the necessary things for whom being involved and having interest in education and research. Various writing in the research and education journals show that the research findings on the program evaluation contribute to solve a problem, improve the institution performance and education/learning quality, socialize the policy for goal achievement, and the evaluation result is necessary to develop the same program in other places.

Biology Education Study Program of Tarbiyah and Teaching Science Faculty of UIN Alauddin Makassar has got DIKTI recommendation (No.2074/D2.2/2007 on

August 13th, 2007) and Operational Permission from DIKTIS (Dj.I/Dt.IV/HK.00.5/78/2007 on November 16th, 2007) that shows the quality and indicator on its implementation. Based on the development of the study program that has been established for about eight years, the review on the vision and mission always follows the change of the faculty vision and mission.

However, the acknowledgement of the Higher Education National Accreditation Institution (BAN-PT) with no 041/BAN-PT/Ak-XIV/S1/XII/2011 on Biology Education Study Program of Tarbiyah and Teaching Science Faculty of UIN Alauddin Makassar is still on level C. Therefore, it should be conducted the evaluation to improve the quality and

standard of the learning process by considering some aspects as the accountability of a program and the implementation success level of Biology Education Study Program of Tarbiyah and Teaching Science Faculty of UIN Alauddin Makassar. Thus, the gained quality can become the reference for the development and the improvement of academic achievement and the aspect of the students' personality.

2. Research Problem

- a. In the context stage, how is the base of Biology Education Study Program of Tarbiyah and Teaching Science Faculty of UIN Alauddin Makassar related to the society's need and the implementation feasibility?
- b. In the input stage, how are the recruitment procedures of students, lecturers, curriculum, and learning facilities in Biology Education Study Program of Tarbiyah and Teaching Science Faculty of UIN Alauddin Makassar?
- c. In the process stage, how is the quality of learning implementation/ practicum in Biology Education Study Program of Tarbiyah and Teaching Science Faculty of UIN Alauddin Makassar?
- d. In the result stage, how is the description of the students' achievement, the students' satisfaction level, the lecturers/staff and the alumni outcome in Biology Education Study Program of Tarbiyah and Teaching Science Faculty of UIN Alauddin Makassar?

3. Research Objectives

This evaluation research aims to acquire the accurate and objective data about the implementation of Study Program as the programs' accountability and the related policy in order to improve

the service quality based formative oriented (decision taking) and summative oriented (accountability) on Biology Education Study Program of Tarbiyah and Teaching Science Faculty of UIN Alauddin Makassar.

4. Research Significance

- a. To give information or description of program accountability related to the service quality of Biology Education Study Program of Tarbiyah and Teaching Science Faculty of UIN Alauddin Makassar.
- b. To be able to become the foundation on determining the performance and achievement standards that should be gained, which will lead Biology Education Study Program of Tarbiyah and Teaching Science Faculty of UIN Alauddin Makassar to get better quality and accreditation.
- c. To give input to the leaders/officials/stakeholders of UIN Alauddin Makassar to improve the service quality of the students.
- d. To motivate the institution to perform and achieve higher productivity level.

5. The Limitation of the Evaluated Program

The evaluated components are limited based on the education micro-system components as shown in the following table 1. The Evaluation Criteria of Biology Education Study Program (The next page)

RESEARCH METHOD

1. The Kind and Model of Evaluation

The implementation of the evaluation used mixed model of quantitative and qualitative approach (Patton, 1990). The evaluation model used was CIPP model (context, input, process,

and product) from Stufflebeam. The evaluation of context aimed to seek the rationale and to determine the education goal based on the need and condition. The evaluation of input aimed to give information on how the sources and facilities that could be used to achieve the program objective. The evaluation of process aimed to detect the weaknesses in the program design, and to keep the program implementation run appropriated with the design. The evaluation of product aimed to measure and interpret the acquired result of the program as long as its implementation.

2. Research Instrument

The instruments used in this evaluation research consisted of (1) inventory checklist/observation manual, (2) interview manual, both structured-interview and open-ended interview, (3) questionnaire, and 4) Documentation.

3. Sampling and Analysis Unit

The kinds of sampling used in this evaluation research consisted of random and purposive sampling (Brinkerhorff, 1986). The purposive sampling was mainly used to determine the respondent based on the consideration or assessment about the data from certain respondent.

The analysis unit in this evaluation research was the implementation process of the study program based on the components of the evaluation of CIPP model. The evaluation was conducted on every activity which the analysis result considered the effectiveness and the accountability of Biology Education Study Program of Tarbiyah and Teaching Science Faculty of UIN Alauddin Makassar.

5. Source of Data

The sources of the data in this evaluation consisted of: 1) document, the written report and other physical evidence, 2) the official leaders of the Faculty and Department, 3) lecturers and administration staff, 4) students/alumni, 5) the Quality Assurance Institution of the Faculty and the University, and 6) the information from the personnel related with the program.

6. Technique of Data Analysis

The validity stabilization of the data was conducted by using triangulation technique. The qualitative data were analyzed through four stages: data collection, data reduction, data display, and drawing conclusion (Miles dan Huberman).

Table 1. The Evaluation Criteria of Biology Education Study Program

Stages	Criteria/Objective Standard
Context	The analysis of program environment: 1. Clear program base and objective and supported by UU, PP and the policy about the program implementation 2. The management system 3. The study program has the feasibility to conduct the program.
Input	1. The lecturers' condition: - the number of the lecturers appropriated with the ratio - the lecturers' academic qualification (strata and skill) - laboratory organizer/manager 2. Curriculum 3. Learning facilities
Process	Program Implementation: 1. The learning and teaching process are conducted based on the syllabus/lesson plan/course outline. 2. Practicum study fulfills the laboratory standard/good practice facilities. 3. The implementation of learning assessment is appropriate with the assessment principles.
Product	Program result: 1. The students GPA mean score 2. The students achievement of intra- and extra-activity 3. The service user Feedback toward the alumni

Whereas, the quantitative data were analyzed based on the achievement percentage of the assessment score result taken from comparing between the empiric score of the assessment result and theoretic maximum score.

RESEARCH FINDINGS

The description of the evaluation result was based on the components which were considered from the following stages;

1. Evaluation of Context

First, Biology Education Study Program has the foundation showed through vision and mission with the strong will to be the superior institution in the implementation of education, research, and community service in biology educational field with the Islamic conception and gets accreditation A in 2019. The distinctness of the study program objective has the description about the expected output and outcome.

The analysis result showed that the accreditation status is still low (C), so that the important points that become the priorities are: a) the development focus determination of the research area and the community service, b) the development of academic monitoring system, c) following up of the evaluation result should be improved, d) the quality control division should be effected, and e) monitoring on the strategic program objective attainment.

Second, the organization management of Biology Education Study Program has the organization structure with the clear duty and function based on the organization work management of UIN Alauddin Makassar (the head of department, the secretary of department, laboratory assistant, academic staff (lecturers), and administration staff). In addition, there is available manual procedure in managing every activity and supported by sufficient operational fund allocation of BOPTN.

Third, the feasibility to implement Biology Education Study Program can be seen from: a) the improvement of the social expectation toward Biology Education Study Program, seen from the improvement of the number of the registrants in the last three years, b) bigger cooperation chance with other institutions, both national and international in the fields of education, research, and community service, and c) the availability of big entrepreneurship chance and creative economy development trend along with the development of science and technology supported by the government and finance institution.

2. Evaluation of Input

First, related to the students' condition, Biology Education Study Program has the active students of academic year 2014/2015 as many as 367 students. If it is observed from the level of the number of the registrants in every year, there is rapid improvement of the registrants till 350% especially in the last three years with the total 6.822 registrants. In addition, the ratio of the accepted registrants for academic year 2014 was 35:1; it shows that Biology Education Study Program is highly competitive with the input of high-grade new students.

Based on the analysis result, the thing that should be considered well is the optimal development of the students' competences (soft skill) through the extracurricular activities, the development of foreign language skill and so forth.

Second, the lecturers' numbers of Biology Education Study Program are 19 people (13 civil servant lecturers and 6 non-civil servant lecturers). In more detail, the lecturers consist of 7 doctors and 12 master degrees. Generally, it can be concluded that the smaller the comparison between the students and the lecturers (to the certain limitation), the higher the

quality and the efficiency of the study program can be improved, the higher the academic position of a lecturer, the more the experience of education, research, and community service. The number of staff is 25 people (13 people of administration staff and 12 people of laboratory assistant) with various educational backgrounds started from undergraduate degree (S1), graduate degree (S2), till doctorate degree (S3).

Based on the analysis, there are several things that should be developed namely: a) establishing the lecturer council as the gathering place to improve the competences and skills appropriated with three principles of higher education, b) giving reward for the extra teaching time (>12 credits), c) facilitating the lecturers' English improvement, d) creating many more scientific activities (seminar, research, and so forth), e) maximizing academic advising activities.

Third, curriculum reinforcement and its development have been conducted step by step by synchronizing the vision and mission of the study program. Review on curriculum based KKNi was recently conducted in academic year 2014/2015 by conducted need assessment in the expected schools and institutions as the user of the alumni in advance. The result of the curriculum review needs reinforcement from Biology Education Association of national level especially for the learning outcome/ the graduate competence standard.

Fourth, the support of the learning facilities and infrastructures has generally been sufficient and fulfilled the feasibility standard of the learning and teaching process including the laboratory facility. It needs an effort to improve the library quality so that it can be used well by the students and the lecturers. The noted things should be improved: a) the ratio of students-practice tools is 1:15; b) the teaching media

is still limited; and c) the maintenance fund is still limited.

3. The Evaluation of Process

First, the monitoring process of academic activities has been observed by the support of good academic system and showed that the learning and teaching process had been conducted based on syllabus/lesson plan/course outline. In addition, the number of researches and community services conducted by the lecturers and the students in the field of science development based study program still needs to be improved and e-learning needs to be developed.

Second, based on the survey conducted on the students about the satisfaction level; it showed that the practicum study fulfilled the good standard of laboratory/practice facility.

Third, the implementation process of learning assessment run based on the procedures but focusing on the cognitive ability was still the majority; needed orientation/training/workshop for the lecturers discussing about the assessment process and the students' learning outcome based on the assessment standard of the higher education national standard.

4. Product components

First, the students' GPA mean score for last three years showed mark of 3.37, 3.37 and 3.42; it means that it has fulfilled the passing grade minimum criteria (> 2.75). In addition, the percentage of the passing grade level for last three years showed that $GPA > 3.50$ got the improvement in 2012 (28.75%), in 2013 (55.38%) and in 2014 (40.27); it means that the output related to the students' learning outcome has achieved the GPA above the mean score.

Second, the students' activities have not fully facilitated yet the students to

get good performance and develop their interest and talent. It needs to maximize the intra- and extra-organizations as the place to develop the interest and talent by the guidance from the study program leaders.

Third, the demand on the community satisfaction and trust toward the quality acknowledgement of the study program by the government still needs to be conducted to get the information from the next survey about the respond on the alumni service user. Thus, the tracer study of the alumni has not optimally run yet and needs the reinforcement of the alumni role through the reinforcement of the Alumni Association Institution of the study program.

CONCLUSION

1. Context Stage

The evaluation result on the context stage related to the components supported the environment of Biology Education Study Program that become the priorities such as: a) determining the development focus of the research and community service area, b) the development of academic monitoring system, c) the improvement of following up the evaluation result, d) the organization system management of Biology Education Study Program by the explicit duty and function based on the organization work management of UIN Alauddin Makassar, e) the feasibility to conduct Biology Education Study Program can be seen through the improvement of the number of the registrants, f) the opened-chance to cooperate with other institutions based on the three principles of higher education.

2. Input Stage

The evaluation result that supported Biology Education Study Program

on the input stage consists of: a) the optimal development on the students' competence (soft skill) through the extracurricular activities, the improvement of foreign language skills, b) establishing the lecturers' council, and c) maximizing the academic advice guidance, d) the result of the curriculum review needs the reinforcement from the association of Biology Education Study Program of national level especially for the learning outcome/ the graduate competence standard, e) the limitation of the learning media, and f) the limitation of the maintenance fund.

3. Process Stage

The evaluation result that supported Biology Education Study Program on the process stage needs to be considered and followed up as follows: a) the number of the researches and community services conducted by the lecturers and the students in the field of science development based study program needs to be improved, b) e-learning study needs to be developed, c) it needs the orientation, training/workshop for the lecturers discussing about the related assessment of the process and the students' learning outcome based on the assessment standard on the higher education national standard.

4. Product Stage

The evaluation result of Biology Education Study Program on the product stage that needs to be considered: a) the students' activities have not fully facilitated the students to get good performance and develop their interest and talent through intra- and extra-organizations as the

place to develop the interest and talent by the guidance from the department leaders/officials, and b) the alumni tracer study has not optimally run yet and needs reinforcement of the alumni role through the institution reinforcement of the Alumni Association of the Study Program.

REFERENCES

- Brinkerhoff, Robert o., et., *Program Evaluation*. Boston: Kluwer Nyhoff Publishing, 1986
- Chen, Huey-Tsyh. *Practical Program Evaluation*. United States of America: Sage Publications. 2005.
- Commitee, Joint. *Standards for Evaluations of Educational Programs, Projects, and Materials (Ukuran maku untuk Evaluasi Program, Proyek dan materi Pendidikan)*. Terj. Rasdi Ekosiswoyo. Semarang: IKIP Semarang Press. 1991.
- Creswell, John.W. *Research Design, Qualitative & Quantitative Approaches*, California USA: Sage Publication. 1994.
- Davidson, E. Jane. *Evaluation Methodology Basics*. United States of America : Sage Publications. 2005.
- Fitzpatrick, Jody L., Sanders, James R., and Worthen, Blaine R. *Program Evaluation*. Uneted States of America: Pearson Education. 2004.
- Fraenkel, Jack R. And Norman E. Wallen. *How to Design and Evaluate Research in Education*. Singapore: Mc-Graw Hill. 1993.
- Issac, Stephen & William b. Michael. *Handbook in Research and*



- Evaluation*. California; EdITS San Diego. 1983
- Malik Ibrahim, Misykat. *Pengembangan Pengukuran Non-Tes Bidang Pendidikan*. Makassar : Alauddin University Press. 2012.
- _____. *Evaluasi Program Bidang Pendidikan*, Makassar: Alauddin University Press. 2013
- _____. Laporan Hasil Penelitian. *Evaluasi Pelaksanaan Manajemen Berbasis Sekolah (MBS) Madrasah Aliyah Negeri Model Makassar*. Makassar. 2010.
- McDavid, James C., and Laura R.L. Hawthorn. *Program Evaluation & Performance Measurement*. United States of America : Sage Publications. 2006.
- Patton, Michael Quinn, *Qualitative Evaluation and Research Methods*. Newbury Park, California: Sage Publications, 1995
- Sax, Gilbert. *Principles of Educational Measurement and Evaluation*. United States of America: Wadsworth Publishing Company. 1974.
- Spaulding, Dean T. *Program Evaluation in Practice*. United States of America : John Wiley & Sons. 2008.
- Stufflebeam, Daniel L & Anthony J.Shinkfield. *Evaluation Theory, Models, and Applications*. USA; John Willey & Sons, Inc. 2007.
- Yaremko, R.M., Harari, Herbert., C. Harrison, Robert., Lynn, Elizabeth. *Reference Handbook of Research and Statistical Methods in Psychology: For Students and Professionals*. New York : Harper & Row publishers. 1982.
- Yusuf, Farida, *Evaluasi Program*. Jakarta; PT. Rineka Cipta. 2000.