# Self-evaluation in Distance Education of Biology Program FKIP-Universitas Terbuka

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**Abstract:** The purpose of this research is expected to help the S1 Biology Education Study Program FKIP-UT in improving academic and administrative services for users. In detail, the objectives of this study are: (1) The effectiveness of the services that have been provided by the Biology Education S1 Study Program FKIP-UT to service users; (2) Student services of the S1 Biology Education Study Program FKIP-UT; (3) Service user satisfaction of the S1 Biology Education Study Program FKIP-UT; (4) Characteristics of the learning process of the S1 Biology Education Study Program FKIP –UT; (5)  Learning experience of service users of  the S1 Biology Education Study Program FKIP-UT. The research used quantitative and qualitative methods. Quantitative methods are carried out by surveying all graduates/students using questionnaires [letters, forms]. While the qualitative method was carried out for limited respondents who were randomly selected proportionally through [online] interviews. The results of this study include data analysis of the effectiveness of services that have been provided by the Biology Education S1 Study Program FKIP-UT to service users, as many as 62.4% are satisfied with the Subject Material Books used, 48.5% are online tutorials, 41.3% Webinars and 56.2% are final exams. As many as 62% of respondents already know the student services of the S1 Biology Education Study Program FKIP-UT regarding reasoning, interests and talents, 60% regarding career guidance and 45.8% regarding welfare and easy access.  Satisfaction with the learning experience in the S1 Biology Education Study Program, respondents were satisfied and very satisfied in discussions, tutorial assignments, practices and practicums. With respondents who are dissatisfied with academic and administrative services, it is necessary to improve services and socialization for those who have difficulty accessing services.

**Keywords:** Biology education; Distance education; Self-evaluation; Study program

## Introduction

Bachelor of Biology Education as one of the Study Programs at the Faculty of Teacher Training and Education (FKIP) Open University (UT) follows all FKIP and UT policies in developing its academic products. Various administrative and academic services are provided to students and users. Administrative services are served by various units within the institution, as well as academic services involving related units. Administrative services from the time students start registration until students graduate involve various related units (Ary, 2019). Academic services in the form of teaching materials, learning assistance and assessment also involve related units. The effectiveness of academic and administrative services, student services, the results of measuring your satisfaction with services, the characteristics of the learning process, the Semester Learning Design the content of learning materials, are important things that must be sought out information from students, graduates, and users (Tanjung, 2022). Such is the case from the variety of teaching materials used, the learning process, the effectiveness of learning methods, the use of assessment techniques and instruments used, the implementation of assessment, satisfaction with the learning experience, to achievements, awards, and achievements in the academic field of students and graduates (Uno, 2013).

In the process of providing administrative and academic services to students, it is necessary to evaluate the extent to which these services are delivered through input from students and graduates. Self-valuation for study programs and universities is not just a process that must be carried out at certain special times or to submit proposals for a particular project (Tanjung et al., 2020). Evaluation should be an aspect in the development cycle of study programs/universities, internal quality assurance, continuous program improvement, and to complete and update the database of each study program (Handayani & Wulandari, 2021)

Study programs that are accustomed to conducting regular self-evaluations, the study program will always be ready with the latest data and information, if requested or demanded by those who need it. Therefore, self-evaluation should be carried out regularly to update the database and information on an ongoing basis (Rolheiser & Ross, 2011).

Evaluation activities are a process of providing information that can be used as a consideration to determine prices and services from objectives achieved, design, implementation, and impact to help make decisions, help accountability, and increase understanding of phenomena. According to this formulation, the essence of evaluation is the provision of information that can be used as consideration in making decisions (Widoyoko, 2012).

According to Wirawan (2012), an evaluation program is an activity or activity designed to implement policies and implement them for an unlimited time. Certain policies are general in nature and to realize policies various types of programs are drawn up (Wirawan, 2012). Meanwhile, according to Nurhasan (2001), evaluation uses a tool or procedure used to find out and measure something in the atmosphere in a predetermined way and rules (Nurhasan, 2001).

Program evaluation according to Arikunto (2009) is a unit or unit of activity that aims to collect information about the realization or implementation of a policy, takes place in a continuous process, and occurs in an organization that involves a group of people for decision making (Arikunto, 2009).

Evaluation is defined in a variety of different statements. According to Fitzpatrick, Sanders et al. (2011) evaluation is the process of identifying, clarifying, and applying criteria to determine the value of an evaluation object (value/benefit) related to certain criteria (Fitzpatrick et al., 2011). While program evaluation according to the Joint Committee, in Means et al. (2009) is a systematic investigative activity about a valuable and valuable object (Means et al., 2009).

Evaluation is the process of collecting and processing data and information that will be used as a basis for decision making, management and development of study programs/universities in the future (Auliya et al., 2018). While self-valuation is an effort by the study program/college to find out the picture of its performance and condition through studies and analysis carried out by the study program/college itself regarding strengths, weaknesses, opportunities, challenges, obstacles, and even threats (Swaffield & MacBeath, 2005). The assessment and analysis can be carried out by utilizing peer experts from outside the study program/university, so that self-evaluation can be carried out objectively (Brady, 2016).

Many evaluation models developed by experts can be used in evaluating learning programs. The CIPP (Context, Input, Process and Product) model is one of the models that is widely known and used by evaluators (Umam & Saripah, 2018; Zhang et al., 2011). Another model is the Kirpatrick which has undergone several refinements (Dwikurnaningsih et al., 2022). In this program evaluation, a combination of two models, namely the Kirkpatrick model and the CIPP model, will be used as a strategy or work guideline in the implementation of program evaluation.

From Kirkpatrick's model that will be used is level 2 (learning evaluation) and level 4 (result evaluation) (Khalid, 2012). Level 2 is used because participants are said to have learned if they have experienced changes in attitudes, improved knowledge, and improved skills. Therefore, to measure the effectiveness of the program, these three aspects need to be measured. Without a change in attitude, an increase in knowledge or skills in participants, the program can be said to fail. While level 4 is focused on the results that occur after participating in a program (Adedokun-Shittu & Shittu, 2013).

From the CIPP model to be used are the Input and Process components. The input component is used because the evaluation of inputs can help in making decisions, determining available sources, what alternatives are taken, what are the plans and strategies to achieve the goals, and what are the work procedures to achieve them (Kurniawati, 2022). The components of input evaluation include: 1) Human resources, 2) Supporting facilities and equipment, 3) Funds or budget, and 4) Various procedures and rules required. Process evaluation is used to detect or predict draft procedures or implementation design during the implementation phase, providing information for program decisions and as a record or archive of procedures that have occurred (Toosi et al., 2021). Process evaluation includes the collection of assessment data that has been determined and applied in program implementation practices. Basically, process evaluation is carried out to find out to what extent the plan has been implemented and what components need to be improved (Muji et al., 2021).

Self-evaluation in is the right way to improve the academic quality of the study program (McNamara & O'Hara, 2008). The purpose of self-evaluation is to provide input materials for department leaders and faculties regarding the governance of the ongoing study program (Mussweiler & Strack, 2000). Findings that are not as expected or planned are sought for future improvements.

This study aims to find out that are; 1) The effectiveness of the services that have been provided by the Study Program to users of the Bachelor of Biology Education Service FKIP – UT. 2) Student services of the Biology Education Study Program FKIP –UT. 3) Service user satisfaction of the Biology Education Study Program FKIP –UT. 4) Characteristics of the learning process of the Biology Education Study Program FKIP – UT. 5) The learning experience of service users of the Biology Education Study Program FKIP –UT.

## Method

This study uses two methods, namely quantitative and qualitative methods. The quantitative method is carried out by surveying all graduates/ students using questionnaires (letters, forms). While the qualitative method is limited to respondents who are randomly selected proportionally. Qualitative data collection was conducted through online interviews.

Respondents are graduates and students in the Biology Education Alumni community group and students of the Biology Education S1 Study Program FKIP-UT. The population in this study is all graduates in 2020, 2019, 2018, 2017, 2016, and active students of the Biology Education S1 Study Program FKIP-UT and the sample of this study is alumni and students who are included in the WA Biology Education Alumni group. Biology Education Communication Forum. This study used an evaluation research design. The evaluation research procedure carried out is as follows:
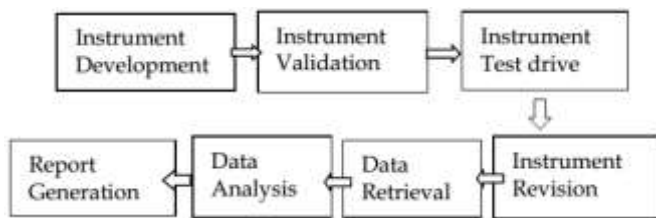


**Figure 1.** Research procedures

Research instruments using instruments/ questionnaires developed by FKIP are given to graduates and students of the S1 Biology Education Study Program FKIP-UT to obtain quantitative data. While the interview guideline instrument is used to obtain qualitative data. The data and information

obtained were analyzed descriptively qualitatively and quantitatively to see the satisfaction of administrative and academic services for users, the characteristics of the learning process, learning materials, learning resources used, and learning experiences in the S1 Biology Education Study Program FKIP-UT.

## Result and Discussion

The effectiveness of the services provided by the S1 Biology Education Study Program FKIP-UT to service users as this figure below.
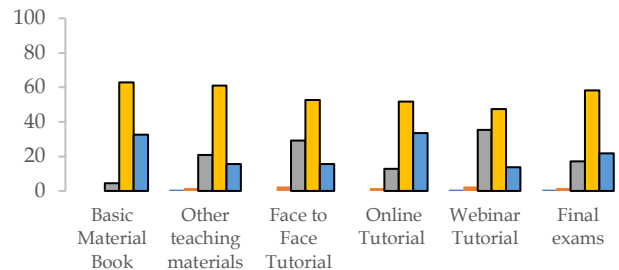


**Figure 2.** Graph of the level of satisfaction with the effectiveness of academic and administrative services of the S1 Biology Education Study Program

Judging from the effectiveness of the services provided by the S1 Biology Education Study Program to respondents, it can be seen that 62.5% of respondents and 59% of respondents are satisfied with the services of the Subject Material Book and other teaching materials they use. And as many as 33% and 16.2% of respondents were very satisfied. Similarly, for tutorial services, both online tutorials, face-to-face tutorials and webinar tutorials, as many as 48.5%, 44.7%, and 43.1% of respondents were satisfied and as many as 35% of respondents, 18.1% of respondents and 14.7% of respondents were very satisfied with the services provided by the S1 Biology Education Study Program. As well as teaching materials and tutorials, for the final semester exam, 56.2% of respondents were satisfied and 22.9% were very satisfied with the services provided by the Study Program (Eryuni Ramdhayani et al., 2020; Frye & Hemmer, 2012).
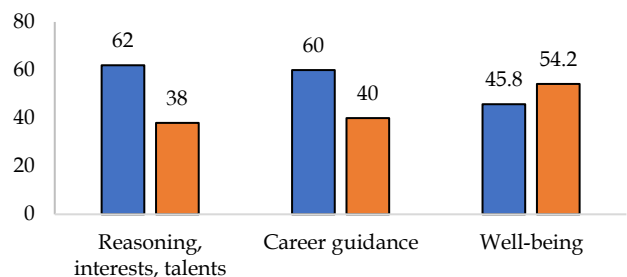


**Figure 3.** Graph of student services provided by the S1 Biology Education Study Program

Most respondents already know the student services provided by the S1 Biology Education Study Program. As seen in Figure 2 as many as 62% of respondents know reasoning services, interests, and talents, 60% know career guidance services and as many as 45.8% know welfare services.
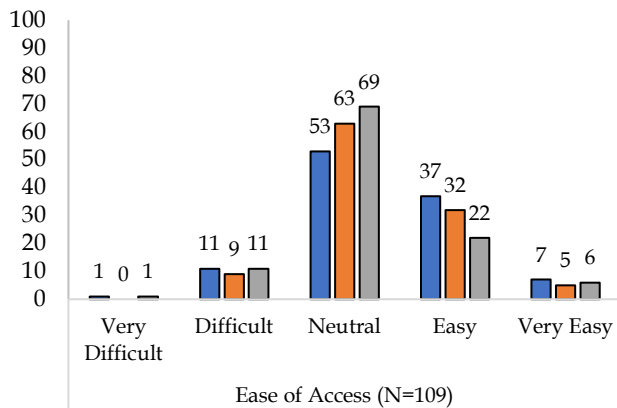


**Figure 4.** Student graph accesses information about student services provided by the S1 Biology Education Study Program

In accessing information about student services provided by the S1 Biology Education Study Program, there are still students who are very difficult to access, which is as much as 0.9% for reasoning and welfare. 6.4% have very easy access to reasoning services, 4.6% have access to career guidance and 5.5% have access to well-being (Mahayukti et al., 2020; Pantiwati, 2016).
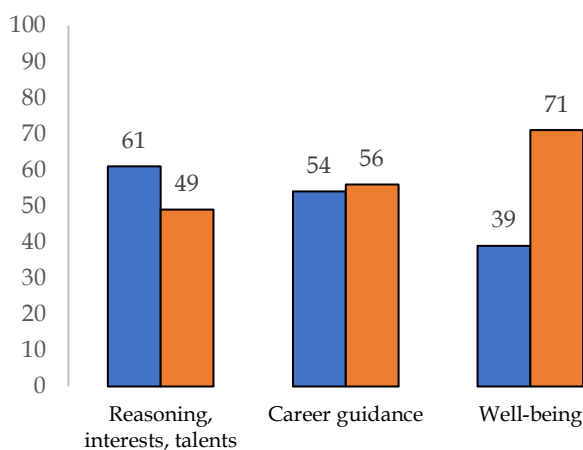


**Figure 5.** Usefulness graph in the field of student services

In terms of the benefits of this field of student services, as many as 55.5% have felt the benefits of reasoning services, interests, and talents, 49.1% have felt career guidance services, and as many as 35.5% have felt welfare services provided by the S1 Biology Education Study Program.

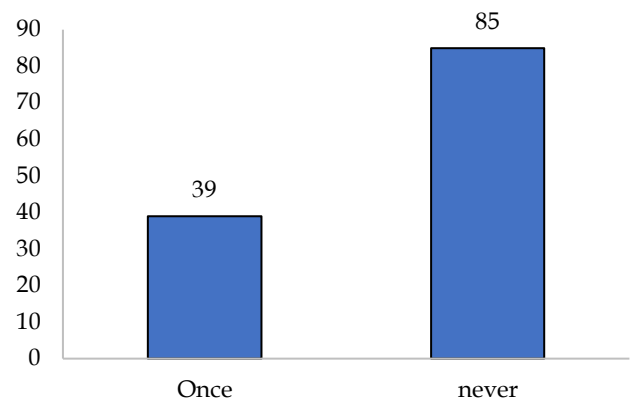Service user satisfactionn S1 Biology Education Study Program FKIP –UT.



**Figure 6.** Student graph has read the report on the results of measuring satisfaction with services

From Figure 5, as many as 85% of respondents have never read the report on the results of measuring student satisfaction with services and as many as 39% have read the report on the results of measuring satisfaction with the services provided by the S1 Biology Education Study Program.
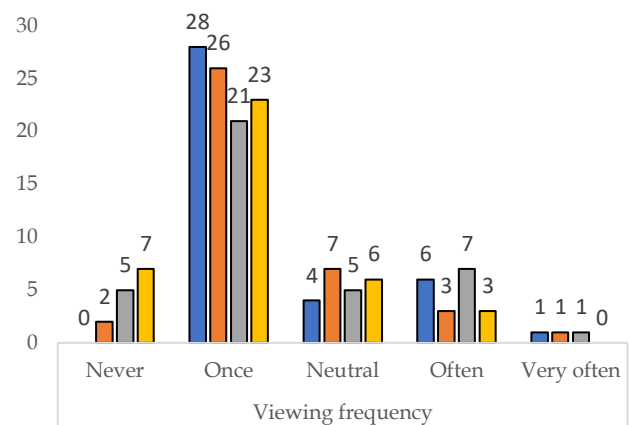


**Figure 7.** Source graph of service satisfaction measurement report

The sources that respondents have read about the report on the results of service satisfaction measurement came from UT Web as much as 71.8%, Study Program Web as much as 66.7%, social media (IG, FB) as much as 53.8% and as much as 59% came from Brochures/leaflets. As many as 2.6% of respondents often read reports on the results of measuring satisfaction with services through UT Web, Study Program Web and social media (IG, FB).

Learning experience of service users of the S1 Biology Education Study Program FKIP – UT.
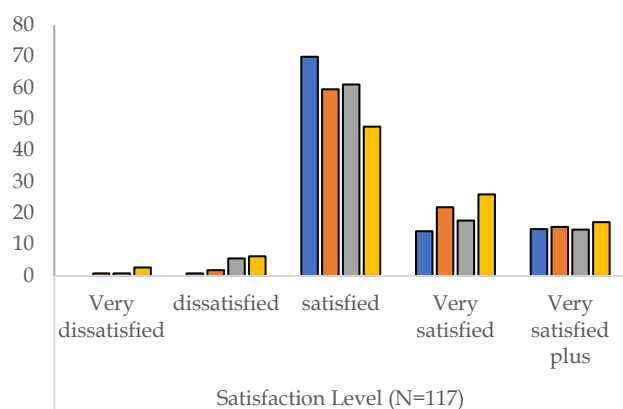
**Figure 8.** Graph of satisfaction with the learning experience in the S1 Biology Education Study Program

Most respondents were satisfied with the learning experience in the S1 Biology Education Study Program. This can be seen from respondents who said they were satisfied with the discussion as much as 69.9%, tutorial assignments as much as 59.6%, practice 61.1%, and practicum 47.7%. As many as 15% of respondents said they were very satisfied with the discussion, 15.6% of respondents to tutorial assignments, 14.8% of respondents to practice, and 17.1% of respondents to practicum.

## Conclusion

In general, respondents were satisfied and very satisfied with administrative and academic services in the S1 Biology Education Study Program FKIP-UT. We can conclude that; 1) responding to the effectiveness of academic and administrative services of the S1 Biology Education Study Program FKIP-UT, most of the respondents were satisfied and very satisfied both in the Basic Material Book service, other teaching materials, face-to-face tutorials (TTM), online tutorials (Tuton), webinar tutorials (Tuweb) and in the final examination service, 2) Respondents already know the services provided by the S1 Biology Education Study Program FKIP-UT and easily access them, 3) Respondents have read reports on the results of measuring satisfaction with services through UT Web, Study Program Web, Social Media, and brochures/leaflets, 4)Regarding the learning experience in the Study Program, respondents felt satisfied, very satisfied and very satisfied in discussions, tutorial assignments, practice and practicum.

**Authors Contribution**

Leonard Raden Hutasoit: Conceptualization, methodology, writing—original draft preparation, formal analysis, investigation, and visualization. Anna Ratnaningsih: validation, supervision, and resources. Krisna Iryani and Tri Wahyuningsih:writing—review and editing.

**Conflicts of Interest**
The authors declare no conflict of interest.

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