Self-evaluation: aviation fire and rescue study program in improving quality

Anton Abdullah[1*)], Syukri Hamzah[2], Hadi Winarto[2]

[1]Politeknik Penerbangan Palembang
[2]Universitas Bengkulu

Article Info

ABSTRACT

This research was conducted as a first step in improving the quality of the Aviation Fire and Rescue Study Program of Palembang Aviation Polytechnic in evaluating itself to obtain information and recommendations for descriptions of each assessment criteria that need to be considered to determine the feasibility of the Study Program based on the criteria that refer to the National Higher Education Standards. This study uses a qualitative approach with a descriptive method, in which the researcher explores the criteria of the Aviation Fire and Rescue Study Program of the Palembang Aviation Polytechnic then looks at suggestions and recommendations to see whether these conditions or criteria have met the Study Program Accreditation based on criteria that refer to the National Standard. Higher education. The results showed that the Aviation Fire and Rescue Study Program of Palembang Aviation Polytechnic got a score of 246.72. The description of the assessment based on the data and information of the Aviation Fire and Rescue Study Program of Palembang Aviation Polytechnic reaches the Good criteria, it needs more effort that must be improved and get attention to be able to go to the Very Good criteria and towards Excellence.

Corresponding Author:

Anton Abdullah,
Politeknik Penerbangan Palembang
Email : anton@poltekbangplg.ac.id

Introduction

Accreditation is an activity to evaluate program feasibility in an educational unit based on predetermined criteria. This research originated from the idea of the Head of the Air Transportation Human Resources Development Center, Ir.HeriSudarmaji, DEA, QIA, regarding the Evaluation of Higher Education Institutions in the Air Transportation Human Resource Development Center (HRDC) to improve the quality of Higher Education Institutions. According to him, ten criteria must be evaluated to improve the quality of tertiary institutions within the Air Transportation Human Resources Development Center.

Accreditation is an assessment process with certain indicators based on facts (Awaludin, 2017). Then, he added, this institutional evaluation activity helps each UPT in determining the feasibility of Study Programs and Higher Education based on criteria that refer to the National Higher Education Standards. This also allows for the semi-external quality assurance of Study Programs and Higher Education by the Air Force Center both in academic and non-academic fields to protect the interests of students and society, before being carried out externally by BANPT. In addition to the legality of the Minister of Education and Culture, in the form of the study programs and college licenses, as well as university accreditation, BAN-PT recognition

standards and international certification are very fundamental things in ensuring the quality of universities(Reknati, 2019). Our college is a vocational college that produces graduates who are ready to work as aviation personnel whose technical services must comply with international standards from the International Civil Aviation Organization (ICAO). ICAO as an official legal entity under the United Nations which discusses Civil Aviation (ICAO, 2016)

All four dimensions are analyzed by researchers and focus on how meaning, input, and process influence school products or performance. The principles used in developing products and instruments in this research are in accordance with the National Accreditation Board for Higher Education Regulation (BAN-PT, 2017)concerning the National Accreditation System for Higher Education.

BAN-PT accreditation is distinguished by the fact that the assessment is carried out by peer experts from outside the relevant institution (external peer reviewer) and is carried out on a voluntary basis for universities conducting a program of study (BAN-PT, 2017).

This is in line with the international standards of ICAO as the official legal entity under the United Nations which regulates Civil Aviation, which requires that every aviation personnel must have a license or certificate of competence in the field of aviation. The same is required nationally through Aviation Law No.1 of 2009 on Aviation. The Aviation Law also states that Aviation Personnel is licensed or certified personnel who are given duties and responsibilities in the field of aviation. Meanwhile, a license is a permit given to a person who has et certain requirements to carry out work in his field within a certain period of time. A competency certificate is proof that a person has met the requirements for knowledge, expertise, and qualifications in the field. A competency certificate is obtained through training that has been recognized internationally (Undang-Undang Tentang Penerbangan, 2009).

The research by Abdullah (2020)shows that work culture and training programs have a positive and significant effect, both partially and simultaneously, on the performance of the Palembang training center. This means that work culture and training programs are indicators that need to be evaluated to improve accreditation in the Aviation and Rescue study program.
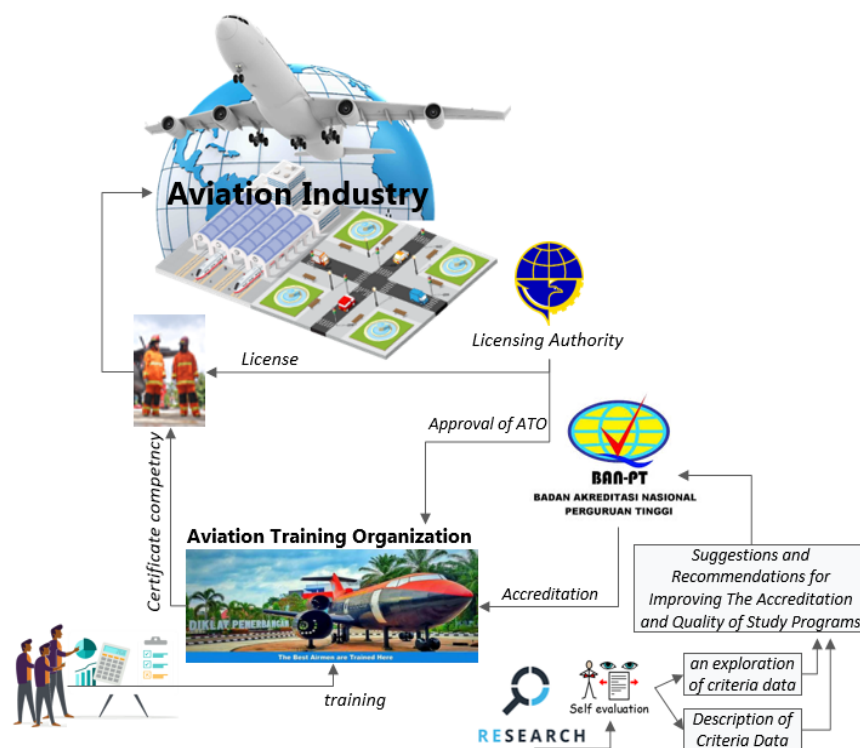

Figure 1. Research flow helps the accreditation process and the quality of the study program

Based on the background and critical issues mentioned above and related to the Evaluation of Change Management at the Institutional Polytechnic in the HRDC environment, in the future, several things need to be done to improve the quality and quantity of human resources to meet national needs, and international labor requirements in the field of aviation. Therefore, the problem formulation is: 1) What are the results of the evaluation of the Aviation Fire and Rescue Study Program of Palembang Aviation Polytechnic? 2) Based on

the results of the evaluation and the assessment criteria for the assessment criteria, what are the things that need to be considered to improve the quality the Aviation Fire and Rescue Study Program of Palembang Aviation Polytechnic? The purpose of this research is: 1) Obtain information on the evaluation results of the Aviation Fire and Rescue Study Program of Palembang Aviation Polytechnic to be immediately followed up as an organization or institution in the field of aviation and vocational study programs in meeting the National Higher Education standards. 2) Obtain recommendations for evaluation results and descriptions of each assessment criteria that need to be considered in order to improve the quality of the Aviation Fire and Rescue Study Program of Palembang Aviation Polytechnic.

Method

The place of this research is in the Aviation Fire and Rescue Study Program of Palembang Aviation Polytechnic.The time used in this study was 6 (six) months starting from July to December 2020.This research is qualitative so that it uses research informants, namely the Director, UPPS, Head of the Aviation Fire and Rescue Study Program, lecturers, and educational staff consisting of administrative staff, technicians, laboratory assistants, and librarians. Qualitative research is an approach to conducting research oriented to natural phenomena or symptoms (Abdussamad & SIK, 2021).This research is based on the evaluation of quality at the level of administration and implementation of vocational higher education in the Aviation Fire and Rescue Study Program of Palembang Aviation Polytechnic. This research design uses a qualitative approach with descriptive methods, using the CIPP model, and is a case of studying the system of administration and implementation of vocational higher education. The CIPP evaluation model was developed by Stufflebeam (1983). This model calls for four elements: context, input, process, and product(Salam et al., 2019).

Context evaluation
The background was assessed for this analysis by reviewing documents covering leadership efficiency and success in governance. The quality of leadership and governance performance includes the integrity of the vision and mission of the study program, leadership, guardianship, resource management systems, strategic partnerships, and internal quality assurance systems.

Input evaluation
Evaluation of input includes the availability of existing resources to achieve goals and meet needs(Stufflebeam & Zhang, 2017). For this study, input evaluation includes human resources (lecturers and education staff), students/cadets, curriculum, infrastructure, finance (financing, and funding).

Process evaluation
The basic purpose of process evaluation is to provide an overview of all activities in the program (Manan et al., 2020). For this research, process evaluation includes the learning process, research, community service, and academic atmosphere.

Product evaluation
Product evaluation assesses outcomes and outcomes, short and long terms, intentional and unintentional, which not only tracks but also focuses on meeting (or not) goals (Sopha & Nanni, 2019). For this research, product evaluation includes the quality and productivity of outputs and outcomes: in the form of graduate quality, scientific products and innovations, and benefits to society.

Referring to the CIPP dimension above, the criteria are adjusted to the higher education accreditation criteria (Attachment 1 Academic Paper-Study Program Accreditation Instrument version 4.0, 2019) includes evaluation of the implementation of educational programs which are grouped into 9 accreditation criteria, one criterion for an assessment of the ability of the study program management unit (UPPS) in recognizing external conditions that affect the existence and development of study programs (PS), one criterion for the ability of UPPS to describe its own profile and the study programs it manages in several important and strategic aspects, 4 criteria as well as the ability of UPPS to analyze and determine future accredited study program development programs. These criteria are as follows:

Criterion 1 External Condition
The assessment of these criteria is focused on consistency with the results of the SWOT analysis and/or other analyzes as well as future development plans (David, 2014).

Criterion 2 Institutional Profile
The assessment of this criterion is focused on the coverage of information in the profile and the consistency between the profile and the data and information presented in each criterion.

Criterion 3 Vision, Mission, Goals, and Strategy

The evaluation of these criteria is focused on 1) Clarity, realisticness, and linkages between the scientific vision, mission, goals, objectives, and strategies for achieving the objectives of the study program management unit, their relationship with the vision, mission, goals, and objectives of the institution, and the relationship with the specified graduate learning outcomes; 2) Understanding, commitment, and consistency in the development of study programs to achieve the vision and learning outcomes of graduates as well as targeted quality with planned, effective, and directed program steps.

Criteria 4 Governance, Governance and Cooperation

Focused on: 1) completeness of the structure and organs of higher education to be able to realize the principles of excellent and effective civil service; 2) the performance and effectiveness of leadership, governance, resource management systems and university programs, including communication systems and information technology used to support civil service and higher education governance; 3) completeness and clarity of the internal quality assurance system and consistency and effectiveness of its implementation; and 4) the existence of policies and the implementation of strategic cooperation and partnerships in the implementation of higher education, both academic and non-academic in tertiary institutions in a sustainable manner at the national, regional, and international levels, and their effectiveness in achieving the vision and mission of higher education and increasing the competitiveness of higher education.

Criteria 5 Students

Focused on: 1) the existence of a new student admission system policy that meets the principles of open access and equity as well as consistency in its implementation; 2) the effectiveness of the new student admission system which is fair and objective, the balance of the ratio of students to lecturers and education staff at the tertiary level which supports the implementation of effective and efficient learning; 3) Policies, programs, involvement, and student achievements in fostering interests, talents, and professions; and 4) the existence of policies and implementation of a service system for students.

Criteria 6 Human Resources

Focused on: 1) the existence of policies and systems for recruitment, development, monitoring, rewards, sanctions, and termination of employment, both for lecturers and education staff to ensure the implementation of quality educational, research, and community service activities according to the vision and mission of the tertiary institution and consistency of implementation; 2) the effectiveness of the system of recruitment, development, monitoring, rewards, and sanctions on the availability of resources in terms of numbers, educational qualifications, and competencies, to carry out quality educational, research, and community service activities according to the vision and mission of higher education institutions; and 3) the existence of a survey mechanism for satisfaction, level of satisfaction, and feedback from lecturers and education staff on human resource management.

Criteria 7 Finance, Facilities and Infrastructure

Focused on: 1) existence of policies and financing systems for the administration of higher education and consistency in its implementation; 2) adequacy, effectiveness, efficiency, and accountability, as well as the sustainability of financing to support the implementation of education, research, and community service; 3) the existence of policies and systems for the provision and maintenance of facilities and infrastructure for administering higher education and consistency in their implementation; and 4) adequacy, effectiveness, efficiency, and accountability, as well as the sustainability of the provision and maintenance of facilities and infrastructure to support the provision of education, research, and community service.

Criteria 8 Education

Focused on: 1) the existence of higher education policies and support in curriculum development, learning processes, assessment systems, and quality assurance systems to support the achievement of graduate learning outcomes in the context of realizing the vision and mission of higher education institutions; and 2) the existence of a policy on the integration of research and community service activities in the educational process and consistency in its implementation.

Criteria 9 Research

Focused on: 1) the existence of policies and research development directions at the tertiary level as well as higher education support for the development and implementation of research activities in work units; 2) excellence, alignment of direction, and research programs with the university's vision; and 3) the existence and functioning of research groups and research laboratories.

Criteria 10 Community Service

Focused on: 1) the existence of policies and direction for developing community service activities at the tertiary level as well as university support for the development and implementation of community service

activities in the work unit; 2) excellence and suitability of community service programs with the university's vision and mission, and 3) the existence and functioning of the Community Service implementing group.

Criteria 11 Outputs and Tridharma Achievements
Focused on: 1) the productivity of the educational program, judged by the efficiency of education and the student's study period, 2) the results of graduate tracking, feedback from graduate users, and public perception of the quality of graduates by the learning outcomes of graduates set by the study program, 3) the number and excellence of scientific publications, the number of citations, the number of intellectual property rights, and the benefit/impact of research results on the realization of the vision and mission implementation, as well as the contribution of community service to the development and empowerment of social, economic and community welfare, and 4) adoption. the results of research and institutionalization of the results of community service by stakeholders and society.

Criteria 12 Analysis and Achievement of Performance
The assessment of these criteria is focused on the comprehensiveness (completeness, breadth, and depth), accuracy, sharpness, and appropriateness of the analysis of performance achievements and consistency with each criterion.

Criteria 13 SWOT analysis
The assessment of these criteria is focused on the appropriateness of the SWOT analysis or relevant analysis in developing an institutional strategy(Rangkuti, 2014).

Criteria 14 Development Programs
Assessment of these criteria is focused on accuracy in determining development program priorities.

Criteria 15 Program Sustainability
The assessment of these criteria is focused on policies, availability of resources, ability to implement, and program characteristics.

Results and Discussions

From the 15 criteria then an indicator of each criterion is developed, the total is 49 indicators according to the indicator matrix on the study program accreditation instrument. Then the data explored and given a weighted scoring assessment, with a weighted score as follows:

Table 1. Chapter/Criteria Weights

No.	Criteria	Item (No.)	Criteria weights	Weights of criteria per item
1.	External Condition	1(1)	1	1
2.	Institutional Profile	2(1)	1	1
3.	Institutional Profile	3(1)	3.1	3.1
4.	Governance, Governance and Cooperation	4 – 10 (7)	6.1	0.87
5.	Students	11 – 12 (2)	9.2	4.6
6.	Human Resources	13 – 21 (9)	12.3	1.37
7.	Finance, Facilities and Infrastructure	22 – 29 (8)	6.1	0.76
8.	Education	30 – 33 (4)	18.4	4.6
9.	Research	34 – 35 (2)	4.6	2.3
10	Community Service	36 – 37 (2)	1.5	0.75
11.	Outputs and Tridharma Achievements	38 – 45 (8)	30.7	3.84
12.	Analysis and Achievement of Performance	46 (1)	1.5	1.5
13.	SWOT analysis	47 (1)	2	2
14.	Development Programs	48 (1)	1.5	1.5
15.	Program Sustainability	49 (1)	1	1

Each item of study program assessment indicators is analyzed and assessed quantitatively with a score range of 0 to 3. A score of 0 is the lowest score that increases with the better the quality of the items being assessed, with a maximum score of 3. The instrument used in this study amounted to 49 items that assessed 15 criteria. Each item has a different weight. The likely range of initial weighted scores obtained by an institution is from 100 to 300. To determine the equivalence of the weighted initial score with the score from BANPT, it is necessary to transform the score. The transformation used is linear in the form:

$$y = m + sx \qquad (1)$$

Where,

y = scaled score
m = Location factor
    = (lowest desired value) - (lowest initial value x)
s = Distance factor
    = (desired range) / (initial range)
x = the score to be transformed is the raw score

For example, the scaled score has a range from 0 to 400 (BANPT score) with the lowest weighted raw score equal to 100 and the highest weighted raw score equal to 300, the transformation equation becomes:y = -200 + 2x. For example, an institution has a weighted initial score of 282.81, then the scaled score is 365.62. Based on the self-evaluation carried out, the data results from the 15 criteria are presented below.

Table 2. Score Result

No.	Criteria	Score
1.	External Condition	3,00
2.	Institutional Profile	3,00
3.	Institutional Profile	3,00
4.	Governance, Governance and Cooperation	2,71
5.	College student	3,00
6.	Human Resources	2,33
7.	Finance, Facilities and Infrastructure	2,50
8.	Education	3,00
9.	Research	2,00
10	Community Service	2,00
11.	Outputs and Tridharma Achievements	1,13
12.	Analysis and Achievement of Performance	3,00
13.	SWOT analysis	3,00
14.	Development Programs	3,00
15.	Program Sustainability	3,00
	Initial Score	**223,36**
	Scaled Score	**246,72**
	Category	**GOOD**

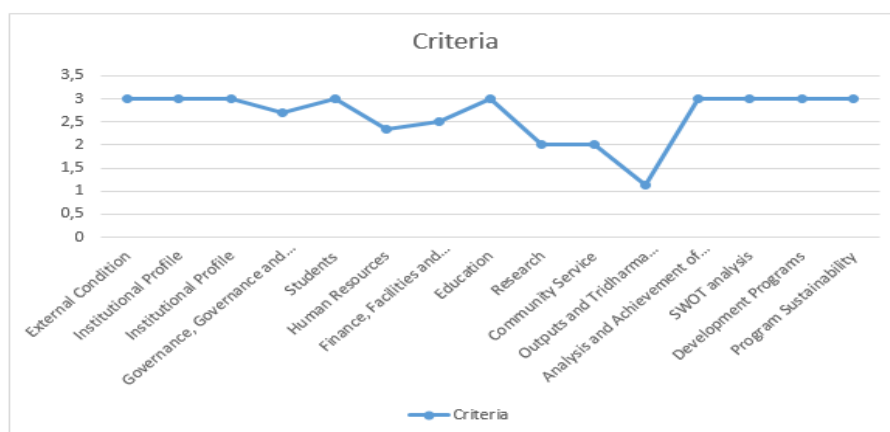Furthermore, when presented graphically, the results of quantitative analysis are as follows:

Figure 2. Graph of evaluation result of the aviation fire and rescue study program of palembang aviation polytechnic

Based on the self-evaluation carried out, the results of the assessment description of the 15 criteria based on the data and information of the Aviation Fire and Rescue Study Program of Palembang Aviation Polytechnic are presented below.

Table 3. Description Result

No.	Criteria	Description of the Assessment Based on Data and Document Information
1.	External Condition	DIII PPKP Study Program is able to identify relevant, comprehensive, and strategic external environmental conditions.
2.	Institutional Profile	The profile description of the DIII PPKP Study Program shows the multiplicity of the information presented concisely and clearly, consistent with the data and information presented in each of the criteria.
3.	Institutional Profile	The DIII PPKP Study Program has: 1) development plans include long term, medium term, and short term, 2) performance indicators, 3) targets that are oriented towards international competitiveness and have been implemented consistently, 4) the goal of providing skilled human resources to anticipate present and future needs, and 5) targets that lead to national economic development.
4.	Governance, Governance and Cooperation	The DIII Study Program has a formal civil service system document that is translated into various policies and regulations that are used consistently, effectively, andefficiently according to the institutional context as well as ensuring accountability, sustainability, transparency, and mitigation of potential risks.
5.	Leadership	The leadership realizes all strategic and operational plans which are programmed and intensively through good communication with internal stakeholders and can make strategic and innovative decisions with measurable risks in implementing operational policies.
6.	Management	The DIII PPKP Study Program has formal evidence of the functioning of the higher education functional and operational management system which includes 5 aspects that are implemented consistently, effectively, and efficiently.
7.	Quality Assurance System	The DIII PPKP Study Program has implemented SPMI which is proven by the existence of 5 aspects, has standards that exceed SN-DIKTI which brings international competitiveness in significant quantity and quality, and is effective for fostering a quality culture, as well as implementing SPM innovations, such as risk (Risk-Based Audit) or other innovations.
8.	Cooperation	The DIII Study Program has a formal document of policiesand procedures, which is comprehensive, detailed, up-to-date, and easilyaccessible tostakeholders,regarding networkdevelopment andpartnerships(domestic and foreign) includinghow to monitor and evaluate the satisfaction of cooperation partners.
9.	Evaluation of Performance Results	The analysis of the performance achievement of the DIII PPKP Study Program has fulfilled 2 aspects, is carried out annually and the results are published to stakeholders
10.	Stakeholder satisfactioninterests.	The DIII PPKP Study Program carried out the measurement of the satisfaction of internal and external stakeholders on each of the criteria that met 4 aspects, the results were published and easily accessed by interests, and carried out a review of the implementation of measuring user satisfaction.
11.	College student Key Performance Indicators Quality of Student Input Student Selection	The DIII PPKP Study Program in 2020 has a ratio of the number of applicants to the number of applicants who passed the selection in the main program is$\geq$ 5 which is 6.95.
12.	College Student Services	Study Program DIII PPKP provides student services in the form of: 1) coaching and developing interests and talents, 2) welfare improvement, as well 3) career counseling and entrepreneurship guidance.

No.	Criteria	Description of the Assessment Based on Data and Document Information
13.	C.4 Human Resources C.4.4 Key Performance Indicators C.4.4.a) Adequacy Profile of Study Program Lecturers	The ratio of the number of permanent lecturers who meet the lecturers' requirements to the number of study programs is still not good.
14.	Lecturer Functional Position	The DIII PPKP Study Program does not yet have a minimum functional position as Head Lector
15.	Lecturer Certification	The percentage of lecturers who have professional educator certificates / professional certificates to the total number of lecturers is still not good
16.	Non-Permanent Lecturer	The DIII PPKP Study Program Study Program has a good percentage of the number of non-permanent lecturers to the total number of lecturers (permanent lecturers and non-permanent lecturers) (zero %)
17.	Lecturer Workload	The ratio of the number of students to the number of lecturers is still good. The ratio achievement of the number of cadets to the number of permanent lecturers in the study program presented in 2020 is 1: 4 with 24 active cadets. If the number of active cadets is counted for 3 academic years (batches 1,2 and 3), the number of active cadets is 72 (24x3), so the ratio of permanent lecturers to active cadets becomes 12 (72/6)
18.	Lecturer Performance Lecturer Research Productivity	The average research/lecturer/year in the last 3 years has been good. The research achievements of PPKP DIII Study Program lecturers still focus on sources of funding from higher education or independent universities, namely 4 (2018); 4 (2019); and 3 (2020)
19.	The productivity of PkM Lecturers	The average PkM / lecturer/year in the last 3 years has been good. Sources of community service financing have a high amount of financing, namely 17 community service sources for sources originating from university or independent. Meanwhile, foreign institutions have a total of 2 community services. So that until 2020 the total PkM activities are 19.
20.	Lecturer Recognition	The lecturers' achievements in terms of lecturer productivity in obtaining recognition for the number of permanent lecturers have exceeded the DIII PPKP Study Program target of 15%. Lecturer recognition for the last 3 years was 133.3%. Meanwhile, the reconstruction in each year is 83.3% for 2020; 16.67% for 2019 and 33.33% for 2018. If seen in the last three years cumulatively, the achievement of lecturers' recognition was 8 achievements or when compared to the technicians to the number of permanent lecturers it was 1.33.
21.	Education Personnel	The DIII PPKP Study Program has educational personnel who meet the level of adequacy and qualifications based on the type of work (librarian, laboratory assistant, technician, instructor, etc.) to support the implementation of Tridharma, functions, and institutional development effectively.
22.	Finance, Facilities, and Infrastructure Key Finansial Performance Indicators Acquisition of Funds	The percentage of funds obtained from students to the total acquisition of higher education funds cannot yet be calculated.
23.		The percentage of obtained college funds from other than students and ministries/ institutions to the total acquisition of higher education funds is more than 10%
24.	Use of Funds	The average operational funding for the learning process/student/year is more than 20 million
25.		The average research fund for lecturers/year is still less than 10 million per a lecturer.
26.		The average PkM funding for lecturers/year is good.

No.	Criteria	Description of the Assessment Based on Data and Document Information
27.	Facilities and infrastructure	The DIII PPKP Study Program has facilities and infrastructure that: 1) Relevant and up-to-date to support learning (the availability of tools during practice is sufficient to allow a student to practice it directly), research, PkM, and facilitating those with special needs according to SN-DIKTI. 2) Supporting Tridharma through the existence of a teaching factory (factory for teaching) or teaching industry (attachment to industry).
28.		The DIII PPKP Study Program has an information system for administrative services that have proven to be effective in fulfilling the following aspects: 1) includes academic services, finance, human resources, and facilities and infrastructure (assets), 2) easily accessible to all work units within the scope of the institution, 3) complete and up to date, 4) all types of services have been integrated and used for decision making, and 5) all types of integrated services are regularly evaluated and the results are followed up to improve the information system.
29.		The DIII PPKP Study Program has an information system for service learning, research, and PkM processes that fulfill the following aspects: 1) availability of e-learning services, libraries (e-journals, e-books, repository, etc.) and 2) easily accessible to the academic community.
30.	Education Curriculum Main Performance Indicators	The DIII PPKP Study Program has guidelines for curriculum development which contain: 1) Profile of graduates, learning outcomes that refer to KKNI, study materials, curriculum structure, and semester learning plans (RPS) which refer to SN-DIKTI and benchmarks at international institutions, the latest regulations, and sensitivity to the latest issues including character education, SDGs, Drugs, and anti-corruption education in accordance with the education program being implemented, 2) The mechanism for determining (legality) of the curriculum involves authorized elements in the institution in an accountable and transparent manner.
31.	Learning	The DIII PPKP Study Program has guidelines on the application of a lecturer assignment system based on needs, qualifications, expertise, and experience in the learning process.
32.	Research and Integration PkM in Learning	The DIII PPKP Study Program has a formal policy document and guidelines for integrating research and PkM activities into learning.
33.	Academic atmosphere	The DIII PPKP Study Program has a formal policy document for the academic atmosphere which includes: scientific autonomy, academic freedom, and freedom of the academic pulpit.
34.	Research Key Research Performance Indicators	The DIII PPKP Study Program does not yet have a formal Research Strategic Plan document that contains a development foundation, a research roadmap, resources, strategic program objectives, and performance indicators.
35.		The DIII PPKP Study Program has socialized research guidelines, is easily accessible, is in accordance with the research strategic plan, and is understood by stakeholders.
36.	Community service Main Performance Indicators of PkM Implementation	The DIII PPKP Study Program does not yet have a formal PkM strategic plan document which contains the development foundation, PkM road map, resources (including internal PkM fund allocation), strategic program objectives

No.	Criteria	Description of the Assessment Based on Data and Document Information
37.		The DIII PPKP Study Program has PkM guidelines that are socialized and easily accessible to stakeholders.
38.	The Output and Achievement of Tridharma Main Education Performance Indicators Student Achievement Index	The DIII PPKP Study Program has not been able to calculate the average GPA of students in the last 3 years, because students are still running in semester 1.
39.		The percentage of graduates who have competency/professional/industry certificates in the last 3 years is more than 30%
40.	Academic Achievements Student	The DIII PPKP does not yet have student academic achievements, both national and international
41.	Non-academic achievements College student	The DIII PPKP does not yet have non-academic achievements, both national and international students
42.	Wait Time for Graduates	The length of time waiting for graduates of the main program in tertiary institutions to get their first job is less than 3 months, it can be ascertained because of the POLBIT program (directly working as a civil servant under the Ministry of Transportation)
43.	Suitability of the Field of Work of Graduates	There is suitability in the field of work of graduates from the main program in higher education to the competence of the field of study, namely as airport PKP-PK personnel.
44.	Research and PkM Scientific Publications	The number of publications in journals in the last 3 years has been good
45.		The number of research outputs / other PkM by DTPS in the form of HKI is good.
46.	Analysis and Determination Program Development Performance Analysis and Outcomes	The DIII PPKP has conducted a performance achievement analysis whose analysis has been supported by relevant data/information (referring to the achievement of higher education quality standards) and of quality (reliable and adequate).
47.	SWOT analysis or another analysis Relevant	The DIII PPKP has conducted a SWOT analysis or other relevant analysis and fulfilled the following aspects: identified strengths or driving factors, weaknesses or inhibiting factors, opportunities and threats faced by the institution and carried out appropriately.
48.	Development Program	The DIII PPKP prioritizes development programs based on the results of a SWOT analysis or other analysis that considers comprehensively: 1) institutional capacity, 2) future institutional needs, 3) the applicable institutional strategic plan, and 4) aspirations from internal stakeholders.
49.	Sustainability Program	Study Program DIII PPKP has policies and efforts to ensure the sustainability of the program which includes: 1) resource allocation, 2) ability to implement, and 3) sustainable quality assurance plan.

DIII PPKP Study Program is able to identify relevant, comprehensive, and strategic external environmental conditions.The profile description of the DIII PPKP Study Program shows the multiplicity of the information presented concisely and clearly, consistent with the data and information presented in each of the criteria.The DIII PPKP Study Program hasdevelopment plans include long term, medium term, and short term, performance indicators,targets that are oriented towards international competitiveness and have been implemented consistently,the goal of providing skilled human resources to anticipate present and future needs, and targets that lead to national economic development.The DIII Study Program has a formal civil service system document that is translated into various policies and regulations that are used consistently, effectively, andefficiently according to the institutional context as well as ensuring accountability, sustainability, transparency, and mitigation of potential risks.

The leadership realizes all strategic and operational plans which are programmed and intensively through good communication with internal stakeholders and can make strategic and innovative decisions with measurable risks in implementing operational policies.The DIII PPKP Study Program has formal evidence of the functioning of the higher education functional and operational management system which includes 5 aspects that are implemented consistently, effectively, and efficiently.The DIII PPKP Study Program has implemented SPMI which is proven by the existence of 5 aspects, has standards that exceed SN-DIKTI which brings international competitiveness in significant quantity and quality, and is effective for fostering a quality culture, as well as implementing SPM innovations, such as risk (Risk-Based Audit) or other innovations.The DIII Study Program has a formal document of policies and procedures, which is comprehensive, detailed, up-to-date, and easily accessible to stakeholders, regarding network development and partnerships (domestic and foreign) including how to monitor and evaluate the satisfaction of cooperation partners.The analysis of the performance achievement of the DIII PPKP Study Program has fulfilled 2 aspects, is carried out annually and the results are published to stakeholders. The lecturers' achievements in terms of lecturer productivity in obtaining recognition for the number of permanent lecturers have exceeded the DIII PPKP Study Program target of 15%. Lecturer recognition for the last 3 years was 133.3%. Meanwhile, the reconstruction in each year is 83.3% for 2020; 16.67% for 2019 and 33.33% for 2018. If seen in the last three years cumulatively, the achievement of lecturers' recognition was 8 achievements or when compared to the technicians to the number of permanent lecturers it was 1.33.

The percentage of obtained college funds from other than students and ministries/ institutions to the total acquisition of higher education funds is more than 10%. The average operational funding for the learning process/student/year is more than 20 million. The DIII PPKP Study Program has facilities and infrastructure that relevant and up-to-date to support learning (the availability of tools during practice is sufficient to allow a student to practice it directly), research, PkM, and facilitating those with special needs according to SN-DIKTI. Supporting tridharma through the existence of a teaching factory (factory for teaching) or teaching industry (attachment to industry).

The DIII PPKP Study Program has guidelines for curriculum development which contain profile of graduates, learning outcomes that refer to KKNI, study materials, curriculum structure, and semester learning plans (RPS) which refer to SN-DIKTI and benchmarks at international institutions, the latest regulations, and sensitivity to the latest issues including character education, SDGs, Drugs, and anti-corruption education in accordance with the education program being implemented. The mechanism for determining (legality) of the curriculum involves authorized elements in the institution in an accountable and transparent manner.

Analysis and Determination Program Development Performance Analysis and Outcomes show that The DIII PPKP has conducted a performance achievement analysis whose analysis has been supported by relevant data/information (referring to the achievement of higher education quality standards) and of quality (reliable and adequate).

Various issues and internal and external conditions within Private Higher Education have positive and negative impacts, which, if analyzed, can become an effective strategy for developing Private Higher Education in the future. Through SWOT analysis, it will be useful to determine strategic choices in understanding the potential of private universities to survive in the future era of globalization (Resmi, 2017). SWOT analysis or another analysis in DIII PPKP has conducted a SWOT analysis or other relevant analysis and fulfilled the following aspects: identified strengths or driving factors, weaknesses or inhibiting factors, opportunities and threats faced by the institution, and carried out appropriately.

The research by Abdullah (2020) shows that work culture and training programs have a positive and significant effect, both partially and simultaneously, on the performance of the Palembang training center. This means that work culture and training programs are indicators that need to be evaluated to improve accreditation in the Aviation and Rescue study program.

Conclusions

Based on the evaluation and discussion data, the conclusions that can be presented are 1) Evaluation results: score of 246.72, with the criteria group Good; 2) There are several things that need to be fixed and get attention, namely: governance, human resources, finance, research, PKM, and Tri Dharma's output. Some suggestions related to things that need to be considered to improve institutional quality are: 1) Some of the criteria that are not yet optimal are: criteria 4, 6, 7, 9, 10, and 11 (Governance, human resources, finance, research, PKM, and Tri Dharma outcomes). Thus, these criteria should be of concern and efforts to improve quality through various programs and activities are necessary; 2) Regarding suggestion number 1, a low score on the Tri Dharma output criteria occurred in the Aviation Fire and Rescue Study Program. Thus, if a priority

scale is made, then Tri Dharma's output criteria need special attention so that the evaluation result score can at least increase for the "Very Good" criteria. If the acquisition of a score of 2 is also something that must be considered, then most of the criteria are a problem. Therefore, in fact, all the criteria need improvement efforts to reach the "Excellent" criteria.

References

Abdullah, A. (2020). Relationship the work culture and training programs within performance. *International Journal of Progressive Sciences and Technologies (IJPSAT)*, *20*(1), 92–101. https://doi.org/10.52155

Abdussamad, H. Z., & SIK, M. S. (2021). *Metode penelitian kualitatif*. CV. Syakir Media Press.

Awaludin, A. A. R. (2017). Akreditasi sekolah sebagai suatu upaya penjaminan mutu pendidikan di Indonesia. *SAP (Susunan Artikel Pendidikan)*, *2*(1).

BAN-PT. (2017). *Akreditasi Institusi Perguruan Tinggi*. BAN-PT.

David, F. R. (2014). Analisis SWOT teknik membedah kasus bisnis. *Jakarta: Gramedia Pustaka Utama*.

ICAO. (2016). 2016–2030 Global Air Navigation Plan: Doc. 9750 fifth edition. *International Civil Aviation Organization*. https://www.icao.int/airnavigation/Documents/GANP-2016-interactive.pdf

Haitao Wang, Umut Durak & Sven Hartmann (2018). Design and Development of Research Aviation Training Device.

https://www.researchgate.net/publication/324114955_Design_and_Development_of_Research_Aviation_Training_Device.

International Civil Aviation Organization (ICAO). (2018). Manual on the Approval of Training Organizations Doc 9841.

International Civil Aviation Organization (ICAO). (2013). Airport Economics Manual Doc 9562.

International Civil Aviation Organization (ICAO). (2016). Aviation Training Policy

Jabar 2012. Evaluasi Pendidikan. Jakarta: Rineka Cipta.

Krit Witthawassamrankul & Kanitha Kaewpoungngam (2017). Guidelines for Improving Service Quality of Aviation Safety Training Center for Flight Attendants. https://www.researchgate.net/publication/318039669_Guidelines_for_Improving_Service_Quality_of_Aviation_Safety_Training_Center_for_Flight_Attendants

Manan, A., Fadhilah, M. A., Kamarullah, K., & Habiburrahim, H. (2020). Evaluating paper-based TOEFL preparation program using the Context, Input, Process, and Product (CIPP) model. *Studies in English Language and Education*, *7*(2), 457–471. https://doi.org/https://doi.org/10.24815/siele.v7i2.16467

Undang-undang tentang penerbangan, Pub. L. No. 1, 310 (2009). https://peraturan.bpk.go.id/Home/Details/54656/uu-no-1-tahun-2009

Rangkuti, F. (2014). *Analisis SWOT: teknik membedah kasus bisnis cara perhitungan bobot rating dan OCAI*.

Regional Aviation Safety Group (Asia & Pacific Regions) (2017). Standardised Capacity Building Programme.

Reknati, P. (2019). Implementasi Sistem Penjamin Mutu Internal dalam Meningkatkan Mutu di Sekolah Tinggi Ilmu Pelayaran. *Meteor STIP Marunda*, *12*(1), 73–81. https://doi.org/https://doi.org/10.36101/msm.v12i1.64

Resmi, N. N., &Mekarsari, N. K. A. (2017). Pengembanganperguruantinggiswastamelaluianalisis SWOT. *Pros Semin Revital Tata Kelola Perguru Tinggi Juni*, *2017*(14), 178-91.

Salam, M., Awang Iskandar, D. N., Ibrahim, D. H. A., & Farooq, M. S. (2019). Service learning in higher education: A systematic literature review. *Asia Pacific Education Review*,*20*, 573–593. https://doi.org/https://doi.org/10.1007/s12564-019-09580-6

Sopha, S., & Nanni, A. (2019). The cipp model: Applications in language program evaluation. *Journal of Asia TEFL*, *16*(4), 1360. https://doi.org/http://dx.doi.org/10.18823/asiatefl.2019.16.4.19.1360

Stufflebeam, D. L., & Zhang, G. (2017). *The CIPP evaluation model: How to evaluate for improvement and accountability*. Guilford Publications.

Yong Ki Yi & Kwang-Eui Yoo. (2018). A Study on Competitiveness Assessment Indicators for Global Aviation Training Organizations. Journal of Education and Training Studies; August 2018 ISSN 2324-805X E-ISSN 2324-8068, 6(8).