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## **KEY PERFORMANCE INDICATORS DEVELOPMENT BASED ON ACADEMIC QUALITY ASSURANCE**

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### **Abstract**

Higher education institutions have autonomy in determining policies and managing education. This policy requires universities to establish, implement, control, and improve education quality assurance activities autonomously or independently. However, in its implementation, standards must be formulated based on the ideal conditions to be achieved and set under laws and regulations. This standard is needed as a reference in the implementation of academic activities to be carried out effectively and efficiently. Indicators are needed in formulating quality standards as benchmarks for the achievement of the goals that have been set. Therefore, the objectives of this study are 1). Formulating Academic Quality Standards for the Faculty of Economics and Business, Jenderal Soedirman University. 2). Formulating Main Performance Indicators of the Faculty of Economics and Business, Jenderal Soedirman University. This research was conducted at the Faculty of Economics and Business, Jenderal Soedirman University, using qualitative methods with focus group discussion and in-depth interviews. This study's results are the compilation of Academic Quality Standards and Main Performance Indicators of the Faculty of Economics and Business, Jenderal Soedirman University.

**Keywords:** key performance indicators, quality assurance, academic quality standards

### **1. Introduction**

Currently, universities have the autonomy to determine policies and have autonomy in managing education. Higher education's autonomy as providers of higher education has been confirmed in Law Number 20 of 2003 concerning the National Education System (UU Sisdiknas). The existence of this law requires universities to determine, implement, control, and increase the quality assurance activities of higher education autonomously or independently.

Higher Education Quality Assurance integrating a system called the Higher Education Quality Assurance System (SPM Dikti). The SPM Dikti consists of an External Quality Assurance System or accreditation implemented by BAN-PT, and the Higher Education Database and Internal Quality Assurance System (SPMI) implemented by each university.

Jenderal Soedirman University established the Internal Quality Assurance System (SPMI) document to ensure higher education quality. Generally, the document consists of two books. In this first document, several manuals have been compiled, including the guidebook of standard improvement, standard implementation, standard control, and standard-setting. The second document contains various quality standards that are implemented at Jenderal Soedirman University. These standards include graduate competency standards, learning content standards, learning process standards, learning assessment standards, lecturer standards, and academic staff standards. The SPMI document of Jenderal Soedirman University is expected to recognize the understanding and attitudes of internal stakeholders at Jenderal Soedirman University regarding the internal quality policy implemented by Jenderal Soedirman University.

Similar to universities, it is required that the faculty level establishes a measurable quality assurance system. Thus, standards are needed that can be used as a reference for implementing SPMI. The faculty's academic quality standards are formulated based on the ideal conditions to be achieved and are determined under the provisions of laws and regulations. This faculty academic quality standard is part of implementing the SPMI at the Faculty of Economics and Business. Academic quality standards serve as guidelines for implementing academic activities to be achieved in a measurable, effective, and efficient manner.

Formulating the faculty's academic quality standards, indicators are needed as benchmarks for achieving the goals that have been set. The Faculty of Economics and Business must have the Main Performance Indicators (IKU) to achieve the vision and mission. This indicator represents the success rate of a strategic objective. This indicator in management science studies is usually called key performance indicators (KPI). KPI is a scale and quantitative measure used to evaluate organizational performance in achieving organizational targets. KPIs are also used to determine measurable objectives, observe trends, and support decision making (Banerjee and Buoti (2012).

Based on the explanation above, the Faculty of Economics and Business must formulate academic quality standards and Main Performance Indicators (IKU) of the Faculty of Economics and Business, Jenderal Soedirman University. It is hoped that this research can become a reference in strengthening the implementation of SPMI at the Faculty of Economics and Business, Jenderal Soedirman University.

## **2. Literature Review**

### *2.1 Key Performance Indicator*

According to Iveta (2012), KPI (Key Performance Indicator) is a quantitative and continuous measure for companies, have various perspectives, based on factual data, serves as a starting point for setting goals and formulating organizational strategies. The definition of KPI (Key Performance Indicator), according to Warren (2011), a key performance indicator is a measurement that assesses how an organization executes its strategic vision. It refers to how the organizational strategy is interactively integrated into the overall organizational strategy. According to Parmenter (2007), Key Performance Indicators are the most critical for organizational success in present and future conditions. Banerjee and Buoti (2012) disclose that

key performance indicators are a scale and quantitative measure used to evaluate organizational performance to achieve organizational targets. KPIs are also used to define measurable objectives, observe trends, and support decision making.

KPIs must meet the SMART criteria, which are as follows:

- 1) Specific: target achievement of Key performance indicators must be formulated clearly and precisely so that all members of the organization can easily understand it
- 2) Measurable: Key performance indicator (both quantitative and qualitative measures) has determined information about the type of data to be extracted, data sources, and how to obtain the data.
- 3) Attributable: the performance indicators that are made must be useful in decision making
- 4) Relevant: the performance indicators must follow the program's scope and describe the cause and effect relationship among other indicators.
- 5) Timely: data on predetermined performance indicators must be collected and reported on time

### **3. Method**

This research uses a qualitative approach. This study's subjects include administrators at the institutional level, departments and study programs, and quality assurance institutions at the faculty and university levels. The research object which becomes the research point of attention is the Quality Standards and Main Performance Indicators (IKU). The data collection method in this research is using focus group discussion and in-depth interviews.

### **4. Results and Discussion**

This research was conducted with several research stages, starting with planning, then extracting data through in-depth interviews with related parties. Furthermore, conducting FGD to formulate academic quality standards and the IKU of the Faculty of Economics and Business, Jenderal Soedirman University. The parties involved in this research are administrators at the institutional level, departments and study programs, quality assurance institutions at the faculty and university levels.

Based on the FGD and in-depth interviews that have been conducted, the academic quality standards of the Faculty of Economics and Business, Jenderal Soedirman University, were established. The compiled academic quality standards outperformed the National Higher Education Standards (SN Dikti). The research results show that academic quality standards can be grouped into six: graduate competency standards, educational standards, research standards, community service standards, student standards, and other standards. For education, research and community service, and other standards, each has sub-standards, as shown in table 1. The following are indicators of academic quality standards for the Faculty of Economics and Business, Jenderal Soedirman University:

Table 1. Indicators of Academic Quality Standards

No	Indicator	Sub Indicator
1	Graduate Competency Standards	-
2	Learning Standards	Learning Contents
		Learning Planning
		Learning process
		Learning Assessment
		Lecturers and Education Personnel
		Learning Facilities and Infrastructure
		Learning Management
		Learning Financing
		Curriculum
3	Research Standards	Research result
		Research content
		Research process
		Research assessment
		Researcher
		Research Facilities and Infrastructure
		Research management
		Research financing
4	Community Service Standard	Community service result
		Community service content
		Community service process
		Community service assessment
		Implementation of Community Service
		Facilities and Infrastructure Community Service
		Community Service management
		Community Service financing
5	Student Standard	-
6	Other Standard	Sistem Information system
		Cooperation
		Public Service

Source: Results of interviews and FGDs with related parties.

In addition to formulating Academic Quality Standards, the research team also formulated the Faculty's Main Performance Indicators. The research results show that the IKU is grouped into ten fields: strategic planning, Managerial and Organizational Management, cooperation, student affairs, Human Resource Development for Educators and Education Personnel, financial facilities and infrastructure, academic and educational, research, community service, and three pillars of higher education. The leading performance indicators for FEB are targeted to be achieved in 2021 according to the strategic plan of the Faculty of Economics and Business, Jenderal Soedirman University. Table 2 below is the IKU of the Faculty of Economics and Business, Jenderal Soedirman University, in detail for each field until 2021.

**Table 2. Main Performance Indicators of the Faculty of Economics and Business, Unsoed**

Area	Performance Indicators Up to 2021
Strategic Planning	The vision, mission, goals, and strategies of FEB Unsoed are following the strategic plan of the university related to the Unsoed Statute and the Unsoed Roadmap
	VTMS FEB review is conducted at least once in the strategic plan period (five years)
	The preparation and review of the Unsoed VTMS FEB involved internal and external stakeholders.
	The VTMS FEB workshop is conducted at least once in the strategic plan period (five years)
	Strategies for achieving goals and objectives are compiled with a short, medium, and long term dissertation with achievement indicators
Managerial and Organizational Management	The organizational structure of FEB Unsoed and its primary duties and functions are appropriate and refer to the applicable Unsoed Statute
	The implementation of good governance (governance) FEB Unsoed adheres to the principles stated in the Unsoed Statute
	The leadership characteristics of FEB Unsoed include at least operational, organizational and public aspects
	The leadership competencies of FEB Unsoed carry out management principles in an effective and efficient, solution, and innovative manner, which refers to the Unsoed statute
	FEB Unsoed carries out unit performance evaluations in the form of

Area	Performance Indicators Up to 2021
	development and meetings at least once a year
	The Quality Assurance Group is following the Unsoed Statute and the Unsoed Quality Policy
	Each study program has a Quality Control Group that runs effectively
	Quality assurance groups and quality control groups carry out at least 1 (one) time internal monitoring and evaluation in a year
	Management service satisfaction surveys are conducted at least once a year using appropriate research methods, are published, and followed up as a base for improvement policies.
Collaboration	The collaboration carried out by FEB Unsoed provides clear benefits in the fields of education, research, and community service and refers to the Unsoed Statute
	Every year FEB Unsoed collaborates with at least five new agencies in each of the fields of education, research, and Community Service
	The number of international collaborations increases $\geq 2$ per year
	The number of national collaborations increases $\geq 6$ per year
	The number of regional/local cooperation increases $\geq 9$ per year
Student Affairs	The ratio of the number of applicants to students who are accepted is $\geq 10: 1$
	The number of applicants increased by 10% in 3 years
	The proportion of international students $\geq 1\%$ per study program per year
	At least 75% of students are actively involved in the Student Activity Unit
	At least 30% of students receive scholarships

Area	Performance Indicators Up to 2021
	At least 100% of prospective graduates receive career training
	30% of students are involved in PIMFEB, PWU, or other scientific activities.
	The minimum level of student satisfaction with student services is $\geq 80\%$
Human Resource Development for Educators and Education Personnel	The number of lecturers with doctoral degrees is $\geq 50\%$ of the number of permanent lecturers in the study program
	The number of lecturers with academic positions as Professor, associate professor, and assistant professor $\geq 70\%$ of the number of permanent lecturers in the study program
	The ratio of the number of students to lecturers is 25-35: 1 per study program
	Lecturers as the main supervisor of students' final assignments $\leq 6$ per semester
	The Full-Time Teaching Equivalence (LKD) is 12 - 16 credits
	The proportion of the number of lecturers acknowledgment/recognition by various institutions is 50% of the number of study program lecturers per three years or 20% per study program per year
	The proportion of total research with foreign sources of funds is $\geq 5\%$ per year of the number of FEB lecturers
	The proportion of total research with domestic funding sources is $\geq 30\%$ per year of the number of study program lecturers per year
	The proportion of total community service with foreign sources of funds is $\geq 5\%$ per year of the number of FEB lecturers
	The proportion of total community service with domestic funding sources is $\geq 30\%$ per year of the number of study program lecturers
	The number of international publications (reputable journals, seminars, media) in three years $\geq 10\%$ of the number of study program lecturers per year
	The number of non-reputable and nationally accredited international publications, national seminars and national media $\geq 100\%$ of the

Area	Performance Indicators Up to 2021
	number of study program lecturers per year
	The proportion of cited articles $\geq 50\%$ of the number of study program lecturers per three years
	The number of books with ISBN and Book Chapters $\geq 30\%$ of the total number of study program lecturers per three years
	A total of 10% of the number of study program lecturers per three years get simple patents / intellectual property rights / social engineering
	Structuring educational personnel reached 50% (fifty percent) according to their competencies
Finance, Facilities and Infrastructure	Total educational operational funds per student per year $\geq 20$ million
	The amount of funding for educational research per lecturer per year is $\geq 10$ million
	Total education community service funds per lecturer per year $\geq 5$ million
	The facilities and infrastructure for learning, research and community service available at FEB Unsoed are in accordance (100%) with the national standards of the Higher Education
Academic and Education	Workshop/curriculum discussion per study program at least 1 (once) in two years involving internal and external stakeholders
	The study program's learning outcomes follow the profile of graduates and KKNI levels, as stated in the curriculum documents of each study program.
	Each study program has a curriculum document following the guidelines for preparing the college curriculum and the Unsoed quality standards.
	Each study program has a curriculum document that contains the correlation between courses and graduate learning outcomes in the form of a curriculum map.
	The quality control group (GKM) at the study program level monitors



Area	Performance Indicators Up to 2021
	and evaluates 1 (one) time a year
	The learning process's characteristics in each study program can produce a graduate profile that matches the specified learning outcomes.
	Learning characteristics satisfy the elements: interactive, holistic, integrative, scientific, contextual, thematic, practical, collaborative, and student-centered.
	The quality control group (GKM) at the study program level monitors and evaluates every 1 (one) year
	100% of courses have a Semester Lesson Plan.  The components of the Minimum Semester Learning Plan consist of:  Study program and course identity  Learning outcomes  Study material (chapter)  Learning methods  Time and stages  Assessment of learning outcomes  Reference
	Group of lecturers (team teaching) in each study program conducts discussions and evaluations of the RPS at least 1 (one) time a year
	The semester learning plan for each course shows learning material that has the relevant depth and breadth to achieve CPL
	The quality control group of each study program conducts monitoring and evaluation at least 1 (once) a year
	50% of the lecturers have PEKERTI and AA certificates
	Lecturers 100% attend face-to-face lectures totaling 14 meetings.
	Each lecturer uses various media and technology in the learning process
	As many as 20% of lecturers use e-learning in the learning process

Area	Performance Indicators Up to 2021
	The quality control group of each study program evaluates the suitability of learning methods with learning outcomes. At least 75% of the subjects show conformity.
	The number of students who score $C \leq 20\%$ for each course
	The Quality Assurance Group prepares guidelines for completing final student assignments
	The final study commission of each study program coordinates to evaluate the learning process related to student research (thesis) once every semester
	Every student is obliged to take part in KKN as a learning process related to Community Service. The KKN scores obtained by students are $\geq B$
	The number of hours of study for practicum and field practice $\geq 20\%$ of the total learning hours
	The Quality Control Group (Study Program) and the Quality Assurance Group (Faculty level), together with the Quality Assurance Agency (University) conduct an Internal Academic Quality Audit every once a year
	At least 70% of courses have an assessment portfolio
	At least 75% of the courses have techniques and assessment instruments that are in accordance with learning outcomes
	The quality control group at the study program level monitors and evaluates once a year
	The number of courses developed from the results of research/community service is at least 4 subjects per study program
	75% of lecturers' research results are integrated into learning materials or teaching materials
	75% of the Student Activity Unit work programs are achieved
	At least one general lecture per study program per semester
	Each laboratory organizes scientific activities involving student associations or student activity units

Area	Performance Indicators Up to 2021
	The level of student satisfaction with the educational process has a score of $\geq 75\%$
	The survey of student satisfaction with the educational process (learning) is conducted once a semester.
	Students are required to fill out a questionnaire about the learning process before seeing the final grade of the course in the academic information system
Research	Each study program has a research road map
	Each study program reviews the research roadmap at least once a year
	The proportion of the number of lecturers' research involving students is $\geq 25\%$ of the total number of study program lecturers per 3 years
Community service	Each study program has a Community Service road map
	Each study program reviews the Community Service road map at least once a year
	The proportion of lecturers' Community Service involving students is $\geq 25\%$ of the total Community Service of study program lecturers per 3 years
University Tridharma Achievement	The proportion of academic achievement of students at international level $\geq 0.1\%$ of the total students.
	The proportion of academic achievement of students at the national level is $\geq 1\%$ of the total number of students
	The proportion of academic achievement of students at the regional/local level $\geq 2\%$ of the total number of students

Area	Performance Indicators Up to 2021
	The proportion of non-academic achievement of international level students $\geq 0.2\%$ of the total students
	The proportion of student non-academic achievement at the national level $\geq 2\%$ of the total number of students
	The proportion of student non-academic achievement at the regional/local level $\geq 4\%$ of the total number of students
	The average GPA of graduates is $\geq 3.25$ for each study program
	The study period for graduates is 3.5 - 4.5 years for each study program
	The percentage of graduation on time is $\geq 50\%$ for each study program
	Study success percentage is $\geq 85\%$ (max dropout percentage is 15%) per study program
	Tracer studies, analysis of results, and follow-up are carried out at least once a year
	The waiting time for graduates to get their first job is <6 months
	Suitability of the field of work of a graduate when getting the first job $\geq 60\%$
	The proportion of the number of graduates working in multinational/international business entities $\geq 5\%$ of the number of traceable graduates.
	The proportion of the number of graduates who work in national-level business entities or licensed entrepreneurs $\geq 20\%$ of the number of traceable graduates
	Proportion of the number of graduates who work in regional/local level business entities or entrepreneurs without a license $\geq 90\%$ of the number of traceable graduates
	Graduate users who assess very good $\geq 75\%$ for every aspect
	Number of international publications (reputable journals, seminars, media) in three years $\geq 1\%$ of the number of study program students per three years
	The number of non-reputable and nationally accredited international publications, national seminars, and national media in three years $\geq$

Area	Performance Indicators Up to 2021
	10% of the number of study program students per year
	The number of non-accredited national publications, regional/local seminars, and regional/local media in three years $\geq$ 20% of the number of study program students per year
	As many as 0.5% of students have simple patents / intellectual property rights / and recognition of social engineering works
	The number of theses recorded in the form of one book chapter with ISBN at least ten articles per year per study program or at least one book per year per study program

Source: Results of interviews and FGDs with related parties.

The quality standards of FEB Unsoed are formulated into six categories: graduate competency standards, educational standards, research standards, community service standards, student standards, and other standards. Each has more detailed sub-standards for education standards, research and community service standards, and other standards. The achievement of these standards must be measurable and its achievement can be evaluated because it is necessary to formulate the KPI as a control tool. IKU FEB Unsoed is prepared based on ten fields, namely strategic planning, Managerial and Organizational Management, collaboration, student affairs, Human Resources Development for Educators and Education Personnel, financial facilities and infrastructure, academics and education, research, community service, and the achievements of the Tri Dharma. Each sector has indicators that meet the SMART criteria so that it is expected to be one of the tools to evaluate each period's achievements.

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