Correlation of Quality Assurance on Postgraduate Academic Performance

Fajar Arianto[1], Rina Harimurti[2], Unit Three Kartini[3], Dian Anita Nuswantara[4], Afifan Yulfadinata[5]

[1,2,3,4,5] Postgraduate School, Universitas Negeri Surabaya & Surabaya

ABSTRACT: Quality assurance in higher education is a necessity and obligation to maintain quality. Academic performance is a student's achievement during their education. Postgraduate academic performance in this research concerns the number of active students, GPA, and study period. The research method used is a documentation study in the academic information system as of February 2023 and as of August 2023 for 6 postgraduate study programs, consisting of 2 doctoral programs and 4 master's programs. Data analysis in this research describes documents and looks for trends with R^2. The research results show that Quality Assurance has very little effect on the average length of study for postgraduate students; Quality Assurance has little effect on the number of active students; guarantees have a low effect on the average GPA of graduate students.

KEYWORDS: Quality assurance, academic performance, postgraduate, GPA, higher education

I. INTRODUCTION

Global demand for higher education in 2025 will reach 263 million students, in line with this demand, quality education is required, which is manifested in increased quality assurance for universities (Ryan, 2015). Industrial countries realize that to maintain the economy requires an increase in high-performing people. With the rapid development of technology, workers are required to be proficient in lifelong learning (Wilger, 1997). Higher education must continue to develop in scientific and technological disciplines, so universities must improve their quality of learning. Improving quality is followed by increasing quality assurance at universities related to internal or external control. Quality assurance standards are tasked with ensuring that the education process runs by established standards and guarantees high standards. Efforts made in tertiary institutions are to compare the academic standards that have been set, which have been implemented and are appropriate (Newton, 2000).

Quality is a university's promise to consumers of higher education. Therefore, universities are responsible for the quality of the educational process and its evaluation. In Indonesia, the Internal Quality Assurance System is implemented and monitored continuously by the Quality Assurance Institute ((Harahap, Gultom, Darwin, Rosnelli, & Nasution, 2023). (Wijatno, 2009) states: Basically, quality assurance is an approach that regulates work that guarantees that; (1) the mission and goals of the organization are clear to all; (2) the system is well thought out, virtually error-free, and communicated to everyone; (3) it is always clear who is responsible for what; (4) quality is clearly defined and recorded; (5) there is a system in place to verify that everything is going according to plan; and (6) there is a way to correct the error

Judging from various existing opinions, the role and duties of Quality Assurance are to carry out management functions, namely planning, implementation, inspection/control, and improvement of organizational quality. The quality guarantee ensures that the standards that have been set, written in a standard document, are socialized, understood, and implemented by all members involved in the quality process and carry out supervision or control over the conformity of the standards with what occurs in the field. Quality assurance is also required to initiate various considerations for improving the quality of higher education.

Considering the importance of Quality Assurance and its role for institutions, it is necessary to know the factors that influence the success of implementing a quality assurance system in higher education. According to (Hedwig & Polla, 2006)it is said that in the organizational structure, it is recommended that Quality Assurance be directly under the Chancellor's line if the scope of quality assurance is at the University level, or under the Dean's line if the scope of assurance is at the faculty level.

Students are an important aspect in evaluating the success of implementing a study program at a university. Monitoring of incoming students, improvement of student abilities, achievements achieved by students, the ratio of graduates to the total number of students, and competency of graduates should receive serious attention to gain stakeholder trust in assessing and determining the use of graduates (Ridwan, Suyono, & Sarosa, 2013).

Correlation of Quality Assurance on Postgraduate Academic Performance

Academic performance is the final result achieved by a person as a success while attending education in an educational institution. In existing literature and articles, the terms learning achievement and learning success are often used to express the same thing (O'Connor & Paunonen, 2007). In discussing learning performance, we first discuss the meaning of learning. Learning is a psychic mental activity, which takes place in active interaction with the environment, which results in changes in knowledge, understanding, skills, values, and attitudes (Mystakidis, Berki, & Valtanen, 2021).

Empirically, academic performance can be photographed from three dimensions. The student dimension includes aspects of tangibles (educational facilities), reliability (reliability of lecturers and academic staff), responsiveness (responsiveness), assurance (treatment of students), and empathy (understanding of student interests) (Rashid, Ismail, & Thomas, 2021). Study program dimensions include aspects of curriculum, learning and academic atmosphere, students and graduates, students and graduates, human resources, academic facilities and infrastructure, research, community service and cooperation, and management systems. Institutional dimensions include aspects of student and graduate standards, curriculum standards, learning, and academic atmosphere, research and community service, and quality assurance. For this reason, this research sets targets in these three dimensions covering all aspects covered therein.

The activity of describing and analyzing external and internal factors that make a major contribution to academic performance in the provision of education will provide a clearer picture of the condition of academic performance. In the implementation of education, academic performance issues are an important aspect so implementation must be planned well so that it can then be implemented as an output in the form of academic services to stakeholders (students, lecturers, and the community). The expected result is a description of the dimensions and aspects that influence academic performance (Valentine, DuBois, & Cooper, 2004) (Widodo, 2012). Makmun, Ismail, & Adnan (2018)explain three important components in learning, namely (1) students improve their academic abilities as optimally as possible through learning, (2) instructors (lecturers/teachers) always create the right situation for learning, making it possible to learning occurs, and (3) goals, namely something that is expected after learning. These components must support each other so that learning is effective and efficient.

II. METHODS

The research used is descriptive using the archival method. The archival method in this research is to describe existing data before the time of the research (Jackson, 2009). The data in this research are in the form of documents in the academic information system as of February 2023 and as of August 2023 for 6 postgraduate study programs, consisting of 2 doctoral programs and 4 master's programs. The data analysis technique used is descriptive statistics, namely numerical measures that describe a distribution by providing information about the distribution's central tendency, distribution width, and distribution shape (Jackson, 2009).

III. RESULT AND DISCUSSIONS

The data in Table 1 shows that the average length of study for the 6 study programs exceeds the study period for completing the curriculum, where for the doctoral program it is 6 semesters, and for the master's program it is 4 semesters. Masters 1 in August experienced an increase in the study period, from 6 semesters to 5 semesters. Meanwhile, Masters 2 experienced a decrease in the length of study, from 6 semesters to 7 semesters. Judging from the trend line in February and August it decreased. R^2 for February shows 0.171, and August $R^2 = 0.116$; It can be concluded that the relationship between Quality Assurance is very small and the average length of study for postgraduate students (graph 1)

**Table 1. Recapitulation of data for February and August 2023**

No	Study program	Active students		Average length of study		Average GPA	
		February	August	February	August	February	August
1	Doctor 1	64	57	7	7	3,88	3,7
2	Doctor 2	165	155	11	11	2,78	3,6
3	Magister 1	59	87	6	5	3,77	3,74
4	Magister 2	104	66	6	7	3,69	3,58
5	Magister 3	59	43	6	6	3,77	3,53
6	Magister 4	30	21	7	7	3,7	3,67

In Table 1 and Graph 2, the number of active students experienced an increase only in the Masters 1 study program. Based on the trend line in February and August, it decreased. The R^2 value for February was 0.245 and the R^2 for August was 0.381, which shows that Quality Assurance has little effect on the number of active students, this month it was the addition of new students. Apart from the Masters 1 study program, there was no significant increase in the number of new students. The average GPA, table
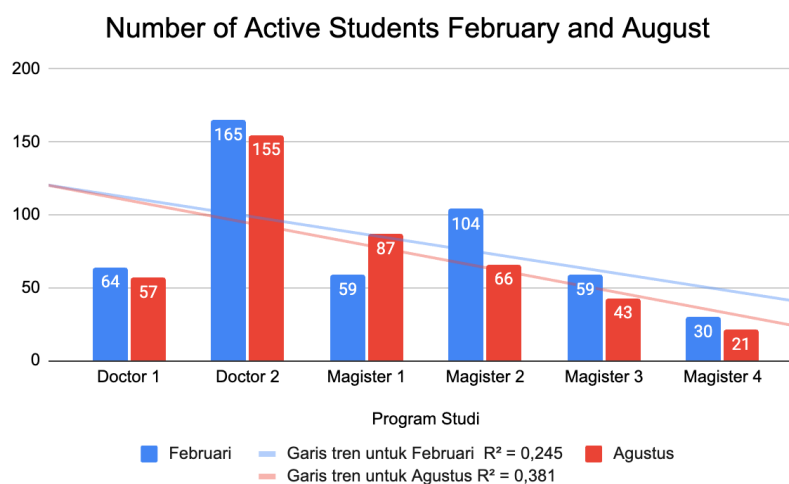
Correlation of Quality Assurance on Postgraduate Academic Performance

1 and graph 3, overall experienced a decrease in the average GPA. Doctoral study program 1 average GPA decreased from 3.88 to 3.70; Doctor 2 from 3.78 to 3.6; Masters 1 from 3.77 to 3.74; Masters 2 from 3.69 to 3.58; Masters 3 from 3.77 to 3.53; and Masters 4 from 3.7 to 3.67.

Judging from R^2 in February = 0.624; it can be concluded that quality assurance has a moderate effect on the average GPA. And R^2 August = 0.122; it can be concluded that guarantees have a low effect on the average GPA of postgraduate students.

Average Length of Study
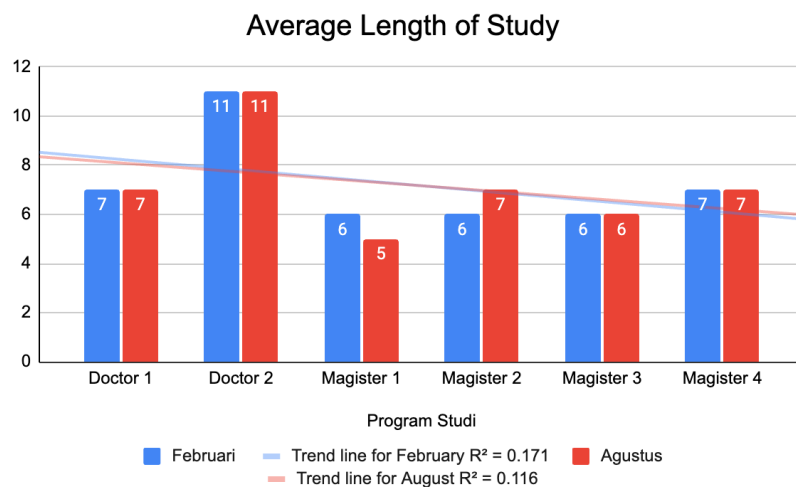
Graph 1. Length of study

Number of Active Students February and August

**Graph 2. Number of active students in February and August**

Research on the effect of quality assurance on academic performance in Postgraduate Schools, based on data results, shows that (1) quality assurance has a small relationship to the length of the student study period (2) Quality assurance has a small relationship to the number of active students; (3) quality assurance has a moderate effect on the average student GPA. The results of this research can conclude that SPMI has little influence on academic performance. The implementation of quality assurance is influenced by the low level of understanding regarding quality standards regarding education, research, and community service (Reknati & Sursina, 2019). The link with academic performance is compliance with academic quality standards by stakeholders. Sulaiman & Wibowo (2016) in their research stated that leadership commitment is needed and they are often trapped in routine activities related to internal quality assurance activities. Sumardjoko (2010) explains from the results of his research that lecturer competence and achievement motivation influence the role of lecturers in quality assurance.

Compliance with educational standards by stakeholders, in this case lecturers, is mandatory. The pattern and completeness of documents in the learning process influence student academic performance. Guiding students in their final assignments is of particular concern about the standards and strategies implemented by the study program. Providing adequate facilities affects lecturers' performance, including discipline and the reward system they obtain (Bassey, Owan, & Agunwa, 2019). Education financing influences student academic performance, education financing is an important element in expediting the education process, the use of which takes into account its effectiveness and efficiency (Hidayah & Syahrani, 2022).

Study programs are related to the number of students influenced by the job market in a region and the certainty of obtaining employment (Gora, Stefan, Popa, & Albu, 2019). Students at universities are not involved in quality assurance and only play a

single role as subjects served (Naylor, Dollinger, Mahat, & Khawaja, 2021). The addition or number of students is influenced by marketing and obtaining scholarships. Most of the master's and doctoral study programs have obtained employment, and the aim of continuing their studies is related to increasing competence and the demands of the working profession. The choice of study program by prospective students is influenced by the accreditation ranking and the attractiveness of the study program.
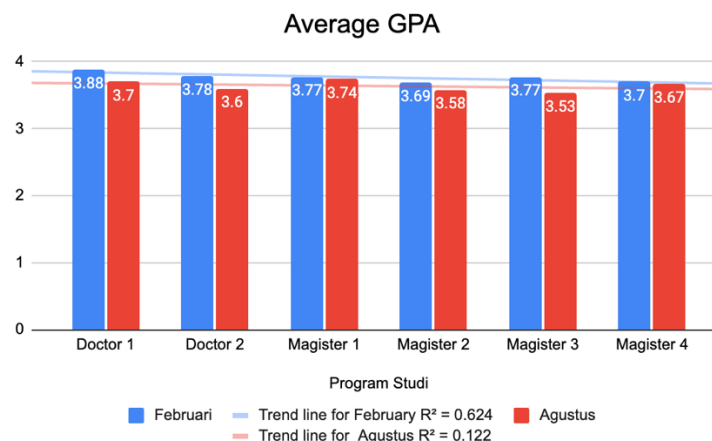
Graph 3. Average GPA

Student GPA is influenced by various things, such as intelligence, personality, and motivation (Kappe & Flier, 2012). Meepradit, Auamnoy, & Leelakanok (2022) explains that student GPA is influenced by demographic factors, admission criteria, learning environment, and psychology. Of these four factors, negative psychological factors influence postgraduate students' academic achievement. Furthermore (Meepradit, Auamnoy, & Leelakanok, 2022) explain that the factors of amotivation, anxiety, depression, and stress are negatively related to GPA.

IV. CONCLUSIONS

Quality assurance in higher education is tasked with guaranteeing established educational standards. Setting educational standards aims to improve the quality of education. This research shows that the relationship between quality assurance and the length of study of postgraduate students is very small. Postgraduate students' study period is influenced by various things, related to the mentoring and research process, as well as various other factors. Quality assurance and the number of active students have a small relationship. Active students are influenced by the attractiveness of the study program and the job share of graduates of a study program. The relationship between quality assurance and student GPA in this study was classified as moderate. Student GPA is influenced by intelligence, psychological, motivation, and learning environment factors.

ACKNOWLEDGMENT

REFERENCES

1) Ryan, T. (2015). Quality assurance in higher education: a review of literature. *High. Learn. Res. Commun. , 5*(4), 1-12.
2) Wilger, A. (1997). *Quality assurance in higher education: a literature review.* Stanford: National Center for Postsecondary Improvement.
3) Newton, J. (2000). Feeding the beast or improving quality?: Academics' perceptions of quality assurance and quality monitoring. *Quality in Higher Education, 6*(2), 153-163,.
4) Harahap, M. S., Gultom, S., Darwin, Rosnelli, & Nasution, N. F. (2023). Kajian implementasi SPMI (sistem penjaminan mutu internal) sekolah dan perguruan tinggi di Indonesia. *Jurnal Education and Development*, 477-480.
5) Wijatno, S. (2009). *Pengelolaan perguruan tinggi secara efisien, efektif, dan ekonomis untuk meningkatkan mutu penyelenggaraan pendidikan dan mutu lulusan.* Jakarta: Salemba Empat.
6) Hedwig, R., & Polla, G. (2006). *Model of quality assurance system and its application process in higher education.* Yogyakarta: Graha Ilmu.
7) Ridwan, M., Suyono, H., & Sarosa, M. (2013). Penerapan data mining untuk evaluasi kinerja akademik mahasiswa menggunakan algoritma naive bayes classifier. *Jurnal EECCIS* , 59-64.
8) O'Connor, M. C., & Paunonen, S. V. (2007). Big five personality predictors of post-secondary academic performance. *Personality and Individual Differences*, 971–990.

9) Mystakidis, S., Berki, E., & Valtanen, J. P. (2021). Deep and meaningful e-learning with social virtual reality environments in higher education: a systematic literature review. *Applied Sciences*, 2412.

10) Brown, G. T. (2019). Is assessment for learning really assessment? *Front. Educ*, 1-7.

11) Rashid, N. Z., Ismail, T. N., & Thomas, B. (2021). The correlation between servqual dimensions and student satisfaction. *Advances in Business Research International Journal*, 7 - 19.

12) Valentine, J. C., DuBois, D. L., & Cooper, H. (2004). The relation between self-beliefs and academic achievement: a meta-analytic review. *Educational Psychologist*, 111-133.

13) Makmun, N., Ismail, & Adnan. (2018). Pengembangan perangkat pembelajaran keanekaragaman hayati berbasis web di SMAN 6 Makassar dan SMAN 2 Maros. *Biology Teaching and Learning*, 143-150.

14) Jackson, S. L. (2009). *Research methods and statistics a critical thinking approach*. Belmont: Wadsworth.

15) Reknati, P., & Sursina. (2019). Implementasi sistem penjamin mutu internal dalam meningkatkan mutu di sekolah tinggi ilmu pelayaran. *Meteor STIP Marunda*, 73–81.

16) Sulaiman, A., & Wibowo, U. B. (2016). Implementasi sistem penjaminan mutu internal Sebagai upaya meningkatkan mutu pendidikan di Universitas Gadjah Mada . *Jurnal Akuntabilitas Manajemen Pendidikan*, 17-32.

17) Sumardjoko, B. (2010). Faktor-faktor determinan peran dosen dalam penjaminan mutu perguruan tinggi. *Jurnal Cakrawala Pendidikan*, 294-310.

18) Bassey, B. A., Owan, V. J., & Agunwa, J. N. (2019). Quality assurance practices and students' performance evaluation in universities of South-South Nigeria: A structural equation modelling approach. *British Journal of Psychological Research,*, 1-13.

19) Hidayah, A., & Syahrani. (2022). Internal quality assurance system of education in financing standards and assessment standards. *Indonesian Journal of Education (INJOE)*, 291~300.

20) Gora, A. A., Stefan, S. C., Popa, S. C., & Albu, C. F. (2019). Students' perspective on quality assurance in higher education in the context of sustainability: A PLS-SEM Approach. *Sustainability* , 1-21.

21) Naylor, R., Dollinger, M., Mahat, M., & Khawaja, M. (2021). Students as customers versus as active agents: conceptualising the student role in governance and quality assurance. *Higher Education Research & Development*, 1026–1039.

22) Kappe, R., & Flier, H. v. (2012). Predicting academic success in higher education: what's more important than being smart? *European Journal of Psychology of Education* , 605–619.

23) Meepradit, K., Auamnoy, T., & Leelakanok, N. (2022). Factors affecting GPA in higher education in asia: a systematic review. *International Journal of Early Childhood Special Education*, 1581-1595.