



Culture of Productivity in Higher Education Institutions in Indonesia

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Abstract. This research seeks to fill the gap by exploring productivity culture theory and applying in concretely in the Indonesian context. Thus, this research is expected to provide new insights and significantly contribute to the design of more effective and inclusive policies to improve the productivity culture in higher education in Indonesia. This research uses a descriptive research type method to better understand productivity culture from various theoretical and practical perspectives. This research shows that productivity culture in higher education is very important. It can be found that there are several challenges and problems of productivity culture in Indonesia, including Inequality of Access, inequality of quality, lack of access, and problems from input, process, and output of higher education in Indonesia. In order to overcome the problems above, it is necessary to have mutual cooperation and collaboration from all parts of the nation as the key to implementing several alternative solutions, including the Use of government education fund allocation for research, The Establishment of Writer University, Collaboration of Indonesian universities with top world universities, Improving the quality and management of educators and education personnel in higher education. The awareness of productivity culture is a concern and requires a balance between input, process, and output quality in higher education. This study may not consider some factors that can influence the increasing productivity culture, such as geographic conditions and cultural diversity in various regions of Indonesia. Further research with a conceptual approach can provide more comprehensive insight into productivity culture problems in higher education in Indonesia.

Keywords: institution, education, culture, education, higher

INTRODUCTION

Education is an important element in the progress of the nation's development. Education is thus inseparable from its contribution to progress. One of the things that is necessary in this case is to increase productivity with various innovations and achievements that must be shown. Improvement is not just once or twice but must become a sustainable habit so that, in this case, it is called a culture of productivity. Thus, The culture of productivity needs to be controlled with quality assurance so that the culture of productivity improves.

The culture of productivity itself in the world of education encompasses three targets, namely, in terms of input, process, and output from existing educational institutions. Today, this culture of productivity needs to be advanced in higher education in Indonesia so that higher

education can compete in the international arena. This is very important because the position of higher education in Indonesia is still far behind that of other countries. As one indication, according to QS WUR 2023, there are only five universities in Indonesia that are included in the list of the world's 500 best campuses. The five universities are the University of Indonesia (237), Gadjah Mada University (263), Bandung Institute of Technology (281), Airlangga University (345), and IPB University (489) (Dian Ihsan, 2023).

Therefore, this study will explain how the culture of productivity in higher education in Indonesia works, the problems it faces, and the innovations needed to overcome existing problems. Previous research on productivity was more oriented to the process aspect, namely those related to the work productivity of employees, lecturers, and so on. (Noviyanti & Kuswanto, 2019; Ruswidiono, 2008). The novelty of this study is that it examines the culture of productivity from inputs, processes, and outputs.

METHOD

This research is a type of descriptive research. The study is included in the literature research. The approach is carried out with a qualitative paradigm, where the data is not statistical data. (Rukminingsih, 2020). The data was collected using documentation techniques from various literary sources such as books and research journals. (Sugiyono, 2017). The data from the literature was then analyzed with a descriptive approach. The main materials in this section are (1) the Theoretical Concept of Productivity Culture, (2) the Productivity Culture Model in Educational Institutions in Indonesia, (3) Challenges in the Implementation of Productivity Culture in Educational Institutions in Indonesia, (4) Innovation and Implications of Productivity Culture in Educational Institutions in Indonesia.

DISCUSSION

Theoretical Concept of Productivity Culture

Talking about productivity culture leads to two things, namely culture and productivity. The word culture was first coined by an anthropologist named Edward B Tylor in 1871. According to Tylor, culture is a social process that produces knowledge, beliefs, morals, laws, habits, abilities, and habits (Uhar Suharsaputra, 2013). According to Schein, culture is "*a pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those*

problems” (Schein, 2010). Culture, in this case, is a pattern of various basic assumptions that are discovered, created, or developed by a group. The goal is for organizations to learn to overcome problems that arise due to external adaptation and internal integration, which have been going well. Therefore, the existing values are taught to each new member as the most appropriate way to accept, think and feel in relation to existing problems. Thus, culture in this article is defined as norms and values that are lived together as the basis for being in a certain community.

Productivity is generally defined as the efficiency of using resources to produce outputs. (Kenneth Moore, 2021) Explains that *Output* is a product or service that is directly produced in the work process, while *Input* is everything that is needed in the work process to produce something. Productivity analysis is directed to obtain information about efficiency in the production process in a company (Sudit: 1). Adding to the existing one, Suharsaputra (2013: 68) argues that productivity is the result of a comparison between *Output Divided Input*. Good *Output* And *Input* are expressed in the form of quantity. Quantity *Output* in the form of the number of graduates and quantity *Input* In the form of the number of school workers and other resources (money, equipment, equipment, materials, etc.). Hasibuan (2005: 128) added that productivity is related to increasing production.

In addition, Whitmore revealed, "Productivity is a measure of the use of the organization's resources and is usually expressed as a ratio of the output obtained by the use resources to the amount of resources employed" (Sedarmayanti, 2001, p. 58). Whitmore views productivity as a measure of an organization's resource use, which is usually expressed as the ratio of output achieved to resources used (Bonaccorsi, Andrea., Belingheri, Paola., Secondi, Luca., 2021: 1-2, Nguyen Anh Tuan et al., 2022). Thus, productivity, in this case, is the efficiency in managing inputs and the process of producing increased and quality output. This is illustrated with the following image:



Figure 1. The Process of Production

Based on the figure above, productivity is related to efficiency, quantity, and quality.

Efficiency

In the context of education, it refers to all resources and efforts to achieve optimal educational results as planned by utilizing existing resources effectively and cost-effectively (Rolf Färe, Shawna Grosskopf, 2007). These efficiencies include:

1. Use of time in the teaching and learning process

Efficiency, in this case, can be in the form of good teaching planning (RPS), effective teaching techniques, and efficient classroom management (Hattie, 2008).

2. Efficiency in the use of resources in educational institutions

Resources in this educational institution can be efficient with good management of existing educators and education personnel. In addition, good management also helps reduce the administrative burden that is often a complaint of teachers.

3. Financing

Financing is very important. Productivity is often associated with the amount of financing available. In this case, efficiency means (a) making more optimal use of available resources without having to add to the resources already available, (b) encouraging to generate more revenue through effective and innovative fiscal arrangements in financing existing funds (C. Lewin, 2000).

4. Improved Teaching Outcomes and Quality

Efficiency in relation to the culture of productivity in educational institutions is not only related to the use of time, resources, and financing but also related to the results obtained.

In this case, the economic principle in productivity meets its urgency. In other words,

learning outcomes in educational institutions are regulated and managed in such a way that the available time, resources, and financing can produce good-quality graduates.

In addition to efficiency, productivity culture is related to quantity. Quantity in relation to educational productivity refers to the number and volume aspects of educational inputs, processes, and outputs, such as the number of students, teachers, facilities, and graduates. The large number of students in an education system reflects widespread access to education, which is an indicator of success in inclusive education programs. In addition, the number of teachers supports productivity because the ideal teacher-to-student ratio increases effectiveness in the teaching and learning process. The quantity of facilities and infrastructure, such as the addition of various facilities such as classrooms, laboratories, and libraries, increases the capacity of schools and supports all learning and teaching processes. In addition, the number of graduates also shows that educational productivity is improving. This quantity has an important effect on educational productivity because it directly affects an educational institution in managing its resources to achieve existing educational goals (OECD, 2018).

Quality in a culture of productivity in educational institutions is also important. Quality in this productivity culture can be measured from various aspects: (1) Productivity culture from input quality, (2) Productivity culture reviewed in terms of process quality, and (3) productivity culture reviewed in terms of output quality.

Productivity culture model in educational institutions

The culture model of productivity in education involves various elements that support quality teaching, effective time management, and increased collaboration between stakeholders. Here are some models of productivity culture in education that can be found:

1. Learning Organization Culture Model

Peter M Senge developed this model with an emphasis on the importance of creating a campus environment that supports learning for all members of the organization in a university environment. In the campus environment, a culture is developed where all stakeholders, ranging from university officials, lecturers, and students to administrative staff, actively participate in the learning process, which encourages creating a culture of productivity in the campus environment. The main elements in this model are continuous learning for lecturers and students, collaboration between all elements in the university environment, and the creation of space for experimentation and innovation in education. (Senge, P. M., Lucas, T., Cambron-McCabe, N., Smith, B., & Dutton, 2012; Senge, 2010).

2. *Higher Education Performance Management Model*

This model prioritizes performance management to increase productivity in higher education. The main focus lies on precise planning, monitoring, and evaluation of educational outcomes, as well as efficient management of resources. The main elements considered in this model are setting clear and measurable goals, using data to make data-driven decisions, and emphasizing continuous productivity improvement accompanied by evaluation. (Hargreaves, 2012; Leithwood & Louis, 2021).

3. Collaboration and cooperation model (*Collaborative Culture*)

This model emphasizes the importance of collaboration between lecturers, students and stakeholders in achieving educational goals. This collaboration creates a culture of cooperation that strengthens the relationship between all parties involved in higher education. The main elements considered in this case are collaboration between lecturers to share best practices, empowering students to advance higher education, and strengthening partnerships between universities and domestic and foreign universities (Johnson, 2002).

4. *Sustained Innovation Model*

This model not only focuses on the intellectual aspect but also emphasizes the development of character and independence of students. Its aim is to produce individuals who are responsible, highly motivated to self-develop, and able to work independently to face various challenges in the future.

5. Outcome-based Learning Model

This model emphasizes the achievement of specific outcomes or competencies that every graduate must possess to indicate success in education. In other words, all activities within the university environment are directed to achieve clear and measurable learning goals. The main things emphasized include the strict determination of measurable learning outcomes, continuous supervision and evaluation of the achievement of results, and the emphasis on the achievement and improvement of students' practical skills (Biggs, 2003; Spady G W, 1994).

6. Efficient time and resource management model

This model focuses on the efficient use of time and resources (both human and material) to achieve optimal outcomes in education. This includes managing teaching time, setting efficient schedules, and using resources wisely. In this model, it is emphasized that there is a systematic schedule that leads to efficiency and optimization, economical

and effective management of resources, and reduction of time waste in the process of teaching and learning activities in higher education institutions. (Robinson, 2015).

Challenges of implementing a culture of productivity in higher education institutions in Indonesia

The culture of productivity in higher education institutions in Indonesia is very important for advancing the quality of human resources in Indonesia. However, it is undeniable that in its implementation, the development of a culture of productivity faces various challenges. In this regard, the Director General of Higher Education, Research, and Technology (Dirjen Diktiristek) of the Ministry of Education and Culture, Abdul Haris, on the occasion of the opening of the XI Indonesian National Education Convention (Konaspi) at the State University of Surabaya (Unesa) on Friday 10/11/2024 argued that there are three challenges faced by universities in Indonesia, namely. (Savitri, 2024):

(a) Access Inequality

Inequality of access is shown from data from the Central Statistics Agency (BPS) 2023; out of 281 million Indonesians, only 97.83% or around 275 million people have successfully completed elementary education. However, this figure decreased at the next level of education, namely junior high school 90.44% (254 million people), and high school 66.79% (188 million people). Worse, for higher education, the Puslapdik of the Ministry of Education and Culture from BPS 2023 data stated that the gross participation rate (APK) of higher education reached 31.45%. This means that out of the entire population of Indonesia, only 88 million people have experienced higher education.

(b) Quality Gap

This quality gap occurs between state universities in big cities and those in the regions. In addition, there is also a gap between PTN and PTS in various places. According to data, out of a number of universities in Indonesia, there are only 5 PTN-BH that are included in the world's top 500, namely: University of Indonesia (UI), Gajah Mada University (UGM), Bandung Institute of Technology (ITB), Airlangga University (Unair), and IPB University (Kompas, 04/01/2024).

(c) Lack of Relevance

The third challenge is the lack of relevance of universities. This phenomenon can be seen from the level of absorption of graduates in jobs that are in accordance with the field of expertise or competence of the study program.

The three challenges faced by universities are certainly also challenges in the implementation of productivity culture in the university environment. Challenges in forming a culture of productivity in the university environment can be traced from three things, namely: (Torberg Falch, 2022)

(a) Challenges in terms of "Input" in higher education

Challenges to productivity culture in terms of inputs can stem:

1. New student admissions in terms of quality and quantity. In this case, there is still a gap between state universities in the regions and in big cities. In addition, the tendency of students in Indonesia to prefer to enroll in well-known PTNs, while many private universities experience a shortage of students.
2. The problem became big when several PTNs changed to PTN-BH. The demand to become a PTN-BH is actually a lure of independence and autonomy in campus management, including in the financial sector. PTN no longer needs to deposit campus revenues into the state treasury and then wait for funds to drop in the form of DIPA, subsidies, or grants, no longer needed. Because PTN is already independent, which is interpreted as financially independent, the campus can autonomously manage its own household needs. Like world-famous campuses such as Harvard, Oxford, MIT, and even NUS, the salaries of campus administrators, lecturers, staff, and other employees are all determined autonomously by the campus (Subiyanto, 2024). One of the weaknesses in this case, according to Subiyanto, is that PTN-BH is increasingly competing to attract as many students as possible with the aim of continuing to improve the welfare of its academic community, so that it neglects to improve quality in the international arena.
3. The existence of a recruitment and professional development mechanism for educators has not been effective and sustainable.

(b) Challenges in terms of "process" in higher education

Based on the Indonesian Education Roadmap 2025 – 2045 published by the Ministry of National Development Planning/Bappenas in 2024, it is stated that in terms of this process, several challenges exist, namely:

1. There is still no uniformity in the quality and competence of educators and higher education personnel. From the following data, it can be seen that the percentage of

educators with doctoral degrees is still very minimal and far behind Japan, Brunei, and Malaysia, which impacts the low productivity culture in higher education.

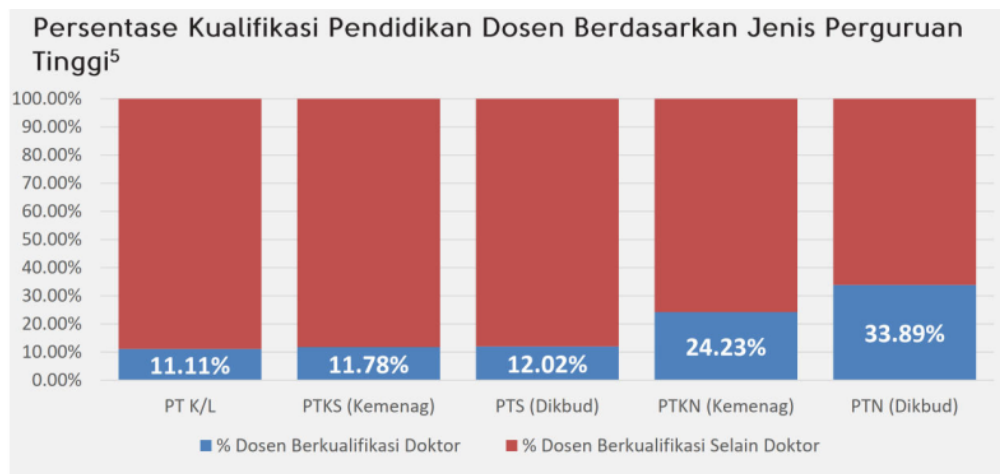


Figure 2. Quality of Lecturer Education

Source: PPDikti Ministry of Education and Culture, 2022

2. The quality of learning and quality assurance of higher education has not been optimal. This happens because of the challenges in terms of a healthy, safe, inclusive and comfortable environment for the entire academic community.
3. There are problems in the capacity and quality of essential infrastructure for higher education. In this case, the challenge is related to the still low adaptation in technology supported by low education budgets. In addition, many universities in Indonesia still do not provide easy access to open scientific journals, digital libraries, or software related to academic writing adequately (Fitrianto, 2024).

(c) Challenges in terms of "output" in higher education

The challenge of productivity culture in terms of output is related to graduates and the results produced from higher education. Still according to the Ministry of National Development Planning/Bappenas, the output challenges from universities are:

1. Higher education is not yet fully aligned with the needs of the industry. Education often only creates "Robot humans", that is, shaping graduates only in one side, not balanced (Madhakomala et al., 2022).
2. Educators and education personnel who are less productive in producing works and research (Falch et al., 2022).
3. The creation and development of science, technology and innovation in universities based on scientific research (basic and applied) has not been optimal.

4. The competitiveness of higher education and science and technology at the global level is still low

Innovation and Implications of Productivity Culture in Higher Education Institutions in Indonesia

The challenges that exist in the formation of a culture of productivity in this case must be overcome with innovations that have implications for the culture of productivity in higher education institutions.

Innovation in the formation of a culture of higher education productivity in Indonesia has great potential to boost the position of higher education in the national and international arena. A good productivity culture certainly boosts quality and improves the ranking of universities in the international arena. Here are some innovations to improve the development of a culture of productivity in higher education:

- (1) Use of education fund allocation from the government for research

The amount of research in a higher education institution can be one of the indicators of a good productivity culture. Research certainly requires funding. Therefore, the use of education fund allocation that is devoted to research capital is very necessary in this case. This step needs to be supported by the apparatus and laws and regulations to oversee the budget utilization program to be effective and efficient.

- (2) Establishment of *Writer University*

A concept that not only focuses on the ability to write scientific papers, but also the creation of a productive and innovative academic climate in higher education institutions in Indonesia. This writer university is supported by several factors, namely: *research skills and competence, self-efficacy, global innovativeness, individual factors, self-determination, mentoring, institutional support, departmental culture, research-oriented culture, electronic information resources* (Ocampo et al., 2022). The establishment of this writer university is of course also accompanied by the development of reading interest of lecturers and students (Madhakomala et al., 2022).

- (3) Collaboration of Universities in Indonesia with the world's top universities

It is undeniable that the ranking of universities in Indonesia is still not optimal. Therefore, mutually beneficial partnerships between Indonesian universities and foreign universities, especially the world's top campuses, continue to be encouraged. The Independent Learning Independent Campus program increases the need for

collaboration with foreign universities, ranging from improving the quality of learning and research to student exchanges. (Napitupulu, 2022).

(4) Improving the Quality and Management of Educators and Education Personnel in Higher Education

The quality of educators and education personnel plays an important role in shaping a culture of productivity. Therefore, reform is needed in the recruitment of educators who support and drive the culture of productivity in higher education (Cf. Education Roadmap 2025-2045).

CONCLUSION

It is undeniable that the formation of a culture of higher education productivity in Indonesia has not yet run optimally. There are still several problems and challenges faced, namely: Inequality of Access, quality gap, lack of relevance, challenges in inputs, processes and outputs in higher education institutions.

From the presentation of the problems and challenges regarding the culture of productivity in higher education institutions in Indonesia, this study emphasizes the importance of actions to overcome existing problems through several solutions, namely the appropriate allocation of funds for research, the establishment of writer universities, collaboration between universities in Indonesia and the world's top universities, and improving the quality and management of educators and education personnel in universities.

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