

Implementation of Continuing Professional Development in Self Professional Development Factors Amongst Aviation Polytechnic's Lecturers

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ABSTRACT

The purpose of this research is to find out the picture of conditions in quantity and quality of lecturers today and the implementation of continuing professional development lecturers in terms of self professional development at makassar aviation polytechnic. This research uses a qualitative approach by collecting data in terms of documents, literature, and interviews. The research subject was a makassar aviation polytechnic lecturer who numbered 16 people supported by interviews with 3 people in managerial positions. The implementation of the factors studied is the implementation factor of continuing professional development lecturers in terms of self professional development. The results of this study show that the implementation of Continuing Professional Development in aviation polytechnics is still not optimal in terms of quantity. This can be seen from the number of certified lecturers as many as 7 people or 43% of the number of permanent lecturers. Aviation polytechnics do not yet have lecturers with doctoral criteria. There are variables of self professional development, namely in the implementation of Continuing Professional Development in self reading activities are considered good, self development in research activities is considered not optimal, and in academic quality activities is considered Not optimal. These findings indicate that implementation of Continuing Professional Development has not been optimal.

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Introduction

One of the main factors that determine the quality of education in college is the quality of lecturers in it. The Head of Higher Education, responsible for its management, because lecturers have a very strategic role and the main support in improving the quality of educators in their universities, is also obliged to manage the human resources (lecturers) needed to implement a quality management system that is carried out

sustainably in order to be effective and efficient in achieving the quality of education that has been established.

In the implementation of education in universities, lecturers have a very central position because it has a direct influence on the education process and the quality of graduates. The quality assurance program developed today, has become a reference that lecturers as a resource that is highly correlated to the ability of graduates who are "competition ended who have expertise and knowledge in accordance with the discipline they pursue" (Wardiman, 1998).

Management of human resources in universities, especially lecturers, needs to be directed to the distinction of lecturers themselves. Of course, the empowerment of lecturers in improving the quality of education in educational institutions. This of course must begin with a stigma of thinking as a logical basis for teachers to be able to contribute to educational institutions. The paradigm of teaching staff (lecturers) according to (Kesit, 2009), is said to start by conducting an educational orientation, which includes: *First*, from terminal learning to lifelong learning; *Second*, from learning to focus on mastery of knowledge to holistic learning; *Third*, change the image of lecturer-student relationships that are confrontational to the image of partnership relationships; *Fourth*, change the orientation from teachers who emphasize scholastic (academic) knowledge to emphasise the balance of value education focus; *The fifth* changes orientation from conventional patterns to patterns of information technology and cultural approaches. And *sixth*, from the appearance of isolated teaching staff (lecturers) to appearances in work teams (partnership to institutions / not subordinate to educational institutions).

Based on research by (Idrianti & Abd Wahid, 2020) Teachers must involved and have competence in the vocational. Means that, The teacher must have all aspects within himself between the profession, professionalism, self-capacity and work itself. Teacher which shows the totality of work called the Indonesian Vocational Teacher Engagement (I-VOCATIE).

Aviation Polytechnic further shortened to makassar police is a military college in the Ministry of Transportation, led by the Director who is under and responsible to the Head of the Human Resource Development Agency, administratively fostered by the Secretary of the Transportation Human Resources Development Agency and technically operationally built by the Head of the Center for Human Resource Development of Air Transportation. The academic technical development of Makassar Policy is carried out by the Minister responsible for National Education and functional technical development is carried out by the Minister of Transportation, in accordance with the provisions of the laws and regulations.

Development process of the TVET Educator competencies concludes the three main components are Personal Traits and Professionalism; Teaching and Learning and Training and Technical and Innovation. The development of these competencies for lecturer is to ensure that the quality TVET Educators produce competent TVET graduates who are capable to meet the requirement of industries and professional bodies (Ismail et al., 2018)

Based on the makassar poltekbang renstra document 2020-2024, there is a Quality and Quantity Development program of Teaching Staff (Lecturer / Instructor / Widyaiswara). The demands for the quality, competence and professionalism of education and training graduates must be balanced with the improvement and development of the quality and professionalism of teachers / educators (widyaiswara, lecturers, instructors) and education and training organizers, for that must be able to meet

the needs of education personnel (quantity and quality) and improve academic ability, professional and guarantee the welfare of educators, so that educators are able to meet the needs of education personnel (quantity and quality) and improve academic ability, professional and welfare assurance of educators, so that educators are able to meet the needs of education personnel (quantity and quality) and improve academic ability, professional and guarantee the welfare of educators, so that educators are able to meet the needs of education personnel (quantity and quality) and improve academic ability, professional and welfare assurance of educators, so that educators are able to meet the needs of education personnel (quantity and quality) and improve academic ability, professional and welfare assurance of educators, so that educators are able to meet the needs of functioning optimally in order to produce graduates who have high competence, discipline, responsibility and integrity.

The current condition, ratio the number of lecturers (permanent lecturers and special lecturers) against the number of cadets is 1: 12, in accordance with the regulation of kemenristek Dikti is still enough because at least 1:25. But when viewed from the regulation of BPSDM Ministry of Transportation should be 1:6. When viewed from its status, there are several lecturers who have a home base in the work unit outside poltekbang makassar. When viewed from the level of education, no one has a S3 (doctoral) education qualification.

In the framework of Continuing Professional Development (CPD) lecturers, makassar police have several strategic targets, namely increasing the quality of the implementation of tri dharma universities that are in accordance with standards and increasing educators and education personnel of competent transportation training. To achieve these strategic goals, it is necessary to be reviewed from several key performance indicators (IKU) namely the Amount of Research by teaching staff published in national and international journals, the Number of Community Service Activities carried out around the training institution, the Percentage of Educators who have certificates of competence in the field taught and Percentage of Increasing Competence of Education Personnel Renstra, 2020

CPD implementation will not be successful if there is no awareness or motivation in each individual to want to make changes forward. Every change must be accompanied by the willingness of the individual to make changes both due to social, economic and work culture factors. Self-professional development needs to be studied to see how CPD is applied. In the process, self-professional development is the first step or the initial stage of CPD implementation. Therefore, this study is focused on:

- i. How is the picture of the condition in quantity and quality of lecturers currently in Makassar Police?
- ii. How is the implementation of CPD lecturers in terms of self professional development in poltekbang makassar?

One of the novelties of this research is the development of a comprehensive model for lecturer professional development that integrates the concepts of Continuing Professional Development (CPD) with modern technological advancements and interdisciplinary approaches. This model will emphasize personalized and adaptive learning pathways for lecturers, incorporating AI-driven analytics to tailor development programs based on individual needs and performance. Additionally, the research will explore the impact of collaborative and team-based professional development activities, moving away from isolated efforts to a more integrated approach that fosters a culture of continuous improvement and innovation within the academic community. The study will

also investigate the application of virtual reality (VR) and augmented reality (AR) technologies in lecturer training programs to enhance practical skills and teaching methodologies. Another innovative aspect is the implementation of a comprehensive evaluation system that includes feedback from students, peers, and industry stakeholders, ensuring that the development programs are aligned with real-world demands and educational standards. This research will not only provide new insights into effective professional development practices but also offer practical solutions for higher education institutions to enhance the quality of their teaching staff and, consequently, the overall quality of education.

Research Methods

This research uses a qualitative approach with descriptive research methods that describe the ongoing circumstances at the time of the study based on existing facts. Qualitative approaches are carried out in natural research field situations, as they are without being manipulated primarily against the data collected. According to (Moleong, 2013), methods that are often used in qualitative research are observations, interviews, field records and the use of documents.

With a qualitative approach it is expected that the description of the symptoms seen in the field can be interpreted the content and its meaning. This study is very descriptive, which collects as much data as possible and is poured in the form of reports and descriptions. The reason the method and approach were chosen because of the problems studied concerning problems that are happening and developing in the development of lecturer quality. This research was conducted at makassar aviation polytechnic.

Data collection techniques using observation methods, interviews, documentation techniques to copy documents, to collect correct and precise information, so that the truth of the data obtained can be accounted for. The data source used is primary data in the form of the words and actions of people observed or interviewed recorded through written records or recordings. While Secondary Data is additional data in the form of documents, archives, books, and so on, related to the Strategic Plan of the Institution, the master plan of development. In this study, using sampling techniques by interviewing parties who can provide correct information about the picture related to institutional management and lecturer development programs.

Data analysis in this study is using qualitative methods, where the process of finding and compiling data is systematically obtained from interview results, field records, documentation and copying techniques, by organizing data into categories, describing it into units, synthesizing, and making conclusions so that it is easy for researchers and others to understand (Sugiyono, 2017). The steps of qualitative analysis are as follows:

- i. Data collection,
- ii. The results of interviews and the distribution of documents written into the memo,
- iii. The findings are categorized so that there is a relationship between problems, and
- iv. Draws conclusions.

To measure the effectiveness of CPD implementation, the following indicators are used:

- i. There are details of CPD programs and activities,
- ii. There are regulations governing the implementation of CPD, and
- iii. Program implementation on CPD.

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Instrument

Kim dung (2020) stated that there are three broad categories that can be applied related to CPD, namely self-professional development, CPD with other institutions or schools, and formal professional development. The participation of lecturers becomes very important in the achievement of CPD. Policies or programs from the leadership become a driving factor to lecturers in implementation. Three categories or variables can be seen in table 1 below.

Table 1 - Implementation of CPD

Variable	Indicator
Self professional development	1. Self reading 2. Research 3. Academic quality
CPD with other institutions or schools	1. Learning by group 2. Industry internship 3. Professional sharing with colleagues 4. Professional organization member
Formal CPD	1. Professional workshop, conferences 2. Certified training courses

The next step is to conduct interviews with lecturers and officials in makassar poltekbang environment. The interview instrument is the result of research by (Kartowagiran, 2011) related to the performance of professional teachers developed with the condition of lecturers in makassar police. Interviews are conducted to find out the conditions related to the implementation of CPD and the implementation of CPD on self-professional development factors. Here is the interview instrument used.

Table 2 - Interview instrument

No	Indicator	Question
1	Self Reading	Read journals or scientific articles in a month
		Read flight rules documents in a month
		Read the updated flight documents
		Read educational news or information in a month
		Read non-fiction science books
		Read fiction books/fiction novels
2	Research	Conduct independent research in a year
		Write articles or journals published in internal journals
		Write articles or journals published in international journals in a year
		Write a book or module in a year
		Conducting development research
		Take part in research competitions both domestically and abroad
3	Academic Quality	Follow the doctoral level
		Do self assesment of teaching

Follow the recurrent course
Obtain lecturer certification

3. Analysis

In theory, (Seyfarth, 2002) says that CPD is an opportunity or challenge given to teachers and lecturer, other professionals, and support personnel to gain new knowledge and attitudes, which will lead to behavioral change, thereby improving cadet achievement. Therefore, to be able to carry out CPD well, good planning needs to be done. Included in the planning stage here is the identification of the needs that reach who needs a particular development with which development materials. Because based on an overall study there is a difference in priority needs of sustainable professionalism development materials reviewed from differences in the level of functional positions of teachers (Waluyanti & Sunarto, 2014).

The current condition in makassar police for CPD there are still some obstacles, one of which is the number of permanent lecturers who are still lacking. The step taken by management is to propose the status of lecturers does not remain a permanent lecturer. But this change takes a long time, due to the assessment process for the transfer of position. Here is the data from lecturers owned by makassar police:

Table 3 - Lecturer data

Status	Sum	Position			Lecturer Certification
		Head Lector	Lecturer	Expert Assistant	
Permanent Lecturer	16	1	7	8	7
Lecturers Are Not Fixed	28	-	-	-	-
TOTAL	46				

Based on the table above, the number of lecturers is still lower compared to the number of non-permanent lecturers. Lecturers do not still consist of guest or special lecturers and instructors who have S2 / master education qualifications but have not transferred their positions into functional positions of lecturers. Poltekbang makassar as vocational higher education that demands a greater portion of practical learning than theory causes the importance of increasing the number of permanent lecturers with aviation competence. Permanent lecturers who have aviation competence only 8 people, the remaining 9 people are permanent lecturers who have general competence or who do not have competence in the field of aviation.

Career development of lecturers is still slow, this can be seen from the number of head lectors who are still 1 person. The number of lecturers who have been certified is also only 7 people. Professional lecturers who always maintain and improve the development of their professional making teaching and education as a field to print the next generation of the nation who are intelligent, virtuous, creative and innovative in the face of the development of science. The development of CPD can be explained through maslow's study of the needs theory known as the hierarchy of needs. Maslow's five levels of the hierarchy of needs show the continuity of one's behavior in meeting needs starting

with the fulfillment of fiiological needs, security needs, togetherness needs, belief needs, and self-actualization needs (Schunk, 2012).

Through CPD, the fulfillment of the teacher's confidence needs is met. Furthermore, to reach the highest level, the need to actualize themselves can be realized by teachers by doing professional growth or development. The results of research conducted by (Althausser, 2015) support this research explaining that professional development programs can improve lecturer self-empowerment and student achievement. The self-empowerment of lecturers personally and generally through participation in professional development programs has a relationship to improve student achievement in accordance with the objective of professional development is to improve cadet achievement.

The development of the quality of lecturers in the form of training and non-training aims to improve the knowledge, skills and behavior of lecturers. Lecturers in the context of learning effectiveness have become a central point in addition to other resources to make hr development does not stop at output, but can reach outcomes and impacts. Every year tens of billions are invested by the government in the state budget and apbd, the budget for the development of government human resources (PNS). But the benefits of training for organizations are minimal (Samsudin, 2006). Kazakovs research results (2014) confirm that there are 12 factors that affect *development solutions* (DS) namely 1. developmental need (Joy-Matthews et al., 2004), 2. Efficiency of DS (Farjad, 2012), 3. Time, 4. DS intensity, 5. Development methods (Kaupin, 1997), 6. Cognitive style (Allinson & Hayes, 1996) 7. DS location, 8. Price (Kurgaeva et al., 2020), 9. Travel expenses, 10. Indirect expenses (Kurgaeva et al., 2020), 11. Fivel level of priorities, 12. Development priorities of competencec (Gemmell, 2011). (Donough, 2011) presented the top ten factors affecting job training, namely: management or leader support, training needs, effective and experienced lecturer, learning objective, learner ability and self motivation, learner readiness, learner emotional investment, class practice, out-of-class practice and appropriate learning environment.

Results and Discussions

Implementation of Self-professional development in self reading

Lecturers must have awareness to develop themselves both academically, research and breadth of knowledge. In this study, lecturers provided responses and activities related to self-professional development in the self reading factor.

Table 4 - Self reading

No	Lecturer's activities	Percentage (n=16 lecturers)		
		Not at all	1-5 times	>5 Times
1	Read journals or scientific articles in a month	56	13	31
2	Read flight rules documents in a month	75	25	
3	Read the updated flight documents	31	69	
4	Read educational news or information in a month	13	38	49
5	Read non-fiction science books	50	27	23
6	Read fiction books/fiction novels	31	50	19

In Tabel 4 shows the average lecturer in self reading activities with not or not at all, which is 43%, doing activities 1-5 times which is 37%, and more than 5 times that is

20%. It can be concluded that the implementation of CPD in self reading activities by lecturers is good. Based on the table above shows that the activities of lecturers related to self reading that has not been or is not at all done by most lecturers, namely reading journals or scientific articles, reading aviation rules documents and reading non-fiction science books. According to the speaker of the AD lecturer, the lack of interest in reading, especially aviation regulations, is a limitation of English language skills.

"Books or flight documents mostly use English. If the English language skills are lacking, it will be lazy to read it. Also less interesting, read the rules of flight make sleepy. Maybe because the rules of aviation are suitable for implementers in the field, if for education or campus is difficult to apply." (Lecturer AD)

Lecturer activity related to reading journals or scientific articles five or more times a month is at 31%. This is because the lecturer is in the process of doctoral program education. So as to make the literacy of reading journals or articles high. Lecturers who do not follow the doctoral education level tend not to or do not read journals or articles at all.

Various factors are suspected as the cause of low culture literacy, but reading habits are considered as the main and fundamental factors. In fact, one of the efforts to improve the quality of human resources to quickly adjust to global developments that cover various aspects of human life is to grow a reading society. Habits are actions that are done repeatedly without the presence of an element of coercion. Habits are not something that is natural in humans but is the result of learning and the influence of experiences and the circumstances of the surrounding environment. Therefore habits can be built and developed. While reading according to (Wijono, 1981) is a process of communication of ideas between the author and the reader, in this process the reader tries to interpret the meaning of the symbol or language of the author to capture and understand the author's idea. This is in line with DJ speech related to reading habits.

"Reading is still a weakness, often reading but not complete or just looking for highlights. The habit must indeed exist in each individual lecturer, there must be a high awareness. I think most lecturers prefer to argue or discuss without reading literature or a lot of reading sources." (Lecturer DJ)

The habit of reading is a reading activity that is done repeatedly without any element of coercion. Reading habits include time to read, the type of reading material, how to get reading material, and the number of books / reading materials read. The ability to read is the basis for the creation of reading habits. However, the ability to read in a person is not a guarantee for the creation of reading habits because reading habits are also influenced by other factors (Winoto, 1994), such as the availability of reading material.

The institution's efforts in developing reading habits are to provide a policy of purchasing literature books every year to each lecturer, full membership in the national library, book surgery seminar activities. As stated by FM sources who have positions in the academic section.

"We always try to improve the quality or quality of educators. We always emphasize to every educator both lecturers and instructors to be able to read the updated flight rules. So that our students cadets can provide information that is always updated. We give flexibility to lecturers to propose reading materials every year and also some book surgery activities carried out to motivate lecturers in reading" (Managerial FM)

Implementation of research

Related to the second indicator, namely *research*, in the contents of Law No. 14 (2005) it is very clear that lecturers are required to have the ability to research / research.

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As one of the pillars of tri dharma, research must be done in the framework of the development of science, technology, and art (IPTEKS). Research needs to be conducted to discover, develop, and disseminate the science, technology, and art that prosper individuals and communities, support regional and national development, and contribute to global problem solving. Quality research will be able to act as the main driver of innovation and service systems in universities. Likewise, it is affirmed in Article 93 PP No. 17 (2010) that universities, institutes, and high schools are obliged to carry out basic research, applied research, development research, and/or industrial research.

Table 5 - Research

No	Lecturer's activities	Percentage (n=16 lecturers)		
		Not at all	1-5 times	>5 Times
1	Conduct independent research in a year	37	63	
2	Write articles or journals published in internal journals		100	
3	Write articles or journals published in international journals in a year	87	13	
4	Write a book or module in a year	62	38	
5	Conducting development research	87	13	
6	Take part in research competitions both domestically and abroad	69	31	

In table 5 shows the average lecturer in research activities with not or not at all, which is 57%, doing activities 1-5 times which is 43%, and more than 5 times that is 0%. It can be concluded that the implementation of CPD in research activities by lecturers has not been optimal.

Based on the table above shows that the activities of lecturers related to research that have not been or are not at all carried out by most lecturers, namely writing articles or journals published in international journals in a year, writing books or modules in a year, conducting development research, participating in research competitions both domestically and abroad.

Research conducted by lecturers is still published in internal journals managed by the campus research and community service unit (PPM). This can be seen from the different data between articles published in internal journals as much as 100% with the percentage of internationally published journals that are only 13% or most lecturers have not or do not submit their journals to international journals.

"Research is still done simply, I have not dared to put it in an international journal. The important thing is that the research responsibility has been done." (Lecturer DJ)

The task of a lecturer in the tri dharma of college is one of them to conduct research. It is not required to be published in international journals, this resulted in lecturers having no desire for publication in international journals. Lecturers who have international journals only amount to 12% of the total number of lecturers, because the lecturer is in the process of increasing functional positions to head lecturers. In accordance with the statement of ar sources.

"I am in the process of publishing an international journal. Because the requirement to become a head lector must have an international journal. But most lecturers are lazy to publish to international journals, because it is difficult and complicated." (Lecturer DJ)

The thing to be proud of is that some lecturers (13%) started doing development research. Development research is made related to learning media. Learning media that

were previously still conventional, namely through handouts, power point presentations were changed to be more interactive to cadets. The use of virtual reality media and interactive learning applications is useful research to develop learning through technology. This is in order to mandate Law No.12 (2012) on Higher Education article 45 which contains that research in universities is directed to develop science and technology, as well as improve the welfare of the community and the competitiveness of the nation.

Research literature by (Chinedu et al., 2018) has shown that good education for sustainable development must be centred on educating individuals within communities. Adopting sustainable ways of living in such a way that a balance in the economic, social and environmental aspects of change can be fostered. Various efforts that can be made from some educators in trying to instill sustainability into the subjects and courses they teach are useful for learners to continue learning and find solutions to each problem.

Furthermore, to increase the interest of lecturers, makassar police will provide *rewards* in every work made by lecturers, namely by creating *output* in the form of national and international journals. In addition, research can also be made as a teaching book and copyrighted work that can be patented. This was stated by a DS source.

"We continue to encourage lecturers to be able to improve the quality of their research. We as management will help in terms of funding related to lecturers who will publish to international journals. This year there is one journal that we have patented in HAKI. Our hope is that more journals or articles can be listed in HAKI" (Managerial DS)

Implementation of academic quality

A quality education has qualitative, and transformative perceptions according to students' conceptions, the world and changes the way they value. Similarly, the quality of education successfully modifies the ideas of the professors themselves in their role as teachers, as well as the culture of the institution itself. This view integrates concepts such as development and empowerment and values the process, not just the results. Quality assurance is a top down process, characterized by inflexibility and based on quantitative measurements, while quality improvement is characterized as a bottom up process, a negotiation process, based on qualitative assessment and engagement with academics. Quality assurance is always expected to improve and improvement involves some assessment of the state of the existing quality process, (Scharager Goldenberg, 2018) Quality improvement has the potential to be one of the biggest drivers for change in academic practice in higher education.

Table 6 - Academic Quality

No	Lecturer's activities	Percentage (n=16 lecturers)		
		Not at all	1-5 times	>5 Times
1	Follow the doctoral level	63	37	
2	Self assesment of teaching	31	69	
3	Follow the recurrent course	75	25	
4	Ireceived lecturer certification	56	44	

In table 6 shows the average lecturer in academic quality activities with not or not at all, which is 56%, doing activities 1-5 times which is 44%, and more than 5 times that is 0%. It can be concluded that the implementation of CPD in academic quality activities by lecturers has not been optimal.

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Quality is construct and its meaning is contextual (Adamu & Addamu, 2012). Based on (Harvey & Green, 1993) proposes five quality assurance approaches: exceptional; perfection; conformity for purpose; value for money, and transformation. The quality of higher education is currently the object of analysis of state interests and the interests of civil society, and the state regulates the quality of universities through quality assurance laws as well as establishing accreditation as its main tool. However, the ideas of those responsible for managing quality at the university have not been studied, (Scharager Goldenberg, 2018)

Based on table 6, the increase in the level of lecturer qualifications in makassar police for doctoral programs is still fairly less (37%). Whereas with the number of lecturers who are qualified S3 is expected to improve the quality of teaching in makassar police. Lecturers who are qualified S3 have knowledge and ways of thinking that are different from the S2 qualification. This is because undergraduate students can elaborate in detail, namely in the first year, doctoral program students are directed to have a broad and in-depth knowledge insight related to important elements in academic culture, among others:

- Mastering the rules of writing scientific papers, publications, and references;
- Have a broad and in-depth insight into new studies of theories, concepts, perspectives, and research methodologies from various literatures;
- Be able to establish good communication with academics;
- Able to provide critical analysis in response to global issues in the field of education,
- Able to actively engage in various academic conversations through national and international seminars and conferences, and
- Able to contribute constructive new thoughts. In the sense that doctoral students are expected to not only be able to respond critically to new issues that are developing today, but also expected to be able to provide innovative, solutive, and constructive ideas that are not only beneficial for their actualization but also benefit the social community nationally and internationally.

The step of makassar police in improving lecturers who have S3 qualifications is to provide tuition fee assistance. As explained by mk sources who have positions in makassar police management.

"Every semester we provide tuition assistance to lecturers who attend S3 tuition. Not only lecturers, but also other employees who want to continue their education to S2 and S1. This is our commitment to improve the quality of teaching on campus and the quality of human resources owned." (Managerial MK)

Recognition of the position of lecturers as professionals is evidenced by the lecturer's sertification and given to lecturers who have qualified. Furthermore, for lecturers who already have sertifikathe lecturer is entitled to earn above the minimum living needs and social welfare security. Income above the minimum living requirement includes basic salary, benefits attached to salary, as well as other income in the form of professional benefits, functional benefits, special benefits, and additional benefits related to his duties as a lecturer set by the principle of appreciation on the basis of achievement.

The number of lecturers who are certified in makassar police almost reaches 50%, this can increase the motivation of lecturers to be able to take the lecturer certification exam. Guidance of lecturers who will follow the lecturer certification must be done, because there are still many lecturers who have not been certified it is a lecturer who failed in the selection. As stated by MN sources.

"I took the certification exam this year, but I failed. There are some administrative requirements that are not yet complete the reason. In the future, when you want to apply for certification again it is better for someone to direct or at least guide us, check our documents first so that when collected everything is appropriate and complete." (Lecturer MN)

According to (Hanisy, 2014), Certification is the process of obtaining a professional certificate by collecting a portfolio of 10 elements. The ten elements are related to each other. If the portfolio is not able to qualify, then the next step is to follow the training (education and training) intensively about tips and methodologies to become a professional lecturer in theory and practice. Certification is considered by the government as a solution to improve the quality of lecturers in Indonesia by improving the performance of lecturers through the policy.

Makassar poltekbang lecturers always evaluate their performance by conducting self-assessment to cadets. Lecturer evaluation needs to be done in order to provide assessments to lecturers related to the mastery of materials and teaching methods. Judging from table 5, that the lecturer's self-evaluation rate is quite high (69%) meaning that the lecturer's awareness in the evaluation in his teaching is already good.

The limitations of recurrent or refreshing training to the ability and ability of lecturers are limited to make the number of recurrent training is still low, which is only 25%. Even though lecturers really need to follow the training so that knowledge and skills can be maintained properly. This was confirmed by a BP source.

"Now there is almost never more recurrent training, this training is actually important so that lecturers do not forget or still hone their skills and knowledge, especially in the field of competence". (Lecturer BP)

This is because the training for the apparatus previously held by vocational universities in the ministry of transportation was stopped. All trainings intended for the apparatus are returned to the training hall for the apparatus under the ministry of transportation. Also caused by the misalignment of existing programs with the needs of training by lecturers or apparatus.

Conclusion

The results of this study concluded that the implementation of CPD in makassar police is still not optimal in terms of quantity. This can be seen from the number of certified lecturers as many as 7 people or 43% of the number of permanent lecturers. Poltekbang makassar does not yet have lecturers of doctoral criteria. But as many as 8 people are currently pursuing doctoral education. The ratio of lecturers and students is 1: 12, still in accordance with the requirements by kemenristek dikti. The application of CPD in relation to self-professional development can be seen from 3 factors, namely as follows:

Self Reading

The implementation of CPD in self reading activities by lecturers is good. Lecturer activities related to self reading that has not been or is not at all carried out by most lecturers, namely reading journals or scientific articles, reading aviation rules documents and reading non-fiction science books. Lecturer activity related to reading journals or scientific articles five or more times a month is at 31%. Most lecturers are interested in reading updated flight documents, news or information or reading fiction books.

Research

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The implementation of CPD in research activities by lecturers has not been optimal because most lecturers have not or do not write articles or journals published in international journals in a year, write books or modules in a year, conduct development research, participate in research competitions both domestically and abroad. Most of the research conducted by lecturers is published in the internal journal of makassar police.

Academic quality

The implementation of CPD in academic quality activities by lecturers has not been optimal because some lecturers have not or are not at all to follow the doctoral level, follow recurrent courses or have lecturer certification.

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