IMPLEMENTATION OF CONTINUING PROFESSIONAL DEVELOPMENT IN LECTURER PARTNERSHIP FACTOR AT AVIATION POLYTECHNIC

Andrian Pratama[1], Bambang Supriyanto[2], I Gusti Putu Asto Buditjahjanto[3], Muchlas Samani[4]

[1,4] *Vocational Education, Postgraduate Department, Surabaya State Univeristy, Surabaya, Indonesia*
E-mail: andrian.20007@mhs.unesa.ac.id, msamani@unesa.ac.id

[2,3] *Electrical Engineering Department, Surabaya State University, Surabaya, Indonesia*
E-mail: bambangsuprianto@unesa.ac.id, asto@unesa.ac.id

Abstract

The purpose of this study is to find out the picture of conditions in quantity and quality of lecturers today and the implementation of continuing professional develompent lecturers from lecturer partnership factor 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 develompent lecturers in terms of lecturer cooperation with other institutions or universities. The results of this study show that from each indicator on the cooperation variables, namely in the implementation of CPD in learning by group activities is good, the implementation of CPD in industry internship activities is still not optimal, the implementation of CPD in professional sharing activities has been good and the implementation of CPD in professional organization member activities has not been optimal.

Keywords : *continuing professional develompent, lecturer, partnership*

I. 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 the quality management system carried out in a sustainable manner in order to be effective and efficient in achieving the quality of education that has been established with continuing professionalism development (CPD).

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 i.e. who have expertise and knowledge in accordance with the discipline they pursue" [1].

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 theCenter for Human Resource Development of Air Transportation. The academic technical development of Makassar Police is carried out by the Minister responsible in the field of National Education and functional technical development is carried out by the Minister of Transportation, in accordance with the provisions of the laws and regulations.

Based on [2], 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, rasio 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 CPD lecturers, makassar police have several strategic targets, namely increasing the quality of the implementation of tri dharma universities 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 the Percentage of Competency Improvement Education Energy[2]

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. Lecturer partnership factor needs to be studied to see how CPD is applied. In the process, partnership is the second step or the initial stage of CPD implementation. Therefore, this study is focused on:

1. How is the condition in quantity and quality of lecturers currently in Makassar Police?
2. How is the implementation of continuing professional develompent lecturers in terms of partnership at makassar aviationpolytechnic?

II. LITERATURE REVIEW

Quality of lecturers in universities must be to improve, according to [3] some of the main things that lecturers can do to realize this desire can be spelled out as follows: *1)* lecturers should always try to improve their knowledge by reading books, looking on the internet, writing in journals, conducting research, attending seminars. *2)* Lecturers need to increase their knowledge by following a higher level of education. *3)* Lecturers must follow the development of information technology so that they can use the internet to improve their knowledge and are expected to make a simple homepage to put teaching materials that can be accessed by all students. *4)* Lecturers should always be aware of their responsibility to help students to be the best by mastering content and methods and preparing learning materials as well as possible. *5)* Lecturers need to have a functional level of lecturer position because this will spur a lecturer to always increase his knowledge by conducting research and journaling.

[4] 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 2 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 (Cooperation)	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. Interviews are conducted to find out the conditions related to the implementation of CPD and the implementation of CPD on factors of cooperation with other institutions or schools. Here is the interview instrument used.

Table 2. Interview instrument

No	Indicator	Question
1	Learning by group	Joined in an internal lecturer group
		Follow a coaching lecturer in an internal environment
		Follow FGD lecturers
		Conducting joint research
		Organize modules in groups
2	Industry internship	Carrying out industry internships during his time as a lecturer
		Have an airport rating according to competence
		Training at the airport
		Taking a ratings exam at the airport
		Become a helper at the airport
3	Professional sharing with other colleagues	Follow FGD between other campuses in the ministry of transportation
		Conducting joint research with other campuses in the
		ministry of transportation
		Conduct research together with lecturers at other universities or polytechnics
		Conducting comparative studies with other universities or polytechnics
		Become a guest lecturer at another campus under the ministry of transportation
		Become a guest lecturer at universities, polytechnics, and vocational schools
4	Professional organization member	Become a member of a skilled professional organization
		Become the manager of a professional organization
		Active in professional organization activities

III. RESEARCH METHODOLOGY

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 [5], 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 surabaya 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[6]. The steps of qualitative analysis are as follows: a) data collection, b) the results of interviews and the distribution of documents written into the memo, c) the findings are categorized so that there is a relationship between problems, and d) draws conclusions. To measure the effectiveness of PKB implementation, the following indicators are used: 1) there are details of CPD programs and activities, 2) there are regulations governing the implementation of CPD, and 3) program implementation on CPD.

IV. RESULT AND DISCUSSION

In theory, [7] says that CPD is an opportunity given to teachers, other professionals, and support personnel to gain new knowledge and attitudes, which will lead to behavioral change, thereby improving student 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 in terms of differences in the level of functional positions of teachers [8].

The current condition in makassar police for CPD there are still someobstacles, 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		
		Head Lector	Lecturer	Expert Assistant
Fixed Lecturer	16	1	7	8
Lecturer Are Not Fixed	28	-	-	-
TOTAL	46			

Based on table 3,the number of lecturers remains 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 flight 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[9].

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 [10] 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 student 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[11]. [12] research results confirm that there are 12 factors that affect *development solutions* (DS) namely 1. developmental need[13], 2. Efficiency of DS [14],3. Time, 4. DS intensity,5.Development methods ,6.Cognitive style [15], 7.DS location ,8.Price[16] ,9. Travel expenses, 10.Indirect expenses,11. Fivel level of priorities, 12. Development priorities of competences[17]. [18] presented the top ten factors affecting job training, namely: management support, legitimate training needs, effective and exprienced trainer, learning objective, learner ability and motivation, learner readiness, learner emotional investment, in-class practice, out-of-class practice and appropriate learning environment.

A. Lecturer partnership factor

Lecturers must have awareness to develop themselves both academically, research and breadth of knowledge. In this study, lecturers provide responses and activities related to cooperation in the implementation of CPD.

Tabel 4. Learning by Group

No	Lecturer's activities	Percentage (n=16 lecturers)		
		Not at all	1-5 times	>5 Times
1	Joined in an internal lecturer group		100	
2	Follow a coaching lecturer in an internal environment		100	
3	Follow FGD lecturers		31	69
4	Conducting joint research	75	25	
5	Organize modules in groups	68	32	

In table 4 shows the average lecturer in learning by group activities with not or not at all which is 29%, doing activities 1-5 times which is 58%, and more than 5 times that is 13%. It can be concluded that the implementation of CPD in learning by group activities by lecturers is good.

Based on table 4 shows that lecturer activities related to learning by group that have not been or are not at all carried out by most lecturers, namely carrying out joint research and compiling modules in groups. According to the speaker of AD lecturers, the lack of conducting joint research is more due to differences in topics to be studied and the busyness of lecturers outside of research.

"Lecturers usually have their own topics that will be discussed... The topic is selected to see from the ability of the lecturer himself. If you study together, usually 1 or 2 people who master the topic. Others just ngikut... That's what creates gaps in research. Therefore, lecturers prefer to carry out research that suits their own topics"

"Most lecturers research independently, because it is more flexible, with independent research can set their own research schedule. It's different if the group has to make an appointment first. When can I do your research together... It's a bit complicated. ."

Lecturer activities related to arranging modules in groups are mostly not or have not been done at all by lecturers (68%) This is because the module will be arranged by lecturers who master the course. So that the modules owned by the study program for one course will vary because each lecturer when going to master the course will make his own according to his knowledge and characteristics.

Co-arranged modules for practicum courses. Because for practicum courses, there are already SOPs and references that must be done when carrying out practicum. Practicum courses are mastered by at least 4 lecturers in the implementation of practicums.

The implementation of CPD, especially in learning by group can be considered good. All lecturers have joined the lecturer group and

discussion group in the internal environment of makassar police. The activeness of lecturers in following coaching lecturers or internal discussions becomes a positive value in the implementation of CPD.

The institution's efforts in increasing collaboration between lecturers are by increasing small group discussionactivities. This activity is intended so that lecturers can actively contribute thoughts and ideas in small groups for the development of learning in makassar police. As stated byFM sources who have positions in the academic section.

"We advise the leaders of the lecturer group to do small group discussions more often. This small group please organize anyone in it and the topics that will be discussed... With the frequent existence of this activity, communication and exchange of information between lecturers will be moremaximal".

Small group discussion is a learning process by conducting small group discussions so that learners have the skills to solve problems related to the main materials and problems faced in everyday life. Small group discussion also means the process of visually ing two or more individuals interacting globally and face-to-face about a particular goal or objective through exchanging information, maintaining opinions or solving problems[19].

Related to the second indicator, namely *the internship industry,* isa form of education and training of educators. An industrial internship program is training that is carried out in relevant industries in order to improve the professional competence of educators. Induction program or better known as internship program is a program that lifts the image and dignity of educators. The program is designed not only to benefit teachers economically but also as an essential part of the teaching's obligation to become professional. Teaching is a complex job and requires professionalism so efforts to develop teacher professionalism is important to improve the quality in learning practice. Through regular internship programs, it is expected that teachers can develop their learning professionalism[20].

Table 5. Industry Internship

No	Lecturer's activities	Percentage (n=16 lecturers)		
		Not at all	1-5 times	>5 Times
1	Carrying out industry internships during his time as a lecturer	81	19	
2	Have an airport rating according to competence	100		
3	Training at the airport	62	38	
4	Taking a ratings exam at the airport	75	25	
5	Become a helper at the airport	75	25	

In table 5 shows the average lecturer in industry internship activities with not or not at all, which is 79%, doing activities 1-5 times which is 21%, and more than 5 times that is 0%. It can be concluded that the implementation of CPD in industry internship activities by lecturers has not been optimal.

Based on table 5 shows that the activities of lecturers related to industrial internships are still not optimal. Most lecturers have never done an industrial internship especially at the airport. The industrial internship program for productive educators in makassar police can increase the relevance of educators' expertise competencies with the development of science and technology in the business world and the industrial world. As stated by the DJ.

"Industrial internships have never been done, actually it's good to have the program. But it's the consideration of time and workload in the office that doesn't allow for those activities."

According to the speaker of lecturer AB, who had participated in industry internships, stated that the program was needed by lecturers to add knowledge and continue to hone skills.

"I've been in an industry internship once... I was assigned an internship at Jakarta Soekarno-Hatta Airport. The benefits are very good to increase knowledge let alone the science of aviation that is fast development... Skills are also honed back when practicing on the field."

The existence of this industry internship foreducators to be able to see in real terms the competencies needed by the industrial world and graduates as needed by the industry so that teachers can adjust the competencies taught to cadets to the needs and development of science and technology in the industry. The paradigm so far to cadets who consider that academic educators of quality under

guest educators or practitioners can be eliminated by the internship program of educators.

Educators will have more self-efficacy in teaching, will have a wider material and can be developed for their research. Industrial internships have a variety of goals to achieve. Referring to [21], the purpose of industrial internships include: (1) improve the technical skills and managerial skills of teachers so that their productivity increases, both in quantity and quality; (2) improve the morale of morals through improving the quality and conformity of their expertise with the work that must be carried out so that the enthusiasm to carry out their duties also becomes better; and (3) increase moral opportunities in a career in education.

There needs to be rules governing the implementation of the apprenticeship program. In order to provide protection to educators who will carry out apprenticeship programs. The commitment of the institution leadership to support the apprenticeship program with the existence of a leadership license to educators to provide motivation to educators who will carry out these activities. Apprenticeship rules must also look at the competence, time, location of implementation and compensation given to apprentices.

Table 6. Professional sharing

No	Lecturer's activities	Percentage (n=16 lecturers)		
		Not at all	1-5 times	>5 Times
1	Follow FGD between other campuses in the ministry of transportation		25	75
2	Conducting joint research with other campuses in the ministry of transportation	31	69	
3	Conduct research together with lecturers at other universities or polytechnics	100		
4	Conducting comparative studies with other universities or polytechnics		100	
5	Become a guest lecturer at another campus under the ministry of transportation	12	62	26
6	Become a guest lecturer at universities, polytechnics, and vocational schools	50	50	

In table 6 shows the average lecturer in professional sharing activities with other campuses that have not been or are not at all, namely 39%, doing activities 1-5 times which is 51%, and more than 5 times that is 10%. It can be concluded that the implementation of CPD in professional sharing activities by lecturers is good.

Based on table 6 shows that the activities of lecturers related to professional sharing with other campuses are good. In the campus environment under the ministry of transportation, most lecturers actively follow FGD lecturers between campuses, carry out comparative studies, or conduct joint research. Joint research was initiated by a research and development agency under the ministry of transportation.

Exchange of information by inviting each other to be guest lecturers is often done by the campus in the ministry of transportation. This is a place to establish good cooperation and communication between institutions under the ministry of transportation. As stated by MK as an official in makassar police.

"To refresh information and communication, we often invite lecturers from other campuses to be able to provide teaching to our cadets. Usually we do with large classes so that all cadets can get information and knowledge from other campus lecturers. Likewise, our lecturers are often invited to other campuses to be able to teach. This is good for cooperative relations between institutions."

Based on table 6,factors that need to be improved are cooperation relationships with universities, polytechnics and other vocational schools. This can be seen in the absence of a form of joint research between lecturers and other polytechnic universities. Joint research collaboration is expected to be realized for the sake of improving the quality of lecturer research. Makassar poltekbang lecturers who mostly master specific competencies in the world of aviation can collaborate with other university lecturers who master science in general.

The cooperation of makassar poltekbang institutions with other universities and polytechnics is focused on tri dharma colleges. But the

implementation is more towards increasing the level of education of makassar poltekbang lecturers, has not led to joint research or the use of assets together. Makassar poltekbang lecturers also actively help teach in vocational schools,especially aviation vocational schools. From the table data can be seen that 50% of the number of lecturersteach at vocational schools and other universities.

"Lecturers especially engineering are often asked to teach to vocational aviation. We are needed to be a teacher and help for the development of the aviation vocational school. So, you could say we who are technical lecturers helped build aviation vocational schools in Makassar".

The existence of this cooperation encourages lecturers in the implementation of CPD to be active in building vocational education in their region. The existence of CPD, the task of lecturers is not only to teach in institutions, but also actively participate in teaching on campus and other schools in order to share their knowledge and experience both in theory and managerial terms.

In the framework for balancing academic and social activities, professional lecturers are also advised to take part in various organizations. Table 7 shows the involvement of lecturers in the organization of their profession.

Table 7. Professional organization member

No	Lecturer's activities	Percentage (n=16 lecturers)		
		Not at all	1-5 times	>5 Times
1	Become a member of a skilled professional organization	37	63	
2	Become the manager of a professional organization	69	31	
3	Active in professional organization activities	50	50	

In table 7 shows the average lecturer in professional organization member activities who have not or is not at all, which is 52%, doing activities 1-5 times which is 48%, and more than 5 times that is 0%. It can be concluded that the implementation of CPD in professional organization member activities by lecturers has not been optimal.

Being an organizational manager in both education and expertise also becomes one of the professional criteria of a lecturer. Table 7 shows that most lecturers become members of professional organizations according to their field. Lecturers who are not members of professional organizations, are lecturers who teach public courses or lecturers do not have expertise in the field of aviation.

Professional organizations, especially in aviation, followed by makassar police lecturers are IATCA, which is a professional organization of air traffic controllers, INAIMA is a professional organization for aviation communication personnel and aeronautical information, then IAEETA (professional organization for airport electrical engineering and air navigation personnel). Professional organizations are dominated by personnel who work at the airport, this is because this organization directly accommodates the interests of the profession. Lecturers whose main profession is teaching, more members than managers.

This can be seen from table 7,that most lecturers do not become administrators of the organization. Lecturers who become managers of the organization have a role only as coordinator lecturers in the organization or become managers in relation to education and regulation issues. As stated by bp lecturer.

"I am a member of IAEETA, just a member. The manager is from airport personnel."

The involvement of lecturers in professional organizations provides benefits to lecturers to always be able to establish intense communication to other members who have the same competencies and can increase knowledge related to the new world of aviation. Since most members of the organization are direct practitioners, the transfer or sharing of knowledge will be more efficient.

"The benefits if we enter the members of the organization are very much. We can discuss with other members, can exchange information or establish good communication with fellow members of the organization. We are although the main task of teaching but we will still hold the same licenses and competencies as other members who are field people"

Lecturers who are actively involved in the professional organization involved is one of the factors that CPD lecturers in makassar police can be categorized well. CPD which aims to be able to improve professionalism in both the field of education and skills can be realized with one of the

factors is lecturers participating or directly involved in professional organizations.

V. 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 lecturer partnership factor can be seen from 4 factors, namely as follows:

1. Learning by group
   The implementation of CPD in learning by group activities by lecturers is good. All lecturers have joined the lecturer group and discussion group in the internal environment of makassar police. The activeness of lecturers in following coaching lecturers or internal discussions becomes a positive value in the implementation of CPD. Lecturer activities that have not been or are not at all carried out by most lecturers are carrying out joint research and compiling modules in groups.

2. Industry Internship
   The implementation of CPD in industry internship activities by lecturers has not been optimal becausemost lecturers have never conducted an industry internship, especially at the airport. Training related to equipment at the airport and rating exams has also largely never been done by makassar police lecturers.

3. Professional sharing with other colleagues
   The implementation of CPD in professional sharing activities by lecturers has been good because thesensitivity of lecturers related to professional sharing with other campuses has been running but in the ministry of transportation environment. In the campus environment under the ministry of transportation, most lecturers actively follow FGD lecturers between campuses, carry out comparative studies, or conduct joint research. The absence of a form of joint research between lecturers with universities and other polytechnics shows that professional sharing with other campuses outside the ministry of transportation has not been optimal.

4. Professional organization member

The implementation of CPD in professional organization member activities by lecturers has not been optimal even thoughmost lecturers become members of professional organizations in accordance with their fields. Lecturers who are not members of professional organizations, are lecturers who teach public courses or lecturers do not have expertise in the field of aviation. But mostlecturers do not become managers of the organization. Lecturers who become managers of the organization have a role only as coordinator lecturers in the organization. Makassar poltekbang lecturers are active in professional organization activities.

ACKNOWLEDGMENT

REFERENCES

[1] W. Djojonegoro, *Pengembangan Sumber Daya Melalui Sekolah Menegah Kejuruan (SMK)*. PT. Balai Pustaka, 2005.

[2] Politeknik Penerbangan Makassar, *Rencana Strategis*. Unit Perencanaan, 2020.

[3] Muttaqin, "Penyiapan Tenaga Pendidik Profesional," *Seminar Nasional. Program PHKI UNY*, 2009.

[4] N. Thi Kim Dung, N. Hoang Doan Huy, N. Thi Hang, D. Thi Thuy Ha, "Self-perception of teachers and managers of the impact of teachers' professional development in Vietnam", *Int. J. Educ and Self Develop*, vol.15, no. 2, 2020.

[5] J. Moleong, *Metode Penelitian Kualitatif*. PT. Rosdakarya, 2007.

[6] Sugiyono, *Metode Penelitian Kuantilatif, Kualitatif, dan Kombinasi (Mixed Methods)*. Alfabeta, 2017.

[7] J.T. Seyfarth, *Human Resource; Management for Effective Schools*. Boston: Allyn and Bacon, Third Edition, 2002.

[8] Sri Waluyanti and Soenarto, "Analisis Kebutuhan Materi Pengembangan Profesionalisme Berkelanjutan Guru SMK Teknik Audio Video", *Jurnal Kependidikan*, Vol. 44, No. 2, p. 146-157, 2014.

[9] D.H. Schunk, *Learning Theories. An Educational Perspective. Terjemahan E. Hamdiah. and E. Fajar*. Pustaka Pelajar,

2012.

[10] K. Althauser, "Job-embedded professional development: its impact on teacher self-efficacy and student performance," *Int. J. Teacher Development*, Vol. 19, No. 2, p. 210-225, 2015.

[11] Sadili Syamsudin, *Manajeme*n *Sumber Daya Manusia.* Pustaka Setia, 2006.

[12] M. Kazakova, *A Competency Based Model for Management of Human Resource Development*. Riga, 2013.

[13] J. Joy-Matthews, D. Megginson.,and M. Sutees, *Human Resource Development*. Kogan Page Publisher, 2004.

[14] F. Shahrooz, The Evaluation Effectiveness of Training Course in University by Kirpatrick's Model. Procedia – social and Behavioral Science, 2012.

[15] C. Allinson and J. Hayes, "The cognitive style index: a measure of intuition-analysis for organisational research", *Journal of Management Studies*, Vol. 33, 1996.

[16] Z. Kurgaeva, *Human Resource Management*. Kazan National Research Technological University, 2006.

[17] T. Gemmell, *Alligning Training with corporate strategy.* Retrieved from training industry, 2011.

[18] Donough, "top ten factors affecting job training", in *Third billenial Germany conference*, 2011.

[19] N.W. Sulistyowati, " Implementasi Small Group Discussion Dan Collaborative Learning Untuk Meningkatkan Prestasi Belajar Mahasiswa Program Studi Pendidikan Akuntansi Ikip Pgri Madiun", *Jurnal Akuntansi dan Pendidikan*, Volume 5, Nomor 2, 2016.

[20] A. Budiman, "Menyiapkan Guru Profesional di SMK Teknik Kendaraan Ringan (TKR)", *Prosiding Konvensi Nasional Asosiasi Pendidikan Teknologi dan Kejuruan (APTEKINDO) ke-7 Universitas Pendidikan Indonesia,* 2014.

[21] M.S.P. Hasibuan, *Manajemen Sumber Daya Manusia,* Cetakan keempat belas. Bumi Aksara, 2014

AUTHOR'S INFORMATION

First Author: Andrian Pratama	Vocational Education, Postgraduate Department, Surabaya State Univeristy, Surabaya, Indonesia E-mail: andrian.20007@mhs.unesa.ac.id
Second Author: Bambang Suprianto	Electrical Engineering Department, Surabaya State University, Surabaya, Indonesia E-mail: bambangsuprianto@unesa.ac.id
Third Author: I Gusti Putu Asto Buditjahjanto	Electrical Engineering Department, Surabaya State University, Surabaya, Indonesia E-mail: asto@unesa.ac.id
Four Author: Muchlas Samani	Vocational Education, Postgraduate Department, Surabaya State Univeristy, Surabaya, Indonesia E-mail: msamani@unesa.ac.id