

FACTORS OF FORMING COMPETENCE OF FACILITATORS THROUGH INVOLVEMENT IN THE PROCESS OF TEACHING AND LEARNING AND WORK ENVIRONMENTS ON DEVELOPMENT EMPOWERMENT TEACHER AND EDUCATION PERSONAL (PPPPTK-IPA) - INDONESIA

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ABSTRACT

The facilitator is a person who has the ability and expertise in the field, so that it is able to perform the tasks and functions with maximal ability in implementing learning training activities. Improvement and development of the competence of facilitators can be done individually. Development and Empowerment Teacher and Education Personal (PPPPTK-IPA), education and training institutions is functional in the field of natural sciences under the banner of the Ministry of education and culture. This research aims to analyze the factors forming the competence of facilitators is determined through the Involvement In The Process of Teaching and Learning and work environment. Research methods using the mix method (method of qualitative and quantitative). Data collection is done by observation, interviewing, documentation, and questionnaires against 41 respondents. Involvement in the process of teaching and learning and work environment can improve the competence of facilitators.

Keywords: involvement in the process of teaching and learning, work environment, the competence of facilitators

Introduction

Development of Human Resources is growing especially in the institutions of government bureaucracy well Center as well as the area in an attempt to improve the quality of competencies as civil servant, who has been prosecuted should always be ready to execute his duties as the elements of the State apparatus in delivering public services. Development and Empowerment Teacher and Education Personal (PPPPTK-IPA) is a vocational education and training in the field of functional natural sciences under the banner of the Ministry of culture and education with the task of organizing Natural Science training for educators and educational personnel and the public.

The improvement of competence is very important for the facilitator in order to carry out its task in the role and professional training activities. The improvement of competence for facilitators need to be supported by the involvement in the process of teaching and learning and work environment. In support of the implementation of the facilitator Empowerment Teacher Development and Education Personal (PPPPTK-IPA), the last 5 years have been doing various activities especially in the formal education qualifications increased from S1 to S2, S2 to S3 it is to meet the minimum formal requirements to become a facilitator must be S2 (Stratum 2), in addition to the facilitators need following the training, internships, seminars, workshops, field practices, research and writing scientific papers.

Results in the field indicates that the program increased the competence of facilitators is still limited, not to be able to reach all of the facilitator and planning is yet to match the needs of competence of facilitators, with four standard competencies i.e. educate, teach, and train good practice or theory must match the substance of the field of his expertise. The Involvement in the process of teaching and learning and work environment in enhancing the competence of facilitators to date have not done well. Teaching and learning at the core of the overall educational process, the teacher as the primary role holder. According to Iskandar W. dan J. Mandalika (1982:37) " The Involvement in the process of teaching and learning (PBM) refers to the relationship between the parties the teacher and parties in learning (students), so the atmosphere in which the students actively learn and teachers actively teaching". Furthermore, the formulation process of teaching and learning (PBM) according to the Ministry of religious affairs RI., (1985:3) formulated that: "Teaching is an attempt to achieve the objectives in the form of a specific ability or teaching business is the creation of a learning situation so that learning to acquire or enhance the capabilities ".

The facilitator has a duty as a function for managing training and developing human resources in the process of teaching and learning held by organizational unit in both the Central Government or local governments, activities as the facilitator is set out in the regulations, the State Minister of empowerment of State Apparatus number 14 Of 2009, that activity in Widyaishwara (Civil Servants who was appointed as acting functional) in the development and implementation of a training credit number can be assessed consists of: (1) analyzing training needs; (2) preparation of training curricula; (3) the preparation of training materials according his specialty; (4) implementation of face-to-face classes fit in front of his specialty; (5) supervision training participants on structural training is appropriate specialty; (6) the management training program at the Office, and (7) evaluating training programs.

In this study, the involvement in the process of teaching and learning is limited to physical and non physical conditions that affect competence i.e. participate in the training, participating in

scientific activities, following an internship in industry, implement production units, and make use of learning resources. In addition to the involvement in the process of teaching and learning, the work environment an important factor in supporting competence of facilitators.

Working environment with regards to facilities and infrastructure that supports the process activities either directly or indirectly. According to Alex s. Nitisemito (1999:183): *"the work environment is something that exists around the workers and could affect him in the exercise of the duties charged to him."* Next Sedarmayanti (2011), stating that "generally, the type of work environment is divided into two, namely, the work environment physical and non-physical work environment. The Involvement in the process of teaching and learning and work environment as a factor strengthening the capacity of the vendors increased competence of facilitators. According to Klemp (1980), competence is *"an underlying characteristic of a person which results in effective and/or superior performance a job"* and according to Spencer and Spencer (1993), competence is *"an underlying characteristic of an individual that is causally related to criterion-referenced effective and/or superior performance in a job situation"*.

Characteristics of the competence of facilitators in the learning material substances include research, planning of learning, of learning, of carrying out the evaluation of the ability of learning and collaboration.

Research Methods

Research methods using the mix method (method of qualitative and quantitative), variable involvement in the process of teaching and learning and work environment as the independent variable and the dependent variable as a competency of the facilitator. Population of 41 facilitators, consisting of 7 training participants, 3 representation Science Teachers Association (IPA) and 26 facilitators. The technique of data collection by way of observation, questionnaires, data documentation, to corroborate the qualitative research results conducted interviews to several resource persons and facilitators who are considered expert to give the completeness of information against the variables examined.

According to Sugiyono (2002:57), the population of which was examined as an object of research: *"a generalization of area which consists of the objects that have the quantity and specific characteristics set by the researchers to learn and then pulled his conclusion."*

Discussion

Qualitative

Research qualitative strengthening as do interviews with expert speakers and facilitators Development Empowerment Teacher and Education Personal (PPPPTK-IPA) says that the involvement in the process of teaching and learning and the environment work as a factor in forming the competence of facilitators. Competence is one of the important aspects in support of one's success, the involvement in the process of teaching and learning need to be supported by the skills of both physically and mentally. The facilitator should have a high competence includes ability in teaching as well as being able to create a work environment that is conducive and effective, capable of digging materials training so that participants who participated in the training will be educated and trained properly in accordance with the changing times and an advanced technology.

According to Muchtar and Samsu (2001:39) says that *"the process of teaching and learning are the stages that traveled in developing cognitive abilities, affective and psychomotor skills, i.e. the person must be owned by the learners"*. In addition to the involvement in the process of teaching and learning, environment the working environment should be noted as a shaper of the competence of facilitators, namely: awarding compensation in the form of material and non-material. According to Siagian (2002:126) says that *"the recognition system with regards to the way organizations provide recognition and rewards to employees with within the framework of maintaining harmony between the individual needs with the objectives of the organization"*.

Quantitative

Testing instrument of research with involvement in the process of teaching and learning, the work environment and the competence of facilitators as follows:

Validity test

Table 1. Involvement in the Process of Teaching and Learning (X₁)

Statement	r count	r critical	Description
X _{1.1}	0,449	0,300	Valid
X _{1.2}	0,346	0,300	Valid
X _{1.3}	0,359	0,300	Valid
X _{1.4}	0,410	0,300	Valid
X _{1.5}	0,473	0,300	Valid
X _{1.6}	0,764	0,300	Valid
X _{1.7}	0,766	0,300	Valid
X _{1.8}	0,587	0,300	Valid
X _{1.9}	0,713	0,300	Valid
X _{1.10}	0,659	0,300	Valid
X _{1.11}	0,708	0,300	Valid
X _{1.12}	0,673	0,300	Valid
X _{1.13}	0,631	0,300	Valid
X _{1.14}	0,753	0,300	Valid
X _{1.15}	0,562	0,300	Valid
X _{1.16}	0,593	0,300	Valid
X _{1.17}	0,772	0,300	Valid
X _{1.18}	0,794	0,300	Valid
X _{1.19}	0,564	0,300	Valid

Sources: the results of processing of SPSS 22, 2017

Based on Table 1 shows the entire statement item variable involvement of the process of learning and teaching is valid, because $r \text{ count} \geq 0.300$, biggest statement X_{1.18} of 0.794, and smallest X_{1.2} statement of 0.346.

Table 2. Work Environment (X₂)

Statement	r count	r critical	Description
X _{2.1}	0,679	0,300	Valid
X _{2.2}	0,303	0,300	Valid
X _{2.3}	0,414	0,300	Valid
X _{2.4}	0,389	0,300	Valid
X _{2.5}	0,650	0,300	Valid
X _{2.6}	0,617	0,300	Valid
X _{2.7}	0,406	0,300	Valid
X _{2.8}	0,669	0,300	Valid
X _{2.9}	0,751	0,300	Valid
X _{2.10}	0,526	0,300	Valid
X _{2.11}	0,610	0,300	Valid
X _{2.12}	0,539	0,300	Valid
X _{2.13}	0,392	0,300	Valid
X _{2.14}	0,579	0,300	Valid
X _{2.15}	0,463	0,300	Valid

Sources: the results of processing of SPSS 22, 2017

Based on Table 2 shows the entire statement item variable work environment valid, because r count \geq 0.300, biggest statement X_{2.9} of 0.751, and smallest X_{2.2} statement of 0.303.

Table 3. Competence of Facilitators Variable (Y)

Statement	r count	r critical	Description
Y.1	0,706	0,300	Valid
Y.2	0,772	0,300	Valid
Y.3	0,732	0,300	Valid
Y.4	0,771	0,300	Valid
Y.5	0,468	0,300	Valid
Y.6	0,881	0,300	Valid
Y.7	0,714	0,300	Valid
Y.8	0,713	0,300	Valid
Y.9	0,781	0,300	Valid
Y.10	0,783	0,300	Valid
Y.11	0,625	0,300	Valid
Y.12	0,644	0,300	Valid
Y.13	0,690	0,300	Valid
Y.14	0,570	0,300	Valid
Y.15	0,516	0,300	Valid
Y.16	0,663	0,300	Valid
Y.17	0,618	0,300	Valid

Sources: the results of processing of SPSS 22, 2017

Based on Table 3 shows the entire statement item variable competence of facilitators valid, because r count ≥ 0.300 , biggest statement Y.6 of 0.881, and smallest Y.15 statement of 0.516

Reliability Test results variable involvement of in the process of learning and teaching, the working environment and the competence of facilitators as follows:

Table 4. Reliability Test Results

No	Variable	Cronbach's Alpha	Test Results	Category
1	The involvement in the process of teaching and learning	0,927	0,700	Reliable
2	The work environment	0,872	0,700	Reliable
3	Competence of facilitators	0,940	0,700	Reliable

Source: Processed Researchers 2017

Table 5. Recapitulation of the Responses of the Respondents about the Involvement of in the Process of Learning and Teaching

No	Dimensions	Σ Score	Number of Statements	Average	Criteria
1	Aspect Training	1145	7	4,13	Good
2	Scientific Involvement	797	5	3,86	Good
3	Aspects of Industrial Apprenticeship	288	2	3,61	Good
4	Production Units	310	2	3,78	Good
5	Utilization of Learning Resources	488	3	3,97	Good
TOTAL			19	3,87	Good

Source: prepared from Lozanov (1978), PP No. 19/2005, Permenpan & RB No. 22/2014 and Perka LAN-RI No. 5/2008

Table 6. Recapitulation of the Responses of the Respondents about the Work Environment

NO	Dimensions	Σ Score	Number of Statements	Average	Criteria
1	System availability award	822	5	4,01	Good
2	Evaluation system	345	2	4,21	Very Good
3	The availability of facilities and infrastructure	700	4	3,42	Good
4	Career development opportunities	369	2	4,50	Very Good
5	Availability of training activities	352	2	4,30	Very Good
	TOTAL	2588	15	4,21	Very Good

Source: prepared from Nitisemito (2000), Sedarmayanti 2001, PP No. 19/2005, Permenpan & RB No. 22/2014 and perka LAN-RI No. 5/2008.

Table 6 above shows the score and the average of the 15 statements work environment variable criteria very well, so as to improve the competence of facilitators.

Table 7. Recapitulation of the Responses of the Respondents about the Competencies of the Facilitator

No	Dimensions	Σ Score	Number of Statements	Average	Criteria
1	Aspect mastery of material substances	540	3	4,39	Very Good
2	Aspect mastery learning planning	703	4	4,29	Very Good
3	Implementation of the learning	537	3	4,37	Very Good
4	Mastery of the execution of the evaluation	499	3	4,06	Good
5	Aspects of cooperation	730	4	4,45	Very Good
	TOTAL	3010	17	4,31	Very Good

Source: prepared from Spencer-Spencer (1993), Stephen p. Robbins (2006), PP No. 19 of 2005, Permenpan & RB number 22 of 2014 and perka LAN-RI No. 5 of year 2008.

Table 7 above shows the score and the average of the variable competence statement 17 facilitators criteria is very good, with formed factor facilitator competencies through involvement in the process of learning and teaching as well as a work environment, then for excellent criteria need to be maintained, even need further enhanced so as to achieve the performance of the facilitators.

The Correlation Analysis

Based on the results of the analysis of the correlation between the variable involvement in the process of teaching and learning and work environment of 0.470, if refers to the second variable correlation interpretation criteria are "strong"

Verified Analysis

Based on the results of the analysis of the verification shows that the influence of the process of teaching and learning, the work environment against competence of facilitators, as shown below:

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1113.946	2	556.973	14.415	.000 ^b
Residual	1468.249	38	38.638		
Total	2582.195	40			

a. Dependent Variable: Competence of Facilitators

b. Predictors: (Constant), Work Environment, Involvement of in the process of learning and teaching.

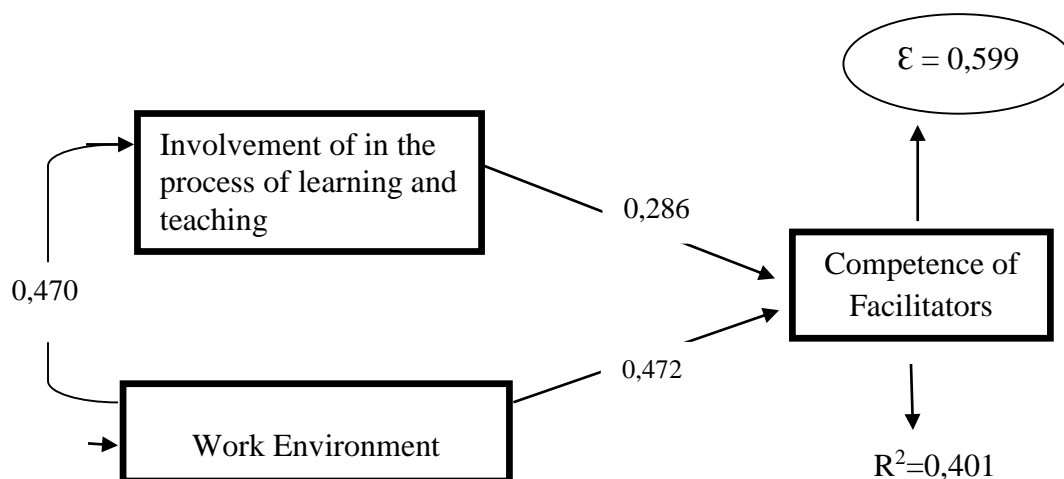


Figure 1. Result

The results of the data processing showed that the learning process is the involvement of influential variables are positively and significantly to the competence of facilitators with the value of the coefficient environment variable 0.286, and influential work positively and significantly to competence of facilitators with the value coefficient 0.472. Variable involvement in the process of teaching and learning and work environments simultaneously influential very significantly to the competence of facilitators with value R^2 (coefficient determination) of 0.401 or 40.1% and value beyond the model of 0.599 or 59.9%. The results indicate that F: F_{value} of 14.415 greater than 3.23 F_{table} can be interpreted as increasing the involvement in the process of teaching and learning and work environment, increasing the competence of facilitators.

Conclusion

Based on the results of the analysis and testing of both qualitative and quantitative can be summed up: the involvement in the process of teaching and learning are good criteria, but there are aspects of the weakness that is the level of activity on the company's industry internship nationwide in the last 3 years has not been in accordance with the duties and responsibilities in the areas of its work. The working environment is on the criteria very well, but there are aspects of weaknesses are: the system of awarding compensation in the form of matter with an honorarium teaching system has not been accepted in accordance with the certificate of teaching task management.

Competence of Facilitators is very well, but there are some aspects of shortcomings, namely: The Facilitator Development and Empowerment Teacher and Education Personal (PPPPTK-IPA) the more expert and experienced less willing to share knowledge, data and information, step-by-step learning, cooperative use of learning resources, as well as implement commitments in presenting the training materials that are interesting and appropriate quality standardized (syllabus, training curricula, training modules, and visualization training) to other facilitators.

Quantitative test results show that the involvement in the process of teaching and learning and work environment are partial and simultaneously there is a positive influence and significantly to the competence of facilitators, refers to a process of increasing the involvement teaching and learning and work environment then competence will increase, and the qualitative research results increased competence of facilitators established through the strengthening of the Involvement in the process of teaching and learning and work environment.

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