

Evaluation on Teacher Professional Programs of Indonesia's Underdeveloped Region (PPG SM-3T) for the Building Engineering Education Study Program (PTB) Universitas Negeri Padang

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Abstract: Indonesian education still has many problems such as education is not evenly distributed yet and teachers have not been distributed to the regions. Besides, unemployment is still high (especially vocational graduates with the highest number) and jobs are not widely available yet. One of Indonesia's education problems recently was the low percentage of PPG SM-3T graduates (41.26%) in 2017 and several study programs did not pass (0%) cause this program must be comprehensively evaluated using the context, input, process & product (CIPP) model. In addition, capability of evaluation is an absolute capability that must be possessed by humans in the industrial revolution 4.0. This evaluation research was carried out in the Department of Civil Engineering (Building Tehcnique Education/PTB), Engineering Faculty, Universitas Negeri Padang (interviewed lecturer) & online questionnaire (for PPG SM-3T participants). The program has been implemented in accordance with its context and has been in accordance with the inputs specified in the program implementation guidelines. But there are problems in the process of program implementation (79.51%), which has the lowest value. The reason is that the low value of the evaluation process is the difference between materials tested with those taught during the program, lack of socialization and communication, and discipline. However, product evaluation states that this program has been carried out as evidenced by the results that participant have the competencies needed to become professional teachers. So the conclusion is the PPG SM-3T program is worthy to continuing with improvements in the program implementation process and improvement in general.

1 INTRODUCTION

The 4.0 industrial revolution era has had a great impact on humans, especially the world of education (Darmawan, 2018; Rakhmah, 2018). Among the major influences of revolution 4.0 in the world of education are internet of things, which are related to media, teaching materials, and reference sources such as online journals to articles (Shrinath, 2017; Mehta, 2018). This open opportunities for humans to be able to learn wherever and whenever by using internet (Ravindra, 2018).

Even so, internet has not been able to change the role of the teacher 100%. The teacher is still a figure needed by humans, especially professional teachers (Harususilo, 2018). Indonesia still lacks teachers, as evidenced by the still low level of school participation and education that is not evenly

distributed, especially in the 3T regions (Bomantama, 2017; Tiharita, 2018; Giatman, 2017). There was an Indonesian government program aimed at creating professional teachers, namely PPG. In 2017, there was a PPG SM-3T program (Nurwardani, 2017). The bad news is, during the main national exam, only 41% of the PPG SM3T UNP participants graduated. Especially for PTB study programs, only 2 graduated from 17 participants (SM-3T-UNP, 2018). Another thing that was found based on interviews with the implementers of these activities was the lack of strong communication and coordination between implementers.

In the other hand, the demands of the modern world, especially the era of industrial revolution 4.0, are about 10 compulsory competencies that must be owned, among them the ability to evaluate and think critically (Gray, 2016; Suriansyah, 2018). The

demand for the 4.0 industrial revolution is a driving force for researchers to evaluate the PPG SM-3T program. Based on existing theories, the CIPP model is a comprehensive model for evaluating educational programs (Wakhinuddin, 2009; Tayibnapis, 2008). As a modern society (revolution 4.0), it is necessary to think critically and be able to evaluate the program using the CIPP evaluation model is a must.

2 METHOD

This evaluation study used the CIPP model (context, input, process, & product) (Sugiyono, 2014). To be clearer about the steps of the activity, it can be seen in Figure 1.

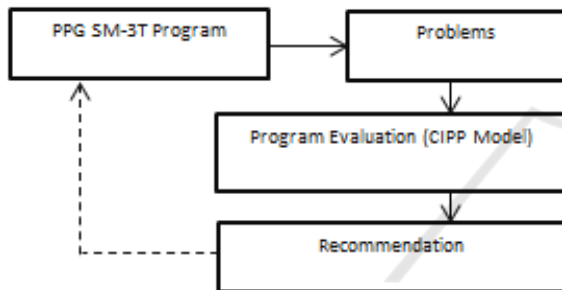


Figure 1: CIPP Evaluation Research Model Flow

Instrument validation is done asking for opinions of three experts (expert judgment).

3 RESULTS AND DISCUSSION

Based on research data, obtained frequency distribution of respondents' answers such as Table 1.

Table 1. Frequency Distribution

No	Variables	average	chategory
1	Konteks	83,56%	Good
2	Input	88,10%	Good
3	Process	79,51%	Enough
4	Product	80,63%	Good

Source: Research Primary Data

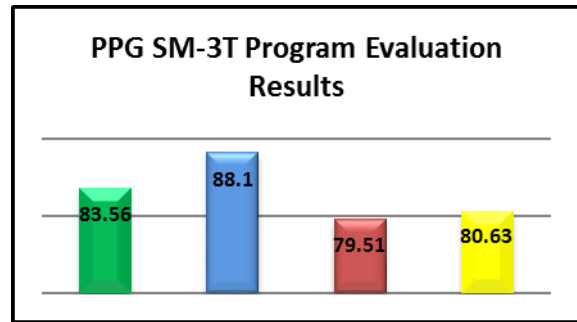


Figure 2: Evaluation of PPG SM-3T Program Diagram (Primary Data)

Table 2: Results of Context Evaluation of PPG SM-3T Program 2017 (PTB Study Program)

Indicator	Sub Indicator	Evaluation Score Results	Chategory
Compliance with the objectives of PPG SM-3T	Have competencies according to the purpose of debriefing PPG SM-3T participants.	86.67%	Good
	The purpose of debriefing PPG SM-3T participants is to improve the ability to solve problems in learning and create professional educators, and have an educator certificate	88.67%	Good
	The purpose of debriefing PPG SM-3T participants is to improve the competence of the Civil Engineering	80.27%	Good

Table 3: Results of Input Evaluation of PPG SM-3T Program 2017 (PTB Study Program)

Indicator	Evaluation Score Results	Chategori
PPG SM-3T program educator/mentor	86.67%	Good
PPG SM-3T curriculum and program guide	78.67%	Enough
Compliance with participant requirements	93.90%	very good

Table 4: Results of Process Evaluation of PPG SM-3T Program 2017 (PTB Study Program)

Indicator	Evaluation Score Results	Chategori
Information about implementing the PPG SM-3T Program	68.00%	Enough
The process of implementing the PPG SM-3T program	88.44%	Good
Facilities and infrastructure	76.67%	Enough
The process of completing assignments & participant exams	90.67%	Very Good
Conformity of the debriefing material with the tested	60.00%	Not Good
The role of PPG SM-3T coordinator / lecturer / educator	78.33%	Enough
The role of teachers from schools where teaching practice	82.00%	Good

Table 5: Results of Product Evaluation of PPG SM-3T Program 2017 (PTB Study Program)

Indicator	Evaluation Score Results	Chategori
Suitability of results with the objectives of the PPG SM-3T program	83.24%	Good
Satisfaction level	76.00%	Enough
Positive and negative impacts	85.33%	Good

The presence of industrial revolution 4.0 requires that humans must have 10 absolute abilities, one of which is evaluation ability. This ability is useful for dealing with challenges that have never been unexpected in modern human life, especially in education. Current problems, one of which occurs in the PPG SM-3T program that needs to be evaluated. Various problems with the program include; graduates of the main national exam were low (41%), lack of conformity in the material taught and tested, lack of communication and coordination between organizers but not revealed/not yet studied. Based on the results of the evaluation on the program using the CIPP evaluation model, it was found that context evaluation showed 83.56%, which means that the program was running

according to the objectives of this program. Lecturers, teachers, participants, all understand the context of the formation of this program. Input evaluation shows 88.10%, with the intention of input to the PPG SM-3T program in accordance with the guidelines determined by the program compilers, including teaching staff, participants, organizers, and all the conditions that support the program's implementation. The third part is process evaluation shows the number 79.51%, which is the lowest value. These results also show some shortcomings in the program process, namely the lack of program socialization, lack of communication between program implementers, resulting in differences in teaching materials with those tested, and lack of guidance to participants from lecturers and partner schools. Finally, product evaluation shows a figure of 80.63%, indicating that in general this program has given birth to competent graduates according to the purpose/context. This means that the PPG SM-3T program is feasible to be continued with the condition that improvements will be made in the future. specifically improving communication between implementers, coordination, and strengthening the team to succeed in similar programs.

4 CONCLUSIONS

The results of the evaluation on the PPG SM-3T program can be concluded that;

1. In context, the 2017 PTB Study Program PPG SM-3T program implementation is in accordance with the program objectives, namely to create professional teacher candidates who have pedagogical, professional, personality, and social competence.
2. By input, the implementation of the PPG SM-3T program is in accordance with the program guidelines, namely educators, participants, curriculum, and infrastructure facilities that have met all the requirements needed during the program implementation.
3. In the process, the implementation of the PPG SM-3T program found several problems, including; (a) lack of information on program implementation such as socialization and explanation of time and schedule, (b) facilities and infrastructure that have not been optimal, (c) until the implementation of national examinations with different material from the material provided during the learning process..

4. By product, the implementation of the PPG SM-3T program can be concluded that; (a) PPG SM-3T participants have competencies in accordance with the objectives of the professional program/teacher (b) on average the participants, lecturers, and teachers involved state that this program is good and considered appropriate as a program that gives birth to professional teacher candidates, (c) and give a good impact to participants, lecturers, partner school teachers, Civil Engineering Department PTB FT UNP and UNP as institutions that give birth to professional teachers.

5 RECOMMENDATION

Based on the conclusions of this study, it was obtained a recommendation that the PPG SM-3T Program be feasible to be continued with improvement.

1. Context

Program implementers must design meetings between lecturers, partner school teachers, and related officials to improve communication and understanding related to the basic foundation and the purpose of the establishment and implementation of the PTB Study Program PPG SM-3T for the future. Besides that, it is also necessary to make (additions) information in the form of innovative oral or written information so that participants and all involved in the PPG SM-3T program know the basic objectives of the establishment and holding of the program.

2. Input

In the future, a coordination meeting must be held so that all those involved in the program can be in line to carry out their duties in accordance with the program guidelines to achieve maximum goals. Besides that, it is necessary to select the participants of PPG SM-3T more carefully by the recruiters so that there will be no synchronization between the fields chosen by participants and the background of the participants. Finally, strong communication is needed between the central PPG organizers and the LPTK organizers so that the teaching materials are in accordance with the National test material.

3. Process

- a. In the future there must be a thorough socialization of both oral and written so that all parties concerned know the implementation of the PPG program.
- b. Management needs to be improved from the program organizing committee to be able to control the implementation of the program in

accordance with the planned schedule. The real example starts from giving leaflets related to the implementation schedule, to conducting routine meetings that will discuss progress and control of program activities.

- c. It is necessary to study and divide the time of program implementation by the organizing committee carefully in order to minimize the occurrence of regular lecture schedule disputes between lecturers and teaching schedules in the PPG SM-3T program.
- d. The organizing committee must provide time and a special team to oversee the implementation of the program in a disciplined manner to become an example and concern for all concerned parties because the PPG program is a professional teacher program which is basically a model program in preparing teachers as very noble professions.
- e. The organizer needs to carry out in-depth analysis in order to be able to utilize the facilities and infrastructure to the fullest during the program. Program organizers can form a study of adjusting teaching materials and infrastructure that are suitable to be used to support the achievement of program objectives.
- f. Strong coordination is needed between the central organizer and the LPTK so that the process of implementing the program is appropriate
- g. The organizer needs to explain to the teacher about the main tasks and functions as a teacher who is not only a companion, but also supervises and guides the participants during teaching practices in partner schools.

4. Product

The implementer must design a PPG SM-3T program for the future so that participants, lecturers, partner school teachers, and all related aspects can join the program in line with the line towards quality product programs (professional teachers). Among the concrete forms the solution is to provide motivation and verbal and written encouragement to participants about targets, tips and tricks so that graduates of the program have more value than graduates of previous programs.

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