Effectiveness of PPL/PLT Implementation in Achieving Vocational Teacher Competency

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Abstract. The general objectives of this study are to describe: (1) the effectiveness of the context seen from the support of all related elements in the implementation of PPL/PLT on students of FT UNY; (2) the effectiveness of the input seen from the readiness of the implementation of PPL/PLT on FT UNY students; (3) the effectiveness of the process seen from the implementation of PPL in learning in schools at FT UNY; and (4) the effectiveness of the PPL/PLT implementation product for FT UNY students, in terms of the success of achieving the criteria and students' academic achievements in achieving competency standards. The method used in this study is program evaluation with the CIPP method (context, input, process, product). The population of this study were students who were taking PPL courses at the Faculty of Engineering, UNY 2018. The sampling technique was carried out by proportional random sampling. Data collection techniques were carried out using documentation, observation, interviews, and questionnaires. The data analysis technique used descriptive qualitative and quantitative analysis. The results of the study show the following. (1) The level of effectiveness of Contect (context) seen from the support of all related elements in the implementation of PPL/PLT for FT UNY students is in the very effective category. (2) The level of effectiveness of the Input (input) seen from the support of all related elements in the implementation of PPL/PLT for FT UNY students is in the quite effective category. (3) The level of effectiveness of the Process (process) seen from the support of all related elements in the implementation of PPL/PLT for FT UNY students is in the quite effective category. (4) The level of effectiveness of the Product (product) seen from the support of all related elements in the implementation of PPL/PLT on FT UNY students is in the quite effective category. The success of students in achieving the competency criteria (B +) in PPL/PLT learning academic achievement reached 96%, based on the graduation criteria limit with the B + score already exceeding the effective limit criteria, namely 80% reaching competent (B +). This means that the implementation of PPL/PLT is declared effective in equipping prospective teacher students to become competent vocational teachers.

Keywords: Effectiveness · Field Experience Practice · FT UNY

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1 Introduction

The teacher education system will have a considerable influence on the quality of education. Several components in the education system unrelate to each other. These components include student teacher candidates, educators, mentors for prospective teachers, curriculum, learning strategies, instructional media, facilities and infrastructure, and so on. All of them have an influence and color on the teacher education process to achieve the goals of the teacher education system, and the results or graduates can be known through a comprehensive and continuous evaluation component.

To produce prospective educators who are professional and have insight and experience in carrying out expertise in the field of education, the LPTK is obliged to provide opportunities for students to carry out PPL/PLT which is one of the curricular activities that must be carried out by students.

PPL/PLT is one of the curricular components that requires integration between material mastery and learning practice. In carrying out the PPL/PLT, there are many things that students should know as where they will carry out the PPL/PLT and the school's willingness to accept practical students, and the syllabus and teaching materials must have the implementation of teaching. PPL/PLT activities include teaching practice, administrative practice, and co-curricular or extra-curricular activities that apply at school or student training areas.

To ensure high-quality education services and empower educational institutions, teacher-printing needs to be evaluated continuously and comprehensively. The results of education graduates must be following the established standards. Evaluations can give information about advantages and disadvantages, also provide a clear direction to achieve better quality.

To find out the effectiveness of PPL/PLT implementation in schools, it is necessary to research a complete and clear picture of the effectiveness of PPL/PLT program implementation in terms of Context, Input, Process, and Product variables. Nevertheless the obstacles as an example, PPL/PLT have not been socialized in public or private schools, students understanding of the importance of implementing practice in schools is still lacking, there is not the common perception of the syllabus, as well as teaching materials used in the implementation of practice, facilities and infrastructure in each school have a different quality and quantity, lacking innovation and creativity of students in carrying out teaching and learning interactions in practical places, lack of guidance by civil servants in each school.

Based on the various problems and reasons that have been stated, the problem formulation of the research are (1) How is the level of effectiveness of the context seen from the support of all related elements in the implementation of PPL/PLT for FT UNY students? (2) How is the input effectiveness level seen from the readiness to implement PPL/PLT for FT UNY students? (3) How is the effectiveness of the process seen from the implementation of PPL/PLT in learning in schools at FT UNY? (4) How is the effectiveness of the PPL/PLT implementation product at FT UNY, in terms of the success of achieving the criteria and student academic achievements in achieving competency standards? The researchers hope this research can provide information to improve the implementation of PPL/PLT activities and determine future policies, as well as eliminate obstacles that arise in the implementation of PPL/PLT activities.

Micro teaching is an early stage of training in the formation of teaching competencies through actualization of basic teaching competencies. Micro teaching is a performance-based learning method whose technique is carried out by training the components of basic teaching competencies in the learning process so that prospective teachers are truly able to master each component one by one or several components in an integrated manner in simplified learning situations.

PPL/PLT is one of the compulsory courses for education students at UNY, as a continuation of micro teaching. This activity is carried out after students have passed micro teaching. It is carried out in schools that have been appointed by the university as places for teaching practice. It is an event to form and foster the professional competencies required by the work of teachers or education personnel. In addition, it is shown to train students to apply the theory of the teaching and learning process on a small scale, which is artificial as a simulation of the actual teaching process.

According to Cowan (1985: 40), effectiveness is an achievement of targets that have been programmed or determined, it can also be a comparison between real results and ideal results. Steers (1985: 75) also reveals that effectiveness is related to the achievement of predetermined targets, and Sudjana (1991) suggests that effectiveness is related to the efforts, techniques, and strategies used in achieving goals quickly and precisely. The same opinion is also expressed by Windham (1988: 35) who suggests that effectiveness is associated with the achievement of predetermined targets.

2 Method

This research is classified as an evaluation research program, using a quantitative research approach, with the presentation of research results in descriptive form from statistical figures. This research uses a quantitative evaluation model, namely the CIPP (Context, Input, Process, and Product) model from Stufflebeam, it aims to assess the effectiveness of PPL/PLT implementation on FT students. Therefore, matters relating to Context, Input, Process, and Product in the implementation of the PPL/PLT will be evaluated based on pre-determined criteria.

Evaluation criteria are always related to predetermined criteria, based on considerations to facilitate researchers in describing and assessing the program components, whether they are following the predetermined program. Therefore, it aims to claim the effectiveness of a program that can be seen by the achievement of program goals. The criteria used are effectiveness criteria, where effectiveness criteria are context indicators if there is the support of faculty, lecturers, schools, teachers, and students is more than 70%. Likewise, in the input, process, and product indicators, more than 70% of students have achieved the competency standards of teaching skills for prospective teachers.

This research was carried out in the PPL/PLT Program which was being taken by FT UNY students in nine Engineering Education Study Programs in the odd semester of the 2017/2018 academic year.

The population in this study includes all students in the nine FT UNY Study Programs, it consists of students from Food and Clothing Engineering Education, Civil Engineering Education Department and Planning, Mechanical Engineering Education, Electrical Engineering Education, Electronics Engineering Education and the samples

were taken proportionally randomly. Proportional is used to determine the size of the sample in each school which is not the same in number, and Random sampling is used to determine the number of students who are entitled to be research subjects taken at random. Determination of the sample size using the Harryking Monogram table with a ts of 5%.

Based on student data from each PPL/PLT coordinator in the department, it is known that the student population is 678 students. Based on that, the total sample size is 145 students using proportional random sampling technique. The data needed in this study is Context, Input, Process, and Product data, therefore the sources of information in this study are the Vice Dean, Supervisor, Principal, Deputy Principal for Curriculum, Head of the Expertise Program Department, Supervising teacher, students PPL/PLT teachers and students.

The data collection methods used in this study were questionnaires, checklists, documentation, and observations. Therefore the data collection tools used were a set of questionnaires, documentation guidelines, and observation guidelines.

3 Result and Discussion

3.1 Description of Data Context

The objective of this study is to determine the effectiveness of the context (Context), namely the support of all related elements in the Implementation of Field Experience Practice (PPL/PLT) and in the implementation of research the term has changed to Guided Field Practice (PPL/PLT) in nine Study Programs at the Faculty of Engineering. Therefore, the context data in this study is a description of the support data for all related elements, namely faculty support, support from supervisors, schools, supervising teachers, PPL/PLT students/teachers and student support in schools where students carry out PPL/PLT.

In revealing the support from all elements related to the implementation of PPL/PLT in FT, three types of questionnaires were used which were distributed to three groups of respondents, namely Questionnaire A, Questionnaire B, and Questionnaire C. Questionnaire A with 6 items was distributed to 9 respondents consisting of faculties, supervising lecturers, schools, supervising teachers. Questionnaire B with 6 items was distributed to 145 respondents from nine Study Programs consisting of students who took PPL/PLT, and Questionnaire C with 6 items was distributed to 232 respondents consisting of students taught by PPL/PLT students at the school where PPL/PLT was implemented. It is known that the mean value (Mean/M) of the context of the A questionnaire is 15.89 which is smaller than the Median value (17.0) and the Mode value (17.0). The difference between the three values is not too extreme, the average value is still used as a benchmark for central symptoms, IT shows that the distribution of scores or data scores supporting all related elements from questionnaire A is above the average value, so it can be said that the distribution of context scores is support. All related elements in the implementation of PPL/PLT in the Study Program at FT UNY are good.

Based on the categorization of the trend score context, the mean score of support for all related elements (context) of questionnaire A is 15.89, it can be said that the tendency of the level of context effectiveness in questionnaire A is in the sufficient category, where

the overall of respondents in group A, namely 9, a total of 3 respondents (33%) think that the tendency of the level of context effectiveness (support of all related elements) towards the implementation of PPL/PLT s in the poor category and the remaining 6 respondents (67%) think it is in the sufficient category.

From the data collection of Questionnaire B, namely the assessment of the context of the support of all related elements by respondent group B, then based on descriptive statistical analysis. From 145 respondents, obtained the mean (M) or the average support for all related elements is 20.70; median (Me) 21.00; and Mode (Mo) or the score that often appears by the most respondents is 18. The Standard Deviation (SD) is to assess the average dispersion of the sample is 2,392, it proves that the distribution of the data is good.

Based on the categorization of the trend score context, the mean score of support for all related elements (context) of questionnaire B is 20.70, so it can be said that the tendency of the level of effectiveness of the context in questionnaire B is in the high category, where of the overall respondents in group B, namely 145, a total of 53 respondents (37%) think that the trend of the effectiveness of the context (support of all related elements) towards the implementation of PPL/PLT is in the sufficient category, and the remaining 92 respondents (63%) think it is in the high category.

Based on the results of the descriptive statistical analysis of the context of the C questionnaire mentioned above, it can be seen that the number of valid data (N) (valid for processing) is 232 pieces, while the missing data is zero, which means all data is ready to be processed. From the obtained mean (M) or the average support for all related elements is 16.70.

Based on the above, the difference between the three values of the mean, median, mode are not too extreme, so the average value is still used as a benchmark for central symptoms, where this shows that the distribution of values or data scores supporting all related elements from Questionnaire C is above the average, so it can be said that the context, namely the support of all related elements in the implementation of PPL/PLT for students in FT, is already good.

Categorizing the trend of context scores, it is known that the average score of support for all related elements (context) of the C questionnaire is 16.70, so it can be said that the trend of the context effectiveness level in the C questionnaire is in high category, where the total respondents in group C, namely 232, with 6 respondents (2.6%) thought that the trend of the effectiveness of the context (support of all related elements) towards the implementation of PPL/PLT students were included in the poor category, a number of 110 respondents (47.4%) were in the sufficient category, and the remaining 108 respondents (50%) included in high category.

Based on the results of the analysis of descriptive statistical data from the three types of questionnaires with the three groups of respondents, namely questionnaires A, B, and C, we can see that in general the effectiveness of the context or support for all elements related to the implementation of PPL/PLT in the Study Program at FT is included in high enough.

Context Effectiveness

Based on the results of the analysis, the tendency of the level of context effectiveness in questionnaire A is in the sufficient category, where of the total respondents in group

A which is 9, with 3 respondents (33%) that think the tendency of the level of context effectiveness (support of all related elements) towards the implementation of PPL/PLT includes less category and the remaining 6 respondents (67%) think it is included in the sufficient category. The results of the analysis indicate the level of effectiveness of the context in the implementation of PPL/PLT from the point of view of the principal in the sufficient category.

Based on the results of the analysis, the tendency of the level of context effectiveness in questionnaire B is in high category, the total respondents in group B are 145, with 53 respondents (37%) that think the tendency of the level of context effectiveness (support of all related elements) towards the implementation of PPL/PLT is included in the category sufficient, and the remaining 92 respondents (63%) think it is in high category. The results of the analysis indicate that the level of contextual effectiveness in the implementation of PPl/PLT in terms of the students' point of view is in high category.

Based on the results of the analysis, the tendency of the level of context effectiveness in questionnaire B is in high category, the total respondents in group C is 232, with 6 respondents (2.6%) think the tendency of the level of context effectiveness (support of all related elements) to the implementation of PLT students included in poor category, with 110 respondents (47.4%) were in the sufficient category, and the remaining 108 respondents (50%) were in high category. The results of the analysis indicate that the level of contextual effectiveness in the implementation of PPL/PLT from the point of view of SMK students is in high category.

Based on the results of the analysis of descriptive statistical data from the three types of questionnaires with the three groups of respondents, namely questionnaires A, B, and C, it can be seen in general the effectiveness of the context or support for all elements related to the implementation of PPL/PLT in the Study Program at FT is included in high category "very effective".

3.2 Description of Data Input

The results of the descriptive statistical analysis of the input of the questionnaire A is can find out the number of valid data (N) is 9 pieces, while the missing data is zero, it means all data are ready to be processed. From the 9 respondents' data, the mean (M) readiness for PPL/PLT implementation is 49.11. It can be seen that the mean input value of questionnaire A is 49.11 the difference between the median and mode values is not extreme, so the average value is still used as a benchmark for central symptoms, it shows that the distribution of values or the data score of PPL/PLT implementation readiness from questionnaire A is above the average value, it can be said that the input, the readiness for PPL/PLT implementation in nine study programs in the FT is already good.

As for the categorization of the input score trend, it is known that the average score of the readiness for the implementation of PPL/PLT (input) questionnaire A is 49.11, it can be said that the trend of the input effectiveness level in the A questionnaire is in the less category, where of the total respondents in group A are 9, with 6 respondents. (66.7%) argues that the trend of the level of effectiveness of inputs (support of all related elements) towards the implementation of PPL/PLT students is included in poor category, a total of 3 respondents (33.3%) are in sufficient category.

From the collection of Questionnaire B data, an assessment of the support input of all related elements by respondent group B, based on descriptive statistical analysis of PPL/PLT students. From the 145 respondent data, the mean (M) is obtained. Support for all related elements is 69.69; median (Me) 69.00; and Mode (Mo) 64 or the score that occurs frequently is 145. The Standard Deviation (SD) is to assess the average dispersion of the sample, is 7294, it proves that the distribution of the data is good.

As for the categorization of the trend of input scores, it is known that the average score of support for all related elements (inputs) of questionnaire B is 69.21, so it can be said that the trend of the level of effectiveness of inputs in questionnaire B is in high category, where out of all respondents in group B are 145, with 1 respondent (0.68%) thinks the trend of the level of effectiveness of inputs (support of all related elements) towards the implementation of PPL/PLT is low category, a total of 69 respondents (47.58%) think it is in sufficient category, and the remaining 75 respondents (51, 72%) think it is in high category.

The results of the descriptive statistical analysis of the C questionnaire input, it can be seen that the number of valid data (N) (valid for processing) is 232 pieces, while the missing data is zero, it means all data is ready to be processed. From the obtained mean (M) support for all related elements is 44.05.

Based on the above, the difference between the three values of the mean, median, and mode is not too extreme, so the average value is still used as a benchmark for central symptoms, it shows that the distribution of values supporting all related elements from Questionnaire C is above the average, so it can be said that the input, namely the support of all related elements in the implementation of PPL/PLT for students in FT, is already good.

As for the categorization of the input score trend, it is known that the mean score of support for all related elements (inputs) of the C questionnaire is 44.05, so it can be said that the trend of the input effectiveness level in the C questionnaire is in the sufficient category, where of the total respondents in group C, namely 232, a number of 1 respondent (0.43%) believes that the trend of the level of effectiveness of the input (support of all related elements) towards the implementation of PPL/PLT students is in the low category, a number of 111 respondents (4.74%) are in the less category, a total of 131 respondents (56.46%) in the sufficient category and the remaining 89 respondents (38.36%) were included in the high category.

Based on the results of the analysis of descriptive statistical data from the three types of questionnaires with the three groups of respondents, namely questionnaires A, B, and C, it can be seen that in general the effectiveness of inputs to the implementation of PPL/PLT in the Study Program at the Faculty of Engineering is included in fairly high category.

Input Effectiveness

Based on the results of the analysis, the trend of the input effectiveness level in questionnaire A is in less category, where of the total respondents in group A are 9, with 6 respondents (66.7%) think that the trend of the input effectiveness level (support of all related elements) towards the implementation of PPL/PLT students included in less category, 3 respondents (33.3%) in sufficient category. The results of the analysis indicate

the level of effectiveness of inputs in the implementation of PPL/PLT in terms of the principal's point of view is in the less category.

Based on the results of the analysis, the trend of the input effectiveness level in questionnaire B is in high category, the total respondents in group B are 145, with 1 respondent (0.68%) believes that the trend of the input effectiveness level (support of all related elements) towards the implementation of PLT includes in low category, as many as 69 respondents (47.58%) thought it was included in sufficient category, and the remaining 75 respondents (51.72%) thought it was included in high category. The results of the analysis indicate that the level of effectiveness of the inputs in the implementation of PPL/PLT from the perspective of students is in high category.

Based on the results of the analysis, the trend of the input effectiveness level in questionnaire C is in the sufficient category, the total respondents in group C are 232, with 1 respondent (0.43%) argues that the trend of the input effectiveness level (support of all related elements) towards the implementation of PPL/PLT students included in low category, a total of 111 respondents (4.74%) in poor category, a number of 131 respondents (56.46%) in sufficient category and the remaining 89 respondents (38.36%) included in high category. The results of the analysis show that the level of the effectiveness of inputs in the implementation of PPL/PLT from the point of view of SMK students is in sufficient category.

Based on the results of descriptive statistical analysis of the three types of questionnaires with the three groups of respondents above, namely questionnaires A, B, and C, we can see that in general the effectiveness of input or support for all elements related to the implementation of PPL/PLT in the Study Program at the Faculty of Engineering is included in "fairly effective" category.

3.3 Description of Data Process

Based on the results of the analysis, the tendency of the level of process effectiveness in questionnaire C is in the less category, where of the total respondents in group A are 9, with 5 respondents (56%) think that the tendency of the level of process effectiveness (support of all related elements) towards the implementation of PPL/PLT students are included in less category, a number of 4 respondents (44%) are in sufficient category. The results of the analysis indicate that the level of process effectiveness in the implementation of PPL/PLT in terms of the principal's point of view is in less category.

Based on the results of the analysis, the tendency of the process effectiveness level in questionnaire B is in high category, where of the total respondents in group B are 145 with 2 respondents (1.37%) think that the tendency of the process effectiveness level (support of all related elements) towards the implementation of PPL/PLT is included in poor category, as many as 61 respondents (42.06%) think it is in sufficient category, and the remaining 82 respondents (56.55%) think it is in high category. The results of the analysis indicate that the level of process effectiveness in the implementation of PPL/PLT in terms of the students' point of view is in high category.

Process Effectiveness

Based on the results of the analysis, the tendency of the effectiveness level of the process (process) in the C questionnaire is in the sufficient category, where of the total respondents in group C are 232, with 1 respondent (0.43%) believes that the tendency of the

process effectiveness level (support of all related elements) towards the implementation of PPL/PLT students is included in low category, a total of 12 respondents (5.17%) in poor category, a number of 136 respondents (58.62%) in sufficient category and the remaining 83 respondents (35.77%) in high category. The results of the analysis indicate that the level of process effectiveness in implementation of PPL/PLT from the point of view of SMK students is in sufficient category.

Based on the results of descriptive statistical analysis of the three types of questionnaires with the three groups of respondents above, namely questionnaires A, B, and C, it can be seen that in general the effectiveness of the process or support of all elements related to the implementation of PPL/PLT in the Study Program at the Faculty of Engineering is included in category "effective enough".

3.4 Description of Data Product

Based on the results of the analysis, the tendency of the level of product effectiveness in questionnaire A is in the sufficient category, where of the total respondents in group A are 9, with 4 respondents (44.4%) think that the tendency of the level of product effectiveness (support of all related elements) towards the implementation of PPL/PLT students included in less category, a number of 5 respondents (55.6%) in sufficient category. The results of the analysis indicate that the level of product effectiveness in the implementation of PPL/PLT in terms of the principal's point of view is in sufficient category.

Based on the results of the analysis, the tendency of the level of product effectiveness in questionnaire B is in high category, where of the total respondents in group B are 145, with 9 respondents (1.37%) think that the tendency of the level of product effectiveness (support of all related elements) to the implementation of PPL/PLT includes in the poor category, as many as 90 respondents (62.07%) thought it was in the sufficient category, and the remaining 46 respondents (31.72%) thought it was in the high category. The results of the analysis indicate that the level of product effectiveness in the implementation of PPL/PLT from the point of view of students is in the sufficient category.

Product Effectiveness

Based on the results of the analysis, the tendency of the level of product effectiveness in questionnaire C is in the sufficient category, where of the total respondents in group C are 232, with 4 respondents (1.71%) think that the tendency of the level of effectiveness of the context (support of all related elements) towards the implementation of PPL/PLT students included in the low category, a total of 30 respondents (12.93%) in the poor category, a number of 104 respondents (44.83%) in the moderate category, and a number of 94 respondents (40.52%) in the high category. The results of the analysis indicate that the level of product effectiveness in the implementation of PPL/PLT from the point of view of SMK students is in the sufficient category.

Based on the results of descriptive statistical analysis of the three types of questionnaires with the three groups of respondents above, namely questionnaires A, B, and C, it can be seen that in general the product effectiveness of all elements related to the

implementation of PPL/PLT in Study Programs at the Faculty of Engineering is included in "fairly effective" category.

4 Conclusion

Based on the results of the research data analysis, the following conclusions can be drawn; The level of effectiveness of the Context seen from the support of all related elements in the implementation of PPL/PLT for FT UNY students is in the very effective category. The level of effectiveness of the Input seen from the support of all related elements in the implementation of PPL/PLT for FT UNY students is in the quite effective category. The level of effectiveness of the Process seen from the support of all related elements in the implementation of PPL/PLT for FT UNY students is in the quite effective category. The level of effectiveness of the Product seen from the support of all related elements in the implementation of PPL/PLT on FT UNY students is in the category of quite effective. The success of students in achieving the competency criteria (B+) in PPL learning academic achievement reached 96%, based on the graduation criteria limit with the B+ score already exceeding the effective limit criteria, namely 80% reaching competent (B+). This means that the implementation of PPL is declared effective in equipping prospective teacher students to become competent vocational teachers.

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