



Development of Competency Test Modules for Culinary Skills in Food Processing and Serving Subjects in the Professional Education for Junior High School Teachers in the Catering Expertise Study Program

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Abstract

The teacher is an important component in the teaching and learning process. A teacher participates in efforts to form potential human resources in the field of development. Teachers who have received educator certificates mean that they are considered professionals in creating quality education systems and practices. The results of the teacher competency test that occurred by vocational school teachers got an average of 50.2 lower than high school teachers, this means that the skill competency test for each skill competency is less specific in certain subjects. The purpose of this study was to develop a learning module for processing and serving food in Teacher Professional Education (PPG). This research applies the development method or R and D. The design chosen is ADDIE, which consists of five stages, namely Analysis, Design, Development, Implementation, and Evaluation. The unit of analysis in this research is the learning module for processing and serving food in Teacher Professional Education (PPG). The instruments used in this study were (1) an assessment sheet of the learning module on food processing and presentation of Teacher Professional Education (PPG); (2) a practical questionnaire for the learning module for processing and serving food in Teacher Professional Education (PPG); and (3) a questionnaire to measure the effectiveness of the learning module for the processing and presentation of food in Teacher Professional Education (PPG). The data analysis used in this study were (1) categorical to determine the feasibility level of the Food Processing and Serving Learning module in Teacher Professional Education (PPG); (2) the Guttman category to determine the practical level of the learning module in the processing and presentation of food in Teacher Professional Education (PPG) using the Kr and Ks coefficients; and (3) N-Gain and N-Gain difference test using the t-test, to determine the effectiveness of learning processing and serving of food in Teacher Professional Education (PPG). Based on the feasibility test, practicality test, and the effectiveness test of the learning module for the processing and presentation of food in the Teacher Professional Education (PPG) that was developed, according to the lecturers' responses as media experts, the responses of the culinary study program teachers obtained the response criteria for learning food processing and serving in professional education The teacher (PPG) is very feasible, the responses from teachers and students are as user responses, the practicality of the module obtains very practical assessment criteria, from the effectiveness test in the experimental class, the module obtains effective criteria.

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INTRODUCTION

The teacher is an important component in the teaching and learning process. A teacher participates in efforts to form potential human resources in the field of development. Teachers are professional educators with the main task of educating, teaching, guiding, directing, training, assessing, and evaluating students in early childhood education through formal education, basic education, and secondary education (Law No.14 of 2005 Article 1 paragraph 1). Professional teachers are all people who have authority and have responsibility for student education, either individually or classically. This means that teachers must have at least basic competencies as a form of authority and ability in carrying out their duties. Teacher competence is a skill that must be possessed by teachers, both in terms of ability in terms of knowledge, ability in terms of skills, and responsibility for the students they teach, so that in carrying out their duties as an educator they can run well.

Teacher certification is a Government effort to improve the quality and competency test of teaching staff in a technical mechanism that has been regulated by the government through the local Education and Culture Office, in collaboration with competent higher education institutions, which ends with the issuance of teacher certificates to teachers who have been declared compliant. professional standards. The main basis of Teacher Certification is Law Number 14 of 2005 concerning Teachers and Lecturers (UUGD) which was passed on December 30, 2005. Namely, Article 8, reads: "*Teachers are required to have academic quality, competence, educator certificates, be physically healthy and can realize the goals of national education*". Teachers who get certification are teachers who are certified educators.

Teachers who have received an educator certificate mean that the teacher is considered professional in creating quality education systems and practices. So those teachers who have received Educator Certificates are expected to be able to bring about changes in education into quality education both in terms of process and output. Educator certificates are owned by teachers who have gone through teacher professional education (PPG).

The Teacher Competency Test, abbreviated as UKG, is an activity to measure basic competencies regarding the subject matter and pedagogy in the teacher content domain. The basic competencies of the field of the study tested are in accordance with the field of study of certification (for teachers who have been certified as educators) and in accordance with the academic qualifications of teachers (for teachers who are not yet certified as educators) According to the Decree of the Head of the Civil Service Agency Number: 46A of 2003, the

definition of competence is the abilities and characteristics possessed by a Civil Servant in the form of knowledge, skills, and behavioral attitudes needed in carrying out their duties so that these Civil Servants can carry out their duties. professionally, effectively and efficiently.

The results of the teacher competency test that occurred for vocational high school teachers got an average of 50.2 lower than high school teachers. Based on these results, we can conclude that the skill competency test for each skill competency is less specific in certain subjects. Meanwhile, a teacher does not necessarily teach all subjects. The purpose of this study was to develop a Competency Test Module for Culinary Skills for Food Processing and Serving Subjects in the Professional Teacher Education (PPG) SMK Catering Skills Study Program.

METHODS

1. Module Development Method

The method used in this research is the method of research and development or Research and Development (R&D). The Research and Development method is a process for developing and producing a certain product that will be tested for the effectiveness of the product (Sugiyono, 2015: 407). Based on the problem formulations described in Chapter I, the reason for using this type of research is because this method is effective in testing the products produced and is very suitable for developing competency test models in the certification process, where there is a learning / training process. This type of R&D research is very suitable.

for assessing or verifying various models of competency test for teaching staff (teachers) in which there is a skills competency test

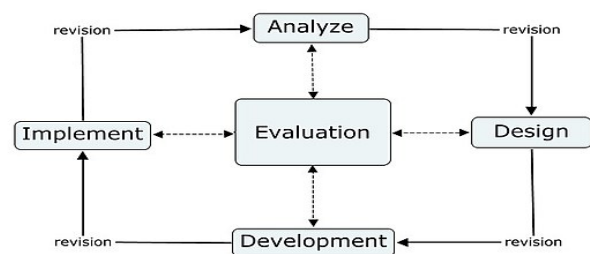


Figure 1. ADDIE Model

The focus in this research is to develop a Skills Competency Test training module using this type of research, namely ADDIE type research and development (R&D), it is estimated that the development of a module that is able to create an ideal training atmosphere, eliminates the weaknesses of previous learning models, creates skilled participants, easy to apply. and in the end, it

can improve the competence of each participant who takes the Professional Teacher Education.

2. Data Collection Methods and Instrument Validity and Reliability

The unit of analysis in this research is the learning module for processing and serving food in Teacher Professional Education (PPG). The data sources of this research are (a) material experts, namely AKS Semarang lecturers and TJP UNNES lecturers; (b) instructional media experts, especially those related to modules; (c) teachers who teach the culinary department; (d) students used to test the practicality of the module; and (e) students who are involved in the module effectiveness test. The instruments used in this study were (a) assessment sheets for the learning module of processing and serving food in Teacher Professional Education (PPG); (b) practicality questionnaire of the learning module for processing and serving food in Teacher Professional Education (PPG); and (c) a questionnaire for evaluating the effectiveness of the learning module on the processing and serving of food in Teacher Professional Education (PPG). The data collection techniques in this study are more detailed as follows:

a) Validity and Reliability Test of Instrument

To find out the validity or validity and reliability or state of the scale used in the study, it is necessary to first test the items of the instrument used. Practicality test and material test were carried out by 2 experts each. The Graphical Feasibility Test includes module size, module cover design and module content design. Feasibility test of the material includes content feasibility, presentation feasibility, language feasibility, and contextual assessment. The practicality of the assessment module includes interest, material, language, and competence. The effectiveness was assessed using the pre and post test questions, the questions consisted of 50 multiple choice questions. Before the questions are used, the difference power test, difficulty level test, distractor effectiveness test, biserial correlation and KR20 are carried out.

Data Type	Method	Data Source
Feasibility test	Assessment sheet	2 media and material experts
Practicality test	Questionnaire	Teacher & students
Testing Instrument Effectivity	Questionnaire	Teacher & students
Effectivity Test	Test	Teacher & students

a. Module Eligibility

Researchers conducted a feasibility test by distributing questionnaires as a research instrument to collect numerical data. In this response the form of module feasibility assessment sheet used is a questionnaire consisting of five options, namely: strongly agree, agree, doubt, disagree, and strongly disagree. This type was chosen because it has many advantages, including: (1) More representative, because it can cover a wide range of material, and (2) Easier and faster in examinations (Arikunto 2016). The module feasibility assessment sheet is given to media experts and material experts used consisting of several aspects and indicators. The feasibility test of the module includes a feasibility test for graphic feasibility and material feasibility. The feasibility of the module is assessed from the validity with a Likert scale with the formula $CVR = (2ne-n) - 1$; and reliability with cohens kappa with the formula

$$K = \frac{\sum_{i=1}^l \pi_{ii} - \sum_{i=1}^l \pi_{i+} \pi_{+i}}{1 - \sum_{i=1}^l \pi_{i+} \pi_{+i}}$$

b. Module Practicality

The module practicality questionnaire used in this is a questionnaire consisting of two options, namely: YES = practical and NO = impractical. The practicality instrument used consists of 25 questionnaire items and the scoring is done by calculating the answers based on the selected score of each answer and the score measurement system applies. Each questionnaire item is estimated to take an average of 1 minute to complete, so that the time allocation needed to complete this questionnaire is 25 minutes.

a) Validity

The formula for calculating the biserial point correlation coefficient of the module practicality assessment sheet is as follows:

$$rpbi = \frac{Mp - Mq}{St} \sqrt{pq}$$

Description:

- rpbi = point biserial correlation coefficient;
- Mp = number of respondents who answered correctly;
- Mq = number of respondents who answered incorrectly;
- St = standard deviation for all items;
- p = proportion of respondents who answered correctly;
- q = proportion of respondents who answered correctly.

Based on the results of data analysis conducted by Akbar Iskandar, the score of rpbi = 1, the data analysis carried out by Adlia Alfi riani rpbi = 0.99, and data analysis by Ellbert Hutabri rpbi = 0.99, this shows that the feasibility instrument sheet of the module used is valid or valid.

b) Reliability

Reliability is used to show that a test questionnaire can be trusted to be used as a data collection tool because the response questionnaire is good. The formula used is as follows:

$$KR_{20} = \left(\frac{n}{n-1}\right) \left(\frac{St^2 - \Sigma pq}{St^2}\right)$$

Description:

KR₂₀ = the overall reliability of the test;

p = the proportion of subjects who answered the item correctly;

q = the proportion of subjects who answered the item incorrectly;

Σpq = the sum of p times q;

n = total item;

St² = Standard deviation from the test (standard deviation is the root of the variance).

While the variance formula used to calculate reliability is as follows:

$$St^2 = \frac{\Sigma x^2 - \frac{(\Sigma x)^2}{N}}{N}$$

Description:

St² = Variance, always expressed in quadratic form, because of the standard deviation is squared;

(Σx)² = The square of the total score obtained by the student;

Σx² = The sum of the squared scores obtained by the students;

N = The number of subjects who took the test.

Based on the results of the data analysis carried out Akbar Iskandar, score KR₂₀=0,639, data analysis performed by Adlia Alfi riani KR₂₀=0,726, and data analysis performed by Ellbert Hutabri KR₂₀=0,800, This shows that the media expert validation sheet used is reliable, with high criteria

c. Module Effectivity

c) Validity

The formula for calculating the biserial point correlation coefficient of the module effectiveness assessment sheet is as follows:

$$rpbi = \frac{Mp - Mq}{St} \sqrt{pq}$$

Description :

rpbi = point biserial correlation coefficient;

Mp = number of respondents who answered correctly;

Mq = number of respondents who answered incorrectly;

St = standard deviation for all items;

p = proportion of respondents who answered correctly;

q = proportion of respondents who answered correctly.

d) Reliability

Reliability is used to show that a test questionnaire can be trusted to be used as a data collection tool because the response is good. The formula used is as follows:

$$KR_{20} = \left(\frac{n}{n-1}\right) \left(\frac{St^2 - \Sigma pq}{St^2}\right)$$

Description:

KR₂₀ = the overall reliability of the test;

p = the proportion of subjects who answered the item correctly;

q = the proportion of subjects who answered the item incorrectly;

Σpq = the sum of p times q;

n = total item;

St² = Standard deviation from the test (standard deviation is the root of the variance).

While the variance formula used to calculate reliability is as follows:

$$St^2 = \frac{\Sigma x^2 - \frac{(\Sigma x)^2}{N}}{N}$$

Description:

St² = Variance, always expressed in quadratic form, because of the standard deviation is squared;

(Σx)² = The square of the total score obtained by the student;

Σx² = The sum of the squared scores obtained by the students;

N = The number of subjects who took the test.

The reliability testing criteria is that after obtaining the r₁₁ price, then the r₁₁ price is consulted with the product moment r price in the table. If r₁₁ > r_{table} then the items tested are reliable.

3. Data Analysis

a. Eligibility

Data from the module feasibility analysis were obtained directly using a response questionnaire conducted by material expert validators and media expert validators.

Table 1. Criteria for Converting the Score into a Five Scale

No	Range	Quantitative Category	Qualitative Category
1	168 < \bar{x} ≤ 200	4.21 – 5.00	Very worthy
2	136 < \bar{x} ≤ 168	3.41 – 4.20	Worthy
3	104 < \bar{x} ≤ 136	2.61 – 3.40	Less Worthy
4	72 < \bar{x} ≤ 104	1.81 – 2.60	Unworthy
5	40 < \bar{x} ≤ 72	0 – 1.80	Very Unworthy

b. Practicality

The data from the module practicality analysis is in the form of a response questionnaire, the reliability of KR 20 will be tested, then the data from the module practicality test results are determined by the reproducibility coefficient (Kr) and scalability coefficient (Ks) to determine whether

the module is practical based on predetermined criteria. Analysis of the practicality of the module using the Reproducibility Coefficient (Kr) and the Scalability Coefficient (Ks) The Cr test formula is $Kr = 1 - e/n$ and Ks is $Ks = 1 - e/k$

c. Data Analysis Requirement

1. Noemality test

(χ^2) as follows:

$$\chi^2 = \sum_{i=1}^k \frac{(O_i - E_i)^2}{E_i}$$

Description:

- χ^2 = Chi-kuadrat
- O_i = Observation Frequency
- E_i = Expected Frequency
- k = Total Class

The normality test is a test to determine whether or not a data distribution is normal by looking at the probability $\chi^2 > 0,05$.

The results of the normality test of the student competency test results have a significance score (Sig.) As in the table, which shows the Sig. > 0.05, it can be concluded that the data are normally distributed.

2. Homogenity Test

$$H_0 : \sigma_1 = \sigma_2 = \dots = \sigma_k$$

$$H_1 : \sigma_i \neq \sigma_j \text{ untuk sedikitnya satu pasang } (i, j).$$

Levene Formula is provided as follows:

$$W = \frac{(n - k) \sum_{i=1}^k n_i (Z_i - Z_j)^2}{(k - 1) \sum_{i=1}^k \sum_{j=1}^k n_{ij} (Z_{ij} - \bar{Z}_i)^2}$$

Based on the results of the homogeneity test of the N-gain data, the sig value is obtained. 0.509 or (p) ≥ 0.05 and indicates that the pre and post-test N-gain data comes from a population that has the same variance (homogeneous).

d. Module Effectivity

1) N-Gain Test

The calculation of the normalized gain score (N-Gain) can be stated in the following formula:

$$N - Gain = \frac{Sekor \text{ Post Test} - Sekor \text{ Pre Test}}{Sekor \text{ Ideal} - Sekor \text{ Pre Test}}$$

The N-Gain score category (%) will later be interpreted into several categories according to the following conditions:

Table 3. Score N-Gain Interpretation

Percentage (%)	Interpretation	Classification
<40	Not Effective	1
40-55	Less Effective	2
56-75	Effective	3
>76	Enough	4

2) t tes

The independent T test formula is as follows:

$$t_{count} = \frac{X_1 - X_2}{\sqrt{\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2} \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

With the provision that if the t score > t table then there is a significant difference between the two data, in other words the module and vice versa if t count < t table then there is no significant difference between the two data.

RESULTS AND DISCUSSION

1. Module Development

a) Analysis Phase. At this stage what is done is conducting a needs analysis, module needs analysis, and competency test analysis for culinary skills. The analysis stage includes needs analysis, module needs analysis, analysis of Catering expertise competency test

b) Design Stage. The second stage of the ADDIE development model is the design stage. The design stage is carried out to make it easier for researchers to design the module media to be built. The design stage includes the criteria for compiling the module framework, collecting and selecting references, designing modules, preparing module response instruments.

c) Development Stage. The third stage of the ADDIE development model is the development stage. This stage aims to see the feasibility of the training modules that have been designed. As a follow-up to the design that was carried out in the design stage, development steps were taken in the form of Learning Module Development and Food Presentation in Teacher Professional Education (PPG), validation of media experts, material experts and validation of Users (teachers and students), revision of the Training module, developing a response questionnaire instrument to test the effectiveness of the learning module

d) Implementation Stage. This application stage can be carried out if the results of the expert test (due diligence) and the practicality test carried out by the Teacher and Siawa have met the feasible and practical criteria. The implementation stage is the application stage of the Food Processing and Serving module at SMK N 1 Petarukan, with 30 students of class XI Tata boga 1 as an experimental class who is given treatment in the form of providing Food Processing and Serving modules to test the effectiveness of the module, while class XI Tata Boga 2, as many as 30 people, only served as the control class and were not given treatment in the form of providing the Food Processing and Serving

- module. Responses from filling out the agket by these students can be a consideration for testing the effectiveness of the module.
- e) Evaluation Phase. This stage will make improvements to a better system by processing data from the previous stage. This evaluation procedure is carried out after the previous four stages have been / been implemented. Evaluation is carried out with the format of normative evaluation and summative evaluation.
2. Module Eligibility

It aims to determine the feasibility of modules carried out by experts by assessing the aspects of instructions, coverage, language and general validation in order to get suggestions and criticism from experts on the developed module. The results of the assessment will be proven by the results of filling in the response questionnaire which shows that the module is suitable for use in research. This feasibility test validator consists of 2 media expert lecturers, namely

Table 4. Overall Scoring Data on Each Aspect of the Validator

Aspect	Validator				Average	Category
	Media Expert 1	Media Expert 2	Media Expert 1	Media Expert 2		
Content eligibility	-	-	4.50	4.00	4.25	Very worthy
Serving Feasibility	-	-	4.40	4.00	4.20	worthy
Linguistic Feasibility	-	-	4.67	4.11	4.39	Very worthy
Contextual Judgment	-	-	4.56	4.00	4.27	Worthy
Graphic Feasibility	4.57	4.14	-	-	4.36	Very worthy
\bar{x} Expert Overall Average					4.29	Very worthy

Based on the data above, it can be seen that the overall average is 4.29 with very feasible criteria, thus the competency test module for catering services expertise in vocational teacher professional education (PPG) is declared valid and very feasible. Based on the results of this validation, it can be concluded that the competency test module for catering services expertise in vocational teacher professional education (PPG) is valid with revisions and does not require significant overhaul and is suitable for use.

3. Module Practicality

This stage is carried out to determine the practicality of the module being developed. The

practicality test of the catering services competency test module in Vocational School Teacher Professional Education (PPG) is carried out by teachers and students to obtain evidence from the results of filling in the response questionnaire which shows that practical modules are used in research. The practicality test is carried out by validating user responses (Teachers and Students) related to the practicality of the catering services competency test module in teacher professional education 6 teachers 30 students of class XI Catering study program at SMK Negeri 1 Petarukan

Table 5. Data Analysis of Cr and Ks scores on Practicality Test by Teachers and Students

Validator	Indicator	Score Kr	Score Ks
Guru	Interest	0.82	1.0
	Theory		
	Language		
	Content Competence		
Siswa	Interest	0.80	1.0
	Theory		
	Language		
	Content Competence		
\bar{x} Average Score		0.81	1.0

The reproducibility coefficient or Kr = 0.81 indicates that the culinary skills competency test module developed is very practical to use because it fits the practical requirements, namely 0.81. This is confirmed in the scalability test, the scalability coefficient or Ks = 1, this number also meets the requirements, which is above 0.60.

1. Module Effectivity Test

a. Data Normality

The normality test aims to determine whether the data used in the experimental class pre and post test data is normally distributed or not. The data normality test was carried out with the IBM SPSS Statistics 23 software according to Kolmogorov Smirnov and Shapiro Wilk, which can be seen in table:

Table 6. Normality Test for Module Effectiveness Questionnaire

Kelas	Sig. Kolmogorov-Smirnov ^a	Sig. Shapiro-Wilk
Pre Test	.145	.057
Post Test	.200*	.566

Based on Table 4.20 the results of the normality test of the student competency test results have a significance score (Sig.) As in the table, which shows the Sig. > 0.05, it can be concluded that the data are normally distributed.

b. Homogeneity Test

The homogeneity test is a test of whether the variances of two or more data distributions are equal. The homogeneity test that will be discussed in this study is the Variance Homogeneity Test. The homogeneity test was carried out to determine whether the N-gain result data for each individual using Levene were as follows:

Table 7. Levene Test

NGain	Levene			
	Statistic	df1	df2	Sig.
Based on Mean	,447	1	28	,509
Based on Median	,497	1	28	,487
Based on Median and with adjusted df	,497	1	26,057	,487
Based on trimmed mean	,434	1	28	,515

Based on the results of the homogeneity test of the N-gain data, the sig value is obtained. 0.509 or (p) ≥ 0.05 and indicates that the pre and post-test N-gain data comes from a population that has the same variance (homogeneous).

c. The N-Gain Test of Teacher's Knowledge of Food Processing and Serving

The N-Gain test is carried out by the gain normalization test (N-Gain). The N-Gain test is calculated based on the difference between the Pre-Test and Post Test scores. The formula for

determining N-Gain with an ideal score of 100 is as follows: N - Gain = The results of the calculation of the N-Gain test with the help of the SPSS 23.0 program, the score in the form of a percentage (%) is in the attachment of the N-Gain Score Test Output Table, the output results. these are summarized in the following table.

Table 8. N-Gain Score Module Effectivity Test

N-Gain Score (%)	
Average	50.74
Minimal	5.88
Maximal	95

Based on the results of the calculation of the N-Gain score test, it shows that the average N-Gain score is 50.74 or 51% with an N-gain score of at least 5.8% and a maximum N-gain score of 95%. The score is then interpreted by the following table of interpretation of the effectiveness of N-Gain:

Table 9. N-Gain Score Interpretation

Percentage (%)	Interpretation
<40	Not Effective
40-55	Less Effective
56-75	Effective Enough
>76	Effective

Based on the table above, the interpretation of the effectiveness of N-Gain, the Gain score of the experimental class is 50.74%, so it can be concluded that the application of the module is effective enough to improve the competence of food service expertise.

d. t test

The method used to determine whether there is a significant difference in Post Test scores in the experimental class is by using the paired sample T test. This test is carried out on the learning outcomes of the experimental class pre-test and post-test. The results of the paired sample T test can be seen in the Appendix Table of the results of the independent sample T test output. Based on calculations using the SPSS program for Pre-Test and Post Test responses, the results are as shown in the following table:

Table 10. Pre-Test dan Post Test Result

	Mean	N	Std. Deviation	Std. Error
Pre test	49.73	30	12.448	2.273
Post test	76.40	30	10.807	1.973

From the table above, it can be seen that the average pretest score is 49.73 and for the post test is 76.40.

Table 11. Paired Sampel T Test Result

Data	T test	Taraf Signifikansi
	-8.955	.000

Based on the calculation results, the value of T count = -8,995 with the T table score at (df = 45; $\alpha = 5\%$) is 0,000. Because T count is greater than T table, so it can be concluded that before being treated using the media of the catering service skills competency test module in teacher professional education (PPG), the two classes have no difference.

The results of the independent sample T test by entering the average N-Gain score in the table, show that the N-Gain_Persen data has a Sig (2-tailed) of 0.000 (less than the 0.05 significance level), meaning that the N-Gain_Persen data in the study This distributed data is quite effective and significant.

CONCLUSION

The final product of this research is the culinary expertise competency test module (food processing and serving) at the PPG SMK culinary expertise program. The module creation process is carried out in stages to produce viable modules. A series of validation processes from media experts, material experts, users, and user effectiveness are carried out to ensure the module is valid or not to be applied. According to Zahrulianingdyah (2013), the development of a conceptual model is produced through four steps, one of which is the implementation stage, which includes developing a draft model, internal validation, external validation, and limited testing so that the model can match the objectives to be achieved.

Efforts to develop a product are an effort to improve the performance and achievement of results for an activity, however, a series of procedures are needed to ensure that the module being developed is feasible and feasible before being implemented. The feasibility test is studied in the form of a learning module so that the success of the product being developed can be evaluated.

The feasibility of a research product with an R&D design is determined by three criteria, namely validation, practicality, and effectiveness (Akker et al., 1999). After the validation test was carried out, it was concluded that the culinary expertise competency test module (processing and serving of food) at the PPG SMK culinary expertise program was very suitable for use by students to improve competence. The results of the conclusions obtained from the feasibility test validator consisted of 2 media experts Validator material expert from the lecturer. The results of the expert consultant's assessment (2 experts) on the components of the module content obtained data that 61.3% of all the material in the module was categorized as very good with a value the kappa coefficient is 0.692 (0.61-0.8) or both experts have a strong agreement in assessing the items in the module.

The results of the expert analysis on the media aspects of the competency test module for foodservice expertise in the subject of processing and serving continental food showed that the expert stated that 69.2% of the media presentation in the module was categorized as very good with a kappa coefficient value of 0.705 (0.61-0.8) or both experts have a strong agreement in assessing the media presentation items in the module. Based on the results of the data analysis, it can be concluded that the competency test module for the skills of catering services in the subject of processing and serving continental food in vocational teacher professional education (PPG) developed can be applied to the teacher certification process.

Practicality At the user validation stage, this is validated by the teachers and students of Catering at SMK Negeri 1 Petarukan. The results of the validity and reliability test on the items showed that the Pearson Correlation value of each question was more than 0.05 or all items were valid. The reliability test results obtained the Guttman split-half Coefficient coefficient value is 0.965 and which means that the question is reliable to use. Validity is a measure that shows the levels of the validity of an instrument so that data from the variables to be studied can be obtained accurately. The validity of the catering service instrument uses the content validity and construction of the Ukobo model (Catering Service Competency Test. (Suharsimi, 2006: 168; Surapranata, 2009: 51).

Module effectiveness level is a strategy in achieving goals optimally, precisely, and quickly (Sudjana, 1990: 50). The effectiveness of the developed modules is related to the objectives of developing the module, which is related to increasing the competence of foodservice expertise in food processing and serving subjects. The test was carried out by comparing the test scores of the food processing and serving subjects before and after the socialization of the module at school. Based on the results of the analysis, the data obtained a significance value of 0.000 ($p < 0.05$) or there is an effect of the provision of a competency test module for food service skills in food processing and serving subjects in vocational teacher professional education (PPG) on knowledge about food processing and serving.

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