

# Development of Project-Based Authentic Assessment Instruments On Business Communication Subjects

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**Abstract :** *The goal of this research and development was to produce authentic assessment instrument based project to ease teachers conducting assessment authentically to the process and student learning outcome in making brochure towards business communication subject. This research was research development which used R & D model. Data collection instrument in this research conducted through questionnaire. Data type that obtained in this research was quantitative data and qualitative data by using data analysis technique of percentage calculation. The result of limited test showed that this authentic assessment instrument based project had percentage of 97% with “easy to use” criteria, while readability test to the work instruction sheets had the average of 95% with “feasible to be used” criteria.*

**Keywords:** *Authentic Assesment Instrumen, Based Project, Business Communication*

The development of education in Indonesia currently progressing rapidly with new curriculum as a nation's educational facility in Indonesia (Shawer, 2017). 2013's curriculum is the first step that government has issued to improve education in Indonesia. 2013's curriculum should provide opportunities for students to observe, asking, explore, associate, and communicate during learning process (Goh et al, 2017). Based on the Undang-undang Dasar no 32 of 2013 on the amendment to government regulation number 19 of 2005 on National Education Standart, there are four element that change because of 2013's curriculum included the Standart Kompetensi Lulusan (SKL), content standart, process standart and assessment standart. Those four should be applied in education in Indonesia (Voronoy et al, 2017).

One aspect that used as a place of change and arrangement in relation of 2013's curriculum implementation is structuring of assessment standarts (Mulyasa, 2014:135). Assessment is the most integral part of learning process. Assessment is also often regarded as one of three main pillars that determine learning activities. The three pillars are planning, implementation, and assessment. So if the three pillars synergistic and sustainable it will be able to determine quality of learning. One of the assessment that canbe used is authentic assessment

(Wu et al, 2015; Hassanpour, 2011).

Authentic assessment is a process of collecting, reporting and using information about student learning outcomes by applying the principles of assessment, continuous implementation, authentic evidence, accurate and consistency as public accountability (Chongdkk, 2016; Lander et al, 2017). Authentic assessment becomes one of the emphases in 2013 curriculum. Kunandar (2014; 35) said that 'through the 2013's curriculum authentic assessment becomes a serious emphasis which theacers must apply authentic assessment in every learning process'.

The result of preliminary study by interviewing and observation teacher of Business Communication Subject at SMK Negeri 1 Turen Malang is that teacher still struggling in arraging the project appraisal format in accordance with the demand of the curriculum. As a result, assessment of student's skill aspect has not been optimally applied. The value of student's skill aspect in the learning outcomes report is derived from practical report score rather than the actual student outcome in learning activities. To respond this fact, it is necessary to develop a project based on authentic assessment instrument that is appropriate to assess the student's skills authentically.

Arifin (2009; 180) said 'authentic assessment is a valuation technique used to determine the level achievement of stuent competence in the form of students' ability, not a made-up or only obtained in the classroom'. Authentic assessment invites students to using academic knowledge in a real life for meaningful purpose. Authentic assessment of skill can be done throught project appraisal (Wel et al 2017; Miterrey et at, 2017; Chu dk, 2017). Prject-based authentic assessment is judgement techniqueconducted by direct observation and must be completed in a certain time to student;s competence during learning activities (Ruggiero, 2017). Projrct-basec authentic assessment is suitable for assessing competency achievement that requires students to perform certain tasks, such as laboratory practices (William 2017). According to Kunandar (2014; 70), the purpose of authentic aseessment is to track the student's progress, check the student's competence, detect competences that have not been mastered by student., give a feedback for student's improvement. Authentic assessment steps are described by Kunandar (2014: 289) as follows : (a) material indentification and mapping; (b) the establishment of project or assignment orders; (c) preparation of an assessment rubric containing any aspects to be observed or assessed; (d) assessing the student's project report: (e) provide records for further project report improvements; (f) conduct analysis of project appraisal results; and (g) incorporate the results of student's project assessment on academic report.

There are several kinds of observation instrument formats that are authentic assessment (check list) and rating scale or the project task assessment format in it.

## METHOD

This research is a development research designed to produce the product in a form of project-based authentic assessment instrument in marketing productive of business communication subject on applying promotion techniques based-competence 11<sup>th</sup> grade SMKN 1 Turen Malang. This development research uses

research and development model. The stages of development research consist 10 stages which are (1) research and data collection; (2) planning; (3) develop preliminary from product; (4) preliminary (initial field trial); (5) main product revision; (8) operational field testing; (9) final product revision: and (10) dissemination and implementation.

The experiments carried out in this development study is limited trials with subject consisting of teachers and student. The types of data obtained from all phases of this research are quantitative and qualitative data. The data analysis techniques used to analyze the quantitative data of validation and experimental subjects(mode and student teacher) to the product development draft is to use following formula :

$$= \frac{\sum x}{\sum x_i} \times 100 \%$$

Annotation:

P = percentage

$\sum X$  = total score trial subject

$\sum$  = maximum total score

Feasibility level of product research identification with percentage score. The greater score of data analysis the better feasibility level of product development research. Feasibility criteria analysis shown on table 1 follows:

Table 1 Feasibility Criteria Analysis

No	Persentase	Keterangan
1	80,00-100	Baik/valid/layak
2	60,00-79,99	Cukup baik/cukup valid/cukup layak
3	50,00-59,99	Kurang baik/kurang valid/kurang layak
4	0-49,99	Tidak baik (diganti)

(Sumber: Sukmadinata, 2002:32)

## RESULT & DISCUSSION

### Result

Validation result used to determine the product feasibility in terms of content and construction. The content of validation project-based authentic assessment instruments is conducted to determine feasibility of content before student's trial. Based on results, contents obtained it will be known how feasible project-based authentic assesment instrument is and also improvement that need to be done to perfect the projrct-based assessment instrument before student trial. The feasibility of assessment instrument by content validation can be seen in tbale 2 as follows :

Table 2 Feasibility of assessment Instrument by content validation

No	Instrumen Penilaian	Rata-rata
1	Pengetahuan	93,75%
2	Keterampilan	92,70%
3	Sikap	93,75%

Based on table 2 shown that the validation of “knowledge appraisal” instrument is feasible with the percentage 93.75%. Indicator of knowledge appraisal include fitness of contextually measured aspect. Fitness with indicators and based competency, conformity of task material with learning objectives, instructions clarity on how to do the task, interest in sentence formulation about communicative, sentences used effectively, sentences are free from statements that can be interpreted more than one meaning, sentences are free of uncertain statements, suitability of language in accordance with Indonesia theorem and in accordance with student education level, scoring guideline clarity.

Based on table 2 above, the validation result of the ‘skill appraisal’ instrument is feasible with percentage 92.70%. Indicator of skills include project suitability to make brochures according to main competence and based competence, conformity of project with learning objectives, clue to answer and fill instrument clarity, clarity of assessment indicator on instrument, work steps on the brochure project, systematically brochure project, how to make brochure easy to understand by student, display the brochure project to attract the user, easily making brochure, suitability of language accordance with Indonesian theorem, communicative and in accordance with the level of students education, writing sentences on problems and work steps of brochure project, clarity on assessment instrument scoring.

Based on table 2 above, the validation result of the ‘attitude appraisal’ instrument is feasible with percentage 93.75%. Indicator for attitude include suitability with based-competence, instrument conformity with learning objectives, instrument containing attitude indicator to observe by student, instruments are easy to use when student’s presentation, clarity of instructions for answer and filling instrument, sentences used effectively, sentences free from statements that can be interpreted more than one meaning, sentences are free from uncertain statements, suitability of language accordance with Indonesian theorem, communicative and in accordance with student education level, scoring guideline clarity.

Construction validation is carried out to determine the feasibility of constructing the assessment instrument before trial. Validation is done by 2 expert validators. The feasibility of assessment instruments by constructs validation can be seen in table 3 as follows

Table 3 feasibility of assessment instrument by construct validation

No	Instrumen Penilaian	Rata-rata
1	Pengetahuan	96,88%
2	Keterampilan	99,87%
3	Sikap	96,42%

Based on table 3 above, validation result of “knowledge appraisal” instrument is feasible with percentage 96.88%. Knowledge indicator include task formulation, task and alternative answer using definite sentences, using a positive sentences, an alternate arrangement of regular answer, a choice of homogeneous and deceptive answer, no answer to choices, no choices of answer ‘all below are correct’ or ‘none of the options are correct’, using three or more multiples choice.

Based on table 3 above, validation result of “skill appraisal” instrument is feasible with percentage 99.87%. Skills assessment indicator include directing students to show achievement of learning outcomes, project task according student progress, time frame of work, rubric can be used in assessing student ability, rubric as student ability’s map, completeness and accuracy aspect in project appraisal, criteria easily observed, criteria can assess student’s skill during the learning process, criteria refers to procedure in work sheet instruction, criteria practice procedure write coherently in work sheet, can be observed, instrument implemented with an integrated learning.

Based on table 3, validation result of “attitude appraisal” instrument is feasible with percentage 96,42%. Skill assessment indicator include instrument guidelines, instrument presented systematically, easy using instrument with an integrated learning, sentences are easy to understand, easy to implement in an integrated learning. The trial result data in this study are from the subject (user). The user of this project-based authentic assessment are teacher and students. Data from teachers is feasibility percentage project-based authentic assessment of class limited trial. Based on that analysis, teachers and researchers declared valid with 97.5% of average percentage of

This students’ data is the percentage of feasibility of authentic assessment on product test result through classroom study. Initial instrument assessed by student in the form of instruction worksheet. Based on that analysis result, instruction worksheet is valid with 94.2% of average percentage.

## **Discussion**

The assessment instrument contains three main assessments, which is knowledge, skill and attitude aspects. Those aspect development refers to basic theory of assessment by Bloom in Sundari (2014; 170), that assessment aspect of learning include three domains (domain), that are cognitive domain, affective domain and psychomotor domain.

Project-based authentic assessment develop according with the applying promotional techniques competence. (Garcia, 2016). Skill competence oriented to motor skills related to limbs, or actions that require coordination between nerves and muscle. Authentic assessment suit for teachers as expressed by Wijayanti (2014; 106) that authentic assessment can improve cognitives abilities, think scientific, and think creatively and keep students in mind. So the skills assessment used to assess the basic of applying promotional techniques competence which more students are required to take an action.

The project-based authentic assessment provide a true assessment of student’s skill performance, since the assessment are support with individual

project observation sheets as practice progress. In addition, there are also project assessment criteria that contain the scores for student. When practice, students are also work instruction sheet that is a project task to facilitate students in carrying out the practice. This is what makes the project-based authentic assessment instrument development able to provide an authentic assessment of students' project. So teachers can easily get the data as revealed (Marhaeni, 2015) that judging from the type of authentic assessment, it is clear that teacher will get enough data to assess the students objectively and honestly.

The advantage of project-based authentic assessment instrument are designed with the aim of facilitating teachers to provide authentic assessment on making brochures by students, since the instrument are accompanied by user, project observation sheets, project appraisal criteria, and scoring instructions so that teachers can provide the actual assessment of the projects undertaken by each student during the practice of making the brochure

The availability of work instruction sheets also an excess of project-based authentic assessment instrument develop by the researcher. A work instruction sheet is a project task that serves as a reference for student to conduct practical activities. Project tasks contain the tasks and tasks that the student should do. The work instruction sheet comes with practical guidance and practical steps that make the students more independent without waiting teacher's explanation. The work instruction sheet and project observation sheet are complementary entity, which the aspect of the project observation sheet refers to a work instruction from preparatory aspect, systematic and work and use of practicum time. The work instruction sheet meets the criteria of available project task.

In the attitude assessment instrument is not only built upon teachers assessment. However, in 2013's curriculum, attitude assessment is also include self assessment and peer assessment. According to Widiyatmoko (2012) the project-based learning is a systematic learning method involving students to assess their friend about the attitude during practicing. The advantage of self-assessment and peer is to make the student more responsible for everything they did, the students are actively involved in the learning process, and the students become open mind and more motivated.

The disadvantage of this assessment instrument is that many aspect of the assessment and project assessment process are carried out on each student so that it takes a long time and less applicable for big class. To overcome this problem, the researcher made the technique to determine scoring using range scale 1,2,3, and 4. Thus it is expected that the user is more practical in determining score when doing the practice even in big class. In addition, the availability of assessment criteria on each score will also help user in providing assessment.

The result of validated and revised project-based authentic assessment instruments are then used in limited trials in classroom teaching and learning. This limited trial aims to determine the project-based authentic assessment practice when used by teacher as an assessment sheet based on questionnaire and also to find out the reader's work sheet as a students reference when doing the practice based on a questionnaire filled by student. Limited trial to XI grade marketing student which around 32 student. Limited trial sampling based on Arifin (2012) that limited trials conducted at least 10 object of research.

A limited trial was conducted during two meetings where the first meeting was used for a test of a skill assessment instrument, a second meeting for a knowledge appraisal instrument and an attitude assessment instrument. From the limited trial results found that project-based authentic assessment instrument beside for knowledge, skill and ease of use by teachers and student are also capable to read the meaning of worksheet instruction as practical reference.

## CONCLUSION & SUGGESTION

### Conclusion

Based on result and discussion of project-based authentic assessment instrument in productive learning of business communication subject, the research conclude several things as follow : This project-based authentic assessment instrument adopts the Borg and Gall's research and development model. This research and development deliver project-based authentic assessment instrument on business communication subject for XI grade student of Vocational School. Feasibility aspect of project-based authentic assessment instrument as a whole eligibility criteria is valid based on Arikunto (2010) content validation, validation collisions and field trial, but there are some things that need to be revised, the researchers have done revisions for project-based authentic assessment instrument perfection.

### Suggestion

The researcher give some suggestions to the next writer about project-based authentic assessment instrument that is as follows : the resulting product needs to be adjusted if used for other schools because selection of practical tasks on skill aspect is different according to each school policy, B) the next researchers expected to determine what aspects really need to be done so that there's not too much aspects to assessed and teacher more focused in assessing student's skill.

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