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Need Assessment and Performance Analysis on Innovative, Adaptive, and Responsive Curriculum Development Geared to Life Skills

To cite this article: N Umamah *et al* 2020 *IOP Conf. Ser.: Earth Environ. Sci.* **485** 012084

View the article online for updates and enhancements.

Need Assessment and Performance Analysis on Innovative, Adaptive, and Responsive Curriculum Development Geared to Life Skills

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Abstract.
Need assessment and performance analysis are important components in identifying the actual issues within learning program. Need assessment is the first step upon instructional design. The research samples under investigation were 14 History teachers and 168 students from 5 public schools in Jember regencyregency. Data collection techniques operative were observation, questionnaire, and interview. The results of needs assessment conducted to teachers and students, which delved into resources component, revealed that (1) 72% of the learning resources used were textbooks and 28% worksheets, (2) 100% of students confirmed the importance of Indonesian National History, (3) 90% of the subjects operationalized LCD, laptop/computer, power point and 10% video (4) both teachers and students claimed that there were no social studies laboratory, (5) learning process included 80% cooperative learning and 20% independent learning, (6) most teachers and students employed globe and maps as teaching aid, (7) the level of pedagogical knowledge was high, (8) teachers' skill level was also considered high, and (9) students learning motivation were at 3,5086 which was categorized as moderate. The performance analysis upon teachers informed that: (1) most schools curricula used the revised edition of the 2013 Curriculum, (2) 100% of the learning objectives were encapsulated in the new main competency, (3) 60% of the development material relied on textbooks and 40% worksheet, (4) 60% teachers engaged a wide variety of methods, namely question and answer, discussion, and 40% of the deployed discovery learning with scientific approach, (5) 80% of the learning media used were power point and 20% video, (6) 80% of learning resources used were textbooks and 20% student worksheets, and (7) 100% assessments used were written tests, multiple choices, and essay tests. This study lays the cornerstone to curriculum development which is beneficial towards History education.

1. Introduction

Industrial Revolution 4.0 brings both challenges and chances for Indonesia higher education. In order to meet the defiance, higher education institutions and colleges attempt to produce students who obtains capacity in critical thinking, creative thinking, communication and collaborative (4C). Within education practice, we notice the so-called need assessment and performance analysis. Those two aspects pose significant influence on policy and learning establishment.

Need assessment is simply defined as need measurement on what is commonly performed in the early stage to diagnose subjects' characteristics. Referring to Jean and Daniel (2009), need assessment is an ordinary term refering to three phases, namely information collecting, analyzing, and framework developing. In the sense of curriculum, need assessment plays as the process by which one defines educational needs and decides what their priorities are [1]. Need assessment is the first step upon instructional design process and prominent stage in improving practitioners' performance [2]. Need assessment in training term, however, needs to emphasize on their performance improvement for identifying and prioritizing all types of performance gaps [3].

In addition, there is also performance analysis to be put in place. Performance analysis is an effort made to measure performance of students based on certain criteria. Some experts argue that performance

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analysis is similar to the definition of need assessment, which is different with respect to possible and potential performance that determines which issues should be addressed through instructional solutions against instructional issues [4]. [5] that performance analysis covers performance variables to determine actual circumstance compared to desired organizational, process, and individual performance. In addition, [6] also argues that the benefit of performance analysis model is to identify the criteria to meet expected organizational performance need through both individual level and process level performance.

Typically, performance analysis covers three main activities, which includes job description, task inventory, and task analysis. Performance analysis scoring depends on goals. For instance, in order to meet a learning objective, students have to perform essay wiring. Thus, criterion used is how to properly arrange a good essay such theme, structure, ideas, etc. Relating to curriculum, performance analysis is deployed to evaluate curriculum implementation within a school setting.

Curriculum is a paramount part in education practice, ranging from pre-school to higher education. Curriculum is designed as good as possible to assist student in achieving learning outcome and gaining benefits skill for the next education levels. In the sense of HistoryHistory subject, the curriculum strongly relates to historical discipline laden with humanities studies. Generally speaking, History learning curriculum objectives are; 1) critical and analytical thinking; 2) writing and communicating skills; 3) basic interpretation capacity; and 4) social, cultural, political, and economic awareness.

Innovative History learning curriculum development aims to deliver positive contribution towards dynamic society. Ideal curriculum development will possibly lead to creativity improvement which results in practical benefits. Curriculum development is expected to be based on adaptive life skill. Life skill means capabilities in dealing with challenges and changes [7]. Life skill may improve psychosocial well-being, communication skill, positive thinking, analytical thinking and collaborative achievement. In addition, life skill is associated to the life dynamics and complexity, thus providing significant value both for education and society.

Furthermore, curriculum development also should be responsive. In the light of pedagogy, responsive behavior means awards are given to students with different needs, interests, and passion. Responsive behavior respects cultural pluralism and attempts to create learning which adapts to students' knowledge, skill and experience. Responsive curriculum development means social changes, which are democratic, participative, relevant, and holistic in nature [8].

Even though performance improvement practitioners generally considers need assessment and analysis as substantial stages to deal with performance issues [9], those two are hardly put into work prior to implementing performance improvement recommendations. Commonly, the practitioners select the preferred method in conducting a needs assessment [10]. The most widely used methods in need assessment are task analysis, job/process analysis, performance improvement, competency-based assessment, strategic needs assessment, and knowledge assessment. While performance analysis is frequently engaged in literature of needs assessment, in definition, it is needs assessment and analysis in combination [11].

This research involved public high schools of Jember regencyregency. Jember is a regencyregency located in East Java province, Indonesia. It has substantial influence towards Probolinggo and Bondowoso regency in the north and Banyuwangi regency in the east.

Objectives

The research entitled Need Assessment and Performance Analysis on Innovative, Adaptive, and Responsive Curriculum Development Geared to Life SkillsHistoryRegency strove to reach two objectives below:

1.   Conducting need assessment in finding and analyzing data related to students' characteristic, resources needed, and system which is potentially used as management planning establishment material.
2.   Performing perfomance analysis to obtain and analyze data of factual framework and expected performance.

2. Method

Need assessment is a prominent early stage in identifying and analysing performance problems. Performing need assessment and performance analysis requires determining the most proper method suitable to the situation to be assessed, since there is no method that fits all situations. This study employed questionnaire distributed toHistoryHistory teachers within Jember regencyregency. Questionnaire items were made thoroughly in order to ensure validity.

Participants

The samples needed from each school were three teachers. The total sample of five schools were 14 teachers, with SMAN 4 Jember involving two HistoryHistory teachers. In addition to teachersteachers, students were also involved in the observation. The total sample at each participating school was as follow: SMAN 1 Jember with 33 students; SMAN 2 Jember with 32 students; SMAN 3 Jember with 38 students; SMAN 4 Jember with 35 students; and SMAN 5 with 29 students. Data collection techniques involved observation, interview, and questionnaire.

3. Results

Need Assessment

Need assessment was examined to identify the gap work within an institution. This study examined the need assessment at SMAN 1 Jember, SMAN 2 Jember, SMAN 3 Jember, SMAN 4 Jember, and SMAN 5 Jember. The discrepancy corresponded to three matters, namely; (1) instructional material availability; (2) knowledge and skill; and (3) students' motivation.

Material Availability
a.   Technology

Technology availability was identified through provided facility in HHistory learning of five schools within Jember regencyregency. All five schools provided LCD and laptop to assist HistoryHistory learning. Yet, those five schools have not provided laboratory of social studies. Thereby, the computer room was rarely used, since it had to be used alternately with other subjects.

b.   School Facility

Material availability provided at five schoolsregency commonly included classrooms, computer laboratory, science laboratory, library, pray room, sports area, canteen, security room, and teachers' room. It can be said that all five schools had yet to provide social studies laboratory, except maps and globes.

c.   Human Resources

Human resources availability in each school of Jember regency for HistoryHistory subjects were three teachers, meaning that there was sufficient number of teacher. 100% of the teachers teacherswere considered skilled in using hand phone/laptop/computers to support HistoryHistory learning process. Besides, students were also able to use those tools during learning activities.

Knowledge and Skills

Knowledge and skill were used to identify teachersteachers' competency. The competency was examined through interview carried out to 14 teachers of the five schoolsregency. Teachers' pedagogical knowledge was measured with respect to how they understood the students; performed ideal learning; designed proper learning; performed ideal assessment; and assisted the development of students' potential. Based on the interview conducted, the teachers were considered fairly sufficient. Thus, their pedagogical knowledge supported effective learning that complied with learning goals. In other words, their competency affected both the process and outcomes of learning.

Besidestheir pedagogical knowledge, this study also discussed students' attitude and skills assessed through observation on learning process. The results acknowledged that most students were interested

in HistoryHistory learning. Good attitude that students showed indicated teachers' success in motivating them. Students' attitude can be seen from several indicators, namely responses, appreciation, assessment, and internalization.

Students' skill can be assessed through direct observation and students' behaviour during learning process, which were also put under a series of tests. Based on the research conducted at the five schoolsregency, 100% of the students were able to develop their skill. Students were able to complete paper assignments, perform presentation, and analyze issues relating History learning. Thus, it can be said that adequate students skill reveals teacher role in learning.

Students Learning Motivation

Motivation determines learning effectiveness. Learning motivation affected History learning process performed by educator. Based on data obtained, 168 students of five schools within Jember regency were participants. Learning motivation indicators adopted form [12] namely; (1) curiosity to learn History obtains mean 3,4862 with moderate category; (2) students'confidence to reach achievement gains mean 3,7414 with high category; (3) compatibility between History learning and other subjects obtained 3,4913 with moderate category; (4) satisfactory towards students learning outcome obtains 3,8660 with high category; (5) self-confidence to achieve success obtains 3,3529 with moderate category and (6) beliefs upon students ability in History learning obtains with moderate category. The description above shows that students of the five schools showcase adequate level of learning motivation.

Performance Analysis

Performance analysis is a study to determine concrete problems of schools and determine solution associated to History learning. Performance analysis was performed using observation towards History teachers of SMAN 1 Jember, SMAN 2 Jember, SMAN 3 Jember, SMAN 4 Jember, and SMAN 5 Jember. Performance analysis components are; 1) curriculum, 2) learning objectives, 3) learning content, 4) learning model and method; 5) learning media; 6) learning sources, and 7) learning assessment. For curriculum, learning curriculum applied within the five schools of Jember regency namely SMAN 1 Jember employed curriculum 2013 revised in 2017, SMAN 2 Jember employed curriculum 2013 revised in 2017, SMAN 3 Jember applied curriculum 2013 revised in 2017, SMAN 1 Jember employed curriculum 2013 revised in 2017, SMAN 4 Jember employed curriculum 2013 revision of 2017, and SMAN 5 Jember applied curriculum 2013 revised in 2017.

The learning objectives implemented by historical teachers in the five schools. The History learning objectives at SMAN 1 Jember has usually been delivered by teachers at the beginning of teaching main competency or new material; the implementation of the objectives of historical learning at SMAN 2 Jember has been delivered by teachers only at the beginning of teaching new main competency; the teachers at SMAN 3 Jember occasionally introduce the learning objectives; the historical learning objectives at SMAN 4 Jember were only introduced at the beginning of teaching new material; and the learning objectives at SMAN 5 Jember was also carried out at the beginning of new material or main competency. So, based on the data, it was concluded that the learning objectives in the schools were only introduced at the outset of teaching new topic of History learning and the during the instruction. It was also found out that sometimes these objectives were not introduced.

The analysis on learning content showed that the development of material carried out by teachers in the 5 schools was different. The development of material carried out by teachers at SMAN 1 Jember was based on the main competency and achievement indicators to integrate HOTS-focused problem; the material development at SMAN 2 Jember was carried out by teachers by referring to the textbook and available worksheet; the development of material at SMAN 3 Jember was carried out by teachers using textbooks, articles, and modules; the material presented by teachers at SMAN 4 Jember was centered on learning resources used, namely worksheet and textbook; and teachers at SMAN 5 Jember have developed materials using the textbook and worksheet. Hence, it can be concluded that the three schools, namely SMAN 2 Jember, SMAN 4 Jember, and SMAN 5 Jember used textbook and worksheet

in developing the instructional materials, while the two schools namely SMAN 1 Jember and SMAN 3 Jember developed learning materials by referring to many learning resources such as textbook articles and teachers' book.

Learning model and method aspect, implementation of learning methods conducted by teachers in 5 different schools. Historical learning methods used by teachers at SMAN 1 Jember namely scientific, lecture, question and answer, and discussion; historical learning methods applied by teachers at SMAN 2 Jember namely lecture, question and answer, discussion, and discovery learning; historical learning methods used by teachers at SMAN 3 Jember namely lectures, question and answer, game, and cooperative learning; the method of learning History by teachers at SMAN 4 Jember namely lectures, question and answer, discussion, and discovey learning; and historical learning methods used by teachers in SMAN 5 Jember namely lectures and questions and answers. Based on these data, it can be concluded that the two schools, namely SMAN 2 Jember and SMAN 4 Jember, have applied historical learning methods in the form of lectures, question and answer, discussion, and discovery learning, while the other three schools have different historical learning methods.

History learning media used in 5 schools was different. History learning media used by teachers at SMAN 1 Jember were power points and historical videos or films; History learning media used by teachers at SMAN 2 Jember, namely power point; History learning media applied by teachers at SMAN 3 Jember namely power point and video; History learning media used by teachers at SMAN 4 Jember, namely power point; and History learning media applied by teachers at SMAN 5 Jember namely power point and historical videos. Hence, it can be concluded that the two schools namely SMAN 2 Jember and SMAN 4 Jember used power point as a learning media for History learning, while the two schools namely SMAN 1 Jember and SMAN 5 Jember engaged power points and historical videos or films, and only SMAN 2 Jember employed power point.

The learning resources used by teachers in learning at these 5 schools varied to great extent. At SMAN 1 Jember the teachers engaged many sources such as textbook, worksheet, articles, internet, and journals; those at SMAN 2 Jember and SMAN 4 Jember used learning resources in the form of textbook and worksheet; while those SMAN 3 Jember utilized learning resources such textbooks, articles, and Educator Handbook; and those at SMAN 5 Jember used learning resources in the form of textbook, worksheet, and educator handbooks.

Lastly, learning assessmentassessment aspect in the five schools was also different. The learning assessment applied by teachers at SMAN 2 Jember, SMAN 4 Jember, and SMAN 5 Jember was in the form of a multiple choice written test. It is different from SMAN 3 Jember which engaged daily assessment, while in SMAN 1 Jember, assessment was carried out based on three aspects, namely attitudes, knowledge, and skills assessments.

Discussion

Based on research results of need assessment the present study has drawn the following conclusions: (1) the learning resources used are textbooks and worksheets, (2) the content commonly discusses Indonesian History (3) learning tool used is LCD, (4) there is no social studies laboratory, (5) study groups are extensively operative (6) teaching aids used are globe and maps, (7) History teachers of every school are 3 teachers, (8) the level of pedagogical knowledge is high, (9) the skills' level is also high, and (10) the level of students' learning motivation is moderate. The description above reveals that need assessment plays prominent role in education. Referring to Seehamat, et. Al. in [13], need assessment is an important component of both curriculum development and implementation. Thus, assessment garners important information for making decisions germane to school curriculum to achieve educational objectives. These results are in harmony with Firdousi's research which tried to determine the importance of training needs within service sector to improve the training delivery and achievement of maximum benefit for investment. The results indicate that need assessment in the right direction can play significant role of companies success in the future.

Referring to Walter, Wilkson and Yarrow (1996) in [14] teaching quality depends on teachers' quality. In other words, it depends to some extent on their professional development. Teacher without proper training, qualification and commitment is unable to meet the challenges of globalization. Teachers are required to obtain adequate skills and knowledge [14].

Mitchel highlights needs analysis as the examination of the existing need for training within an organization. A need analysis identifies performance areas or programs within an organization where training should be performed [14]. In fact, teachers require a range variety of current opportunities to develop their abilities. Effective teacher professional improvement starts by understanding teachers' needs and their work environment. Although the majority of teachers consider themselves to be knowledgeable and confident, at the same time, the new expectations and challenges appear. Teachers hold the perception of a gap between their current knowledge and what they need to know to become an competent teacher [14].

The performance analysis reveals the following findings: (1) the school curriculum has used the revised edition of the 2013curriculum, (2) the learning objectives are delivered in the new main competency, (3) the development of material centers on textbooks and worksheet, (4) the method used is lecture, question and answer, discussion, discovery learning, and cooperative learning, (5) the media used are in the form of video and power points, (6) learning resources used are textbooks and student worksheets, and (7) assessments used are written tests, multiple choice, and daily assessment.

All jobs are consisted of assignment or different activities. A task analysis typically complies with a needs assessment and direction geared to specific task identified as performance opportunity [14]. Robbins et al., in [14], Then, a task analysis details the expertise needed to conduct the task: knowledge, skill, tools, conditions, and other requirement for achieving expected performance. Referring to Rothwell and Kazanas, task analysis is beneficial for identifying expected performance, and constructing performance standard. Practitioners frequently perform the analysis of learning objectives, the tasks to assign, the importance of assignments, task series, design, media, assessment and assessment [14]. Regarding curriculum development, [15] argue that curriculum development research has had considerable influence in shaping and directing the curriculum in vocational, technical, and practical arts education.

Conclusion

Need assessment that has been obtained provides a reflection on the learning motivation of students who are still developing. This provides further information for researchers to be able to find alternatives to motivation so that it increases optimally. The performance analysis provided a reflection that the school has applied the 2013 curriculum as well. Student's assessment based on their performance analysisinvolve written tests, multiple choices, and regular assessment. This provided recommendations to futureresearchers to develop further research on outcome-based learning assessment. Optimal assessment to teaching and learning process will increase the teaching and learning effectiveness.

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