

## THE TRANSFORMATION OF 21<sup>st</sup> CENTURY LEARNING ASSESSMENT IN COURSES OF CURRICULUM 2013

Supriyono<sup>1</sup>, Jumbuh Prabowo<sup>2</sup>

<sup>1</sup>*Open University of UPBJJ Purwokerto, University of Sultan Ageng Tirtayasa Banten  
Indonesia*

<sup>1</sup>[supriyono@ecampus.ut.ac.id](mailto:supriyono@ecampus.ut.ac.id), <sup>2</sup>[Prabowo.eng@gmail.com](mailto:Prabowo.eng@gmail.com)

### Abstract

The research studied a teaching and learning process on assessment of courses in curriculum 2013. An assessment is a process intended to figure out whether the process and the results of an activity program have been consistent with the predetermined goals or criteria. Therefore, it is necessary to comprehend how the transformation or change of assessment in 21<sup>st</sup> Century learning actually is. This assessment is done in an integrated manner with the teaching and learning process continuously. Here, the competence consists of three competence domains, namely (1) affect (attitude which deals with emotion), (2) psychomotor (having something to do with physical movement and use motor skill), and (3) cognitive domains (related to knowledge and intellectual ability development). The achievement of national education quality never be separated from the 8 national education standards, that are (1) standard of competence, (2) standard of content, (3) standard of process, (4) standard of educator and education staff, (5) standard of facility and infrastructure, (6) management, (7) financing, and (8) educational assessment. The results showed that a teacher or educator should have ideally standard of teaching and learning process and aware to the teaching and learning goals.

**Keywords: Assessment, Teaching and Learning, Curriculum 2013, Transformation**

### Introduction

The effort to advance the nation has been done through education curriculum change. The development and revision of curriculum are made by taking the current development and needs into consideration. The curriculum development since the the day Indonesia was liberated began with the implementation of 1950 Curriculum (without Manipol Usdek), 1962 Curriculum (containing Manipol Usdek), 1969 Curriculum (with Manipol Usdek) learning hour change, 1975 Curriculum, 1984 Curriculum, 1994 Curriculum, 2004 Curriculum, 2006 Curriculum, and finally 2013 Curriculum.

The government expects that the curriculum changes which have been made can create a generation of faith and piety to God the Almighty, noble manner, health, knowledge, skills, creativity and independence who can be democratic and responsible citizens. This is as mandated by Law of the Republic of Indonesia Number 20 Year 2003 concerning National Education System (Sisdiknas Law) which formulates the function and goals of national education. Article 3 of Sisdiknas Law states that “National education serves the function of developing and shaping the nation’s dignified characters and civilization in order to advance

the life of the nation, intended to develop students' potential to be human beings of faith and piety to God the Almighty, noble manner, health, knowledge, skills, creativity and independence who can be democratic and responsible citizens.”

To realize this national education objective, i.e. developing and shaping the nation's dignified characters and civilization in order to advance the life of the nation, the emphasis given to character education becomes a highly important part. Therefore, the education process should be capable of implementing character education holistically to allow the realization of the nation's successor's characters people are dreaming of, particularly in courses in 2013 Curriculum. The citizens share the responsibility to realize the expectation for a good nation's generation to be born.

In courses in 2013 Curriculum, character education becomes an urgent part in this current education curriculum. Character education is expected to be applied as early as possible to younger children. From the character education process provided to children, a generation of strong characters is expected to be born. The expectation for the character education to exist in 2013 Curriculum is the real spirit of education (shaping a better generation of the nation).

A good education quality will be achieved when the teaching and learning process can run well. What the current development and needs demand from education have been special challenges, particularly in courses in 2013 Curriculum to enable the existing human resources to have strong characters. Therefore, a synchronized teaching and learning is needed in this 21st century era.

Achieving the ideal condition in relation to the education process can never really be separated from assessment process. This is because assessment becomes an inseparable means in education to figure out or measure an education process success. According to Suwandi (2011:9) assessment is

a process used to find out whether or not a process and result of an activity program have been consistent with the goals or criteria which have been set.

#### **A. Problem Formulation**

When a demand for changes is directed towards 21st Century teaching and learning, it will also result in another demand for changes to be made to the assessment process in education. Therefore, this paper tries to explain how the transformation or change of assessment is in 21st Century teaching and learning?

#### **B. Character Education in 21st Century Teaching And Learning: A Demand and Challenge**

In Law of the Republic of Indonesia No. 20 Year 2003 concerning National Education System, education is defined as a conscious and planned effort to realize a learning atmosphere and a teaching and learning process where students can actively develop their potentials.

Education is a process of changing an individual or group of people's attitude and behavior in the effort of maturing human beings through teaching and training attempts. Education can also be said as a process, method, and action of educating (KBBI).

As suggested by Lickona (in Muslich, 2011: 35), there are 10 signs which indicate that a nation is in the brink of destruction, they are (1) Increased violence among youth, (2) Worsened use of language and words, (3) Strong influence of peer group in violence, (4) Increased self-harming behavior, such as drugs and alcohol abuses, and free sex, (5) Increasingly obscurer moral guideline of what is good and bad, (6) Decreased work ethos, (7) Increasingly poorer respect to the elders and teachers/lecturers, (8) Low sense of responsibility of individuals and citizens, (9) Entrenching dishonesty, and (10) Reciprocal suspicion and hatred among fellow citizens.

The best step to be taken to rectify these conditions is to implement character

education which is applied as earlier as possible in educational institution. Character education according to Saptono (2011:23) is the deliberately-made, systematically-arranged efforts to develop good characters based on core virtues objectively for both individuals and society. Character is one's trait, mold, manner, or personality which is shaped as a result of internalizing many virtues they believe in and used as the basis of perceiving, thinking, standing, and acting. The character building which has been made at early stage of student's life will provide a foundation and robust fortress of a nation's civilization.

The characters built are those virtues applicable in the society. These virtues consist of a number of values, moralities, and norms, such as honest, dare to act, trustworthy, and respectful towards others (Hasan et al. 2010: 3). According to Thomas Lickona, people of characters constitute an individual's natural quality in responding to a situation in a morally correct manner, as manifested in real action through such good behaviors as being honest, responsible, respectful, and other noble characters. From the character shaping which is implanted through education, it is expected that our nation will be able to create a generation of superiority, nobleness and good manners.

The implementation of character education at various educational levels has been something no one can no longer ignore. After M. Nuh (Minister of Education and Culture) promotes the 2045 golden generation program on May 2, 2012, the education orientation in its objective of building a strong generation as set forth in Sisdiknas Law shall be the commitment of all those elements in this country. Therefore, in its implementation character education should be provided since early childhood. This because when character education is not provided since early childhood, then the dream of realizing the 2045 golden generation would be impossible. Freud suggests that the failure of implanting good personality at early childhood will result

in problematic individuals when they grow in the future. It means the effort of shaping a generation in the future is significantly influenced by strong foundation within the children themselves.

Character education focuses the education on the attempt to change human's moral behavior towards betterment. This of course need common commitment to realize. The commitment here means the one tightly upheld by all parties, be it students, teachers, parents, the society and the government. This is intended to create a harmony between the education's objective and the education model being implemented. The harmony built in education will be highly supportive towards a quality education realization.

The achievement of national education quality cannot be separated from 8 national education standards which include:

1. Graduate's Competence standard, the criteria regarding the qualification of graduate's ability which involve attitude, knowledge, and skills.
2. Content standard, the criteria which deal with the scope of materials and competence level to be achieved by the graduates at certain level and type of education.
3. Process standard, the criteria concerning the implementation of teaching and learning at one school to achieve the graduate's competence standard.
4. Educator and education staff standard, the criteria which have something to do with pre-service education and feasibility as well as mental and in-service education.
5. Facility and infrastructure standard, the criteria regarding the learning room, exercise space, place for worshipping, library, laboratory, workshop, play ground, place for creation and leisure as well as other learning sources, which are needed to support the teaching and learning process, including the use of

information and communication technology.

6. Management standard, the criteria concerning the planning, execution, and monitoring of education activity at school, regency/municipality, province or national levels in order to achieve the efficient and effective education administration.
7. Financing standard, the criteria regarding the components and amount of operating costs of the school which applies for a year.
8. Educational assessment standard, the criteria on the mechanism, procedure, and instrument to assess student's learning outcome.

In 21st Century teaching and learning, what a teacher needs to pay attention to include:

1. Life-long learner. Teachers need to continuously upgrade their knowledge by reading more and discussing with other teachers or consulting with experts. There should never be any satisfaction with the existing knowledge, because time keeps on ticking and teachers are required to be up to date so that they can guide students according to what they need.
2. Creative and inovatif. Creative students are born from creative and innovative teachers. Teachers are expected to be able to use varied sources of learning to prepare activities in classroom.
3. Optimizing technology. One character of 21st Century teaching and learning model is blended learning, a combination of conventional face-to-face method and use of digital and online media. In 21st Century teaching and learning, technology is not something additional, it is even compulsory.
4. Reflective. A reflective teacher is he/she who can use assessment of learning outcome to improve his/her teaching quality. A reflective teacher is aware of when his/her teaching strategy is less optimal to help students achieve learning

goals. Some teachers are never aware even after teaching for years that their approaches do not suit student's learning style. A reflective teacher can correct his/her own approach to match it with student's needs, rather than keep on blaming students for failing to comprehend the learning.

5. Collaborative. This is one of 21st Century teaching and learning uniquenesses. Teachers can collaborate with their students in teaching and learning. There is always mutual respect and friendliness so that the teaching and learning will be more fun. Additionally, teachers also collaborate with parents through active communication in monitoring student's development.
6. Applying student-centered learning. This is one key feature in the modern classroom teaching and learning. In this case, students play an active role in teaching and learning, hence teachers act only as a facilitator. Thus, in 21st Century classrooms, lecturing method is no longer popular to be applied since it relies too heavily on one-way communication from teachers to students.
7. Applying differentiation approach. In applying this approach, teachers shall design the classroom based on students' learning style. Student grouping in classroom is also based on their interest and ability. In performing the assessment, teachers apply formative assessment by assessing students regularly based on their performance (not limited only to written test). Furthermore, teachers together with students try to manage the classroom to make it a safe environment, supportive for learning.

To realize this 21st Century teaching and learning well, in addition to the demand directed to teachers, students are also demanded to have the following competences.

1. Way of thinking, i.e. several abilities of thinking which should be mastered by students in the face of 21st Century's world. These abilities of thinking include: creative, critical thinking, problem solving, decision making and learners.
2. Ways of working, i.e. the ability of knowing how they should work. Taking how the current global and digital worlds are into consideration, several abilities students should master are communication and collaboration. The 21st Century generation should be capable of communicating well, using various communication methods and strategies. They should also be capable of collaborating and cooperating with both individuals and communities and networks. These communication and cooperation networks utilize many ICT-based ways, methods and strategy. In short, this is about how people should work together with varied abilities.
3. Tools for working. One should have and master some tools for working. The mastery of Information and Communication Technology (ICT) and information literacy has been a necessity. Without ICT and information sources which are based on multiple sources, it will be difficult for one to develop his/her job.
4. Skills for living in the world. The abilities to live in 21st Century are: Citizenship, life and career, and personal and social responsibility. This is about how students should live as citizens, life and career, and personal and social responsibilities.

Meanwhile, Jennifer Nichols simplify them into 4 (four) principles, namely: (1) *instruction should be student-centered*; (2) *education should be collaborative*; (3) *learning should have context*; and (4) *schools should be integrated with society*. These four **main principles of 21st century teaching and learning** suggested by Jennifer Nichols can be explained and developed as follows:

### 1. ***Instruction should be student-centered***

The development of teaching and learning ought to use a student-centered learning approach. Students are placed as the subjects of teaching and learning who actively develop their interests and potentials. Students are no longer demanded to listed and memorize the course content provided by the teachers, rather they try to construct their own knowledge and skills according to their capacity and pace of thinking, all while being invited to contribute to solve real-life problems occurring within the society.

The teaching and learning are centered on students. This does not necessarily mean that teachers hand over the learning control to students completely. Teacher's intervention is still needed. Teachers play the facilitator role who try to help relate prior knowledge students have owned with the new information they are about to learn. Teachers also give students the chance to learn according to their respective learning method and style and motivate them to be responsible for the learning process they have undergone. Additionally, teachers also play the advisor role, who try to help students when they encounter some difficulties when trying to construct their knowledge and skills.

### 2. ***Education should be collaborative***

*Students should be trained to collaborate with others*. It means collaborating with different people in the cultural settings and values they embrace. In exploring information and building meaning, students need to be motivated to be able to collaborate with their classmates. In doing a project, students need to be trained on how to appreciate the strengths and talents of everyone as well as on how to play their roles and adapt themselves quickly with them.

Likewise, schools (teachers included) ought to cooperate with other educational institutions (teachers) in all parts of the world to share information and experience regarding the teaching and learning practices and methods they have developed. Later, they should be willing to make some changes to

their teaching and learning method to make it better.

### **3. *Learning should have context***

Teaching and learning would not be significantly meaningful when it has no real impact on students' life beyond the school. Therefore, course contents need to be related to students' daily lives. Teachers develop a teaching and learning method which enables students to get themselves connected with real word. Teachers help students to find values, meanings and belief of what they are learning as well as to apply them in their daily lives. Teachers assess students' performance which is related to real world.

### **4. *Schools should be integrated with society***

In the effort of preparing students to be responsible citizens, schools ought to facilitate students to be involved in their social environment. For example, they might organize public service activity, where students can learn how to play their role and do certain activities in their social environment. Students can be involved in the development of various programs in the society, such as: health, education, and environmental programs and so forth. In addition, students need to be invited to visit orphanages to sharpen their sensitivity, empathy and social care.

Using the power of technology and the internet, today's students can do more. These students' social movement space are no longer limited to merely around their school or home, rather they can even outreach to those societies in many parts of the world. Education needs to help students become responsible netizens.

## **C. Assessment in 2013 Curriculum in 21st Century Teaching And Learning**

### **1. Definition of Assessment**

Assessment according to Arends (2008:217) is a process of collecting information on students and classes to serve the purposes of instructional decision making. This means assessment is a process of collecting information using appropriate technique to be

the basis or guideline in making decisions related to student's learning process. An assessment has four stages which should be performed by teachers, namely planning, execution, analysis and decision making.

Assessment according to Sudjana and Ibrahim (2007:235) is the measurement of various behavioral aspects intended to see an individual or group's differences, the result of which is used for the purpose of selecting, guiding, and planning the education for students at school. The student's behavioral aspects to be assessed include learning outcome, disposition (intelligence, talent), interest, attitude and personality aspects of students. This means that the assessments are made to such aspects as cognitive, affect and psychomotor of students. Assessment is also defined as an activity performed by teachers to obtain information objectively, continuously and thoroughly regarding the learning process and outcome the students have been through, the result of which is used as the basis to determine the next treatment(s).

According to Jihad and Haris (2009:55) assessment is a process of giving or assigning a certain learning outcome based on specific criteria. According to Rea-Dickins and Germaine (1993: xi) "*Evaluation takes us right into the classroom to describe, analyze, and interpret what actually occurs when teaching and learning take place*". Assessment serves the function of describing, analyzing and interpreting what actually is happening during teaching and learning. This means that assessment is done not only to find out students' learning outcome, rather it is also used to discover the teaching and learning process.

According to Scheerens *et al.* (2003:1) "*evaluation consists of systematic information gathering and making some kind of judgment on the basis of this information*". This means evaluation is about collecting information and making decisions systematically based on the obtained information.

## 2. Domain of Assessment of Courses in 2013 Curriculum

Learning assessment is a process systematically performed to obtain data as information to make decisions towards the competence that students own. In assessment, the competences to be measured usually consist of three domains of competence. These three domains or aspects include affect, psychomotor, and cognitive domains. These three competence domains will be explained in further detail as follows:

### a. Affect Domain

The affect domain has something to do with emotion-related attitudes, such as senses, values, appreciation, enthusiasm, motivation and attitude.

### b. Psychomotor Domain

The psychomotor domain deals with physical movement, coordination and use of motor skill. The development of this skill requires practices and it is measured with such terms as speed, precision, distance, procedure or execution technique.

### c. Cognitive Domain

The cognitive domain is related to knowledge and intellectual ability development. This knowledge includes memory, pattern of specific facts, procedural pattern and concept which involves development of intellectual ability and skill.

## 3. Authentic Assessment in 2013 Curriculum

Authentic assessment is a process that teachers do to gather information regarding the development of learning that students have made. This assessment is done to discover whether or not students have actually learned; whether or not students' learning experience has positive influence on both their intellectual and mental developments. An authentic assessment is done in an integrated manner with the teaching and learning process. This assessment is done continuously during the teaching and learning. Therefore, its emphasis is directed toward learning process, rather than learning outcome.

Authentic assessment is frequently called as performance assessment or alternative assessment. However, a closer look at these three assessments will reveal that the latter two have different meanings from the authentic assessment. According to Wiyono and Sunarni (2009: 41) authentic assessment is the act of showing students the tasks which will be meaningful to their life. Authentic assesment means to have equivalent value in both internal and external contexts. The internal context refers to classroom teaching and learning process, and the external context refers to real life.

In E. Gronlund & Waugh (2009:143) it is stated that *“performance assessment is needed when performance skills are not adequately assessed by paper and pencil test alone. For example, science courses are concerned with laboratory skills, English and foreign-language courses are concerned with communication skills.”*

According to Wiyono & Tumardi (2003:29) performance assessment is a process of collecting information through systematic observation to make decisions in regard to the students. Meanwhile, alternative assesment is defined as the use of non-traditional approach to assign assessment of learning performance or outcome of the students.

Assessment based on its function has three objectives, i.e. assessment of learning, assessment for learning, and assessment as learning. Firstly, assessment of learning consists of two phases, initial or diagnostic and formative assessments. This assessment can be based on many sources of information (portfolio, work progress, teacher observation, discussion).

Secondly, Assessment for Learning (AFL) aims at providing feedback to teachers and students in regard to the learning progress in moving forward towards learning objectives. This feedback will be used by teachers to revise and develop the next teaching. AFL will be effective when teachers

use tasks of performance which are formulated in a rubric.

Finally, assessment as learning is the assessment which gives students or learners an understanding to be aware of the learning objectives and performance criteria they have to achieve, which later on can result in the possession of learning outcome by students, and the student's responsibility to drive the thought metacognitively. In this context, assessment is done throughout the teaching and learning process.

### Conclusion

Ideally, an educator or teacher in their teaching and learning process ought to be aware of their learning objectives (what students' knowledges or skills are expected after teaching and learning), aware of changes within students related to the knowledge or skills they own after attending the teaching and learning, and aware of the degree or level of competence mastery achieved by students. The efforts made by educators to achieve this ideal level is through the assessment process which is done properly and appropriately. This means teachers properly make the assessment process to discover the results or impacts of a teaching and learning process.

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