

Teachers' and Students' Perceptions on Computer-Based Test toward the Curriculum Used in SMKN 11 Bandung

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Abstract. *Computer-based test (CBT) is one of evaluation ways to develop the current curriculum because it deals with the demand of ICT development which students have to be able to gain their knowledge by using the advanced of technology. Besides, the current curriculum is intended to provide learners with a broad range of learning experiences in order to help them develop better attitudes, abilities, and knowledge. It is also the most important factor that helps learners become more capable and effective as citizens of the world. Thus, this study aims at investigating teachers' and students' perceptions on applying CBT toward the implementation of curriculum used in SMKN 11 Bandung. Descriptive qualitative design was employed using a 20-item Likert-scale questionnaire and an interview guideline as the research instruments. The findings showed that teachers and students agreed that the assessment for the final test applying CBT in their school already implemented the current curriculum and it could be used to evaluate the learning condition in the school. Meanwhile, in conclusion, teachers mostly agreed that the questions written on CBT were already appropriate with their teaching during the learning process.*

Keywords: *computer-based test, curriculum, ICT, teachers' and students' perceptions.*

Abstrak. Tes berbasis komputer (CBT) merupakan salah satu cara evaluasi untuk mengembangkan kurikulum saat ini karena berkaitan dengan tuntutan perkembangan TIK dimana siswa harus dapat memperoleh pengetahuannya dengan memanfaatkan kemajuan teknologi. Selain itu, kurikulum saat ini dimaksudkan untuk memberikan peserta didik berbagai pengalaman belajar untuk membantu mereka mengembangkan sikap, kemampuan, dan pengetahuan yang lebih baik. Itu juga merupakan faktor terpenting yang membantu pembelajar menjadi lebih mampu dan efektif. Oleh karena itu, penelitian ini bertujuan untuk mengetahui persepsi guru dan siswa tentang penerapan CBT terhadap implementasi kurikulum yang digunakan di SMKN 11 Bandung. Desain kualitatif deskriptif digunakan dengan menggunakan kuesioner skala Likert 20 item dan pedoman wawancara sebagai instrumen penelitian. Hasil temuan menunjukkan bahwa guru dan siswa sepakat bahwa penerapan CBT di sekolahnya sudah menerapkan kurikulum yang berlaku dan dapat digunakan untuk mengevaluasi kondisi pembelajaran di sekolah tersebut. Sementara itu, kesimpulannya, sebagian besar guru setuju bahwa soal-soal yang ditulis dalam CBT sudah sesuai dengan pengajaran mereka selama proses pembelajaran.

Kata kunci: kurikulum, persepsi guru dan siswa, TIK, ujian berbasis komputer.

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INTRODUCTION

To gain the educational goals set by the Indonesian government, curriculum should be strategically arranged and formulated into certain programs because curriculum becomes an important issue and a part of the educational program. Among various sources of education, curriculum is the most significant element which contributes to improving learners' ability and potency (Richard, 2001). Curriculum used in this school is 2013 curriculum and it has a purpose to make learners be active and creative. Indonesia, through its Ministry of Education, implements 2013 curriculum officially that reflects the competency of learners. The new 2013 curriculum is a curriculum which is designed to promote the three-competence in learning and teaching process, namely affective competence, cognitive competence and psychomotor competence addressed to improve the quality of education in Indonesia. 2013 curriculum appears as an answer to promote the education character program that is needed to accompany the human's life skills in society. In other words, 2013 curriculum is going to provide a great contribution to produce the Indonesian citizens who are capable and credible in the globalization era.

According to Regulations of Ministry of Education and Culture No. 65/2013, dated on 4th June, 2013, which states that the implementation of 2013 curriculum in learning and teaching process should be supported by ICT as a media to deliver the knowledge for every single subject. Through this statement above, we can acknowledge that the ICT has important role to mediate the learning and teaching process in order to be successful for each subject delivery. The use of ICT in education has also effected the development of assessment as well. It shifts from the paper-based test to the ICT-based one. As it is stated in UNESCO (2011) regarding the integration of ICT in teaching in ASEAN.

The aims of this study are to investigate teachers' and students' perceptions on applying CBT toward the implementation of 2013 curriculum used in SMKN 11 Bandung. The underlying reason concerning the study is due to pros and cons that follow the use of CBT in Indonesia especially in implementing 2013 curriculum. Researchers have been done concerning on the computer-based test. They include the exploration of computer-based test conducted by Newhouse (2013). He found that progress towards various forms of computer-based exams and how these may encourage curriculum and pedagogy suited to 21st Century learning was important to be researched. In Indonesian context, Nurhidayat (2016), found that before conducting CBT, it needed several steps such as preparation, management and implementation. Similar to that, Harmiyuni & Sailan (2016) found that there were 4 advantages on the implementation of CBT in Indonesia: 1) efficiency (cheaper in printing and distributing the test),

2) reducing the step of scoring, since the score of the test taker will be sent via online to the main server, 3) security control (the test is in the form of database), and 4) cost saving and time on the implementation of the National examination.

Although computer-based test becomes an upcoming issue in education especially for assessing students' ability, there seems a scant research on applying CBT in the term of current curriculum used in SMKN 11 Bandung, 2013 curriculum. Besides, it might be beneficial to seek whether CBT has significant interrelatedness with 2013 curriculum. Considering those circumstances, the writer would like to conduct a study on teachers' and students' perceptions on applying CBT in 2013 curriculum implementation at the level of vocational high school.

LITERATURE REVIEW

a. ICT

Information and Communication Technology (ICT) is a program which covers all kinds of technological devices to process, manipulates and delivers the information as part of communication processes. Those are aimed to assist the teaching and learning to be more enjoyable and meaningful for the human being activities. According to UNESCO (2004), ICT is a technology which is used to communicate, create, manage and distribute the information. While based on UNESCO (2011) particularly concerning to technology literacy included in the curriculum and assessment, pedagogy, organization and administration, and teacher professional learning.

From the definitions above, it can be concluded that ICT is all kinds of activities which relate to the process, manipulation, management and information delivery that support the human being needs in the globalization era. Therefore, looking at the importance of ICT, the use of ICT in the teaching and learning process is a must for creating the meaningful instructional atmosphere because of the global demands.

b. CBT

In line with the development of CBT used in education, Indonesia adopts the usage of CBT on the final test. Primarily, the first implementation of CBT on assessment in Indonesia was promoted by Universitas Terbuka in 2007 on its final semester examination since it deals with distance learning and modes daring (Sapriati and Zuhairi, 2010). Mardjuki (2017) also stated that the implementation of CBT to the students of Universitas Terbuka is to solve the challenges regarding how to meet the specific needs of Universitas Terbuka students due to students'

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inability to sit for the scheduled test, conflicting test schedules, and students' opportunity to take examination to improve their grades.

Therefore, the government particularly the ministry of education tried to go to the implementation of CBT that firstly began in 2012 at Indonesian schools in Singapore and Malaysia as the piloting ones. The following Indonesian schools were chosen due to the adequate ICT-based facilitation.

c. 2013 Curriculum

In general, 2013 curriculum contains four elements of change (Rudy, 2014). They are (1) standard of graduate competencies, (2) standard of contents, (3) standard of learning processes, and (4) standard of assessment.

1. Standard of Graduate Competencies (SKL)

The learners in this regard are expected to improve and to balance between the soft skills and hard skills that include aspects of competencies of attitudes (including: personal faith, morality, self-confident, and responsibility in interacting effectively with the social environment, the natural surroundings, as well as the world and its civilization), skills (including: a person having effective and creative thinking in the realm of the abstract and concrete domains), and knowledge (the ability to produce the persons mastering the knowledge, science, technology, arts, and culture that are based on humanity, national, state, and civilization).

2. Standard of Contents

The competencies which are originally derived from the subjects' turns into a subject are developed from the competencies. Competence is developed through:

- a. Integrative thematic in all subjects at the elementary school level,
- b. Subjects at the levels of junior high school and senior high school,
- c. Vocations at the level of vocational high school.

3. Standards of Learning Process

- a. Standard process that was initially focused on the exploration, elaboration, and confirmation is fitted with observing, questioning, collecting information, presenting, summing, and creating.
- b. Learning does not just happen in the classroom, but also in school and community environments.
- c. Teachers are not the only source of learning.
- d. Attitudes are not taught verbally, but through example and role model

4. Standard of Assessment

- a. The shift from assessment through tests (measuring the competence of knowledge based on the results of course) to the authentic assessment (measure all attitude competencies, skills, and knowledge based process and outcome).
- b. Strengthening criterion reference assessment, i.e. the achievement of learning outcomes is based on the scores obtained on the position of the ideal score (maximum).
- c. Assessment is not only on the level of Basic Competencies (KD), but also the Core Competencies (KI) and Standard of Graduate Competencies (SKL).
- d. Encouraging the use of portfolios made up by students as the main instrument of assessment.

From the description, the common thread in 2013 curriculum that can be used for the curriculum development is the standard of processes. Standard of processes that was initially focused on the exploration, elaboration, and confirmation is changed to observing, questioning, processing, presenting, summarizing, and creating (Rudy, 2014). In addition, learning does not only happen in the classroom, but also in the school and the community environment. Thus, teachers are not the only source of learning in the formation of learners' characters, attitude is not taught verbally but through example and role model, including the establishment of living environment awareness.

A. Previous studies on computer-based test (CBT)

Newhouse (2013) drew attention to research led to investigate the feasibility of a number of forms of computer-based exams for high-stakes summative assessment in secondary education. The result was the successful development and implementation of audiovisual stimuli and response computer-based exams, and digital production exams resulting in portfolios of evidence. Each implemented form of exam was tested for feasibility to ensure a defensible balance of manageability, reliability and validity. He believed that for most high-stakes summative assessment in Australian schools it is time to replace the ancient paper-based technology with computer-based technologies.

Nurhidayat (2016) investigated the implementation of CBT in SMAN 1 Wonosari based on its resources, infrastructures, students, and implementation methods. He conducted interview, observation and documentation at three different places, those are Dinas Pendidikan, Pemuda dan Olahraga DIY, Dinas Pendidikan, Pemuda dan Olahraga in Gunungkidul district and SMAN 1 Wonosari, which was analyzed quantitatively. Two main results were obtained. First, before conducting CBT, it needed several steps such as preparation, management and implementation. Second, there were obstacles that technically and non-technically found in implementing CBT;

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(1) blackout during the examination, (2) lack of places for the examination and (3) inappropriate computer server.

Harmiyuni & Sailan (2016) conducted their study on students' perceptions on computer-based test which was analyzed quantitatively by using the result of questionnaire, interview and documentation. They used cluster random sampling in conducting the questionnaire which 20% of third grade students in SMK Komputer Mutiara Ilmu would be asked to respond the statements. Moreover, they found that there were 4 advantages on the implementation of CBT in Indonesia: 1) efficiency (cheaper in printing and distributing the test), 2) reducing the step of scoring, since the score of the test taker will be sent via online to the main server, 3) security control (the test is in the form of database), and 4) cost saving and time on the implementation of the National examination.

B. Synthesis

Current technological advances offer interesting opportunities to design assessments that are active and simulative, and that measure complex student knowledge and provide rich observations for student learning. In 21st century skills, it cannot be assessed by the traditional standard approach to testing based on responses to small items that minimizes the need for human judgment in marking. The use of technology to digitize, make more efficient, redesign or transform assessments and tests that includes professional examinations, qualifications, certifications and school tests, classroom assessment and assessment for learning. Consequently, computer-based test tries to be used in Indonesia to answer the current era that students have to understand how to use ICT in their learning process. Thus, by understanding how the students' perceptions on the implementation of CBT related to what should be reflected, teachers might be easier to find out and analyze the own strengths and weaknesses, to understand some factors that might influence the students' learning and their attitudes upon the subject and professional routines themselves, and to reconstruct how the next actions will be developed, modified, or eliminated.

The aims of this study are to investigate teachers' and students' perceptions on applying computer-based test toward the implementation of curriculum used in SMKN 11 Bandung. The underlying reason concerning the study is due to pros and cons that follow the use of CBT on assessing the students' capabilities in Indonesia especially in implementing 2013 curriculum. Researchers have been done concerning on the computer-based test. They include the exploration of computer-based test conducted by Newhouse (2013). He found that progress

towards various forms of computer-based exams and how these may encourage curriculum and pedagogy suited to 21st Century learning was important to be researched. In Indonesian context, Nurhidayat (2016), found that before conducting CBT, it needed several steps such as preparation, management and implementation. Although computer-based test becomes an upcoming issue in education especially for assessing students' ability, there seems a scant research on applying CBT in the term of current curriculum. Considering those circumstances, it might be beneficial to seek whether CBT has significant interrelatedness with the curriculum at the level of vocational high school especially in SMKN 11 Bandung.

METHOD

The design of this study is descriptive qualitative. It is conducted in the actual setting of the phenomenon (Hamied, 2017). However, the objectives of this study are not intended to make generalization among all teachers' and students' perceptions in the implementation of CBT. In other words, present findings and interpretations were not about to represent a whole value, or related activities taken later in other circumstances could possibly lead to emergence of new different perspectives (Sugiyono, 2013). Moreover, the subjects of the research are fifteen teachers and thirty students of third grade at SMKN 11 Bandung because this vocational high school is the first school which implemented the current curriculum in Bandung.

The research instruments employed in the present study were a questionnaire (for the main data) on the components of CBT and curriculum and an interview guideline (for the supporting data) to find out the teachers' and students' perceptions on applying CBT toward the implementation of the curriculum. They are adapted from Arifin, R. (2014); Budiarto, H. (2008); Leonokto, I. (2016); and Nurhidayat, A. (2016) in which the questionnaire consists of 20 statements and one open question for teacher, while for students there are 10 statements and 6 open questions for students with Likert-scale from strongly agreed to strongly disagree. The rationale of taking this questionnaire is because it has been validated by the authors and has comprehensive statements for each component. Additionally, the data gained were analyzed qualitatively by employing the data analysis technique proposed by Miles and Huberman (1994) who set the analysis through three procedures: data reduction, data display, and conclusion drawing/verification.

FINDINGS AND DISCUSSION

Findings

The questionnaires were distributed to the teachers and students to know their perceptions on applying CBT toward the implementation of 2013 curriculum. This is indicated by the teachers' and students' percentage score got from the questionnaire.

1. Teachers' perceptions

Table 1. School teaches students to inspire spiritual values to God

Responses	Frequency	Percent	Cumulative Percen
Very good	11	73.0	73
Good	4	27.0	100.0
Somewhat good	0	0.0	100.0
Not very good	0	0.0	100.0
Total	15	100.0	

This implied that the teachers were mostly very delighted to inspire spiritual values to their students. We can see that 73% of teachers said absolutely good in applying this point, 27% of teachers stated good in doing this duty.

Table 2. School asks students to pray to the God whether it is an obligation or not based on their beliefs

Responses	Frequency	Percent	Cumulative Percent
Very good	10	67.0	67.0
Good	5	33.0	100.0
Somewhat good	0	0.0	100.0
Not very good	0	0.0	100.0
Total	15	100.0	

We can see that 67% of teachers were very good with it and 33% of teachers were good with it. It meant that most of the teachers can ask students to pray to the God based on their beliefs.

Table 3. School teaches students to show their integrity in their daily life

Responses	Frequency	Percent	Cumulative Percent
Very good	13	87.0	87.0
Good	2	13.0	100.0
Somewhat good	0	0.0	100.0
Not very good	0	0.0	100.0
Total	15	100.0	

We can see that 87% of teachers were very good on it and 13% of teachers were good. It meant that most of the teachers can teach students to show their integrity in their daily life.

Table 4. School teaches students to show their respect and obedient to their parents and teachers

Responses	Frequency	Percent	Cumulative Percent
Very good	12	80.0	80.0
Good	3	20.0	100.0
Somewhat good	0	0.0	100.0
Not very good	0	0.0	100.0
Total	15	100.0	

We can see on the table 4 that 80% of teachers were very good on it and 20% of teachers were good. It meant that almost teachers can teach students to show their respect and obedient to their parents and teachers.

Table 5. School asks students to wear appropriate uniform based on the school's rules

Responses	Frequency	Percent	Cumulative Percent
Very good	11	73.0	73.0
Good	4	27.0	100.0
Somewhat good	0	0.0	100.0
Not very good	0	0.0	100.0
Total	15	100.0	

We can see on the table 5 that 73 percent of teachers stated that schools was good in asking students to wear appropriate uniform based on the school's rules, while 27 percent of them said that it was good on it. It meant that almost teachers could ask students to wear appropriate uniform based on the school's rules.

Table 6. School does not permit students to have fight with other students

Responses	Frequency	Percent	Cumulative Percent
Very good	12	80.0	80.0
Good	3	20.0	100.0
Somewhat good	0	0.0	100.0
Not very good	0	0.0	100.0
Total	15	100.0	

It implied that almost teachers agreed that school would not permit the students to have fight with other students. We can see on the table 6 that 80 percent of teachers strongly agreed that school was very good to prohibit the students fight each other and 20% was good on it.

Table 7. School directs students to understand, apply and analyze factual, conceptual and procedural knowledge based on their curiosity

Responses	Frequency	Percent	Cumulative Percent
Very good	9	60.0	60.0
Good	6	40.0	100.0
Somewhat good	0	0.0	100.0
Not very good	0	0.0	100.0
Total	15	100.0	

It implied that almost teachers thought that school could direct students to understand, apply and analyze factual, conceptual and procedural knowledge based on their curiosity. We can see on the table 7 that 60 percent of teachers were very good on doing it and 40 percent of them were good on it.

Table 8. School directs students to apply procedural knowledge on the specific thing for their problem solving

Responses	Frequency	Percent	Cumulative Percent
Very good	6	40.0	40.0
Good	9	60.0	100.0
Somewhat good	0	0.0	100.0
Not very good	0	0.0	100.0
Total	15	100.0	

It implied that almost teachers thought that school could direct students to apply procedural knowledge on the specific thing for their problem solving. We can see on the table 8 that only 40 percent of teachers said very good, while 60 percent of them was good on it.

Table 9. School teaches students to process, think and present what they learn in the school independently

Responses	Frequency	Percent	Cumulative Percent
Very good	8	53.0	53.0
Good	7	47.0	100.0
Somewhat good	0	0.0	100.0
Not very good	0	0.0	100.0
Total	15	100.0	

It implied that almost teachers thought that school could teach students to process, think and present what they learn in the school independently. We can see on the table 9 that 53 percent of teachers were very good on it and 47 percent of them were good.

Table 10. School teaches students to be able to do specific duties under the school's control

Responses	Frequency	Percent	Cumulative Percent
Very good	9	60.0	60.0
Good	6	40.0	100.0
Somewhat good	0	0.0	100.0
Not very good	0	0.0	100.0
Total	15	100.0	

It implied that almost teachers thought that school could teach students to be able to do specific duties under the school's control. We can see on the table 10 that 60 percent of teachers were very good on it and 40 percent of them were good.

The second questionnaire was distributed to the teachers to know their perceptions on applying CBT. This was indicated by the teachers' percentage score got from the second questionnaire as shown in the following table:

Table 1. Questions in CBT are already appropriate with my teaching based on 2013 curriculum

Responses	Frequency	Percent	Cumulative Percent
Strongly Disagree	0	00.0	00.0
Disagree	2	13.0	13.0
Agreed	10	67.0	80.0
Strongly Agreed	3	20.0	100.0
Total	15	100.0	

This implied that the teachers agreed if questions in computer-based final test are already appropriate with their teaching based on curriculum. We can see that mean of disagree is about 13 percent, the mean of agree about the appropriate questions is 67 percent, while 20 percent strongly agree about it.

Table 2. Subjects applied in CBT already represent all knowledge that I teach to my students based on 2013 curriculum

Responses	Frequency	Percent	Cumulative Percent
Strongly Disagree	2	13.0	13.0
Disagree	2	13.0	26.0
Agreed	8	54.0	80.0
Strongly Agreed	3	20.0	100.0
Total	15	100.0	

This implied that subjects applied in CBT already represent all knowledge that teachers teach to their students based on 2013 curriculum. We can see that 54% of teachers agreed with it, 13% of teachers strongly disagree with it, 13% of teachers disagree and 20% of them strongly disagreed with it.

Table 3. Subjects applied in CBT cannot measure students' ability

Responses	Frequency	Percent	Cumulative Percent
Strongly Disagree	1	7.0	7.0
Disagree	4	26.0	26.0
Agreed	9	60.0	80.0
Strongly Agreed	1	7.0	100.0
Total	15	100.0	

We can see that 60% of teachers agreed with it, 7% of teachers strongly agreed with it, while 26% of teachers disagreed and 7% of them strongly disagreed with it. It meant that most of the teachers think that subjects applied in CBT cannot measure students' ability.

Table 4. Subjects applied in CBT cannot measure students' skills

Responses	Frequency	Percent	Cumulative Percent
Strongly Disagree	2	13.0	13.0
Disagree	2	13.0	26.0
Agreed	10	67.0	93.0
Strongly Agreed	1	7.0	100.0
Total	15	100.0	

We can see that 67% of teachers agreed with it, only 7% of teachers strongly agreed with it, and 13% of them strongly disagreed and disagreed with it. It meant that most of the teachers think that subjects applied in CBT cannot measure students' skills.

Table 5. The implementation of CBT is supported by school's infrastructure

Responses	Frequency	Percent	Cumulative Percent
Strongly Disagree	0	0.0	0.0
Disagree	0	0.0	0.0
Agreed	10	67.0	67.0
Strongly Agreed	5	33.0	100.0
Total	15	100.0	

We can see that 67% of teachers agreed with it and 33 % of them strongly agreed with it. It meant that most of the teachers think that the implementation of CBT is supported by school's infrastructure.

Table 6. CBT makes me anxious

Responses	Frequency	Percent	Cumulative Percent
Strongly Disagree	5	33.0	33.0
Disagree	5	33.0	66.0
Agreed	2	14.0	80.0
Strongly Agreed	3	20.0	100.0
Total	15	100.0	

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 We can see that 33% of teachers strongly disagree and disagree with it, 14% of teachers agreed with it, while 20% of them strongly agreed with it. It meant that most of the teachers think that CBT does not make them anxious.

Table 7. Standard of graduate competencies that is determined by the government is very burdensome

Responses	Frequency	Percent	Cumulative Percent
Strongly Disagree	3	20.0	20.0
Disagree	8	54.0	74.0
Agreed	2	13.0	87.0
Strongly Agreed	2	13.0	100.0
Total	15	100.0	

It implied that standard of graduate competencies that is determined by the government is not very burdensome. We can see that 54% of teachers disagree with it, 20% of teachers strongly disagree with it, while 13 % of them agree and strongly agree with it.

Table 8. CBT increases students' motivation to learn

Responses	Frequency	Percent	Cumulative Percent
Strongly Disagree	1	7.0	7.0
Disagree	0	0.0	7.0
Agreed	10	67.0	74.0
Strongly Agreed	4	26.0	100.0
Total	15	100.0	

It implied that CBT increases students' motivation to learn. We can see that 67% of teachers agreed with it, 26% of teachers strongly agreed with it, and 7% of them strongly disagreed with it.

Table 9. Evaluation system using CBT does not pay attention to the school's situation and condition

Responses	Frequency	Percent	Cumulative Percent
Strongly Disagree	3	20.0	20.0
Disagree	2	13.0	33.0
Agreed	6	40.0	73.0
Strongly Agreed	4	27.0	100.0
Total	15	100.0	

It implied that evaluation system using CBT does not pay attention to the school's situation and condition. We can see that 40% of teachers agreed with it, 27% of teachers strongly agreed with it, 20% of them strongly disagree and 13% of them disagree with it.

Table 10. The output of CBT does not determine the students' graduation but it is for evaluating the learning condition in the school

Responses	Frequency	Percent	Cumulative Percent
Strongly Disagree	0	0.0	0.0
Disagree	0	0.0	0.0
Agreed	9	60.0	60.0
Strongly Agreed	6	40.0	40.0
Total	15	100.0	

It implied that the output of CBT does not determine the students' graduation but it is for evaluating the learning condition in the school. We can see that 60% of teachers agreed with it and 40% of them strongly agreed with it.

Open ended questions were also distributed to the teachers to know about their obstacles in implementing 2013 curriculum. First, it is about lack of 2013 curriculum socialization. They think that they still need it to improve their knowledge. Second, lack of good response from the students becomes one of obstacles. Some teachers think that students' response can make learning process in implementing 2013 curriculum better. Third, it is about lack of good response from the societies. Fourth, it deals with infrastructure in the school which is easily being broken. It disturbs teachers to deliver the material. Fifth, there are some delays on delivering the resources such as module for 2013 curriculum material. All of those can be problems in implementing 2013 curriculum, thus it could be fixed as soon as possible to make better curriculum.

2. Students' perceptions

The questionnaires were distributed to the students to know their perceptions on applying CBT toward the implementation of the curriculum used in SMKN 11 Bandung. This is indicated by the students' percentage score got from the questionnaire in the following table:

Table 1. Questions in CBT are already appropriate with the lesson I get in my school based on 2013 curriculum.

Responses	Frequency	Percent	Cumulative Percent
Strongly Disagree	4	13.0	13.0
Disagree	14	47.0	60.0
Agreed	12	40.0	100.0
Strongly Agreed	0	0.0	0.0
Total	30	100.0	

This implied that the students agreed if questions in CBT are already appropriate with the lesson they get in their school based on 2013 curriculum. We can see that mean of disagree is about 47 percent, the mean of strongly disagree about the appropriate questions is 13 percent, while 40 percent agreed about it.

Table 2. Subjects applied in CBT already represent all knowledge that I learn in my school based on 2013 curriculum

Responses	Frequency	Percent	Cumulative Percent
Strongly Disagree	1	3.0	3.0
Disagree	11	37.0	40.0
Agreed	15	50.0	90.0
Strongly Agreed	3	10.0	100.0
Total	30	100.0	

This implied that subjects applied in CBT already represent all knowledge that students learn in their school based on 2013 curriculum. We can see that 50% of students agreed with it, 10% of students strongly agreed with it, 37% of teachers disagree and only 3% of them strongly disagreed with it.

Table 3. Subjects applied in CBT cannot measure my ability as a student.

Responses	Frequency	Percent	Cumulative Percent
Strongly Disagree	2	7.0	7.0
Disagree	4	13.0	20.0
Agreed	16	53.0	73.0
Strongly Agreed	8	27.0	100.0
Total	30	100.0	

We can see that 53% of students agreed with it, 27% of students strongly agreed with it, while 13% of students disagreed and 7% of them strongly disagreed with it. It meant that most of the students think that subjects applied in CBT cannot measure their ability as a student.

Table 4. Subjects applied in CBT cannot measure my skills as a student

Responses	Frequency	Percent	Cumulative Percent
Strongly Disagree	2	7.0	7.0
Disagree	5	17.0	24.0
Agreed	14	46.0	70.0
Strongly Agreed	9	30.0	100.0
Total	30	100.0	

We can see that 46% of students agreed with it, 30% of students strongly agreed with it, while 17% of students disagreed and 7% of them strongly disagreed with it. It meant that most of the students think that subjects applied in CBT cannot measure their skills as a student.

Table 5. The implementation of CBT is supported by school's infrastructure

Responses	Frequency	Percent	Cumulative Percent
Strongly Disagree	0	0.0	0.0
Disagree	3	10.0	10.0
Agreed	16	53.0	63.0
Strongly Agreed	11	37.0	100.0
Total	30	100.0	

We can see that 53% of students agreed with it, while 37% of them strongly agreed and only 10 % of them disagree with it. It meant that most of the students think that the implementation of CBT is supported by school's infrastructure.

Table 6. CBT makes me anxious

Responses	Frequency	Percent	Cumulative Percent
Strongly Disagree	4	13.0	13.0
Disagree	4	13.0	26.0
Agreed	18	61.0	87.0
Strongly Agreed	4	13.0	100.0
Total	30	100.0	

We can see that 61% of students agreed with it and 14% of them agreed, disagree and strongly disagree with it. It meant that most of the students think that CBT makes them anxious.

Table 7. Standard of graduate competencies that is determined by the government is very burdensome for me

Responses	Frequency	Percent	Cumulative Percent
Strongly Disagree	2	7.0	7.0
Disagree	15	50.0	57.0
Agreed	12	40.0	97.0
Strongly Agreed	1	3.0	100.0
Total	30	100.0	

It implied that standard of graduate competencies that is determined by the government is not very burdensome for students. We can see that 50% of students disagree with it, 40% of students agreed with it, while 7 % of them strongly disagree and 3% of them strongly agree with it.

Table 8. CBT increases my motivation to learn.

Responses	Frequency	Percent	Cumulative Percent
Strongly Disagree	1	3.0	3.0
Disagree	2	7.0	10.0
Agreed	19	63.0	73.0
Strongly Agreed	8	27.0	100.0
Total	30	100.0	

It implied that CBT increases students' motivation to learn. We can see that 63% of students agreed with it, 27% of students strongly agreed with it, 7% of them disagree with it and 3% of them strongly disagreed with it.

Table 9. Evaluation system using CBT does not pay attention to the school's situation and condition

Responses	Frequency	Percent	Cumulative Percent
Strongly Disagree	0	0.0	0.0
Disagree	4	13.0	13.0
Agreed	17	57.0	70.0
Strongly Agreed	9	30.0	100.0
Total	30	100.0	

It implied that evaluation system using CBT does not pay attention to the school's situation and condition. We can see that 57% of students agreed with it, 30% of them strongly agreed with it and 13% of them disagree with it.

Table 10. The output of CBT does not determine the students' graduation but it is for evaluating the learning condition in the school

Responses	Frequency	Percent	Cumulative Percent
Strongly Disagree	1	3.0	3.0
Disagree	2	7.0	10.0
Agreed	14	47.0	57.0
Strongly Agreed	13	43.0	100.0
Total	30	100.0	

It implied that the output of CBT does not determine the students' graduation but it is for evaluating the learning condition in the school. We can see that 47 % of students agreed with it, 43% of them strongly agreed, 7% of them disagree and 3% of them strongly disagree with it.

Open ended questions were also distributed to the students to know about the implementation of CBT based on the curriculum used in SMKN 11 Bandung. First, it is about their preparation on doing the test, some students state that they prepare them well in facing CBT because they already plan for it before. Second, it deals with students' satisfaction with the implementation of CBT based on 2013 curriculum. Eighteen students think that it does not satisfy them because some questions are not suitable with what they learn in school. Third, it is about teacher's teaching method that teacher can teach students to think analytically so students can do CBT well. Some students think that their teachers already do it and give tips and tricks such as don't be too focus on the difficult questions. Fourth, the effectiveness of the implementation of CBT based on 2013 curriculum also becomes point of evaluation. The result is most students think that it is not effective enough because some students still do not understand yet about the implementation of 2013 curriculum.

Discussion

CBT or computer-based test is one ways of evaluation to develop the 2013 curriculum because it deals with the demand of ICT development which students have to be able to gain their knowledge by using the advanced of technology. Mardjuki (2017) stated that the ultimate goal of 2013 curriculum also underlines the benefit of using ICT-based materials in enhancing

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students' English literacy, particularly reading and writing, towards autonomous language learners having high awareness on comprehending important information within various texts. Besides, in 2013 curriculum, students centered is the important thing to be focused because in this stage students can try to independently process, think and present what they get from finding the sources.

Reflecting from the findings, teachers and students agree that CBT in their school already implements 2013 curriculum and it can be used to evaluate the learning condition in the school. From the result of questionnaire, teachers mostly agree that the questions written on are already appropriate with their teaching during the learning process. Nevertheless, based on the questionnaire, some students state that there are teachers who still teach them some materials that not relate to the current curriculum. It makes them confused in doing CBT which the materials tend to 2013 curriculum items. From this problem, teacher has to change his/her method to follow the government rules in implementing 2013 curriculum because there are many benefits that students can get, for example 2013 curriculum incredibly emphasizes the activeness of learners in learning and teaching process (Chairani, 2015). It is designed to give learning experiment broadly to learners to improve their attitude, skills, and knowledge. It is also the most significant element which contributes to improving learners' ability and potency as global citizen.

CONCLUSIONS

In conclusion, this study suggests that CBT or computer-based test is one ways of evaluation to develop the 2013 curriculum because it deals with the demand of ICT development which students have to be able to gain their knowledge by using the advanced of technology. Teachers state that 2013 curriculum have many benefits in the term of students centeredness which can be applied in CBT that students will do their examination independently because there is no time to talk to each other students. However, some teachers still deliver former curriculum material during the learning process although they know that the examination will use 2013 curriculum, it makes students anxious because they have to learn 2013 curriculum material by themselves. So, it is very delighted if teachers can follow the government rules to implement 2013 curriculum.

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