Authentic Assessment in The Pandemic Period

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A B S T R A C T

The pandemic period was resulted in a sudden change from an offline to an online learning system without any preparation. This condition requires educators to harmonize the assessment system carried out so that it is suitable and relevant to the current pandemic era. Educators should be able to find a new formula for conducting assessments that are easy, simple, but still represent the student competency. This article provides strategies for how to perform authentic assessments in online learning in the pandemic era. This research is a descriptive study that focuses on solving actual problems encountered by educators (teachers) when learning takes place online due to the pandemic. Several authentic assessments that can be performed are (1) giving simple quizzes frequently, (2) giving assignments at the end of online learning activities, as detecting students' understanding of the material presented, (3) making variations in the form of questions and assignments so that students don't get bored, excited, and interested in studying, and (4) deliberating for deadlines and increasing the number of test questions/exams.

BACKGROUND

Learning is a system consisting of various components that interact with each other to achieve predetermined learning goals (Basuki, 2017; Isnaini and Utami, 2020). Every time the learning process takes place, it is important for a teacher and students to understand whether this goal can be achieved or not (Astin and others, 2012; DeLuca and Bellara, 2013). This can only be known if the teacher conducts an evaluation, both the evaluation of the learning process and the product. An evaluation has a broader meaning than an assessment because evaluation includes assessment (Basuki, 2020; Cizek, 2000).

It is not cliché if a teacher has a heavy workload. Apart from having to teach, teachers are also encouraged to be able to develop their professionalism through various kinds of activities outside their routine teaching duties (Kurniawan, 2011; Malang, 2012). The obligation to assess students on these three aspects certainly makes the teacher's workload heavier. Nevertheless, it still needs to be carried out, even with all the limitations of time, effort, and cost.

The most common obstacle encountered by teachers in conducting assessments is the lack of assessment instruments that can be replicated in the implementation (Amalia and Susilaningsih, 2014). Although they exist, the assessment instruments are usually almost uniform in shape/format and content. If the teacher wants to adopt the instruments directly, it is often not in accordance with the conditions and the characteristics of the students, but when adapting, the teachers are relatively limited because they have no sufficient provisions to execute the assessment (Hanifah, 2019).

The task of assessing is getting heavier experienced by teachers during this pandemic period (Rigianti, 2020). Absolutely, besides having to teach online, teachers must also be able to assess the competence of their students remotely. It is not easy to target competencies in this way, especially without prior preparation. How

to make accurate assessments, but practical and easy to be applied when the teachers assess from home, without meeting directly with students, is a hot issue at the present (McDowell, 2020).

The small number of students will make the teacher lighter in conducting an assessment. However, if the number of students is more than 50 and there are many classes to be taught, it is indeed a formidable challenge in this new era of habit. Teachers should be able to find ways to assess students appropriately and correctly so that the results of the assessment are truly a reflection of the students' abilities and on the other hand, no students are disadvantaged because of the improper assessment process (Supriyanto, 2020; Wahyudi Rufiana and Nurhidayah, 2020). Teachers are required to harmonize all matters related to educational tasks, including aligning a scoring system that can reveal the competence and the student learning success in three domains (cognitive, affective, and psychomotor) (Djarwo and Lepa, 2018; Wulandari and Suyanta, 2019).

Based on the facts provided, it is necessary to formulate what things can be carried out so that the assessment remains on the right track and can precisely target the competence of students at the time of this pandemic. In addition, it is also necessary to formulate a way to assess student character, even though the teaching and learning process takes place without face to face, only online. This article will discuss tips or strategies that can be executed in carrying out authentic assessments while adhering to the principles that prioritize ease of implementation but are still on target.

METHODS

This research is an analysis-descriptive study derived from the author's experience during the assessment of online learning. The research focuses on solving actual problems encountered by educators

(teachers) when learning takes place online due to a pandemic, namely online learning assessments during a pandemic. All data presented are representative data obtained during the online assessment and learning from March to December 2020. The descriptive research would attempt to describe a symptom, event, and incident that occurred at this time where the researcher tries to photograph the events and incidents that are the center of attention to then be described in their state. Descriptive research method aims to solve the problems in present.

RESULT AND DISCUSSION

Harmonization of the Assessment System in the Pandemic Period

The current Covid-19 pandemic has resulted in direct interaction between educators and students cannot be conducted. This has an impact on changes in the entire learning system, including changes in the competency assessment process that students already have. Therefore, it is urgent to be able to get around the direction of education so as not to deviate from the true nature of education. Education does not only mean the transfer of knowledge, but also includes the transfer of values and the transfer of skills in which the transfer process is easier when educators face to face with students, but it feels heavy in this pandemic period because the meetings are conducted only in the virtual world.

The pandemic period resulted in a sudden change from offline to online learning systems, and this was without proper preparation from the government, schools, or educators as the main actors of the learning process (Absor, 2020). Therefore, the change in distance learning (online) requires educators to try to harmonize the assessment system carried out so that it is suitable and relevant to the current pandemic period (Pujilestari, 2020). Educators must be able to find new

formulas for conducting assessments that are easy, simple, do not require the application of sophisticated technology, but can produce target competency as expected (Putro Widyastuti and Hastuti, 2020).

Application of Authentic Assessment in the Pandemic Period

In accordance with the recommendations in the 2013 Curriculum, although in an unpredictable period as nowadays, the assessments made of student competencies must constantly comprehensive, accurate, and accountable (Fernandes, 2019). The assessment not only aims to produce numbers or categories, but it has further meaning, namely describing the competence of students in an objective, integrated, transparent, accountable, educative, correct, and precise (Mendikbud, 2016). The Permendikbud stated that the principles of assessment include nine things: valid (legal), objective, fair, integrated, open, comprehensive and sustainable, systematic, based on criteria, and accountable. These nine principles are the main basis for developing any methods, techniques, and scoring systems used during the pandemic period. In other words, teachers can develop methods, techniques, strategies in each type of assessment as long as they follow these principles, so that the assessment is correct and precise.

The assessment of the student that cover all competencies is known as authentic assessments (Sudria and Siregar, 2009). Authentic assessment will produce a significant measure of competence on student learning outcomes, in the domains of knowledge, attitudes, and skills (Syaâ Amaliyah Ismail et al., 2016). Authentic assessment will be very meaningful for educators to determine the best way so that all students can achieve the final result, even with different units of time. Fostering attitudes, skills, and knowledge is achieved through completing assignments in which students play an active and creative role. The involvement of students in carrying out

tasks is very meaningful for their personal development.

Although in the pandemic period, educators still have to carry out various types of authentic assessments, such as performance assessments, simple projects, portfolios, and written assessments. In its implementation, idealism needs to be put aside to get accurate work results, free from interference from other people in carrying out the tasks or questions given. The prudent attitude of the teacher is to choose the type of assignment and test questions that have a low probability for students to cooperate with other students or as easy as possible for teachers to detect it

In a pandemic period as today, the focus of teachers is no longer on the sophistication of the media used in assessments, but on how easy and practical it is to carry out assessments that meet good assessment criteria. It would unwise if at this time still fussing about "what program should I use and what if I cannot", because this is a burden for teachers, whereas currently, everyone's main focus is a health condition.

Many schools provide short training for teachers to implement computerized scoring systems. However, in reality, teachers are increasingly depressed, especially senior teachers, because as they get older, it is increasingly difficult to follow the advancement of Information Technology (IT) (Anugrahana, 2020). The assessment system with certain IT-based programs also does not guarantee the fluency of teachers in carrying out the assessments, ranging from signal constraints to limited eye accommodation ability when looking at a laptop for a long period. Therefore, the most important thing that must be conducted now is what can be done and still fulfill the assessment principles recommended by the curriculum.

Whatever the assessment is carried out will not be as perfect as when conducting direct assessments to students. However, all efforts are required to be conducted to a minimum so that the objectives of the student's competence are not too far off the mark and relatively close to the real competence. The assignment given is expected to be able to minimize cooperation between students and more easily detect fraud (copy and paste, plagiarism, browsing on the internet, etc.). Teachers have a strong instinct when reading students' work, whether it is original work or not. The following will explain several things that can be conducted to keep the assessment on the right track: (1) more frequently conducting simple quizzes, (2) giving assignments at the end of online learning activities, and (3) making variations in the form of questions and form of assignments.

More frequently conducting simple quizzes

The more quizzes that are given, the easier for the teacher to see the trends in student competencies. For instance, the teacher conducts a quiz at the end of each lesson about a topic or chapter, e.g. with short questions (10 - 15 questions) uploaded via online media, and students answer it in a short time (for example 10 minutes). If 10 quizzes are carried out, for example in one semester, then the score of person A is above 8 (score scale 10) 8 times, this shows that the tendency of the students have a high cognitive competence (Table 1).

By looking at the quiz scores 8 times, it can be known that students B, C, and F tend to have low cognitive competence. Conversely, other students tend to have high cognitive competence. This will not be seen if only one or two quizzes are carried out, or even not conducted at all. For example, student E scored 55 and 81 on the 1st and 2nd quizzes. Which score can be used as a reference to determine student E's real competence? This provides evidence that two quizzes are not sufficient to provide conclusive meaning.

In addition, there are several methods to comprehend that students are

taking the quiz on their own. Although 100% honesty of children cannot be monitored, several things can be conducted, for example, providing submit deadlines, writing directly on online media, and so on, so that if the submission is late then the time submission can be seen quickly. A teacher can detect the language and sentences made by students because generally, the language style used by children is in accordance with their age so that if there is interference from parents or other people it will be easier to recognize.

Table 1. Tabulated quiz scores with short processing time (10 minutes)

Students	Quiz							
	1	2	3	4	5	6	7	8
A	55	72	88	80	100	82	82	90
B	40	50	72	40	33	46	80	60
C	52	35	64	40	33	76	65	75
D	67	92	96	73	100	84	90	80
E	55	82	92	73	93	84	85	90
F	40	66	56	40	70	72	57	70
G	75	70	92	80	73	80	67	75
H	75	90	96	80	100	82	90	85
I	60	82	96	73	100	82	95	90
J	70	90	92	73	100	82	85	85

Figure 1. Examples of very similar student quiz answers

Pay attention to the examples of quiz answers from two students below, at first glance the teacher's instinct will know that one of them is copying and pasting his friend's answer (the student who sent it later is strongly suspected of copying the answer that was sent earlier.). In this case, the answer also looks similar the same so that when it is said that the student who sent later (even though only 1-minute difference) copy-paste his friend's answer, at first the student concerned does not admit it, but after being given a "warning" that the grade will not be given, then the student himself admits.

Giving assignments at the end of online learning activities

At the end of each meeting, students should be given activities as feedback on whether students have understood the material presented. Feedback can be in the form of asking questions from students (limited to each meeting of five students), individual or group assignments, making papers, discussing material that needs to be deepened, material summaries in the form of charts, concept maps, and so on. Each given activity must receive an assessment so that students are serious about doing it and show that the teacher appreciates the student's work. If there are students who ask questions, then the quality of the questions submitted must be assessed, as well as the answers. For example, if there are students, just ask "please explain the material again…. what you have explained earlier", then this question has low quality because it shows that students pay less attention to the (online) learning that is being carried out.

Examples of questions posed in Junior High School science subjects on the topic of Chemistry are presented in Table 2. Their questions are documented and

assessed at the same time and then sent to students so that they know how good the quality of their questions is and also learn to compose questions that are good and easy to understand.

Table 2. Examples of questions quality assessment of acid-base materials

No	Questioner	Questions	Answers	Score
1	Agni Nur Indrawati	Why to understand the properties of acids and bases, we should use the standard pH instead of pOH?	Actually, it is allowed to use the term degree of basicity. However, because the inventor (Sorensen) used the term of the degree of acidity for the first time, then the next generation continued to use the term, but it is important to understand what pH and pOH mean?	90
2	Andrea Nugroho	Why not all acid can be tasted?	Because the natural properties of acid are not only from the taste, but it also can be seen from other characteristics, for instance, the degree of pH, its reaction with other substances, and so on. Therefore, you need to be careful and alert when dealing with chemicals and do not taste them immediately. It was explained earlier.	80
3	Michelle Cobalti	Why do we need to put the word acid in front of the name of an acid compound and not to base? So it is not easy to say that a compound is considered as a base.	Actually, the name acid can also be mentioned without the word "acid" in front of it, for instance, HCl (hydrogen chloride). It is known how to name a compound with a trivial name and IUPAC.	80
4	Magnesi Alkali	Previously you said that alkaline tastes bitter. Is herbal medicine such as jamu including bases?	Not necessarily, because bitterness is only one of the characteristics of a base. It does not mean that all that is bitter is alkaline. It needs to be checked for other characteristics such as pH.	70
5	Kevin Kurniawan	Does all salt taste salty?	Not all salt tastes salty. There are 5 different tastes of salt: salty (sodium chloride, sweet (lead(II) acetate, toxic if ingested), sour (potassium bitartrate), bitter (magnesium sulfate), and savory (monosodium glutamate).	80

Making variations in the form of questions and form of assignments

It has been 8 months since the learning is carried out online during the Covid-19 pandemic. If for 7 months the teacher only teaches in the same way and the same assignment, then students will be at a high level of saturation, and this is dangerous because it can cause stress to depression (severe level) (Khairunnafi, 2020). One of the strategies that the teacher must apply is to vary the form of the assignment given and also the variation of the questions used for tests and exams.

Creative children who are bored will be excited because they are allowed to actualize themselves through a world that enjoys various forms of social media. So, take the advantage of their world by providing creative and interesting tasks, such as making videos of manufacturing hand sanitizers, making leaflets or posters, making short advertisements related to chemicals and corona, producing short films of 5 to 10 minutes duration, and other similar activities are some of the most effective methods (Fathurahman, 2020).

The assignments given must be varied, not only related to the left brain (logical, scientific, rational, and rational),

but also must involve the right brain (music, aesthetics, and rhythm) so that there is a balance between the right and the left brains which in the end can provide happiness in learning. In the writer's experience, sometimes students are given the assignments of making a summary of the material outlined in the form of a song, namely changing the lyrics of the song they like with the important concepts that are being learned. Students could also be asked

to write something a little imaginative, such as writing an essay "If I were Minister of Education and Culture in the Pandemic Era" or "Cell Phones of the Future," or articles that are not directly related to the material. For example, "The Relationship of Learning Science with Gratitude". The student must be enthusiastic and happy to be able to explore their imaginations into writing assignments, even though the assignments contain a "religious" character.

LARUTAN ELEKTROLIT DAN NON ELEKTROLIT (dinyayikan seperti lagu Aisyah Istri Rasulullah – Syakir Daulay)	EKOSISTEM (dinyayikan seperti lagu Los Dol - Denny Caknan)

Elektrolit non elektrolit
Keduanya adalah jenis larutan
Beda karna daya penghantarnya
Dan ionisasinya
    Elektrolit nyalakan lampu
    Gelembung busa banyak di katoda
    Jika lemah reduplah lampunya
    Sedikit busanya
 	
Reff:
Gelembung busanya menempel banyak di katoda
Itu tanda dia kuatlah elektrolitnya
Berbeda larutan non elektrolit yang lampunya tak menyala
Meskipun konsentrasinya besar banyak volumnya
Tapi tetap saja gelembung busa tak ada
Karna tanpa ion yang dihasilkannya
Mati lampu gelembung tiada
	Ekosistem itu ada dua
	Satu alamiah, yang satunya buatan
	Gurun sungai danau contoh alamiah
	Sawah ladang waduk
	Dan akuarium, Itu contoh ekosistem buatan
	    Antar ekosistem saling berhubungan
	    Hingga terbentuk namanya biosfer
	    Dalam biosfer, ada banyak komunitas
	    Tumbuhan dan juga hewan
	Juga komunitas mikroorganisme
	Jika komunitas membentuk kumpulan
	Namanya jadi bioma, banyak sekali macamnya
	Sesuai dengan daerahnya
	
	Reff:
	Komponen penyusun ekosistem
	Biotik contohnya, produsen dan konsumen
	Contoh abiotik, cahaya udara
	Air, tanah, suhu, Dan juga mineral
	Itu konsep tentang ekosistemmu

Figure 2. An example of assignments to change song lyrics into a medium for memorizing subject matter

An example of a unique but fun assignment is that the students are asked to write song lyrics about Electrolyte and Non-electrolyte Solutions as well as Ecosystems (Figure 2). Even though this task is an interlude so that children are not bored and happy in learning, it must still be assessed correctly and appropriately. This is so that the children also excel, not carelessly. It is suggested that what aspects will be assessed from the assignment are informed so that the students will try their best to fulfill the aspects being assessed (Table 3).

In conducting performance appraisals, teachers are expected to always include a rubric even though it is quite simple. The assessment rubric is used as a guide so that the assessment of each criterion (category) can be carried out

objectively and consistently. Without an assessment rubric, the students can be disadvantaged, because of our inconsistency in categorizing the quality of assignments. The existence of this rubric prevents us from the possible influence of the assessment in the form of the hallo effect (due to the student appearance), the influence of generosity (because of the instinct to do good), and the carry-over effect (impressed with the previous assessment) (Salirawati, 2018).

In contrast to test questions or exams during a pandemic. Perhaps if the teachers are asked to design questions that can be uploaded with a certain time allocation, most of them cannot (Mulawarman, 2020). Therefore, teachers should be more concerned with strategies that can be conducted so that they can still assess. For

example, the teachers can create objective questions and descriptions and send them via group chat (WhatsApp / Telegram) with

a time limit for completing what has been thought.

Table 3. Examples of song-making assignments assessed from lyrics, sounds, and number of concepts

Group	Members name	Lyrics	Sound	Number of Concepts	Grades per student
I	1. Aulia Kusuma Astuti	90	70	80	80
	2. Dian Nur'aida Afifah				80
	3. Annisa Sabila Rosada				80
II	1. Ittaba'hidayaturrahmah S	70	70	90	85
	2. Dwiyarini Yuendita				80
	3. Husna Latifah				80
III	1. Andaru Riza Ayusti	80	90	70	80
	2. Rizka Maylaffayza Putri				70
	3. Bisabillia Intujanna				80

Assessment guide			
Rated aspects	Criteria	Description	Score
Lyrics	Good	$\geq 80\%$ the number of syllables is the same as the original	90
	Enough	$60 \leq X < 80\%$ the number of syllables is the same as the original	80
	Less	$X < 60\%$ the number of syllables is the same as the original	70
Sound	Good	Does not false	90
	Enough	Slightly false	80
	Less	false	70
Number of Concepts	Good	≥ 10 the concept covered in the song	90
	Enough	$5 \leq X < 10$ the concept covered in the song	80
	Less	$X < 5$ the concept covered in the song	70

The above methods are several alternative assessments that can be used during the pandemic, although no one can guarantee the accuracy of the assessment. During the pandemic, teachers cannot be too idealistic in assessing, but all that can be performed is to minimize the occurrence of fraud. The teacher can organize a UTS with objective questions, it can be in a multiple-choice or a short entry form. The thing that must be anticipated is how to prevent students from having an affair with each other or asking other people for help. One way to do this is by providing as many questions as possible with the time limitation to answer the questions. Ideally, 1 multiple choice question or theoretical short entry takes 1 minute and calculation question takes 1.5 - 3 minutes (Mardapi, 2008), however, this is not used, because the teacher wants students not to have the opportunity to collaborate through various

media. So that questions can be made like the Academic Potential Test (TPA), for example, within 50 minutes, 25 multiple choice questions (10 count questions) and 30 short questions are given. The ideal time is $(15 + 30) \times 1$ minute + $(10 \times 3$ minutes) = 75 minutes. If there is a student busy calling his friend or asking someone for help, the time is certainly finished and he cannot solve all the questions.

Exam questions in the form of descriptions can also be applied, by providing questions that require analysis, logic, and reasoning in answering so that students cannot easily transfer sentences from book sources or other references (Croom and Stair, 2005). In this case, this question is included in the HOTS (Higher Ordered Thinking Skill) group of questions. In addition, so that the students do not just copy and paste, the answers must be handwritten, not typed, so they will run out

of time if they just copy exactly as in the textbook. It is possible that parents or other people can help, but as teachers, they will know whether the sentence is in accordance with the language of the students or not. Parents should be reminded that helping children in doing assignments or tests/exams is not a wise action because it is detrimental to their children.

CONCLUSION

The sudden and unexpected arrival of the Covid-19 pandemic turned out to be enough to create panic in the implementation of education at all levels, including all parties who work in the world of education. Teachers as direct implementers of the learning process should not only be dumbfounded and confused by this pandemic situation because after all learning must continue, the noble task of realizing the nation's next-generation with high quality, character, and intelligence rests on their shoulders. Therefore, during the Covid-19 pandemic, teachers must immediately harmonize the entire learning system with the pandemic, including the assessment system, carried out so that student competency assessments remain precise, good, accurate, and accountable. Technological sophistication does not require to be a priority in conducting assessment because there is no much time to study this technology. It is more important to put forward is to acquire comprehensive data on student's competence. Even though it is not an easy thing, with sincere intentions, the teacher can perform it well.

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