

Conference Paper

Labanotation-Based Motion Literation Teaching Materials To Diagnose Intelligent Kinesthetic Students In Junior High Schools Through E-Learning

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Abstract

This study aims to produce labanotation-based motion literacy teaching materials to diagnose the kinesthetic intelligence of students in junior high schools through e-learning. This research method uses a design procedure with validation of eligibility by six experts in the learning materials of labanotation-based motion literacy through qualitative e-learning. The level of agreement (reliability) among the six assessors can be explained by calculating the reliability coefficient between the assessors using the Intraclass Correlation Coefficient (by using the SPSS version 16 program assistance). The results of the study suggest thnis educational approach can be utilized by arts and culture teachers in dance learning, using learning media and communication media with students to discover kinesthetic intelligence in a fun way.

Keywords: teaching materials, motion literacy, labanotation

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1. Introduction

In the era of disruption 4.0 related to so-called “smart factories” [1], where the virtual world in decentralized decision making can be developed [2], with a system of cooperation and communication with each other in real time with various services [3]. This will bring up social innovations that lead to positive ongoing transformations in community networks [4, 5]. Social innovation must express novelty and increase responsiveness to the needs of society [3].

One of the responses to the needs of the community in the world of education, where learning procedures have been developed with technology media that demands the

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ability of technology literacy, and data literacy [6]. Transforming education to integrate online learning, active learning that emphasizes 21st century skills requires digital literacy skills, as the need for the importance of lifelong learning as individual skills [7]. 21st Century skills are skills for survival in the digital age, while 21st century skills are classified into three groups: 1) basic literacy as numeracy literacy, scientific literacy, technology and information literacy, as well as financial and cultural literacy, 2) competence or ability to handle various complex problems, 3) ability to survive in a changing environment.

Literacy is an ability in a person to write and read [8]. Literacy is the language ability possessed by someone in communicating (reading, speaking, listening and writing) in different ways according to their purpose [9]. The essence of the statement explains that literacy refers to the ability to read and write.

The ability to read and write in dance is more about motion or in the form of perceived symbols then expressed. Several studies on movement literation are used to determine the ability to think and move through dance notation in the form of symbols and coding [10]. These symbols and codes are quite complex, so it is important for dancers to make written notes about motion, read symbols, and form patterns from these symbols. Students learn to dance while honing their language skills and begin to engage in cross-disciplinary, cross-experience experiences that build understanding and spark creativity [11].

Harrow's theory that mentions the psychomotor realm consists of manipulative skills, motor and movement that requires neuromuscular coordination [12]. The existence of this neuromuscular coordination that leads to motion carried out using cognitive (perception of motion), so that a good literacy of motion is needed.

The kinesthetic intelligence of dance's basic motion is the main element that contains a certain understanding and purpose of a motion. Dance education can train movement skills and coordination of children's movements, in addition to that as a means to introduce, civilize and instill the values of national culture and art. Dance itself is a rhythmic movement of art that uses rhythmic body movements for the purpose of expressing feelings, intentions, and thoughts carried out at a certain place and time [13].

Rudolf von Laban focuses on analyzing and recording every human movement, as well as modern European dance. Therefore, a notation system has been developed to describe movements in terms of spatial models and concepts in which temporal patterns, actions, floor plans, body parts, and the use of three-dimensional space are accurately and accurately described. The labanotation system gives a score of notation

as explicit knowledge, only the notator who learns how to read Laban's notation score, can read symbols. Not too many people take serious studies on the Labanotation symbol.

Body expression of emotion through body posture and gesture is literacy movement which is more about understanding or meaning of motion [14]. To diagnose the ability of motion literacy can be done by e-learning in the form of the web by uploading the results of the creativity of the motion, or translating what is appreciated in the form of dance moves.

The study of e-learning in the form of practice, has a significant impact on student achievement, digital technology is increasingly being used in programs in schools [15]. Interactive leads to more information processing, a higher preference for the product, besides the use of a web site requires an ognosis of information processing [16]. For that, abilities related to cognition, psychomotor, and affective integrated can be seen in the learning of motion literacy. For this reason, the problem of literacy skills in dance based on psychomotor skills, along with thinking skills in perceiving movement symbols, can be determined through Laban notation motion analysis.

This study aims to compile teaching materials and formulate standards and indicators of motion literacy that are suitable for Indonesian junior high school students and with an assessment system that can diagnose student kinesthetic. The availability of teaching materials and assessments through e-learning makes it easier for school teachers to convey the subject of dance art and evaluate their program of activities, which will also help realize the assessment of motion literacy competencies to diagnose the kinesthetic of students. To assess the success of motion literacy teaching materials, assessment needs to be done to assess the extent to which kinesthetic competencies students have through this teaching material.

2. Method

This research method uses the Research by design procedure of labanotation-based motion literacy teaching materials through e-learning. In essence, there are two main stages in this research, namely the preparation of standards and indicators for teaching materials based on labanotation motion literacy and designing the system for teaching materials based on labanotation based motion literacy through e-learning. After standards and indicators for labanotation-based motion literacy teaching materials are made, the next step is to design a web e-learning that will include basic competencies and indicators of material description about labanotation-based motion literacy. The

last step is expert validation of teaching material products, namely web design and teaching materials contained in e-learning web.

Expert validation was carried out by six expert experts, three material experts and three media experts. The instrument used for expert validation was a questionnaire, which consisted of 33 statements for media experts and 28 statements for experts on teaching material. The method used in expert validation is the Delphi Technique. The Delphi technique is a widely used and accepted method for achieving convergence of opinions from experts in a particular field on an issue [17]. Data collection was carried out by distributing questionnaires in two iterations. The analysis technique uses descriptive qualitative analysis. The level of agreement (reliability) among the six assessors can be explained by calculating the reliability coefficient between the assessors using the Intraclass Correlation Coefficient (using the SPSS version 16 program).

3. Result and Discussion

The design of the motion literacy teaching material products compiled refers to the basic competencies of art and culture in the field of dance studies in the 2013 curriculum. The steps that must be taken when preparing a design of the motion literacy teaching material products are as follows; Develop a framework that contains: (1) preparation of standards and indicators; (2) systematic teaching materials; (3) web design formulation; (4) web content formulation. After motion literacy teaching materials are made in the form of web learning, e-learning sites for motion literacy can be accessed through the internet network. To access from a computer/laptop internet network you must have a hotspot (wifi). When you have received the signal open a web browser and enter the site <http://litasigerak.id> then the main page will appear from e-learning. The main page introduces students to the e-learning system of motion literacy. This system needs material introduces to students about what devices are used. This page further discusses the contents of the main page in which there are modules 1 (basic), Module 2 (intermediate), and Module 3 (Advance).

The next stage after the design of motion literacy teaching materials is formed is validated using expert validation. At this stage the instructional material that has been designed is consulted with experts. Teaching material that has been produced is evaluated, whether the instructional material designed is feasible or not, and how the appropriateness of the contents of the learning assessment material. The trial, validated the teaching materials by 2 media experts and 4 material experts from different points of view and with different criteria based on the wishes of researchers but homogeneous

according to their interests and relevance to the variables that want to be validated both from academics, practitioners, and content, to find the selected variable. From these 6 experts, comments or suggestions will be obtained in the form of research variable sentences, addition and subtraction of the number of variables, data processing, and so on. Here are the experts who meet the researchers' requirements.

The validated teaching material is in the form of a web e-learning containing motion literacy material. For each item the measurement scale is qualitatively determined, through this system the quality of the product can be gradually gradual from a score of 1 if it is only able to achieve one criterion, and a score of 4 if it is able to reach all the scoring criteria. The steps taken in the development of motion literation teaching materials are formatted in the form of observation sheets, the main elements of which consist of media and material. Furthermore, the inputs above are used to revise the teaching material products to be further confirmed by the validator as the input provider. The results of the six expert validations state that the performance assessment instruments are feasible to use. Next, calculate the reliability among assessors using SPSS v16. This approach is used to assess agreements between rater in assessing a product. Thus the reliability is inherent in the score given, not the measuring instrument.

From table 2 it can be seen that the results of the ICC calculation for media experts using SPSS v.16 can be obtained. The results of the analysis show an average agreement between rater of 0.717 while for the rater the consistency is 0.884 which means it has high stability [18].

TABLE 1: Results of Media Expert Reliability

	Intraclass Correlation Coefficient						
	Intraclass Correlation ^a	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.717 ^b	.563	.835	8.600	33	66	.000
Average Measures	.884 ^c	.795	.938	8.600	33	66	.000

From table 3 it can be seen that the results of the ICC calculation for material experts using SPSS v.16 can be obtained. The results of the analysis show the average agreement between rater is 0.856 while for the rater the consistency is 0.947 which means it has high stability.

The results of the data analysis show that labonation-based motion literacy teaching materials through e-learning are appropriate to be used, in accordance with a study of technology-based assessment in the Journal of Information Technology Education, vol

TABLE 2: Expert Contents Reliability Results

	Intraclass Correlation Coefficient						
	Intraclass Correlation ^a	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.856	.751	.925	18.826	27	54	.000
Average Measures	.947 ^c	.900	.974	18.826	27	54	.000

5, 2006 is an ongoing process that involves planning, discussion, building consensus, reflection, measure, analyze, and improve based on data and artifacts collected about learning objectives [19].

Further explained technology offers new steps for assessing learning that will produce a rich source of data and expand the ways in which educators understand mastery of learning, and teaching effectiveness [20]. This provides a solution, for students to study at a distance. E-learning allows students to understand their weaknesses and feedback that is considered to be impersonal and non-judgmental. Thus the use of digital can open the window as well as the teacher [21–23].

4. Conclusion

Motion literacy is the ability to read, write, and translate movement symbols in dance, which integrates thinking skills, movement skills, and attitude skills. In labonation-based motion literacy teaching materials through e-learning, three literacy abilities are: 1) technological literacy as the ability of teachers and students to use computers to learn new things about motion symbols, 2) data literacy, where student work results documented in the web site, both in terms of scoring and feedback, and 3) basic literacy, namely the ability to read and write in the form of symbols that are described in writing.

The three literacies are accumulated in the understanding of the dance motion symbol known as Laban Notation, so that it can be called as motion literacy. The literacy symbol of motion created by Rudolf van Laban is adapted to the present by simplifying symbols and codes. This is because the understanding of the symbol perceived, and subsequently expressed in motion requires a higher level of thinking skills, so it is hoped that the learning of motion notation becomes interesting.

The use of the web site in conducting motion literacy learning is expected to be able to motivate students to continue to develop their compound literacy skills, and

students can be motivated, because of communication between peers as well as between students and teachers documented in the e-learning motion literacy web.

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