



Wix Web-Based Dance Learning Media to Support Teaching in The Pandemic Era in High School

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Abstract

This study intends to develop and design a web for dance learning for high school students. This design-based research focuses on two problems, namely (1) the concept of a dance website design which is expected to be suitable for use as a medium for learning dance in the current pandemic era, and (2) the effectiveness of the dance website that is developed as a digital literacy source that can be used as a medium for learning dance in senior high schools. The research method used in this research is design-based research (DBR) with research stages that include design process, design development, evaluation, and design revision. Data collection techniques were carried out by interview and document study. Data analysis was carried out by combining qualitative and quantitative methods. The results show that the website design developed is relevant to the needs and online-based student learning methods needed during the current Covid-19 pandemic. After going through the validation and testing process, the website design developed can be applied properly. The website developed is easily accessible by students and teachers to support the implementation of dance learning that takes place online. Access mechanisms, material structure, content, and existing supporting features can be used as a means of technology literacy education for students.

Keywords: website, digital literacy, dance learning

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INTRODUCTION

Dance learning in schools contains three learning activities: theory, appreciation, and practice (Malarsih, 2016). Theory learning activities aim to provide knowledge and understanding of dance material textually and contextually. The appreciation activity aims to provide real reinforcement of the material presented in theory through objects that students observe. Practical learning activities are carried out to provide direct experience to students doing dance practice, such as culti-

vating the potential of their bodies. Unfortunately, dance lessons that should include dance practice activities cannot be carried out due to the uncompromising Pandemic conditions for the safety of teachers and students. Learning activities in the pandemic era require learning to be done more by students online (Adnan & Anwar, 2020; Kraehe, 2020; Yao, Rao, Jiang, & Xiong, 2020). So methods of teaching dance that are appropriate to current conditions are needed (Cahyaningrum & Kusumastuti, 2014).

The current condition of the Co-

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vid-19 emergency has greatly affected the learning culture applied in various countries (Cavus, Sani, Haruna, & Lawan, 2021), including in Indonesia. The transition from offline learning to online learning (online-based learning) has become an alternative to student learning and teacher teaching that is used almost all over the world (Buchholz, DeHart, & Moorman, 2020a). The Covid-19 pandemic situation greatly affects the teaching system carried out by teachers towards students (Ferdig, Baumgartner, Hartshorne, Kaplan-Rakowski, & Mouza, 2020). Technology is used as a medium and resource for teachers and students in carrying out learning interactions (Assunção Flores & Gago, 2020; Avgerinou & Moros, 2020; Crick, Knight, Watermeyer, & Goodall, 2020).

In recent years there has been research on the use of websites in learning activities. Yasin, Rochintaniawati, and Prima (2021) conduct research on the development of websites used in science learning to help school students understand scientific phenomena in everyday life. Astuti, Wihardi, and Rochintaniawati (2020) conduct research in developing educational websites that apply interactive content to help students learn integrated science material in discussing the topic of the human body. Mumpuni and Nurpratiwiningsih (2018) examined the development of website-based learning to improve students' writing skills. However, there has been no research that has developed a dance website that is used in learning. Teachers and students can use the website access to learn the dance to access the material resources needed in learning.

Digital learning is one of the learning trends used by teachers today (Joosten, Lee-McCarthy, Harness, & Paulus, 2020). Educators developed various digital technology innovations in learning (Fletcher, Everatt, Mackey, & Fickel, 2020; Jackson, 2020) to realize effective and efficient learning following the current pandemic conditions. Digital technology is used by students to carry out various learning activities at school such as searching for in-

formation through internet media sources, running projects, making slideshows, and outside of school (communicating with people outside of school in the interests of joint project development) (Rachel Bolstad, 2017; Lourie, 2020; Tallon & Milligan, 2018). Digital technology can be used by teachers and students in learning activities outside of the classroom or school to obtain a more realistic learning experience (D U Bolliger, McCoy, Kilty, & Shepherd, 2021; Doris U Bolliger & Shepherd, 2018; Hills & Thomas, 2020; Thomas et al., 2019). The development of technology in art and art education is one of the cultural influences of globalization (Wibowo, 2019).

Today's growing use of digital media technology shows a changing trend in the learning culture that students and teachers must adapt quickly (Barker-Ruchti, 2019; Barker-Ruchti, Barker, Rynne, & Lee, 2016; Enright & Gard, 2016, 2018). The existence of digital technology media in children is very difficult to avoid (Blankenship, 2020; Hendry, 2019). The integration of digital technology in learning demands teacher competence in mastering technology and creatively developing technology in learning based on a pedagogical approach (Ertmer & Ottenbreit-Leftwich, 2013; Hendry, 2019; McCormack, 2019; Sheffield, Blackley, & Moro, 2018; Webb & Doman, 2020).

The use of technology in learning will help students understand the material they are learning through the process of observing the technology used in learning (McCormack, 2019; Spencer, 2019; Webb & Doman, 2020). The tendency to use technology is more to present information (Kirkwood & Price, 2006). A teacher needs to utilize technology to optimize the potential of students, in the sense that learning carried out through the use of technology is more student-centered (Åkerlind, 2003; Cope & Ward, 2002). Teachers also use technology to assess student learning outcomes (Ottenbreit-Leftwich, Glazewski, Newby, & Ertmer, 2010). Technological developments in dance are often used in making interactive dance works (Siegel &

Jacobsen, 1998).

Digital technology is one part of technology that is used as a tool to help someone achieve their goals (Larkin & Lowrie, 2019; Lindeman & Anderson, 2015; Vargas, 2017). Currently, technology has become part of the educational web portal system (Byker, Putman, Handler, & Polly, 2017; Goh, Hii, Tan, & Rasli, 2020; Wright, 2015). The use of digital technology in education has become part of the competency of skills that teachers and students must possess (Grand-Clement, Devaux, Belanger, & Manville, 2017). The existence of digital technology has been able to assist teachers in creating creative learning for students (Huddy, 2017). Digital technology helps students to learn independently (R Bolstad, 2017).

Explaining the term dance education will relate to teaching and learning dance in formal and non-formal school environments. This teaching and learning dance practice is often referred to as dance training and education (Giguere, 2015). Vocational dance education uses more conventional methods by teaching dance to students through imitating movements demonstrated by a dance teacher or trainer (Bolwell, 1998). Dance education in non-vocational schools does not target students to become dance experts (Koff, 2000). The concept of dance education in schools emphasizes the individual development of students through self-exploration activities, the introduction of knowledge and understanding of dance based on elements in dance, namely the elements of time, space, and energy (Ashley, 2019; Gibbons, 2007; Pickard & Risner, 2020; Purcell, 1994).

Dance education has the multidimensional achievement of learning outcomes such as motor learning, art creation, development of attitudinal abilities (developing self-esteem, emotional, spiritual), and cognitive (knowledge about culture, cultural benefits) (Bresler, 2004; Carter, 2004; Hanna, 1999). The implementation of dance education in schools should provide opportunities for students to develop their creative skills (Chappell, 2005, 2007; Chap-

pell, Craft, Rolfe, & Jobbins, 2009; Craft, 2012).

However, in dance learning, the existence of technology can be used as a learning medium used by teachers to deliver learning materials (Anderson, 2012a; Holdt, 2013). Pedagogy issues remain an aspect that needs attention in dance education, and this aspect becomes one of the challenges for a dance teacher to master it (McCarthy-Brown, 2017). The use of technology in education is used in formal education and dance studios and dance courses where this technology is used by dance teachers and trainers (Risner, 2009).

Various learning media are selected or developed by the teacher to make it easier for students to absorb knowledge and improve their skills during this pandemic. However, because the pandemic situation occurred so suddenly, teachers generally only used power points with the support of YouTube which can be accessed freely via the internet. The low tendency of students' interest in learning in dance subjects in schools, as expressed by the teachers, could be due to the teachers' lack of innovation and creativity in selecting and using learning media. Therefore, as one solution, through this research, website-based learning media is developed which is deemed suitable for use by students as a source of digital literacy. This strategy is considered effective because students can freely access them using their smartphone communication tools through this media.

METHOD

This research was conducted with a design-based research approach (DBR) which was carried out systematically in the process of designing and developing innovations that were oriented towards learning needs (Flanagan & Hall, 2017; Saxe & Saxe, 2016). In this research approach, there are three process stages which include: (1) design; (2) design development; and (3) evaluation and revision of the developed design based on the results of an in-depth and thorough study (Komalasari,

Budiman, Masunah, & Sunaryo, 2021).

The data collection process was carried out using interviews, assessment sheets, and questionnaires. Interview activities were carried out to obtain basic information for the development of dance learning materials in senior high schools. In addition, it is also carried out to obtain real and accurate information related to the need for dance websites that can be used by students in learning dance in high schools. The assessment sheet is used when the researcher validates the website design being developed. The questionnaire is used to determine student responses after using the website media developed during the trial. Data analysis was carried out both qualitatively and quantitatively with the aim of comprehensive results.

RESULTS AND DISCUSSION

Characteristics of the *Nari Kuy* Website Developed

The pandemic situation (Buchholz, DeHart, & Moorman, 2020b) of course, forces students to study at home to avoid social crowds in overcoming the spread of Covid-19 (Coelho & Menon, 2020). This situation is part of government policy as a social distancing policy to limit the gathering of people in various social activities, including learning activities in schools (Adnan & Anwar, 2020). Students do learning activity at home using technology media. The *Nari Kuy* website is an innovative learning media designed by students and teachers to carry out learning at home. The *Nari Kuy* website provides several menu features and dance materials that students can access as a learning resource. Teaching using technology is a new model (McWilliam, 2008) that teachers must-do during the Covid-19 pandemic. This website model is one of the alternative media used by dance teachers in implementing learning in schools.

Based on the results of observations and interviews conducted by researchers, the learning process of dance in high schools (SMA) still often uses conventional

learning media such as print modules and Microsoft PowerPoint presentation media. The audiovisual media often used by teachers in implementing e-learning is in the form of dance videos. As a result, learning resources that students can access are very limited. Through videos, dance learning usually only focuses on practical material that is useful for students in understanding and memorizing the structures of motion needed for further exercise in movement techniques (Sitti Rahmah, Yusnizar, & Rahayu, 2019). Meanwhile, learning dance using website media will be more flexible in providing the learning resources needed by students, both knowledge and skills. Various learning resource materials in the form of text, audio, and social audio can be accommodated and organized in a website-based learning media space (Anderson, 2012a).

Usability and Accesibility

The *Nari Kuy* website users targeted in this study were high school students. The device requirements needed for website users are computers, laptops, tablets, or smartphones connected to the internet network. Therefore, students can easily access dance material textually and audio-visually on the website. The *Nari Kuy* website has a way of working that is easy for students to access by accessing it via a link <https://narikuy.wixsite.com/website>. Even though the target users of this website are high school students during the trial, in its implementation, it can also be used by other users who need information and knowledge related to dance material contained on the website.

There are several ways that users can access the *Nari Kuy* website. The first thing to do is determine what devices will be used to access the website such as computer devices (PCs), laptops, iPads / Tablets, and smartphones. The *Nari Kuy* website's software can use Windows, DOS, Android, and iOS. Users can choose any browser to run the *Nari Kuy* website system. However, because this website is free, users cannot immediately search for the

name *Nari Kuy* on search engines such as Google Chrome, Mozilla Firefox, Internet Explorer, UC Browser, Opera Mini, and Browser. Users can only access this website by entering the link (URL) of *Nari Kuy*. Supporting tools for accessing the website link are described in Table 1.

Visual Design of the Nari Kuy Website

One of the reasons for developing this website is the low learning interest of students in participating in learning dance art at school, especially class XI students at the high school level (SMA). Therefore, the designs made on this website pay attention to the quality of appearance to attract high school students to take dance lessons. This website design has a color composition, graphic layout, and presentation of contents from the textual and audio-visual side which is made interesting and unique to attract students' interest to visit the website as a source of internet-based learning literacy.

Dance Material on the Nari Kuy Website

The dance material content displayed on the *Nari Kuy* website is divided into two main parts: (1) a textual display of dance material and (2) an audio-visual display of dance material. The two displays of dance material are intended to solve students' learning problems in finding the teaching resources needed in school dance learning. Dance material textually contains basic knowledge of dance such as elements of dance movements (space, energy, and time), concepts and theory of dance composition, concepts of dance criticism, how to do dance criticism, important things that must be considered in making dance

criticism, how to create creative dance, and how to design dance performance activities that can be applied in schools. The appearance of the website on textual material is as shown in Figure 1.

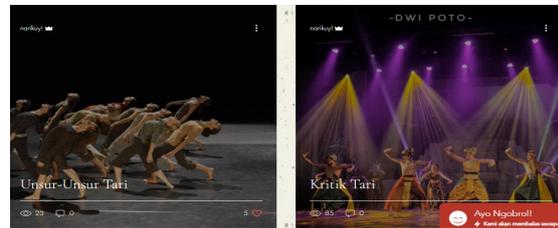


Figure 1. Website display on the textual material page (Source: Gaung Rizki Gustiaji, 2020)

Meanwhile, the audio-visual material page displays several video materials for local and Indonesian traditional dance selected according to high school students' learning needs. Access to video material on this website is also linked to dance material on Youtube so that students can have themselves according to their respective teaching material needs. Website display on audio-visual material as shown in Figure 2.

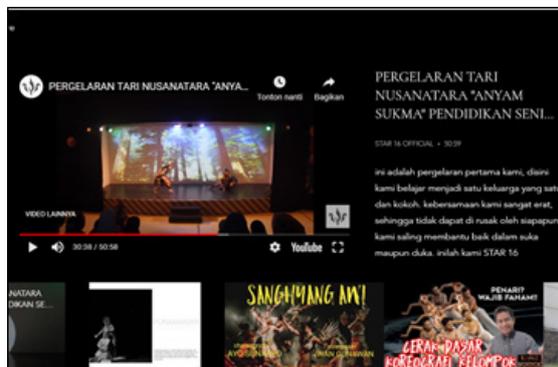


Figure 2. Website display on video material pages connected to YouTube (Source: Gaung Rizki Gustiaji, 2020)

Table 1. Supporting Tools for Accessing the *Nari Kuy* website

Hardware	Software	
	Operating System (OS)	Browser
Personal Computer (PC)	Windows	Google Chrome
Laptop	DOS	Mozilla Fire Fox
iPad / Tablet	Android	Internet Explorer
Smartphone	iOS	UC Browser
		Opera Mini
		Browser

Compability

The software that is used to develop websites in this study is wix.com that can be accessed through the Google Chrome browser. This software is based on considerations of assessments from various sources that state it is very good in terms of reliability, price, ease of use, support, and features. As for the administrator, this study used the hardware and software to sustain the development and operation of the website. The hardware specifications used are as described in Table 2.

Table 2. Computer spesification/Laptop ASUS X441U

Hardware	Spesification
Processor	Intel Core i3
RAM	4 GB
Hard Disk Drive	1 TB
Operating System	Windows 10
VGA	Intel(R) HD Graphics 520

Functionally

School art learning aims to shape students' skills so that they have abilities and skills following the art subjects given by the teacher (Budiman, Nugraheni, & Purnomo, 2020). The development of the Nari Kuy website is carried out to provide alternative dance learning solutions in developing dance learning media that utilize technological literacy as a learning resource. The Nari Kuy website was developed by paying attention to the pedagogical aspects of technology needed as a dance learning medium (Anderson, 2012a; Li, Zhou, & Teo, 2018; Ostashewski, Reid, & Ostashewski, 2016). The concept of this website is in line with the development of internet-based social media which has long been popular in the world and Indonesia. Through this digital technology-based media, students can easily recognize, use, and utilize it in learning dance (Dania, Hatziharistos, Koutsouba, & Tyrovola, 2011; Mabingo, 2015; Risner & Anderson, 2008).

The Development Stage of the *Nari Kuy* Website and the Effectiveness of the Application in Learning

The Development Stage of the *Nari Kuy* Website

The website name of *Nary Kuy* means an invitation to dance aimed at teenagers. The word 'Nari' comes from the word 'dance' (*menari* in Bahasa) which is often used in everyday language; then it is simplified to become 'Nari'. Meanwhile, the word 'Kuy' is a 'slang' language that is often spoken by young generation Z or millennial adolescents. The word 'Kuy' itself comes from the invitation word 'Ayo' which was later simplified to 'Yuk' and is now familiarly reversed to 'Kuy'. The researcher uses the name so that it is easy for high school students to remember who often use simple slang.

The detailed development of the *Nari Kuy* website is carried out in 12 stages which include: (1) the stages of accessing wix.com; (2) the email address registration stage; (3) the stage of selecting the type of website; (4) the stage of selecting a website creation method; (5) the stage of selecting the type of website; (6) the stage of selecting the website name; (7) image and text insertion stage; (8) the information review & edit stage; (9) the stage of selecting the website theme; (10) stages of editing the PC display; (11) the editing model display stage, and (12) the website publishing stage.

Expert Validation

Before the *Nari Kuy* website is applied in dance learning, it is validated first by experts who are competent in their fields from academics, teachers, and IT-based media practitioners. The validation stage is carried out to provide an assessment of the website being developed. The assessment of the components of the website includes five aspects, namely: (1) the overall design of the website appearance; (2) the engineering of the software for ac-

cessing the website; (3) the ease with which students understand dance on the website; (4) the uniqueness of the presentation of the website from the initial appearance (home page), and (5) the use of the website as a source of digital technology literacy in dance learning. In the website content component, an assessment is carried out on the following aspects: (1) the design of dance material on the website; (2) clarity of dance; (3) the relevance of the dance material on the website with the material taught in dance lessons; (4) the uniqueness of the dance material on the web; and (5) clarity of text, images, and video material about dance displayed on the website. The results of the assessment on these two components are summarized in Table 3.

Based on these data, it shows that the score for the assessment of IT experts on the devices developed is an average of 88.4. While the assessment of dance material experts on website content is an average of 91.4. Based on the results of this assessment, it shows that the media developed has very good criteria so that it is suitable for use in learning dance at school. Although IT experts give some critical suggestions for the improvement process,

such as (1) instructions for using the website need to be clarified by adding images in each theme or content that will be accessed by students; (2) the resolution of text and images needs to be strengthened; (3) the use of the font color for each feature and theme needs to be clarified so that it does not overlap; (4) the layout of the letters (text) and images needs to be regulated and the level of legibility is taken into account. Meanwhile, suggestions for improvement from the assessors of the website content components include: (1) clarifying the content of the text to be able to explain the dance subject matter to be delivered in the lesson; (2) choosing dance images that are more able to stimulate students' creative thinking; (3) increasing the adequacy, breadth, and relevance of dance material based on the existing learning curriculum.

The Trial of the Nari Kuy Website

The website trial stage was carried out at one of the high schools (SMA) in Bandung, West Java. The sample of the trial was 34 students who were in class XI. The trial implementation was carried out on students who took part in learning dance. The trial process was carried out

Table 3. Aspek dan Hasil Penilaian terhadap Perangkat dan Konten Website *Nari Kuy*

Aspects of assessment of website tools	Score
Overall design appearance	87
Software engineering for accessing the website	85
Students' ease in understanding dance materials on the website	90
The uniqueness of web presentation from the initial appearance (home page)	88
The use of website as a source of digital technology literacy in dance learning	92
Total	442
Mean (average score)	88,4
Aspects of assessment of website content	
Design of dance materials on the website	91
Clarity of dance materials	89
The relevance of dance material on the website with the material taught in dance learning	92
The uniqueness of content of dance material on the web	92
The clarity of text, images, and video material about dance displayed on the website	93
Total	457
Mean (average score)	91,4

Table 4. Student Assessment on the Nari Kuy Website

Aspects of Assessment	Measurement scale			
	1	2	3	4
Clarity of instructions using the web	-	4	19	11
Student ease of accessing the website	-	2	24	8
The relevance of the dance material on the website with the material taught in dance learning	-	2	27	5
Student ease in understanding dance on the website	-	6	15	13
The uniqueness of the web presentation from the initial appearance (home page)	-	1	14	19
The uniqueness of the content of dance material on the web	-	1	9	24
Clarity of text, images, and video material about dance displayed on the website	-	2	7	25
The usefulness of the website as a source of digital technology literacy in dance learning	-	1	13	20

Description: 4 = 76-100 (very good); 3 = 50-75 (good); 2 = 25-49 (adequate); 1 = 0-24 (poor)

for 24 weeks totaling 12 hours of lessons which were completely carried out online using the developed website. The website developed during the learning process is used as a source of digital technology literacy that students can access through various technological devices owned by students and school facilities such as computers, laptops, tablets, cellphones, and other technological media devices. Student assessments of the *Nari Kuy* website that were carried out after the implementation of the trial are described in Table 4.

Based on the data, the results of the trial showed that the assessment of the clarity of the instructions using the website was 11.76%, and students rated it as adequate, 55.88% considered it good, and 32.35% considered it very good. Assessment of the aspect of student ease in accessing the website was 5.88%, and students rated it as adequate, 70.58% rated it good, and 23.52% rated it very good. Assessment of the relevance of the dance material on the website with the material taught in dance learning was 5.88% and students rated it as adequate, 79.4% considered it good, and 14.7% considered it very good. Assessment of the aspects of the students' ease of understanding dance on the website was 17.64% and students rated it as adequate, 44.11% considered it good, and 38.23%

considered it very good. Assessment of the uniqueness of the web presentation from the initial display (home page) was 2.94% and students rated it as adequate, 41.17% considered it good, and 55.88% considered it very good. Assessment of the uniqueness of the content of dance material on the web was 2.94% of students rated it as adequate, 26.47% rated it as good, and 70.58% rated it very good. Assessment of the clarity of the text material, images, and videos about dance displayed on the website was 5.88% and students rated it as adequate, 20.58% rated it as good, and 73.52% considered it very good. Furthermore, the assessment of the aspects of the use of the website as a source of digital technology literacy in dance learning was 2.94% and students rated it as adequate, 38.23% considered it good, and 58.82% considered it very good. Based on all aspects of the assessment, if added together, 46% of students rated it very good, 47% of students rated it good, and only 0.7% rated it on adequate criteria.

Advantages and Disadvantages of the Nari Kuy Website

The website integrates the concept of learning dance with technology. This concept is in line with Birringer (2002) regarding the integration of modern dance and technology when teachers and choreo-

graphers try to promote their work. Dance videos are made accessible to students through technology. The use of websites in dance learning has become an effective learning strategy for students (McDougall & Jones, 2006; Parrish, 2007). The concept of web-based learning is closer to social learning theory. This is of course, different from the use of other dance learning media such as videos, for example. As done by Tomczak (2011), the more so, who only uses video to evaluate the progress of dance learning practices that occur during the dance learning process.

The role of technology media can be used in the learning process to collaborate technology with student work in a live performance (Brooks & Kasra, 2017). However, in the context of this research, digital technology is used in designing websites which, based on their characteristics, are considered suitable for online learning. The website application has also been used by Dias et al., (2019) in learning dance for blind students. However, the function of the website in the context of learning dance is only used by teachers to visualize the movements made by students. There are several advantages and disadvantages of implementing the *Nari Kuy* website in dance learning for further development considerations. Some of these important things are summarized in Table 5.

Even though there are some disad-

vantages, the website-based learning media developed are very suitable for the current learning culture of students. This is in line with the support and development of facilities as well as the tendency for students' learning methods to be mostly carried out using technological media such as the use of smartphones (Divayana, Suyasa, & Sugihartini, 2016). In addition, the use of the *Nari Kuy* website as a dance learning medium provides flexibility for students, including (1) all students (users) can register (sign up) to become members of this dance learning website; (2) students (users) can log in to the dance learning website at any time; (3) students (users) can easily understand and take advantage of the menus on the website; (4) students (users) can study dance art material online coherently; (5) students (users) can download images in the learning material; (6) students (users) can access or view videos to be appreciated; and (7) students (users).

CONCLUSION

The *Nari Kuy* website is one of the innovations offered by researchers to dance teachers in carrying out dance lessons in high schools (SMA) during the pandemic. This website can be used as a breakthrough in developing technology-based learning literacy resources that students can use in doing online learning. It is different from

Table 5. Advantages and Disadvantages of Dance Learning through the *Nari Kuy* Website

Advantages	Disadvantages
Students can study dance material both inside and outside class hours.	A strategy is needed to control how students learn.
Students can choose dance material according to the needs of the dance material that is being and will be studied.	The achievement of student learning outcomes will be largely determined by the motivation and independence of students in learning.
Students can access the website link with their technology media devices such as computers, laptops, tablets, and cell.	Clear instructions are needed to guide student learning activities when using the website.
The <i>Nari Kuy</i> website can be used as a source of additional dance material and the dance material given in class.	There is limited space for interaction and discussion between students and teachers in discussing the dance material being studied.
Dance material on the website can be updated according to learning needs.	
They are educating students to be able to use technology positively in learning process activities at school.	

the technology-based learning media that teachers and students generally use in the implementation of dance learning in schools so far.

The *Nari Kuy* website has several advantages and flexibility in access that students can use to find sources of dance learning material in both textual and audio-visual form. According to the curriculum, the *Nari Kuy* website is equipped with several learning menu features such as dance pictures, dance learning videos, and dance learning knowledge text materials.

In addition, this website pays close attention to the pedagogical aspect, which is different from other art and cultural information websites on the internet. Therefore, the use of the *Nari Kuy* website in dance learning and a means of technology literacy education for students in utilizing technology as a learning resource.

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