Developing web-based character value integration in school culture

S Nuraini¹,², A Marini³, D Safitri³, R Rosinar³, T Rihatno¹, W Hadi² and ZEF F Putra¹

¹Faculty of Sport Science, Universitas Negeri Jakarta Jalan Rawamangun Muka No: 1 Jakarta Timur, DKI Jakarta, Indonesia
²Faculty of Education, Universitas Negeri Jakarta Jalan Rawamangun Muka No: 1 Jakarta Timur, DKI Jakarta, Indonesia
³Faculty of Social Science, Universitas Negeri Jakarta Jalan Rawamangun Muka No: 1 Jakarta Timur, DKI Jakarta, Indonesia
⁴Faculty of Engineering, Universitas Negeri Jakarta Jalan Rawamangun Muka No: 1 Jakarta Timur, DKI Jakarta, Indonesia

*srinuraini@unj.ac.id

Abstract. This study aims at developing web-based character value integration in school culture for elementary school students in Jakarta in Indonesia. The research method used is Research and Development. The research product of web-based character value integration in school culture built with wix.com consist of home, introduction, concept, application of character value integration in school culture at elementary school, video, and contact pages. The result of validation of expert, limited, and extensive field test related to usage of web-based character value integration in school culture including organization, content utility, navigation, graphical representation, purpose, simplicity, credibility, consistency, accuracy, loading speed, security, interactive, strong user control capabilities, readability, efficiency, and learnability attained 3.78, 3.82, and 3.85 from maximum score 4 pointing out that this product has already been valid, practical, and effective. This study comes to the conclusion that web-based character value integration in school culture is effective to be implemented at elementary schools in Jakarta in Indonesia.

1. Introduction
National education in Indonesia functions to improve student abilities and shape student character and civilization [1]. National education aims to develop the student potential to become noble, healthy, knowledgeable, capable, creative, independent, democratic, and responsible. The objectives of character educational reinforcement are to equip the students with good character education in order to face dynamical change in the future [2]. National education platform in Indonesia places character education as the main soul of educational institution.

Character building in religious school culture by providing worship facilities, doing religious ceremonies, and using religious symbols can develop student religious character indicated by compliance with accomplishing the teachings of one’s religion, carrying out religious tolerance toward others, and living in harmony with friends of other religions [3]. Education character through knowledge
Implementation of character building can be conducted in the classroom, school culture, extracurricular activities, and through community involvement [10-12]. The teacher asking the students to pray, to greet with the teacher, and to do reflection related to the character value integration at the end of the class [13]. Character building is associated with student self-esteem leading to the student communication and interaction skill development [14-17]. The quality of interpersonal communication among students can enhance student character building. Application of cooperating learning method in group task, the students motivated by the teacher to be active in class, and the teacher focusing on student affective aspects stimulates character value integration in teacher learning process activities [18,19]. Engaging website and the success of website need proper web design as a critical element [20-22]. Effective design of website consists of navigation, graphical representation, organization, content utility, purpose, simplicity, and readability. Web design plays a role in the interaction user-interface. A website design addressed to simplicity and freedom of doing navigation gives complete and correct information in all its contents and an appearance calling for the users’ attention. This study found the effectiveness of aspects related to presentation format, quantity and type of content in producing website [23]. This effectiveness is not affected as much by the presentation format, quantity, and content type provided. The website content extension appears more favorable, affective, and behavioral responses only if having an informative nature. Building successful websites has three main stages consisting of planning and analysis, design and implementation and maintenance and updating [24]. Informative website should be designed to attract user. Identification of user can assist website builders to identify the website contents and how content can reach user. Using website can take into account individual differences and encourage students in doing self-assessments [25]. This study found that explanatory factors appointing to the needs of instructional website involve content and structure of teaching materials, interactive designs, system configuration establishment, layout design, and interface design [26]. However, these previous studies haven’t paid particular attention to combine character value integration in school culture with Information and Communication Technology (ICT) related to the website.

2. Methods
This research method used Research and Development to develop web-based character value integration in school culture consisting of home, introduction, concept, application of character value integration in school culture involving religious, honest, discipline, clean and healthy, tolerant, working ethos, and nationalism school culture for students at elementary schools in Jakarta in Indonesia, video, and contact pages. Data collection consisted of validation instrument for web-based character building related to organization, content utility, navigation, graphical representation, purpose, simplicity, credibility, consistency, accuracy, loading speed, security, interactive, strong user control capabilities, readability, efficiency, and learnability. Data analysis used technique of descriptive quantitative.

3. Results and discussion
Need analysis about the effectiveness of character value integration in school culture consisting of religious, honest, discipline, clean and healthy, tolerant, working ethos, and nationalism school culture done at 145 public elementary schools in Jakarta in Indonesia arrived at 78.67 %. Therefore, this research is aimed at developing web-based character value integration in school culture for elementary school students in Jakarta in Indonesia in order to improve the effectiveness.

In this research, developing web-based character value integration in school culture for elementary school students in Jakarta in Indonesia was done using wix in which website was developed without much need for code editing. The complete website was created using the drag and drop editor. Wix has more than 500 design templates chosen according to the types and characters suitable for this research. The template can be changed after entering the content which doesn’t directly appear on the page replaced due to having a preview mode before publishing.
In edit template, a page will appear to edit all parts of the template having been selected in order to move photos, change the text color, and add Google Maps as web accessories. Text was added by clicking on the “+ Add” button at the top left, where a selection box appeared containing several formats in the form of text size, font type, and other formats (see Figure 1). Images were added by clicking the “+ Add” button in the upper left side of the editor, then ‘image’ was clicked (see Figure 2).

![Figure 1. Adding texts.](image1)

![Figure 2. Adding images.](image2)

Some documents having a large film size of maximum 15 Megabytes were also shared to web by clicking the “+ Add” button in the upper left side of the editor (seen in Figure 3). The first display which is the center of the website appearing when logging back into wix.com is the dashboard page. The dashboard page can be accessed from the editor page by clicking ‘site’ in the upper left and ‘My Sites’ (see Figure 4). Web can be accessed from the dashboard page and people who subscribe to the web were managed. The research product of web-based character value integration in school culture for elementary school students in Jakarta in Indonesia can be seen in Figure 5.
Validation of expert, limited, and extensive field test connected with the usage of web-based character value integration in school culture including organization, content utility, navigation, graphical representation, purpose, simplicity, credibility, consistency, accuracy, loading speed, security, interactive, strong user control capabilities, readability, efficiency, and learnability achieved 3.78, 3.82, and 3.85 from interval scores 1 to 4 indicating that this product has already been valid, practical, and effective.

**Figure 3.** Adding documents.

**Figure 4.** Going to the dashboard page.
4. Conclusion
In the conclusion of this research, it is highlighted that web-based character value integration in school culture developed in this research is practical and effective to be applied for students at elementary schools in Jakarta in Indonesia.

Acknowledgements
This research was funded by Directorate General Higher Education, Ministry of Research, Technology, and Higher Education Republic Indonesia.

References
[1] Indonesia Republic President 2003 Indonesia Republic Constitution No. 30 about National Education System
[2] Indonesia Republic President 2017 Indonesia Republic President Regulation No. 87 about Character Education Strengthening
[3] Marini A, Safitri D and Muda I 2018 Journal of Social Studies Education Research 9(4) 274
[4] Izfanna D and Hisyam M A 2012 Multicultural Education & Technology Journal 6(2) 77
[5] Rihatno T, Safitri D, Nuraini S, Marini A, Putra Z E F F and Wahyudi A 2020 International Journal of Advanced Science and Technology 29(8s) 103
[6] Nuraini A, Safitri D, Rihatno T, Marini A, Putra Z E F F and Wahyudi A 2020 International Journal of Advanced Science and Technology 29(8s) 97
[7] Ibrahim N, Safitri D, Umasih, Marini A and Wahyudi A 2020 International Journal of Advanced Science and Technology 29(6) 1471
[8] Marini A, Safitri D, Nuraini S, Rihatno T, Satibi O and Wahyudi A 2020 *International Journal of Advanced Science and Technology* 29(6) 1121
[9] Edwita, Safitri D, Nuraini S, Rihatno T, Sudrajat A, Marini A and Wahyudi A 2020 *International Journal of Advanced Science and Technology* 29(6) 1125
[10] Furkan N 2014 *Journal of Literature, Languages and Linguistics* 3 14
[11] Oktarina N, Widiyanto and Soekardi 2015 *IOSR Journal of Research & Method in Education* 5(5) 11
[12] Marini A 2019 *International Journal of Control and Automation* 12(4) 1
[13] Marini A 2019 *Journal of Physics: Conference Series* 1402(2) 1
[14] Cubukcu Z 2012 *Educational Sciences: Theory & Practice* 12(2) 1526
[15] Umasih, Safitri D, Nuraini S, Rihatno T, Maksum A, Marini A and Wahyudi A 2020 *International Journal of Advanced Science and Technology* 29(6) 1136
[16] Wibowo U B, Marini A, Safitri D and Wahyudi A 2020 *International Journal of Advanced Science and Technology* 29(6) 1161
[17] Hartati S, Safitri D, Nuraini S, Rihatno T, Marini A and Wahyudi A 2020 *International Journal of Advanced Science and Technology* 29(6) 1129
[18] Marini A 2019 *Universal Journal of Educational Research* 7(10) 2089
[19] Nafiah M, Riyadi, Sampurna P D, Marini A and Wahyudi A 2020 *International Journal of Advanced Science and Technology* 29(6) 1458
[20] Garett R, Chiu C, Zhang L and Young S D 2016 *Online Journal of Communication and Media Technologies* 6(3) 1
[21] Flavian C, Gurrea R and Orus C 2009 *Journal of Systems and Information Technology* 11(2) 168
[22] Tarafdar M and Zhang J 2005 *Journal of Computer Information Systems* 46(2) 14
[23] Cabezudo R S, Arranz A M G and Cillan J G 2008 *Journal of Internet Commerce* 6(1) 35
[24] Mohammad A H, Ghwanmeh S and Alibrahim A 2013 *International Journal of Computer Applications* 78(3) 975
[25] Qudah A H 2016 *Journal of Education and Practice* 7(5) 139
[26] Lo H J, Fu G L and Chuang K C 2013 *The Turkish Online Journal of Educational Technology* 12(4) 113