Web-based character-building model for managing school in Jakarta

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Abstract. The aim of this study is to develop an effective web-based character-building model for managing school in Jakarta in Indonesia. The method of Research and Development (R&D) has been conducted in this study. Development of the model of web-based character-building regarding the four aspects of integration of character values in classroom, school culture, extracurricular activities, and through community involvement. The product of this research is available at URL: https://pembangunankarakter.wixsite.com/characterbuilding. Expert validation, limited, and extensive field test result arrived at 3.65, 3.89, and 3.68 from scores ranging 1 to 4 indicating that this product was valid, practical, and effective model. Consequently, it can be stated that web-based character-building model for managing school in Jakarta in Indonesia has been effective to improve the student positive characters. In this sense, it is recommended that the model developed in the scope of the study applied for school management in Jakarta can also be implemented for managing school in other cities in Indonesia.

1. Introduction

Educational system in Indonesia is conducted to improve student religious character as well as noble character [1]. Education must create learning atmosphere that the students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, and noble morals. Reinforcement of character education is done through strengthening religious, honest, tolerant, disciplined, hardworking, creative, independent, democratic, curiosity, national spirit, communicative, loving peace, caring for the environment, sociable, and responsible values [2]. However, most of elementary schools in Jakarta, the capital city of Indonesia would rather concentrate on student cognitive aspects than student positive characters.

Religious character measured by obedience in carrying out the teachings of one’s religions, the practice of religious tolerance towards others and living in harmony with other religions can be improved by providing elementary school students with worship facilities, conducting religious ceremonies, and
using religious symbols [3]. Character building can be conducted through integration of character valued in teaching learning process, school culture, extracurricular activities, and through community involvement [4-8]. Character values integrated in class can be conducted in teaching learning process preparation, teaching learning process, and teaching learning process closing activities leading to improve student prudence as dimension of student character [9-11]. Observation in educational process can be done to measure student character development [12]. Effectiveness of character building implemented depended on the method used in integrating the values to the students [13-18]. Web-based learning is a valid and effective method supporting practical learning [19,20]. In a large class-size teaching environment, teaching approach on the basis of web is more optimal than traditional teaching methods [21]. Web based course positively associated with the student readiness related to self-directed learning [22]. Web based learning environment promoted student self-regulated learning [23,24]. Implementing a web-based language learning system can improve student learning satisfaction [25]. The application of web-based content can enhance student achievement [26,27]. Applying web-based learning environment model can enhance student cognitive and critical thinking skills [28]. However, the previous studies focused on character building without connecting with Information and Communication Technology (ICT) especially for website.

2. Method
This research aim is to develop an effective web-based portal as implementation of character-building model for school management in Jakarta in Indonesia. This research applied Research and Development involving needs analysis of web-based character-building development regarding the four aspects of integration of character values in teaching learning process, school culture, curricular activities, and through community involvement. Data collected consists of validation instrument for web-based character-building. Data were analyzed using technique of descriptive quantitative.

3. Results and discussion
Based on the survey result related to needs analysis at 145 public elementary schools in Jakarta in Indonesia indicating that effectiveness of managing character building in classroom reached at 56.6 %. Effectiveness of character building management at elementary school in school culture attained 78.67 %. Effectiveness of school management on the basis character building in extracurricular activities achieved 77.39 %. Effectiveness of managing character building through community involvement arrived at 75.53 %.

The steps of developing and designing web-based character-building model for school management in Jakarta in Indonesia was started by selecting wix.com as the ‘home’ of the web with registering at the address http://wix.com and pressing the ‘Start Now’ button (seen in Figure 1). After pressing the ‘Start Now’ button, it will go to the ‘Sign Up’ page so that it is registered as a new user on wix.com and can use it anytime and anywhere by using the registered email and password. The next step is to choose web category suitable with describing web built consisting of business, online stores, photography, music, designers, restaurants and food, accommodation, large events, blogs, beauty and health, portfolios, and other categories. The next page displayed is wix editor’s selection page providing pages for editing web parts with an editor which is very easy to use. Wix displays many templates which can be changed according to user needs seen in Figure 2. In template edit page, user can edit all sections of the selected template specifically for moving photos, changing color of text, and adding Google Maps as web accessories (seen in Figure 3). In this wix editor, users can add as many web pages as desired and manage layout, duplicate or delete an existing page from the page list (seen in Figure 4). The next step, users can add subpages which will appear on the web in the form of dropdown menus.

The research product of web-based character-building model for school management in Jakarta in Indonesia can be seen at URL: https://pembangunankarakter.wixsite.com/characterbuilding. The display of main page shown in Figure 5 of web-based character-building model for managing school in Jakarta in Indonesia consists of title and welcome contact information. The page of introduction seen in Figure 6 involves background, legal basis, and objectives of the web-based character-building model.
developed as a guidance for teachers and principals to optimize character building at elementary schools in Jakarta in Indonesia.

On page of the web-based character-building model concept for managing school in Jakarta in Indonesia shown in Figure 7 includes definition, management, objectives, and principles of character building implementation at elementary schools. Figure 8 displays application page of character building management at elementary schools related to teaching learning process, school culture, extracurricular activities, and through community involvement.

**Figure 1.** Start page from wix.com

**Figure 2.** Choosing template page.

**Figure 3.** Template edit page.
Figure 4. Adding a web page.

Figure 5. Main page display.

Figure 6. Introduction page.

Figure 7. Concept page.
Other pages consist of video page about character building implementation at elementary school in Jakarta in Indonesia and contact page. Expert validation, limited, and extensive field test result associated with efficiency of application, system of navigation, simplicity, clarity of navigation, consistency of navigation menu placement, attractiveness, compatibility support, and loading time attained at 3.65, 3.89, and 3.68 from maximum score 4 showing that this model was valid, practical, and effective.

4. Conclusion
It is recommended that the web-based character-building model for managing school in Jakarta in Indonesia developed in this research can also be implemented for managing school in other cities in Indonesia.

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