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Date : Feb. 11th, 2020

UNIVERSITAS NEGERI SURABAYA,
LIDAH WETAN,
SURABAYA, EAST JAVA,
60213, INDONESIA

Sir,

ACCEPTANCE OF PRESENTER IN "INTERNATIONAL CONFERENCE ON SPECIAL EDUCATION IN SOUTHEAST ASIA REGION 10TH SERIES" (ICSAR 2020)

The above matter is referred to.

2.   We are pleased to announce that the Secretariat of the 10th South East Asia Special Educational International Seminar 2020 (ICSAR 2020) has accepted your participation as a presenter.

Presenter's Name	:	**DR. MOCHAMAD NURSALIM**
Title	:	**SYSTEM QUALITY IN WEB-BASED APPLICATION OF CHILDREN WITH SPECIAL NEEDS SERVICE MANAGEMENT**
Institution	:	**UNIVERSITAS NEGERI SURABAYA**

3. In this regards, you are invited to attend the ICSAR 2020 Seminar as below:
    Date   : March 29th, 2020 (Sunday)
    Venue : Faculty of Human Sciences, University of Tsukuba, Japan.

Your cooperation towards this matter is highly appreciated.

Thank you.

Yours sincerely,

PROF. MADYA DR. MOHD HANAFI MOHD YASIN
PENGERUSI BERSAMA
INTERNATIONAL CONFERENCE ON SPECIAL EDUCATION IN SOUTHEAST ASIA REGION 10TH SERIES (ICSAR 2020)

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System Quality in Web-Based Application of Children With Special Needs Service Management

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ABSTRACT
This study aims to determine the feasibility and effectiveness of system quality in web-based aplication of
children with special needs service management. System quality indicators include: (1) the application has
never experienced interference when used, (2) the application provides complete features, (3) the application
can be accessed anywhere and anytime, and (4) the application has a decent display. This research is a
development research which procedures referring to Gall, Gall, & Borg, that is: identification of needs,
planning, initial product development, expert testing, revision, small-scale field testing, and large-scale field
testing. The results obtained are a percentage of 91.67, which means that the system quality in the web-based
application of children with special needs service management is very feasible and very effective to use.

Keywords: Children with special needs services, management, web-based application, system quality

1. INTRODUCTION

Children with special needs are children who are
different from normal community standards. These
differences can be due to physical, sensory, cognitive, or
behavioral characteristics (Gargiulo, 2012), as well as
social or emotional, which significantly influence the
process of growth or development (Ministry of Women's
Empowerment and Child Protection of Indonesia, 2013).
While Republic of Indonesia Law Number 8 of 2016
mentions children with special needs as persons with
disabilities, that is, anyone who experiences physical,
intellectual, mental, and/or sensory limitations for a long
period of time which are in interacting with the
environment can experience obstacles and difficulties to
participate fully and effective with other citizens based
on equal rights.

Children who are identified as having special needs
have the right to receive special education services
and/or other necessary services. Determining the right
service requires a process. First, assessment to obtain
data about the characteristics of children. Second,
arranging of a child's profile based on the results of the
assessment. Third, arranging of service programs, both
educational and other services. Fourth, implementation
of services. And fifth, progress monitoring and
evaluation (Budiyanto et al, 2009).

The management of services for children with special
needs must adapt to the changing in the needs of its

users, which is following the rapid development of
technology, especially information and communication
technology. The progress that has been achieved by
humans in the field of Information and Communication
Technology (ICT) is something to be thankful for
because these advances make humans do their work and
tasks easier.

Technology and communication development can be
done in terms of information management. Information
management is a very important part in an institution,
especially in terms of the distribution of information.
Management is defined as a set of activities aimed at the
effective and efficient use of organizational resources to
achieve organizational goals (Sapre, 2002; Wijayanto,
2012).

In Indonesia, based on Republic of Indonesia Law
No. 8 of 2016 article 42, there is an obligation for the
city or provincial government to facilitate the
establishment of disability service units. Good
information management is expected to help the
disability service units to achieve the effectiveness of
information. Effectiveness is the ability to achieve goals.
Effectiveness is related to the term "doing things right"
so that it become efficient (Wijayanto, 2012).

Based on preliminary surveys that have been
conducted, special needs service units in five cities in
East Java Province Indonesia have not utilized web-
based application technology for managing their data or

information. Information management is still done manually. The impact of this manual information management is that it takes a long time to find information when needed and often loses information documents. Information management that utilizes web-based application technology in the services of children with special needs is expected to help the management of institution to achieve the effectiveness of information needed by professionals. Therefore we need a web-based application in the Management of Children with Special Needs Services.

One of the feasibility factors of a web-based application is the quality of the system. The quality of the application system is a characteristic of inherent information about the application system itself, where the quality of the application system refers to how well the hardware, software and procedural policy capabilities of the information application system can provide the information needs of the user (Delone and McLean, 2003).

The purpose of this study is to determine the feasibility and effectiveness of the quality of web-based application systems in the management of child service programs with special needs.

2. METHOD

This research is a development research. The research procedure refers to Gall, Gall, & Borg (2003), namely: (1) needs analysis, (2) planning, (3) initial product development, (3) expert testing, (4) revision, (5) small-scale field test, and (6) large-scale field test (Figure 1).

A needs analysis is carried out to identify service trends needed by children with special needs through literature review, focus group discussions (FGDs) and surveys. Initial trials were carried out by experts in Special Education and experts in Management and Information Systems. The location of the field test was carried out at the Service Unit for children with Special Needs, Universitas Negeri Surabaya. A small-scale field test was carried out by four staff at the Unit. While a large-scale field test was carried out on all personnel in the Special Needs Children Service Unit, Universitas Negeri Surabaya as many as nine people. Data was collected using a questionnaire.

The data used to be analyzed were data obtained from large-scale field test, with the indicators in the Table 1. The data were analyzed quantitatively using a Likert scale to measure the feasibility and effectiveness of the system quality in web-based application of the children with special needs service management.

The measurement for feasibility in this study can be explained as follows:

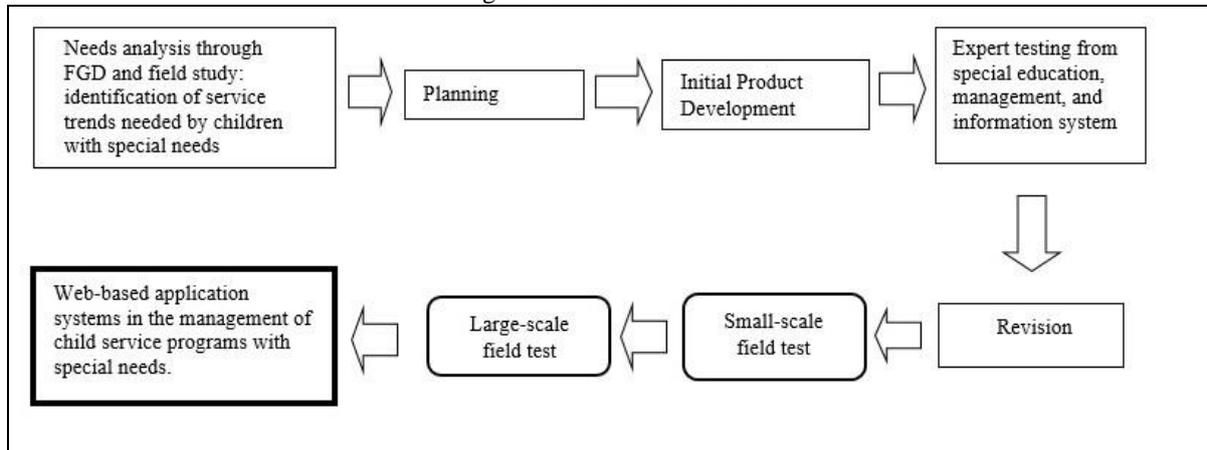|	
1% - 25%	= very unfeasible, revised
26% - 50%	= unfeasible, revised
51% - 75%	= feasible, not revised
76% - 100%	= very feasible, not revised

Figure 1. The research flow

Table 1. Indicators of system quality used in this study

Focus	Indicators	Item Number
System Quality	The application has never experienced interference	1
	Application provides complete features	2
	The application can be accessed anytime and anywhere	3
	The application has a decent appearance	4

3. RESULT AND DISCUSSION

System quality indicators in this study are: (1) the application has never experienced interference when used, (2) the application provides complete features, (3) the application can be accessed anywhere and anytime, and (4) the application has a decent display.

Item number one contains a statement about the application has never experienced interference when used. Six respondents strongly agreed, and three respondents agreed. Total score was 33. Percentage was 91.67.

Item number two contains a statement about the Application providing complete features. As many as six respondents strongly agreed, and three respondents agreed. This result was the same as item number one with a total score of 33 and percentage of 91.67.

Item number three contains a statement about the application can be accessed anytime and anywhere. All nine respondents strongly agreed. Total score was 36 and percentage was 100.

Item number four contains a statement about the appearance of the application is feasible. Three respondents stated strongly agreed, and six respondents agreed. This results in a total score 30 with percentage of 30.

Analysis of the results can be seen in table 2. From the table it can be seen that the quality of the system has a mean percentage of 91.67, which means that the quality of the system is very feasible and is very effective.

Table 2. The results of system quality analysis from large-scale field tests

Focus	Item	S1	S2	S3	S4	S5	S6	S7	S8	S9	Total	Percentage Per item	Mean
System Quality	1	4	4	4	4	4	3	3	3	4	33	91,67	
	2	4	3	4	4	4	4	3	3	4	33	91,67	91,67
	3	4	4	4	4	4	4	4	4	4	36	100	
	4	3	4	3	3	3	3	4	4	3	30	83,33	

The flexibility of the system is that the system can adapt to various user needs and to changing conditions. System integration, the system makes it easy to combine data from various sources to support business decision making. System accessibility is the ease of accessing information or the ease of generating information from a system.

Jogiyanto (2007) explains that "The quality of the system is used to measure the quality of the technology system itself". Another opinion that expresses the same definition is Chen (2010) that "The quality of the system is a measure of the processing of the information system itself". Based on the opinions of some experts it can be concluded that the quality of the system is a measure of the information system itself and is focused on the interaction between the user and the system.

The implication of this research is information management utilizing web-based application technology in the services of children with special needs is expected to help the management of institution to achieve the effectiveness of information needed by professionals. In accordance with Sutarman's statement (2012) that proper data management can make the data useful information for informants.

A person can make plans and set goals if he knows information. According to Sutabri (2012), information is data that has been classified or processed or interpreted for use in the decision making process. In line with opinions of Schoderbek et al (1990) who stated that information will be used for a decision making process. So that good information will produce good decisions for children with special needs. A good decision will lead to the right services, special education services and/or other necessary services, such as physiotherapy, audiology, psychology, recreational therapy, orientation and mobility, translation services, occupational therapy, counseling, etc. (Gargiulo, 2016).

4. CONCLUSION

The conclusion are the quality of web-based application systems in the management of children with special needs services is very feasible to use and the quality of web-based application systems in the management of child service programs with special needs is very effective in use.

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