Education Policy Development With Development Strategy Application Of National Test Exercises For Vocational High School Case Study Vocational High School Bina Taruna Masaran Sragen

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Abstract

This study was motivated by the implementation of the national exam practice that has been run on a conventional vocational teachers still give problems, students are working and to obtain the student corrected. Students can not know the results then try out as well, so that students' motivation to learn decreases. The purpose of this study was to produce applications for the national practice exam online Vocational School that are useful to help students practice working on the national exam practice questions that determine the level of students' skills as a preparation to face the National Exam.

In this study uses multiple methods of data collection methods, namely, requirements analysis, design, manufacture, and implementas Trial. The results of this study is the National Examination Process Implementation Training for Vocational High School online. So that students can immediately find out the value after the completion of work, able to make students more motivated and keen to learn.

Keywords: Education Strategy, National Exam Practice Online

1. Introduction

Education is the most important infrastructure, especially in the development of individual potential, and generally in the development potential of the nation. Therefore, efforts to develop the quality of education is an absolute must to get attention. With the development of educational technology, it is expected a significant increase in the education sector, both in local and national scale. Improving the quality of education can include improving the quality of teaching materials, student understanding, as well as the competence of teachers. **Darmawan (2006)**

Advancement in internet technology have a major impact for the life of education. Internet is driving the advancement of education because of the internet, we can make communication more extensive than what was previously. Just imagine the internet discussion can take place not only in the obvious class of the class load limit, with the internet, space, time and place is no longer a problem.

Hites and Ewing (1997) described the Web as a powerful tool that facilitates the distribution of instructional resources regionally and globally.

Internet is used to discuss the scope of not only regional but in the world. The use of email is the beginning of a learning process and improve the discussion on the mailing lists is also an embryo for distance learning. Web has lots of features (eg, text, images, sounds and video clips) are very good to support the interaction between students and educators. In essence, technology education can be a kind of visual aids and devices often or can easily be found in some educational institutions. But along with growing interest to use computers in all activities, some educational technology development is directed to use the computer as a medium to support the learning process. **Darmawan (2006)**

Increasingly difficult to pass, the teachers are supposedly able to equip students in the national exams. In addition to providing teacher materials, teacher also tested the ability of students with a national practice exam. Try out the process of implementing a national exam that has been running at SMK Pembangunan Pemuda Masaran is conventionally, the teacher gives questions, students are working and to obtain the student corrected. Students can not know the results then try out as well, so the students' motivation to learn are decreases.

This document is set in 10-point Times New Roman. If absolutely necessary, we suggest the use of condensed line spacing rather than smaller point sizes. Some technical formatting software print mathematical formulas in italic type, with subscripts and superscripts in a slightly smaller font size. This is acceptable.

2. Basic Theory

2.1. Understanding Learning Media

Learning Media is a tool that is used to facilitate the learning process. Meanwhile, the definition of instructional media Media Learning According to I Wayan Santyasa (2007). The word media is plural form of the word medium. Medium can be defined as an intermediary or the introduction of the communication from sender to receiver. Media is one of the components of communication, namely as a messenger from the communicator to the communicant. Based on these definitions, we can say that learning is a process of communication. Contains the five components of the learning process of communication, the teacher (communicator), instructional materials, instructional media, students (communicant), and the learning objectives. Thus, learning media is everything that can be used to deliver the message (instructional materials) so as to stimulate the attention, interests, thoughts and feelings of the students in learning activities to achieve learning objectives.

2.2. Types of Learning Media

1. The text. The basic elements for an information which has various types and forms of writing that seeks to appeal the delivery of information.
2. Media Audio. Help deliver a more memorable edict help improve traction on something offerings. Type of audio including background noise, music or sound recordings and more.
3. Visual Media. Media that can provide visual stimuli such as pictures / photos, sketches, diagrams, charts, graphs, cartoons, posters, bulletin boards and others.
4. Projection Motion Media. These include motion film, film bracelets, TV programs, video tapes (CD, VCD, or DVD)
5. Artificial objects / miniature. Such as three-dimensional objects that can be touched and felt by the students. Media was created to overcome the limitations of both objects and situations so that the learning process is still running well. 6. Humans. This includes teachers, students, or expert / expert in the field / particular matter.
Supriatna (2009)

2.3. Benefits of Learning Media

1. Clarify the presentation of a message is not to be too verbalistis.
2. Overcome the limitations of space, time and power senses such as:
   a. Objects that are too large, can be replaced with reality, image, movie frames, film, video image, or model.
   b. Small objects that assisted with micro projectors, film slides, video images or pictures.
   c. Motion is too slow or too fast can be helped with timelapse, highspeed slow motion photography or video playback.
   d. Event or events that occurred in the past may reappear through the recording film, video, or photos.
   e. Objects that are too complex to be presented with a model, diagram.
   f. Too broad a concept that can be visualized in the form of films, slides, pictures or video
3. By using appropriate media and varied learning can overcome the passivity of students. In this case the medium of learning is useful for:
   a. Excite learning.
   b. Allow direct interaction between the students with the environment and the facts
   c. Allows students to learn by themselves according to interests and abilities
4. With the unique nature of the students as well with the environment and experience different, while the curriculum and learning materials are the same for each student, this problem can be overcome by the ability of learning media:
   a. Provide the same stimulus
   b. Equate experience
   c. Lead to the same perception.
   Supriatna (2009)

2.4. Elements of Online Learning

Many wrote that the research element of the web learning component must be a virtual class is the same as a conventional class. The difference is when a conventional class must have physical form. But that was formed in the virtual class online learning is more directed to the virtual class that no other use of Internet technology in their applications. There are so many factors that can begin construction of a virtual class needs a dynamic web, like the animations, video, audio, and is used to present a lesson, so students who use the web learning can be really active and follow the lecture. Web learning should also be able to change the habits of the traditional classroom students, that are passive to active learners who seek to know from existing sources. So it can be discussed and issued an opinion his opinion that knowledge transfer will occur as expected. **Hasibuan (2006)**

2.5. Understanding PHP

According Triswansyah Yuliano; 2003, PHP (an acronym for PHP: Hypertext Preprocessor) is a programming language that serves to create dynamic websites and web applications. In contrast to HTML which can only display

static content, PHP can interact with a database, file and folder, making PHP can display dynamic content from a website. Blogs, Online Store, CMS, Forum, and Social Networking Website is a sample web application that can be made by PHP. PHP is a scripting language, not language tag-based like HTML. PHP includes a cross-platform language, this means that PHP can run on different operating systems vary (Windows, Linux, or Mac). PHP programs are written in a file as plain text (plain text) and have the suffix ". Php".

2.6. Terms Running PHP

To be able to run, PHP requires web server, which is responsible for processing the php files and sends the processing results to be displayed in the client browser. Therefore, PHP includes server-side scripting (script is processed on the server). Web server is a software that is installed on the local computer or other computers on the internet intranet network that serves to serve web requests from the client.. Web servers are most widely used today PHP is "Apache" (www.apache.org). In addition to Apache, PHP also need a PHP binary (www.php.net) that can be configured as an Apache module or as CGI. For media data storage (database server), PHP used to use "MySQL" (www.mysql.com).

2.7. MySql

According to Agus Saputro (2011), MySQL is also the software is open source. As the name implies, the standard language used was SQL, SQL stands for Structured Query Language, which is a standard language for database processing. MySQL to work using the language of the database or DBMS (Database Management System). But the script is processed by a PHP server script only its course (which is enclosed in <? Php and?>). The rest will be directly sent to the client browser without processing it first. *Yuliano(2003)*

j. Study of Library

Hasibuan (2006) concluded in his paper that in designing a web that is used for e-learning, required a lot of convenient features that can interact with each other. Management consists of the schedule and grade, interaction with the tools and support email and chatingnya like e-library. All is a unity which, if it goes according to its function will give birth to active student learning and student knowledge because they have extensive knowledge not only of a single resource, but with a lot of resources.

Darmawan (2006) in his paper reveals that the model through the development of computer-based learning media is expected to enhance students' understanding of the design disciplines, which in turn can increase their competence when the study has been completed. Increased competence will certainly be able to

change the public perception of design education in particular paradigm, and in art education in general. From the results obtained, it can be concluded that the application has to run well in accordance with the expected goal is to create an application that helps a person to do the typing with ten fingers and pass judgment. Results of assessment using fuzzy systems have the advantage that the values obtained are not comparable with the results of absolute but also in comparison with another user who has conducted training typing with this application so the user can know the level.

3. Analysis

3.1. Systems Ongoing

Bina Vocational High School Youth Masaran is one school located in Sragen district. SMK Youth Development has 811 students, 40 educators and 15 education personnel. Youth Development in Vocational students attend a variety of exercises (try out) to prepare a national exam that includes Indonesian, English and Mathematics to be able to meet the minimum passing standards is increasing.

The process of implementation of the exercise (try out) a national exam that has been running at SMK Masaran Youth Development is conventionally the teacher gives questions, students are working on and corrected by the teacher to get the students.

3.2. Analysis of Problems

With the implementation of which is conventional practice and about the training given to students at national exams are all the same, makes the student to commit fraud. Therefore, the students gained a doubt, whether the correct value is the value obtained in accordance with the its ability alone. To facilitate the implementation of the national exam practice, it will be designed application-based national exam practice website. with the application of the national exam training is expected to help students prepare for national examinations.

3.3. Analysis of Needs

Tools that can support in conducting this study consisted of two parts, the hardware (hardware), software (Software) Hardware (Hardware). Computer with enough specifications to run the PhP software, Dreamweaver, XAMPP, Adobe Photoshop CS3, Corel Draw X4, Microsoft Office 2007 on Microsoft Windows 7 operating system. In conducting research using AMD Sempron (tm) Processor 2800 +, 256 MB memory, 30 GB hard drive, 32 MB VGA Card, Monitor with 1047x768 display setting 32-bit color, software (Software). The software used in this study include Operating Systems Windows 7, XAMPP as the server and database processing as a web server, Adobe Photoshop.

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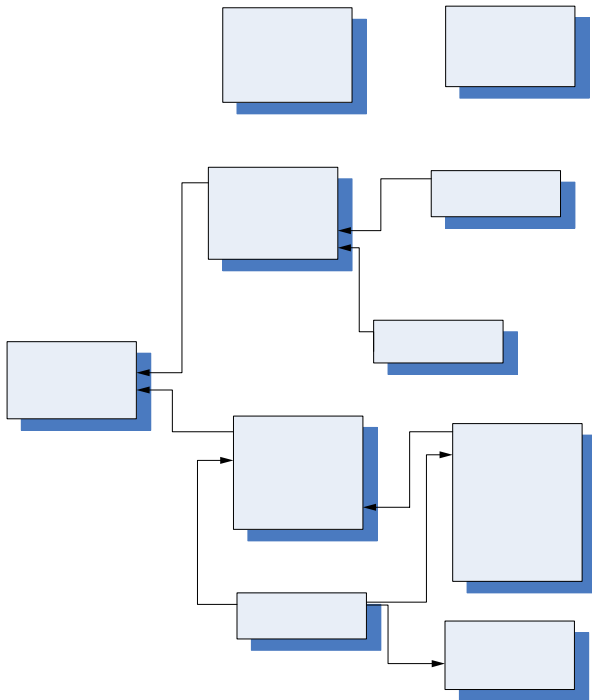
3.4. Relation Between Table

Figure 3.1. Relational

4. Implementation

4.1. Making *Database*

In making application to the National Exam Training Vocational School database or a database created by XAMPP. Database used for the manufacture of Exercise National Exam Applications are named *un.sql* that consist of *tbdownload, tbguru, tbinformasi, tbkelas, tbmapel, tbnilai, tbsiswa, tbsoal, tbtahundiklat, tbujian, user*.

4.2. Image Visit Website

a. Main Display

The main view in the exercise of national examinations, there are three menu options. Students menu is only the students go to the website. Menu teachers for teachers in the study. While Admin only for administrators

Figure Main Page.

b. Student Login Page

Login page is a page that allows students to go to the website.
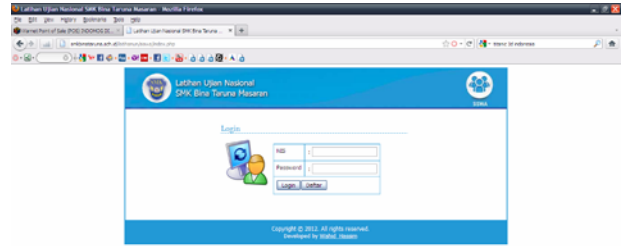
Figure Student Login Page

c. Register Page

These pages are used to create a new account for students who do not already have an account to login to the Application Exercise National Exam. And then they waiting for confirmation from the Admin.

Picture List of New Student Account

d. Design Exam Page

In this page the student can do the exercise in accordance with the National Examination of the tested eye test

Picture Design Exam Page

e. Exam page Job
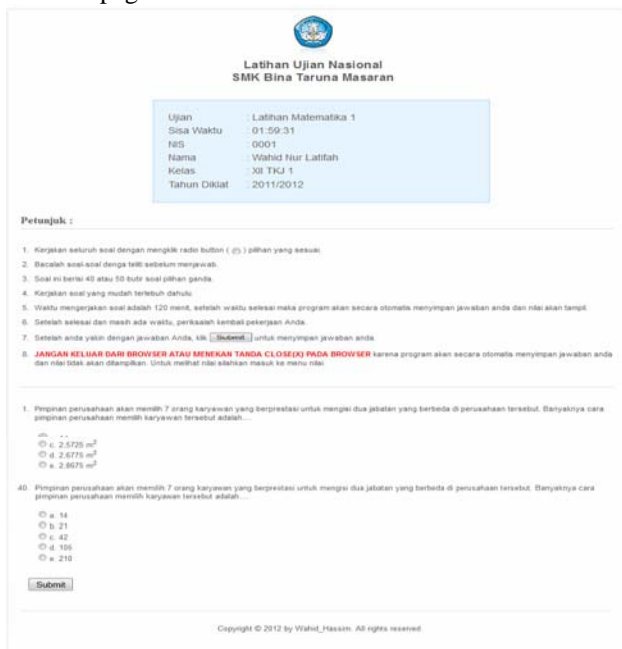
Figure *Worksheet Exam*

f. Work Results Exam Page
In this page the student can see the value of the test is done after students have inished.

Figure The page After Doing Exam

g. The List Page
In these pages, students can see all the values of the subjects had done
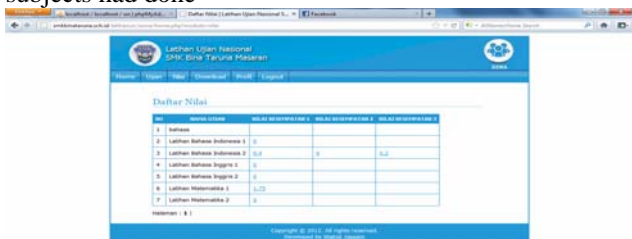
Picture The List Page

When the cursor is placed on the value of the evidence tone or real question, the question wrong, the question is not answered and value.
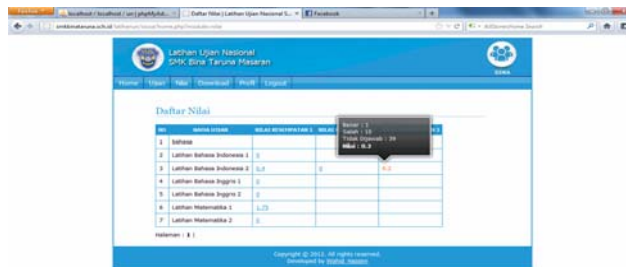
Figiue *Description of Value*

h. Download Page
In this page the student can retrieve or download the course materials.

Figure D*ownload Page*

i. Profile Page
In this page the student can change the password to maintain account security.

Figure P*rofil Page*

Teacher Page
a. *Teacher Login Page*
Login page is a page that allows teachers to go to the website.

Picture Login Page

b. *Teacher Login Page*

In this page the teacher can manage the website by selecting the menu contained in the website
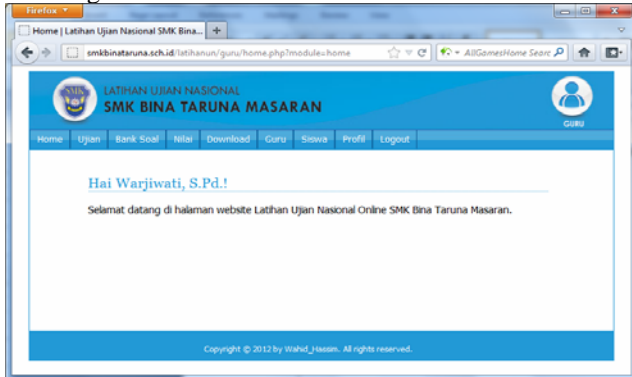
Figure Home Teacher

c. *Exam Teacher*

In this page teachers can view a list of exercises that are active national exams.

Figure *Page List of Exam*

d. *Page Add of Exam*

In this page teachers can add and enable the national practice exam questions that will be tested.
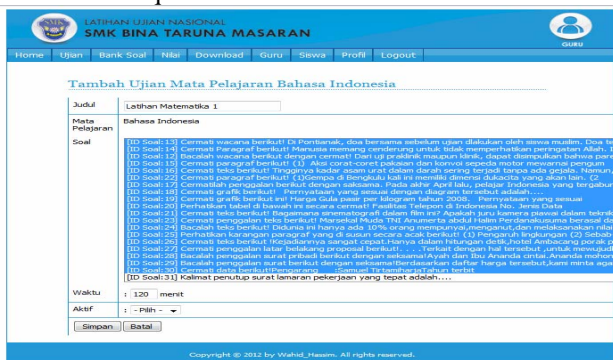
Figure *Add the exam*

e. Test Bank Page
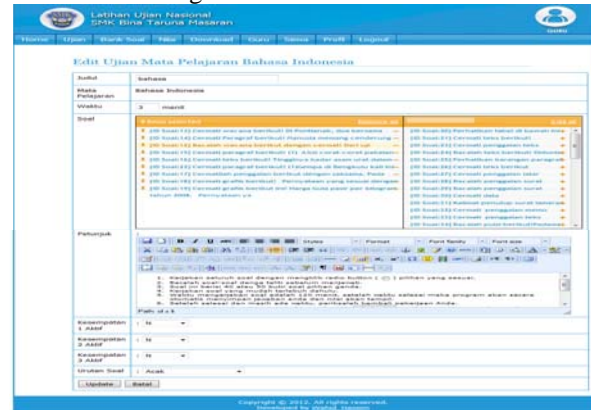
Figure Test Bank Page

In this page teachers can view the full list of national practice exam questions that will be tested.

Figure Picture Test Bank Page

f. Add a Page Problem Teacher

In this page teachers can add to the national practice exam questions that will be tested.
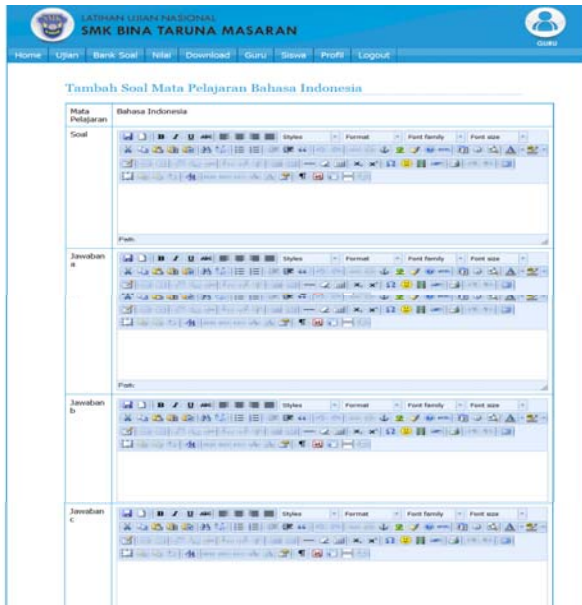
Figure Design Problem

g. Edit Page Problem
In this page the teacher can edit the fields of study questions that have been included.
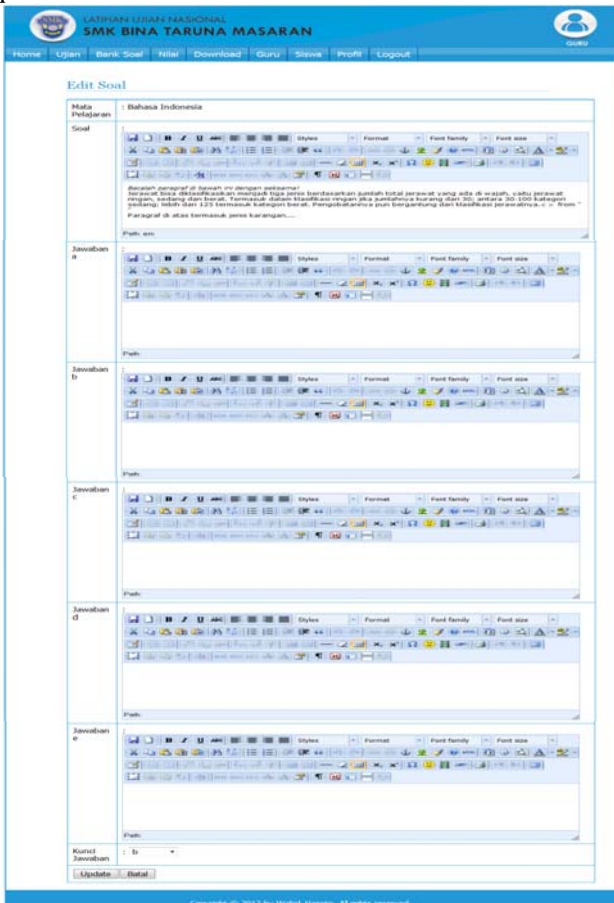
Figure Exam *Editing*

The page design In this page teachers can see the student scores.

Figure Value Page

h. Design Value List
In this page teachers can view a list of the students and can remove the value.
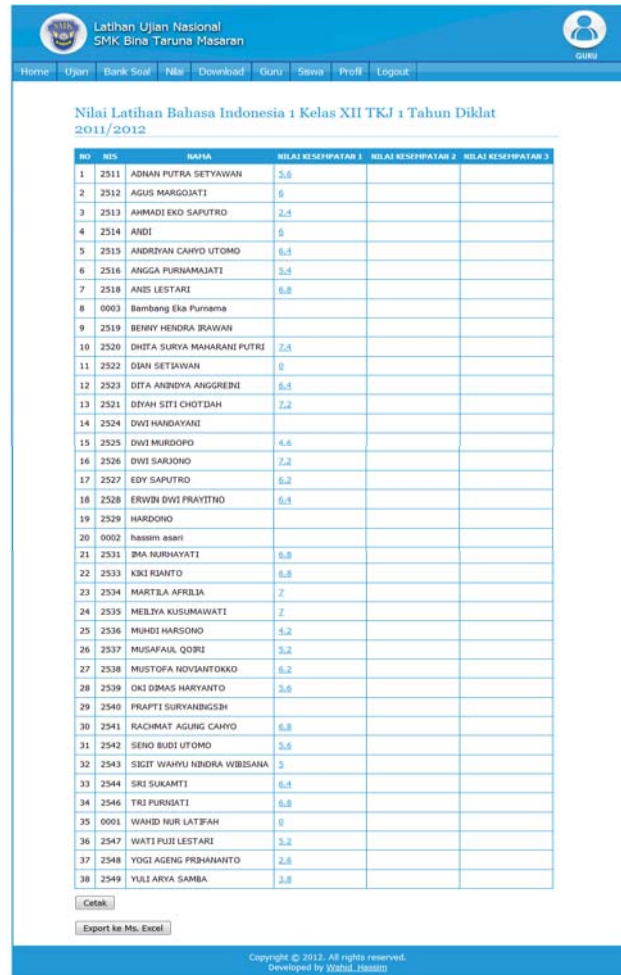
Figure *List of Value*

i. Page A list of files
In this page teachers can add files, edit files, download and delete files to be downloaded by the student material.

Figure List of File

j. Add a File Download Page

In this page teachers can add to the material file to be downloaded by students.

Figure Added File

k. List Teacher Page

In this page teachers can view a list of teachers of other ubjects

Picture List of Teacher

l. List of Student Page

In this page studies teachers can view a list of all students.

Figure List of Student

a. Exam List page

In this page the administrator can view a list of all exams.

Figure List of Exam

a. Page List of Teachers

In this page the administrator can view a list of teachers' subject areas.

Figure Page List of Teachers

a. Students page

In this page the administrator can view a list of students who are active and not active. For students who do not actively need to be confirmed through the edit menu.

Figure Student Page

a. information Page

In this page the administrator can view, edit, activate and deactivate the announcement.

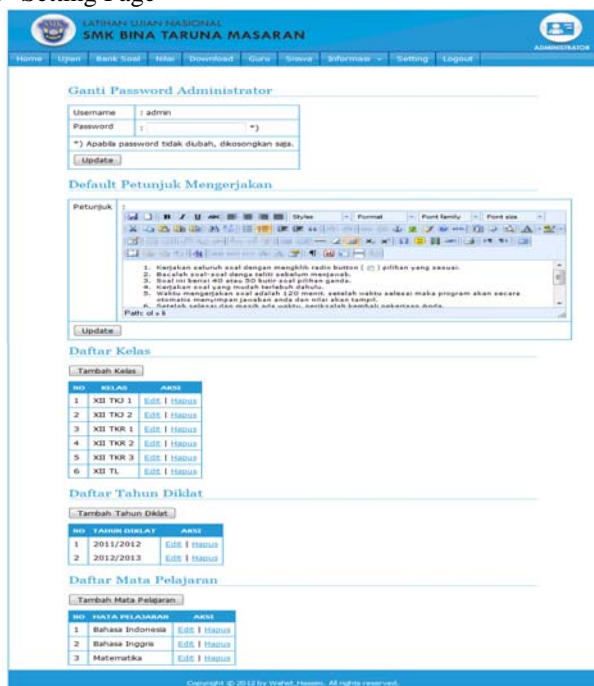

Figure Information Page

a. Setting Page

Figure Setting Page

4.3. Trial

After the installation process on a computer website server is completed it is necessary to test.. The test application exercises Vocational High School National Exam conducted for 3 days. The following schedule of implementation of the National Examination Training Vocational School

Table Schedule of National Examination in Vocational Training Youth Development Masaran

Table 1. Trial Schedule

No	Hari / Tanggal	Waktu Aktif Ujian	Mata pelajaran
1	Tuesday 3 April 2012	08.00 s.d. 17.00 WIB	Indonesian Language
2	Wednesday, 4 April 2012	08.00 s.d. 17.00 WIB	Matematics
3	Thursday, 5 April 2012	08.00 s.d. 17.00 WIB	English Language

The results of trials in the use of the National Examination Application Training Vocational School:

1. Tests on the first day is Tuesday April 3, 2012, found cheating that students can do when it opened the exam and the student work sheet or cover sheet and students working to reopen the examination, students are still able to work again with the whole time.

2. Tests on the second day is Wednesday April 4, 2012 with the subjects of mathematics, students get bad grades. while the admin and teachers do not know whether the students are working or not working because there is no column to determine right or wrong in practice the application of national exams.

3. Tests on the third day on Thursday 5 April 2012 the National Examination Application Exercises secondary vocational schools run smoother because no fraud was found as the first and second day.

5. Result

a. Process Pelakasaan Exercise National Exam for Vocational High School of Industrial Engineering at SMK Masaran Youth Development can be carried out online.

b. With the students can immediately find out the value after the completion of work to make students more motivated and keen to learn as stock mengajadapi test.

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