EMPOWERMENT OF CSE-UCLA MODEL BASED ON GLICKMAN QUADRANT AIDED BY VISUAL APPLICATION TO EVALUATE THE BLENDED LEARNING PROGRAM ON SMA NEGERI 1 UBUD

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ABSTRACT

The purpose of this research was to obtain information about effectiveness level of blended learning program implementation on SMA Negeri 1 Ubud through evaluation result evaluated from the component of system assessment, program planning, program implementation, program improvement, program certification by using CSE-UCLA model based on Glickman quadrant aided by visual application. Besides, this study also aims to obtain information about the constraint found in the implementation of blended learning program on SMA Negeri 1 Ubud. The approach used in this research was qualitative with an evaluative method. The evaluation design used in this research was the CSE-UCLA model, which consists of five evaluation components, such as system assessment, program planning, program implementation, program improvement, and program certification. Subjects involved in this research, consist of head of school, head of computer laboratory, and two information technology teams, all subjects involved during the interview. The activity to obtain data from questionnaire distribution results, it involves five teachers and ten students. Determination of all research subjects using purposive sampling technique. The results showed good category on the effectiveness of blended learning program implementation on SMA Negeri 1 Ubud. Those statement reinforced by an evaluation based on the Glickman quadrant aided by visual application, where the evaluation results lie in the ‘Good’ quadrant, which is indicated by a combination of + + + - + values for each evaluation components.

Keywords: CSE-UCLA, Evaluation, Glickman Quadrant, Blended Learning

1. INTRODUCTION

The profession as a teacher is a field of work that requires special skills based on the principle of professionalism that should develop professionalism continuously to change the character of learners from the unknown to known, from the bad to be good or from good and even become better. Encounter the character of learners who are always different and has been affected by technological progress becomes a challenge for a teacher. As a teacher, ideally must have the willingness to continue for learning and develop themselves following the development of science and technology increasingly sophisticated, so inevitably and likes or dislike, a teacher is required to have to learn and adapt to technological advances that occur today.

Technological advances greatly affect the various fields of life, including also in the field of
education, where advances in technology affect the interaction that occurs among teachers and learners in the learning process. Learning process not only occurs conventionally through face to face in the classroom but also has developed in the form of online learning through internet facilities. Learning that combines the learning process through face to face in the classroom with the learning process through online is often said as blended learning.

Through blended learning, synchronous and asynchronous online learning can be implemented without leaving the face-to-face learning process. This statement consistent with the concept that blended learning as a mix learning model that led by traditional instructors, synchronous online learning, self-learning asynchronously, and task-based structured training from a teacher [1].

Blended learning can well do if supported by good infrastructures, one of them is the availability of adequate platform. Some platforms can be used in learning with blended learning such as Group Miling List (Mailing Lists, like Yahoogroups, Google+, etc.), Web Blogs, Social Media (Facebook, Twitter, Instagram, Path, etc.) Learning Management Systems or LMS applications (such as Moodle, Edmodo, Quipper, Kelase), etc. [2].

One school in the area of Bali, especially in Gianyar regency that has applied blended learning in the learning process through learning program that uses the Moodle application platform that is SMA Negeri 1 Ubud [3]. At first glance, the blended learning program implemented by SMA Negeri 1 Ubud has been running smoothly, but the reality in this program is still found obstacles both regarding the provision of facilities and infrastructure, human resources, policies and others. To problem-solving these problems, it is necessary to evaluate the blended learning program implemented on SMA Negeri 1 Ubud.


Evaluation results can show the program weaknesses clearly so that later can be used as a basis for making improvements to the blended learning program. The new findings that can be done to overcome the obstacles in the implementation of blended learning program on
SMA Negeri 1 Ubud in the form of empowering CSE-UCLA model based on visual application, because this evaluation model is very suitable to evaluate service program (such as blended learning) so ease in determining the effectiveness level of the program’s implementation and can get the right recommendations based on valid and accurate calculations following the Glickman pattern through visual application.

That statement is consistent with the concept that CSE-UCLA evaluation model is appropriate and suitable for evaluating service programs, such as library programs, cooperatives, and banks [90]. Through CSE-UCLA evaluation model, the program can be evaluated from several components such as system assessment to evaluate the initial existence of the program, program planning to evaluate the things needed as input in the program, program implementation to evaluate the program promotion, program improvement to evaluate program performance, and program certification to evaluate the impact/usefulness of the program for its users.

Some previous research results related to the evaluation of service programs in general and the evaluation of blended learning programs in particular that researchers can use as a basis, reference and comparison in this research include the research results have conducted by Dewa Gede Hendra Divayana about the evaluation of digital library programs based on expert systems on Universitas Teknologi Indonesia [2] has similarities with the researcher concerning utilization the evaluation model used to evaluate the services program, i.e. CSE-UCLA, whereas the difference lies in the evaluated object, where Dewa Gede Hendra Divayana evaluates the digital library program based on the expert system, while the authors evaluate the blended learning program.

The research results obtained by Hardjanto, Koestoro, and Riswandi about the evaluation of learning mathematics based on blended learning model in class VII of SMP Islam Terpadu Ar Raihan [91] have similarities with researchers regarding the object being evaluated is the blended learning program, while the difference lies in the utilization of evaluation model used to evaluate the program, where Widodo Tri Hardjanto, Budi Koestoro, and Riswandi use CIPP model, while the author uses CSE-UCLA model. The weakness found in research conducted by Hardjanto, Koestoro, and Riswandi was not yet able to show the promotion of blended learning model in Mathematics learning which explained in detail to the students.

The research results conducted by Alfina and Hanum on the Effectiveness of Management of Teachers’ Working Groups Kindergarten I of Manguharjo Districts, Madiun City [92] also have similarities concerning utilizing evaluation models used to evaluate the program, i.e., CSE-UCLA, whereas the difference lies in the evaluated object, wherein Alfina and Hanum evaluate the management of working group of kindergarten teachers, while the author evaluates the blended learning program. The research results obtained from Yuniarito on the implementation of evaluation on moodle-based blended learning in Chemistry learning in college [93] have similarities with research results that conducted by researchers in this research about the evaluated object, i.e. blended learning program, while the difference lies in the utilization evaluation model used to evaluate the program, where Yuniarito uses evaluation model based on process and outcome, while the author uses CSE-UCLA model.

Based on the problems and previous research conducted by some researchers related to the evaluation of service programs so that it can be precisely explained the problem statements of this research, such as (1) How is the effectiveness level of blended learning program that evaluated using CSE-UCLA model based on Glickman quadrant with aided by visual application regarding system assessment component, program planning component, program implementation component, program improvement component, and program certification component?; (2) What are the constraints found in the implementation of blended learning program on SMA Negeri 1 Ubud after conducting the evaluation using CSE-UCLA model based on visual application aided by Glickman quadrant and how does the solution solve those constraints?

2. RESEARCH METHODOLOGY

2.1 Research Approach

The approach used in this study was a qualitative approach. The method used in this research was evaluative research method. The evaluation design used was the CSE-UCLA model, which has five stages:

a. System Assessment

On this stage, the provision of information about the initial state of the blended learning program was evaluated. The stages of the system assessment aims to provide information about the initial conditions that need to be evaluated in the
blended learning program, including 1) the vision of blended learning implementation, 2) the mission of blended learning implementation, 3) the purpose of blended learning implementation, 4) Legal law of blended learning implementation, 5) Strategy to fulfill the human resource competency requirement that is involved in the blended learning implementation, 6) support of school community in the blended learning implementation.

b. Program Planning

On this stage the selection of effective attributes to meet the needs of the program. On this stage also aims to help select the effective aspects to meet the identified needs of system assessment. The effective aspects used to evaluate the fulfillment of the needs of blended learning program implementation are: 1) the readiness of teacher ability in the blended learning operation, 2) the readiness of students' ability in the blended learning operation, 3) the readiness of development team in preparing the blended learning program, 4) the availability of organizational structure clearly from the management team and the developer of blended learning program; 5) availability of facilities and infrastructure supporting the implementation of blended learning programs; and 6) availability of funds to support the implementation of blended learning program.

c. Program Implementation

On this stage has done giving information or introduction program to the blended learning user. The purpose of this stage was to socialize the blended learning program to the user to facilitate the user in understanding the function of the blended learning program and understand the tools needed in the operation of blended learning. Things that need to be evaluated at this stage include: 1) socialization of blended learning features for users, 2) introduction of hardware needed in blended learning, and 3) introduction of software needed in blended learning.

d. Program Improvement

On this stage, information gives to the user about the operation of the blended learning program, the work of the development team in realizing the blended learning program and information about the mechanism of budget management in a transparent manner in the blended learning implementation was reported to the Head of School and the stakeholders. Some of the things that are evaluated include: 1) Learning make the Blended Learning Content for teachers, 2) learning for teachers and students about the use of blended learning program features, 3) installation and setting hardware and software to realize the blended learning, 4) budget management for the implementation of blended learning.

e. Program Certification

Some things are evaluated on this stage include: 1) quality of the physical display of blended learning applications (tangibles), 2) the level of accessibility of blended learning (reliability) applications, 3) response speed of the blended learning application (responsiveness), security in the utilization of blended learning application (assurance), and 5) ease level of implementation of discussion forum through blended learning application (empathy).

2.2 Research Subject

Research subjects were used in this study include five teachers, ten students, two information technology team, head of the computer lab, head of school. Determination of research subjects using purposive sampling technique, namely the stakeholders with the implementation of blended learning program on SMA Negeri 1 Ubud.

2.3 Research Object

The object of this research was blended learning program applied on SMA Negeri 1 Ubud.

2.4 Research Location

The location of this research was on SMA Negeri 1 Ubud.

2.5 Instruments of Data Collection

The data collection instruments used in this research was to obtain some expected data that is in the form of questionnaires given to the users of blended learning program (teachers and students) to get the assessment result of system assessment components in the blended learning program, especially on two aspects, such as 1) the strategy of fulfilling the human resource competency that needs to be involved in the blended learning implementation, and 2) the support of school community in the implementation of blended learning. Besides, the questionnaires given to teachers and students are also used to obtain the assessment results of program planning components, especially on two aspects, such as 1) the readiness of teachers and students ability in the operation of blended learning, 2) the readiness of facilities and infrastructure supporting the blended learning implementation. On the program implementation components, the questionnaires were used to obtain assessment results on all aspects of the implementation program, such as 1) the socialization of blended learning features, and
2) the socialization of hardware and software needed in blended learning. On the program improvement components, the questionnaires were used to obtain the assessment results on two aspects, such as 1) Learning to make the Blended Learning Content for teachers, and 2) learning the use of blended learning program features for teachers and students. On the program certification components, the questionnaire was used to obtain the assessment results on all aspects of the program certification, such as 1) tangibles, 2) reliability, 3) responsiveness, 4) assurance, and 5) empathy.

The data collection instruments in the form of interview guidelines were used as a guide for interviewing with Head of School to obtain all information about blended learning program, especially in information related to vision, mission, objective, and law legality, and funding preparation of blended learning. Interview guides are also used as guidance in interviewing with the heads of laboratories and development teams related to some information, such as 1) preparedness of development team in preparing blended learning program, 2) organizational structure of management team and blended learning developer, 3) facilities and infrastructure supporting the implementation of blended learning program, 4) installation and setting of hardware and software supporting blended learning, and 5) budget management for the implementation of blended learning.

The data collection instruments in the form of observation guidance were used as a reference in conducting direct observation in the field to obtain information about the readiness of facilities and infrastructure supporting the implementation of the blended learning program. Documentation instrument was authentic evidence of the research implementation which in the form of photographs of the research process on SMA Negeri 1 Ubud, such as photos of judges expert, photos of questionnaires spread, and photos of observation implementation.

2.6 Data Analysis Techniques

Data analysis about the blended learning implementation program on SMA Negeri 1 Ubud was reviewed from the component of system assessment, program planning, program implementation, program improvement, and program certification using quantitative descriptive analysis tool. While data analysis about the constraints found in the blended learning implementation on SMA Negeri 1 Ubud using a qualitative descriptive analysis tool.

The stages of data analysis that conducted in evaluating the blended learning program on SMA Negeri 1 Ubud, such as:

1. Primary data analysis was done by analyzing data obtained from the results of filling questionnaires from program users (i.e., teachers and students). The steps in analyzing the primary data, including:
   a. Calculates the effectiveness percentage of each evaluation aspects and converts it into Guilford’s classification of validity, shown in Table 1 below.

   **Table 1: Categorization of Effectiveness Percentage that Referring to Guilford’s Validity Classification**

<table>
<thead>
<tr>
<th>Range of Effectiveness Level</th>
<th>Classification/Categorization</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.80 – 1.00</td>
<td>Excellent</td>
</tr>
<tr>
<td>0.60 – 0.80</td>
<td>Good</td>
</tr>
<tr>
<td>0.40 – 0.60</td>
<td>Moderate</td>
</tr>
<tr>
<td>0.20 – 0.40</td>
<td>Less</td>
</tr>
<tr>
<td>0.00 – 0.20</td>
<td>Poor</td>
</tr>
</tbody>
</table>

   b. Changed the scores obtained into the standard score (z-score) with the following formula [94]:

   \[ z = \frac{X - \bar{X}}{SD} \]  

   Notes:
   - \( z \) = Standard score
   - \( X \) = Raw scores obtained by respondents
   - \( \bar{X} \) = Mean
   - SD = Standard Deviation

   c. Changed the z-score into a T-score with the formula:

   \[ \text{Skor T-score} = (z-score \times 10) + 50 \]  

   Where:
   - \( T > 50 \) : high component values, symbolized by ‘+’
   - \( T < 50 \) : low component values, symbolized by ‘−’

   If 50 is a constant number which is the average limit of the normal curve moving from 20 to 80 with six standard deviation values, so that a value of standard deviation is 10.

   d. Interpreting T-scores of each component into the category of Glickman Quadrant implementation level, as shown in Table 2 and then implemented into a computerized system aided by visual application to obtain quick and accurate calculations.
e. The next step was to interpret the analysis results of the components that researched for each component, among components and holistically to obtain information about the effectiveness level of each component.

2. Secondary data analysis was done by several stages:
   a. Confirming the results of the primary data tabulation (obtained from questionnaire distribution results) with data obtained through interviews, observation, and documentation.
   b. Conducting searches, discussions, and inferences on the things that led to the information about the effectiveness of blended learning implementation on SMA Negeri 1 Ubud.

   Based on two analysis stages, both the primary and secondary data, it can be found problems or constraints that exist and can be recommended solutions.

3. RESULTS AND DISCUSSION

3.1 Results

3.1.1 The effectiveness level of blended learning implementation viewed from system assessment component

Effectiveness level of blended learning implementation on SMA Negeri 1 Ubud if viewed from the perspective of system assessment components can be seen more in Table 3 below.

<table>
<thead>
<tr>
<th>No</th>
<th>Indicator or Criteria</th>
<th>Percentage of Effectiveness (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>The strategy of fulfilling the human resource competency needs</td>
<td>86.00</td>
</tr>
<tr>
<td>X1</td>
<td>Efforts to increase user competence in making digital files that are used as learning resources or content of blended learning</td>
<td>88.00</td>
</tr>
<tr>
<td>X2</td>
<td>Efforts to increase user competence in the operating of blended learning</td>
<td>84.00</td>
</tr>
<tr>
<td>B1</td>
<td>Support from school community and society</td>
<td>84.70</td>
</tr>
<tr>
<td>X3</td>
<td>Support from the school community and society in the form of thoughts (suggestions and criticism) to hold the blended learning</td>
<td>86.70</td>
</tr>
<tr>
<td>X4</td>
<td>Support from school community and society in the form of funds for the purchase of infrastructure and facilities supporting the blended learning</td>
<td>82.70</td>
</tr>
<tr>
<td></td>
<td>Average of Total the Effectiveness Percentage</td>
<td>85.30</td>
</tr>
</tbody>
</table>
3.1.2 The effectiveness level of blended learning implementation viewed from program planning component

Effectiveness level of blended learning implementation on SMA Negeri 1 Ubud if viewed from the perspective of program planning components can be seen more in Table 4 below.

Table 4: Effectiveness Level of Blended Learning Implementation Viewed from Program Planning Component

<table>
<thead>
<tr>
<th>No</th>
<th>Evaluation Aspects</th>
<th>Percentage of Effectiveness (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2</td>
<td>The readiness of user ability in the blended learning operation</td>
<td>67.10</td>
</tr>
<tr>
<td></td>
<td>Users can use computers and internet</td>
<td>70.70</td>
</tr>
<tr>
<td>X5</td>
<td>Users can create and manage documents or digital files to be uploaded or published into blended learning</td>
<td>66.70</td>
</tr>
<tr>
<td>X6</td>
<td>Users can use blended learning support facilities</td>
<td>64.00</td>
</tr>
<tr>
<td>B2</td>
<td>Facilities and infrastructure supporting the implementation of blended learning program</td>
<td>62.70</td>
</tr>
<tr>
<td>X8</td>
<td>The availability of classrooms or laboratories are adequate and suitable with the needs of the implementation of blended learning</td>
<td>65.30</td>
</tr>
<tr>
<td>X9</td>
<td>The availability of server computers are adequate to support the implementation of blended learning</td>
<td>54.70</td>
</tr>
<tr>
<td>X10</td>
<td>Availability of client computers are adequate to support the implementation of blended learning</td>
<td>58.70</td>
</tr>
<tr>
<td>X11</td>
<td>Availability of adequate computer network facilities to support the implementation of blended learning</td>
<td>58.70</td>
</tr>
<tr>
<td>X12</td>
<td>The availability of stable internet access to support the implementation of blended learning</td>
<td>64.00</td>
</tr>
<tr>
<td>X13</td>
<td>The availability of stable electrical resources to support the implementation of blended learning</td>
<td>73.30</td>
</tr>
<tr>
<td>X14</td>
<td>Availability of adequate supporting equipment for creating digital documents or digital files</td>
<td>61.30</td>
</tr>
<tr>
<td>X15</td>
<td>Availability of adequate air conditioning facilities in the classroom</td>
<td>56.00</td>
</tr>
<tr>
<td>X16</td>
<td>Availability of tables and chairs with adequate conditions in the classroom</td>
<td>72.00</td>
</tr>
<tr>
<td></td>
<td>Total of Average</td>
<td>63.80</td>
</tr>
</tbody>
</table>

3.1.3 The effectiveness level of blended learning implementation viewed from program implementation component

Effectiveness level of blended learning implementation on SMA Negeri 1 Ubud if viewed from the perspective of program implementation components can be seen more in Table 5 below.

Table 5: Effectiveness Level of Blended Learning Implementation Viewed from Program Implementation Component

<table>
<thead>
<tr>
<th>No</th>
<th>Evaluation Aspects</th>
<th>Percentage of Effectiveness (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A3</td>
<td>Socialization of blended learning features for users</td>
<td>61.30</td>
</tr>
<tr>
<td></td>
<td>The availability of clear socialization are provided to the users about the existence of blended learning through pamphlets or brochures posted on information boards or from Whatsapp</td>
<td>65.30</td>
</tr>
<tr>
<td>X17</td>
<td>The availability of clear socialization are provided to the user about the existence of blended learning through the manual book</td>
<td>57.30</td>
</tr>
<tr>
<td>X18</td>
<td>The availability of clear socialization are provided to the user about the existence of blended learning through the manual book</td>
<td>57.30</td>
</tr>
<tr>
<td>B3</td>
<td>Introduction of hardware and software in realizing blended learning</td>
<td>59.30</td>
</tr>
<tr>
<td>X19</td>
<td>The availability of clear forms of socialization through pamphlets or brochures are given to users about the hardware and software needed to blended learning implementation</td>
<td>62.70</td>
</tr>
<tr>
<td>X20</td>
<td>The availability of clear forms of socialization are provided to users about the hardware and software needed for the implementation of blended learning program through a manual book</td>
<td>56.00</td>
</tr>
<tr>
<td></td>
<td>Average of Total the Effectiveness Percentage</td>
<td>60.30</td>
</tr>
</tbody>
</table>

3.1.4 The effectiveness level of blended learning implementation viewed from program improvement component

Effectiveness level of blended learning implementation on SMA Negeri 1 Ubud if viewed from the perspective of program improvement components can be seen more in Table 6 below.
Table 6: Effectiveness Level of Blended Learning Implementation Viewed from Program Improvement Component

<table>
<thead>
<tr>
<th>No</th>
<th>Evaluation Aspects</th>
<th>Percentage of Effectiveness (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A4</td>
<td>The learning to make the content of blended learning</td>
<td>64.70</td>
</tr>
<tr>
<td>X21</td>
<td>Users have following the training/workshop about creating the account to access blended learning</td>
<td>74.70</td>
</tr>
<tr>
<td>X22</td>
<td>Users have following the training/workshop about creation the suitable content with file formats that can be incorporated into blended learning</td>
<td>54.70</td>
</tr>
<tr>
<td>B4</td>
<td>The learning to blended learning usage</td>
<td>59.30</td>
</tr>
<tr>
<td>X23</td>
<td>Users have following the training/workshop about the use of features to create new classes, discussion forums and upload material content into blended learning</td>
<td>65.30</td>
</tr>
<tr>
<td>X24</td>
<td>Users have following the training/workshop about the use of features to create task facilities, quiz, middle test and final test into blended learning</td>
<td>53.30</td>
</tr>
</tbody>
</table>

Average of Total the Effectiveness Percentage: 62.00

3.1.5 The effectiveness level of blended learning implementation viewed from program certification component

Effectiveness level of blended learning implementation on SMA Negeri 1 Ubud if viewed from the perspective of program certification components can be seen more in Table 7 below.

Table 7: Effectiveness Level of Blended Learning Implementation Viewed from Program Certification Component

<table>
<thead>
<tr>
<th>No</th>
<th>Evaluation Aspects</th>
<th>Percentage of Effectiveness (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A5</td>
<td>The Effectiveness of Blended Learning Program From Tangibles Dimension</td>
<td>59.20</td>
</tr>
<tr>
<td>X25</td>
<td>Classroom or laboratory conditions are still adequate for use in the implementation of blended learning</td>
<td>54.70</td>
</tr>
<tr>
<td>X26</td>
<td>Classroom or laboratory circulations are still adequate for use in the implementation of blended learning</td>
<td>53.30</td>
</tr>
<tr>
<td>X27</td>
<td>The condition of tables and chairs are adequate and worth for use in the implementation of blended learning</td>
<td>65.30</td>
</tr>
<tr>
<td>X28</td>
<td>The rooms lighting are still decent</td>
<td>64.00</td>
</tr>
<tr>
<td>X29</td>
<td>Availability of LCD projectors that are still eligible to use</td>
<td>66.70</td>
</tr>
<tr>
<td>X30</td>
<td>The main device used to operate the blended learning (especially computers) are still inadequate condition</td>
<td>62.70</td>
</tr>
<tr>
<td>X31</td>
<td>Blended learning materials in digital form are still complete</td>
<td>68.00</td>
</tr>
<tr>
<td>X32</td>
<td>Blended learning materials have updated</td>
<td>64.00</td>
</tr>
<tr>
<td>X33</td>
<td>Handbook/manual/operational standards for the use of blended learning are adequate</td>
<td>64.00</td>
</tr>
<tr>
<td>B5</td>
<td>The Effectiveness of Blended Learning Program From Reliability Dimension</td>
<td>76.00</td>
</tr>
<tr>
<td>X34</td>
<td>Blended learning programs are easily accessible to all users</td>
<td>82.70</td>
</tr>
<tr>
<td>X35</td>
<td>Access the blended learning programs can be done by the user whenever and wherever they are</td>
<td>82.70</td>
</tr>
<tr>
<td>X36</td>
<td>The teams of blended learning developers are always there when needed</td>
<td>62.70</td>
</tr>
<tr>
<td>C5</td>
<td>The Effectiveness of Blended Learning Program From Responsiveness Dimension</td>
<td>73.70</td>
</tr>
<tr>
<td>X37</td>
<td>The services provided by the blended learning development team are done quickly if there are users who encounter problems while operating blended learning</td>
<td>64.00</td>
</tr>
<tr>
<td>X38</td>
<td>The services provided by the blended learning team are done earnestly</td>
<td>68.00</td>
</tr>
<tr>
<td>X39</td>
<td>Blended learning application is very fast in giving a response in the form of notification when the user finished doing activities to upload content material into blended learning</td>
<td>76.00</td>
</tr>
<tr>
<td>X40</td>
<td>Response blended learning applications in the process of data manipulation (input, edit, delete) on the material content can be done quickly</td>
<td>86.70</td>
</tr>
<tr>
<td>D5</td>
<td>The Effectiveness of Blended Learning Program From Assurance Dimension</td>
<td>81.80</td>
</tr>
<tr>
<td>X41</td>
<td>The content of material stored in blended learning applications can be guaranteed it security</td>
<td>86.70</td>
</tr>
<tr>
<td>X42</td>
<td>Access rights for the use of blended learning applications by a user can be secured and not accessible by others without permission from the owner</td>
<td>81.30</td>
</tr>
<tr>
<td>X43</td>
<td>The teams of blended learning developers can be trusted to maintain the comfort and safety of the users of blended learning applications</td>
<td>77.30</td>
</tr>
<tr>
<td>E5</td>
<td>The Effectiveness of Blended Learning Program From Empathy Dimension</td>
<td>76.30</td>
</tr>
<tr>
<td>X44</td>
<td>The teams of blended learning developers are willing to respond the complaints and problems of blended learning from users when they have difficulty in operating blended learning</td>
<td>78.70</td>
</tr>
</tbody>
</table>
The teams of blended learning developers provide clear and easily understood information by blended learning users related to the way of operation and the things that are needed in the implementation of blended learning

Some facilities enable users to provide comments and suggestions on blended learning programs

Some facilities facilitate discussion among users of blended learning in the form of online discussion forums

Average of Total the Effectiveness Percentage

3.1.6 Effectiveness Level of Each Evaluation Component Based on the Glickman Quadrant

The effectiveness level when viewed from the perspective of all CSE-UCLA evaluation components that follow the Glickman Quadrant aided by visual application to produce T-Score which is used as the basis for categorizing the effectiveness of blended learning program on SMA Negeri 1 Ubud. The display of visual application that used to assist in determining the effectiveness level based on Glickman Quadrant of the blended learning implementation on SMA Negeri 1 Ubud can be seen in Figure 1, and the calculation result recapitulation of effectiveness level can be seen in Table 8 below.

![Figure 1: Display of Vizual Application to Determine the Effectiveness Level Based on Glickman Quadrant](image_url)

Table 8: Recapitulation of the Effectiveness Level of Blended Learning Program Implementation Viewed from All CSE-UCLA Evaluation Components and T-Scores Following the Glickman Quadrant

<table>
<thead>
<tr>
<th>No</th>
<th>Evaluation Components</th>
<th>Percentage of Effectiveness (%)</th>
<th>Evaluation Results</th>
<th>T-Score</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>System Assessment</td>
<td>85.30</td>
<td>Excellent</td>
<td>50.0027</td>
<td>+</td>
</tr>
<tr>
<td>2</td>
<td>Program Planning</td>
<td>63.80</td>
<td>Good</td>
<td>50.0007</td>
<td>+</td>
</tr>
<tr>
<td>3</td>
<td>Program Implementation</td>
<td>60.30</td>
<td>Good</td>
<td>50.0013</td>
<td>+</td>
</tr>
<tr>
<td>4</td>
<td>Program Improvement</td>
<td>66.70</td>
<td>Good</td>
<td>49.9980</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Program Certification</td>
<td>71.10</td>
<td>Good</td>
<td>50.0009</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>69.44</td>
<td></td>
<td></td>
<td>Good</td>
</tr>
</tbody>
</table>

3.1.7 Constraints in the evaluation of blended learning program on SMA Negeri 1 Ubud

Although in general the effectiveness of blended learning program implementation on SMA Negeri 1 Ubud has been classified in the good category, but there are still constraints found in the implementation of blended learning program on SMA Negeri 1 Ubud based on evaluation result using CSE-UCLA evaluation model, such as:

a. Constraints found in the program planning component

Through the program planning component, found some weaknesses in the implementation of blended learning program on SMA Negeri 1 Ubud, such as 1) server and client computers used to support the implementation of blended learning was inadequate, 2) computer network used to support
the implementation of blended learning also inadequate.

b. Constraints found in the program implementation components

Through the program implementation components, noticed some weakness in the implementation of blended learning program on SMA Negeri 1 Ubud, such as 1) socialization through an instruction manual given to the user about the existence of blended learning still not optimal, and 2) socialization through the guidebook given to users about the hardware and software needed to run the blended learning program still not optimal.

c. Constraints found in the program improvement components

Through the program improvement components, found some weakness in the implementation of blended learning program on SMA Negeri 1 Ubud, such as 1) the implementation of content creation training following the file format that can be incorporated into the blended learning has not run optimally and 2) the training of features used to create task facilities, quiz, middle test and final test in blended learning has not run optimally.

d. Constraints found in the program certification components

Through the program certification component, found some weakness in the implementation of blended learning program on SMA Negeri 1 Ubud especially in aspects of tangibles, where air circulation and classroom or lab conditions used in the implementation of blended learning was still inadequate.

3.2 Discussion

Based on the percentage of effectiveness level of blended learning program implementation on SMA Negeri 1 Ubud concerning the system assessment component was shown in Table 3 above and compared with Guilford Classification shown in Table 1, it can be explained that in the component of the system assessment, especially for aspect A1 (the strategy of fulfilling the human resource competency needs) was included in the ‘excellent’ category because the effectiveness percentage score of 84.70% was in the range 0.80 - 1.00. Therefore the aspect of B1 needs to be maintained its effectiveness. Average of total the effectiveness percentage on the system assessment component of 85.30% belongs to the ‘excellent’ category, therefore this component must be maintained its effectiveness.

Based on the percentage of effectiveness level of blended learning program implementation on SMA Negeri 1 Ubud concerning the program planning component was shown in Table 4 above and compared with Guilford Classification shown in Table 1, it can be explained that in the component of the program planning, especially for aspect A2 (the readiness of user ability in the blended learning operation) was included in the ‘good’ category because the percentage effectiveness score of 67.10% was within the range of 0.60 - 0.80. Therefore the aspect of A2 should be maintained its effectiveness. In the aspect of B2 (facilities and infrastructure supporting the implementation of blended learning program) was included in the ‘good’ category because the effectiveness percentage score of 62.70% was in the range 0.60 - 0.80. Therefore the aspect of B2 needs to be maintained its effectiveness. Average of total the effectiveness percentage on the program planning component of 63.80% belongs to the ‘good’ category, therefore this component must be maintained its effectiveness.

Based on the percentage of effectiveness level of blended learning program implementation on SMA Negeri 1 Ubud concerning the program implementation component was shown in Table 5 above and compared with Guilford Classification shown in Table 1, it can be explained that in the component of the program implementation, especially for aspect A3 (socialization of blended learning features for users) was included in the ‘good’ category because the percentage effectiveness score of 61.30% was within the range of 0.60 - 0.80. Therefore the aspect of A3 should be maintained its effectiveness. In the aspect of B3 (introduction of hardware and software in realizing blended learning) was included in the ‘moderate’ category because the effectiveness percentage score of 59.30% was in the range 0.40 - 0.60. Therefore the aspect of B3 needs to be improved its effectiveness. Average of total the effectiveness percentage on the program implementation component of 60.30% belongs to the ‘good’ category, therefore this component must be maintained its effectiveness.
Based on the percentage of effectiveness level of blended learning program implementation on SMA Negeri 1 Ubud concerning the program improvement component was shown in Table 6 above and compared with Guilford Classification shown in Table 1, it can be explained that in the component of the program improvement, especially for aspect A4 (the learning to make the content of blended learning) was included in the ‘good’ category because the percentage effectiveness score of 64.70% was within the range of 0.60 - 0.80. Therefore the aspect of A4 should be maintained for its effectiveness. In the aspect of B4 (the learning to blended learning usage) was included in the ‘moderate’ category because the effectiveness percentage score of 59.30% was in the range 0.40 - 0.60. Therefore the aspect of B4 needs to be improved its effectiveness. Average of total the effectiveness percentage on the program improvement component of 62.00% belongs to the ‘good’ category, therefore this component must be maintained its effectiveness.

Based on the percentage of effectiveness level of blended learning program implementation on SMA Negeri 1 Ubud concerning the program certification component was shown in Table 7 above and compared with Guilford Classification shown in Table 1, it can be explained that in the component of the program certification, especially for aspect A5 (the effectiveness of blended learning program from tangibles dimension) was included in the ‘moderate’ category because the percentage effectiveness score of 59.20% was within the range of 0.40 - 0.60. Therefore the aspect of A5 should be improved its effectiveness. In the aspect of B5 (the effectiveness of blended learning program from reliability dimension) was included in the ‘good’ category because the effectiveness percentage score of 76.00% was in the range 0.60 - 0.80. Therefore the aspect of B5 needs to be maintained its effectiveness. In the aspect of C5 (the effectiveness of blended learning program from responsiveness dimension) was included in the ‘good’ category because the effectiveness percentage score of 73.70% was in the range 0.60 - 0.80. Therefore the aspect of C5 needs to be maintained its effectiveness. In the aspect of D5 (the effectiveness of blended learning program from assurance dimension) was included in the ‘excellent’ category because the effectiveness percentage score of 81.80% was in the range 0.80 - 1.00. Therefore the aspect of D5 needs to be maintained its effectiveness. In the aspect of E5 (the effectiveness of blended learning program from empathy dimension) was included in the ‘good’ category because the effectiveness percentage score of 76.30% was in the range 0.60 - 0.80. Therefore the aspect of E5 needs to be maintained its effectiveness. Average of total the effectiveness percentage on the program certification component of 71.10% belongs to the ‘good’ category, therefore this component must be maintained its effectiveness.

Based on the results of effectiveness level recapitulation and the T-score following the Glickman Quadrant showed in table 8 and reinforced by the application shown in Figure 1 above shows that there was a similarity of categorization value is ‘good category’, where between the evaluation results obtained from the average score of effectiveness percentage of all evaluation components with categorization results obtained from the T value referring to the Glickman quadrant, where the value of ‘+’ (positive) in the system assessment component, the value of ‘+’ (positive) in the program planning component, the value of ‘+’ (positive) in the program implementation component, the value of ‘+’ (positive) in program certification component, also shows the same categorization value that is ‘good category’.

Therefore, it can be decided that result of the implementation of the blended learning program on SMA Negeri 1 Ubud has been running well. The results of this research have successfully answered the weaknesses found earlier by Hardjanto, Koestoro, and Riswandi in research they have done, which in this research has been able to show the existence of socialization of blended learning program and at the same time there are socialization about hardware and software used for support the implementation of the program.

Although this research has advantages and can answer weaknesses in previous studies by other researchers, but this study also has weaknesses, especially regarding difficulty determine the most dominant aspects and components in influencing and determining the optimization of blended learning program.

4. CONCLUSIONS

The evaluation of blended learning implementation on SMA Negeri 1 Ubud has been running well, which was marked by the evaluation result on every evaluation component of the CSE-UCLA model has shown good category and especially excellent in the system assessment.
component. Although in general evaluation results have shown the implementation of blended learning program on SMA Negeri 1 Ubud has been running well, but apparently, there are some constraints found in the components of program planning, program implementation, program improvement, and program certification.

Solutions that can be offered to overcome the obstacle found in this research is by using one of decision support method (weighted product or simple additive weighted) which is part of artificial intelligence, to determine the most dominant aspects and components in influencing the optimization of the blended learning program.

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