Development of a Blended Learning Environment Tool for Tertiary Students of Isabela State University

Betchie E. Aguinaldo
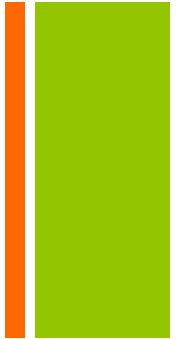Isabela State University
San Mateo Campus

RATIONALE

- Online learning, partner of educators in teaching students

- Instructional and assessment materials are entrusted technology

- However, Online Learning has its limitations & issues

Google education
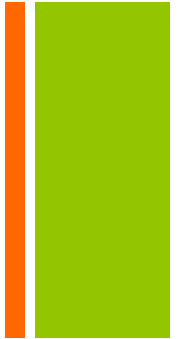web based apps
for students

RATIONALE

- Wong (2007)

  1. technological limitations
  2. personal issues
  3. limitations compared to traditional
  4. campus design limitations
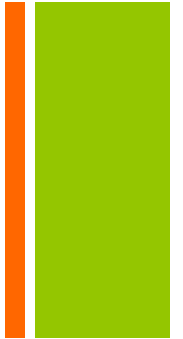 5. and other limitations in online learning

RATIONALE

- <u>Kamarudin (2004)</u>

- interactivity issues is one of the barriers of e-learning (*i.e. online learning*), it was classified into three categories:

  1. *material-to-student interactivity;*

  2. *tutor-to-student interactivity and;*

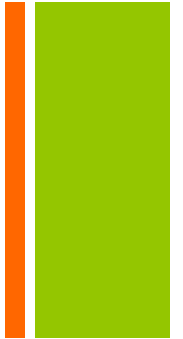 3. *student-to-student interactivity.*

RATIONALE

- **<u>Kamarudin (2004)</u>**
  - *<u>material to student interactivity</u>*

    - *"providers often concentrates on the delivery tools rather than content."*

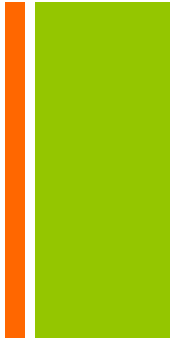   - *"the tools must be used appropriately, so as to achieve the right impact."*

RATIONALE

- **Tham & Tham (2011) & Teo et.al, (2006)**

  - *material to student interactivity (Kamarudin,2004)*

- *Most content developers are more concerne with showcasing their technology-enhanced products rather than enhancing the knowledge aspect of e-learning*
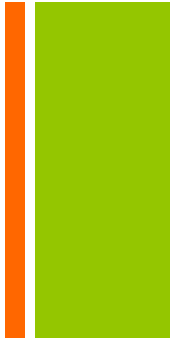
RATIONALE

- **Rovai & Jordan (2004) & Wong (2007)**

  - *tutor to student interactivity (Kamarudin,2004)*

    - the lack of immediate feedback and assistance are not provided, which made student encountered the feeling of isolation and results to frustration
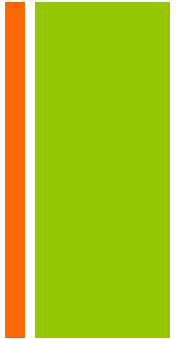
RATIONALE

- <u>Ng (2010)</u>

  - *<u>student to student interactivity (Kamarudin,2004</u>)*

- showed that number of views for online posting is higher than the number of messages posted by the students.
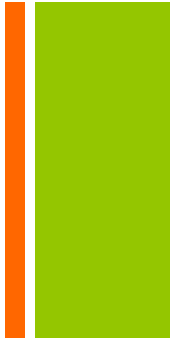
+ RATIONALE

- the limited number of lecture hours in traditional classroom makes online learning work extend the teaching and learning hours.

RATIONALE

- *Chen & Jones (2007) & Rovai & Jordan (2004)*

- the *ambiguity and vagueness* of instructions posted in an online environment *lacks the motivation*
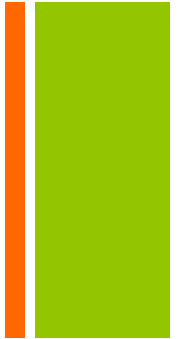
+ RATIONALE

- *no capability to read student gestures* which **face-to-face learning** made necessary to *provide the instruction clearly* and inform the educator to *extend necessary assistance* to students

OBJECTIVE

- This study aims to present the development of the blended learning environment tool.
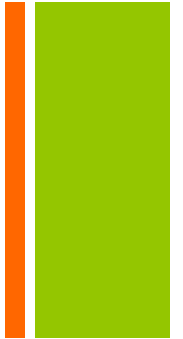
METHODOLOGY

- Blended learning is commonly defined as combination, convergence, utilizing both online learning and face-to-face learning. (Simpson, 2008; Lynch & Dembo, 2004; Educause, Volume 2004 Issue 7; and Precel et. al. 2009).

- It is defined in this study as the merging of the strength and influence of online learning and the irreplaceable capability of face-to-face learning.

METHODOLOGY

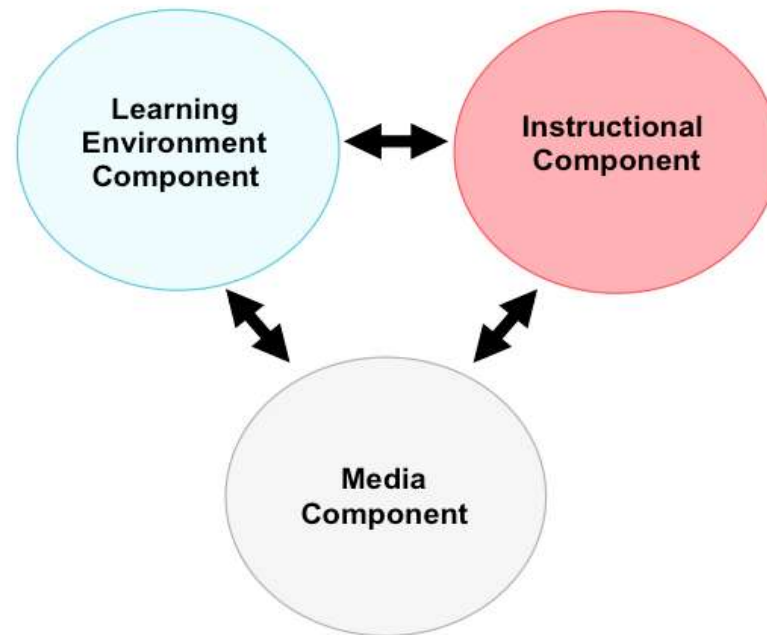- *E-Learning Participant's Baseline*

- This approach was used to gauge students awareness and faculty readiness in e-learning.

METHODOLOGY
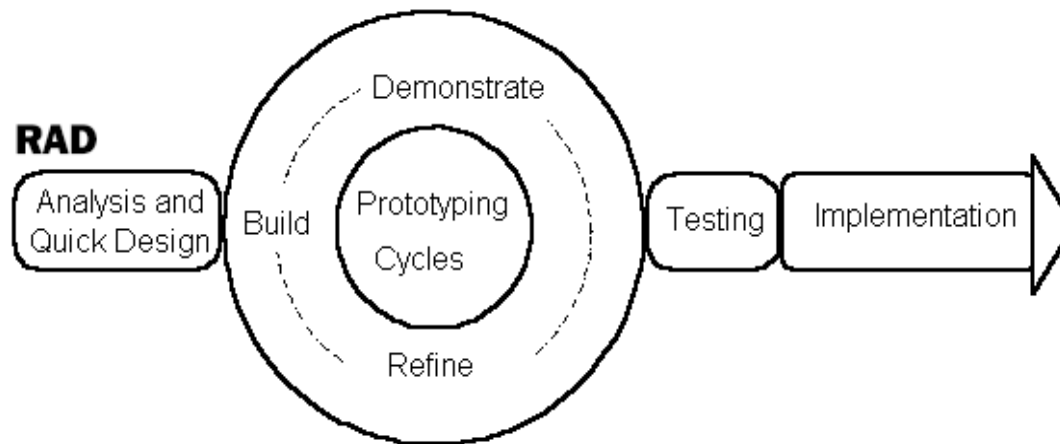
■ *Blended Learning Model Components*

Blended Learning Concept Model, Holden, Jolly (2007)

METHODOLOGY

■ *Software Development Model*

Rapid Application Development (RAD) Model

+ METHODOLOGY

■ **Development Platforms**

Server Scripting

Database - SQL

Hosting Services
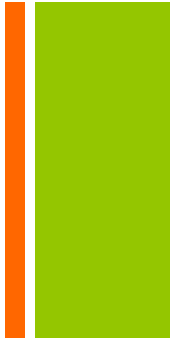
Filezilla

METHODOLOGY

- *Software Development Process*
  - Features are based on the curriculum and teachers requirements
  - development platforms (PHP for server scripting & MySQL)
  - WAMP (Windows, Apache, MySQL, PHP) platform
  - Source codes and other files are stored on a dedicated server
  - Levels of security are created to identify the distinction of accessibility of files for each different types of user
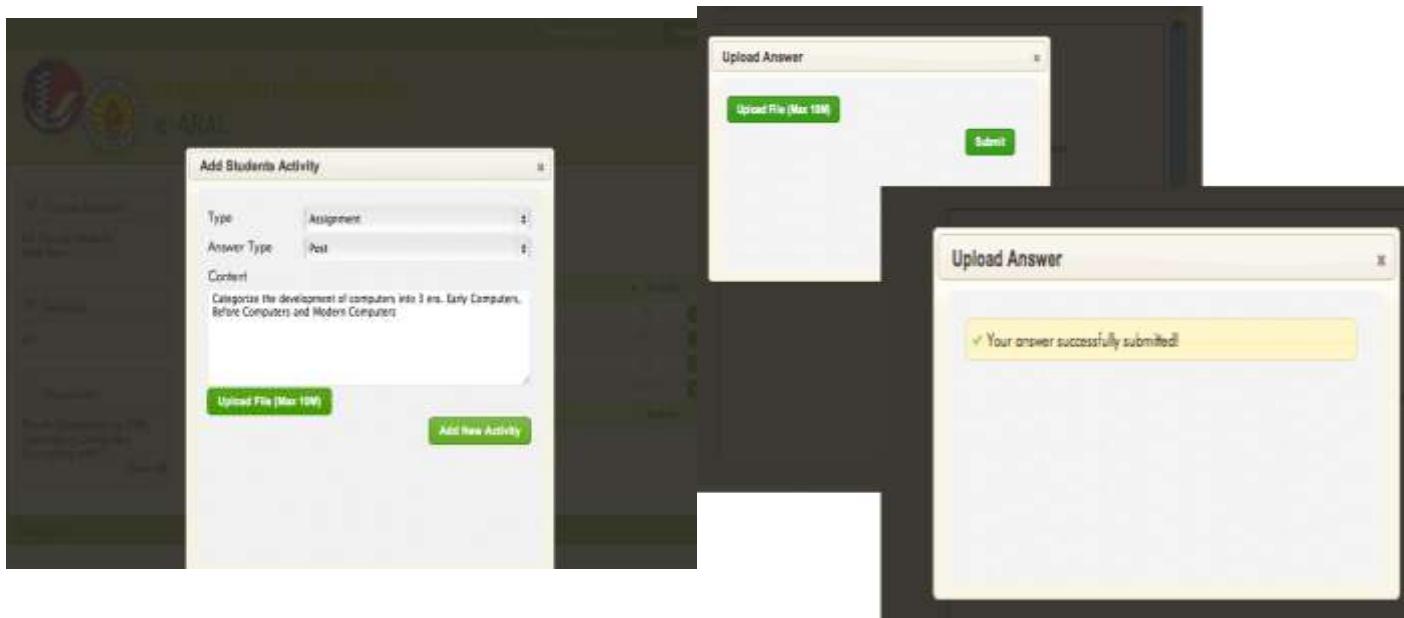
METHODOLOGY

■ *User Interface Design*
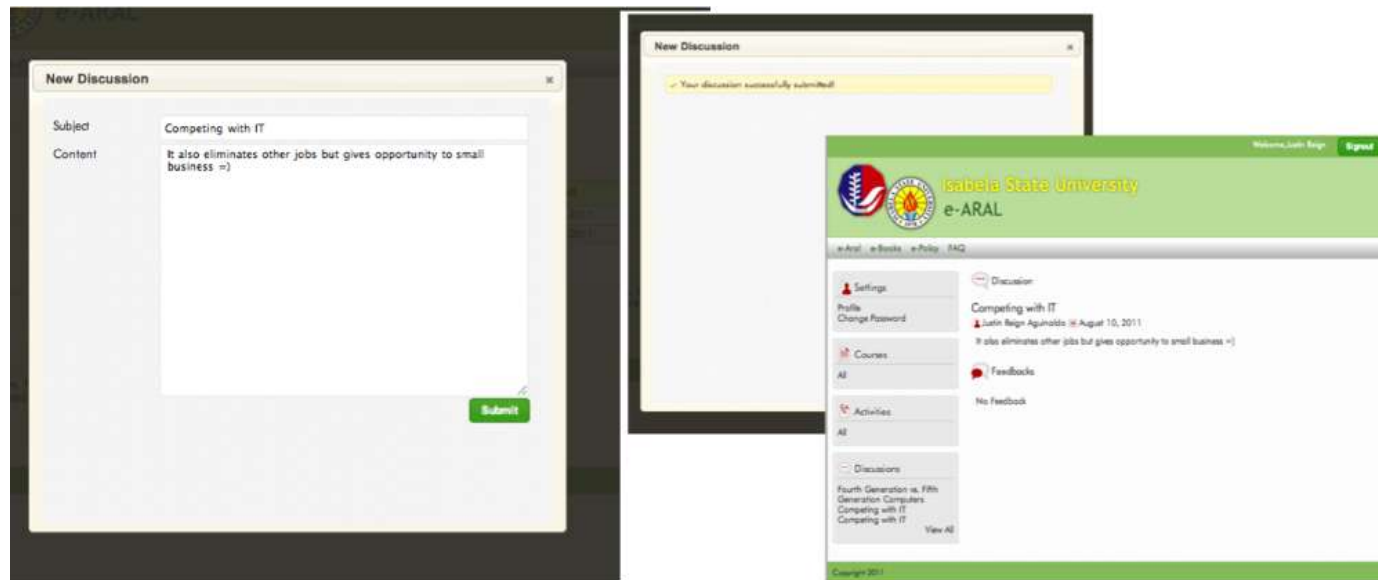
Feedback/Discussion Form
of the Blended Learning Environment Tool

METHODOLOGY

- *<u>User Interface Design</u>*

(a) List of Courses and (b) Lectures posted
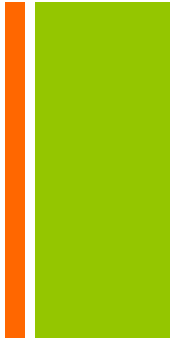
METHODOLOGY

■ *User Interface Design*

Activity Form

RESULT & DISCUSSION

- The result of the study on student's e-learning awareness and faculty readiness aid the smooth development of the tool

- Blended learning components model served as an effective basis of the development.
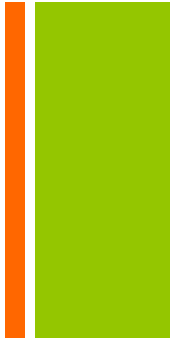
RESULTS & DISCUSSION

- Learning environment component was considered by feedback/discussion feature of the tool works in an asynchronous learning environment.

- Instruction component, faculty can upload the learning materials to be viewed by the students, thus it allows faculty to continue the lectures and activities discussed in the traditional classroom in online environment.
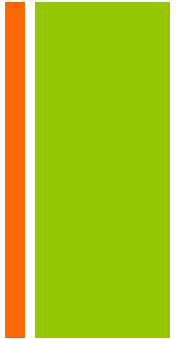
RESULTS & DISCUSSION

- Media component, the blended learning environment tool is not overloaded with media such as real-time chat, video conferencing and audio conferencing to address the technological limitation.
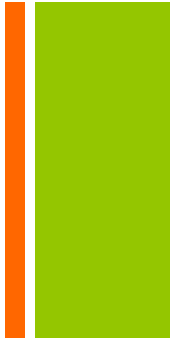
CONCLUSION

- Blended learning attempted to patch the issues encountered both in online and face-to-face learning to utilize the capabilities of online and face-to-face learning.

- Blended learning environment tool was developed by addressing some issues of online learning.

CONCLUSION

- Its emphasis is to have continuity of learning done in a traditional classroom and stimulate social interaction between student-to-student and sustain feedback mechanism between faculty-to-student to achieve the complete learning process.

RECOMMENDATION

- This study customized the blended learning environment tool based on the need and e-learning experience of student in the university.

- It is recommended to improve and enhance the tool based on different types of learners.

RECOMMENDATION
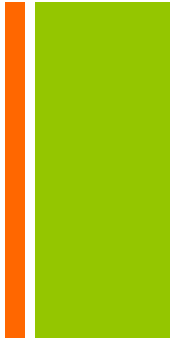
- The tool was developed based on issues of online learning discussed on this study.

  - it is recommended to review and analyze other issues of online learning cited in published researches to be included in future enhancement of the tool.

  - Furthermore, another research should focus on the depth of learning attained using this tool.

"Technology is just a tool. In terms of getting the kids working together and motivating them, the teacher is the most important."

-Bill Gates