UNIVERSITYOF BIRMINGHAM

iVLE Platform Testing

1. Purpose

iVLE platform testing was intended to compare the functions of the four iVLE platform which were the competitors of the university new iVLE platform. The testing focused on the iVLE functionality on mobile devices including tablets and mobile phones. All four iVLE platforms only have web interface available, none of them has mobile application supported at the time. Due to the limited functions of the iVLE platforms on mobile devices, some of the functions can't be tested which has been marked as N/A in the form.

The testing was on the following aspects:

- 1. Content management/update: audio upload/play and video upload/display;
- 2. Communication: instant chats and group discussion;
- 3. Some of the routine administration work for lecturer such as user management;

The first two aspects are quite important for iVLE to support mobile learning. It provides users with better accessibility and great convenience. Unfortunately, on the four testing iVLE platforms, none of the iVLE system is performing very well, although Instructure and Desire2Learn are generally better mobile device supported than the traditional iVLE systems including Blackboard and Moodle. As to the routine administration work, mobile platform can support some of them. But the user interface is not user friendly. The solution to this problem is to have the mobile application developed instead of the web interface.

2. iVLE Platform Testing Results

| Test Case/iVle | Blackboard | Moodle | Instructure | Desire2Learn |
|---|------------|--------|-------------|--------------|
| Course creation | | | | |
| An administrator creates a blank new course. | Υ | У | Yes | У |
| Variations: | | | | |
| The new course is based on a predefined template. | N/a | n/a | n/a | n/a |
| User management | | | | |
| An administrator enrols six users as instructors. | Υ | У | Y | У |
| An instructor enrols a list of 24 students, detailed in an Excel spreadsheet. | N/A | n/a | N/A | n/a |
| An instructor converts four students into teaching assistants. | Υ | У | N/A | Y |

| An instructor creates five student groups, each containing four specific students. | 1, Need to click on the "items to select" in order to show and select the users; 2, when selecting multiple members, only the first user's name is listed although all selected are enrolled. | n/a | Y | n/a |
|---|--|-----|---|-----|
| Variations: | | | | |
| Instructor unenrols a number of students who were enrolled in error. | Υ | У | Υ | У |
| Instructor temporarily blocks a student's access to a course/section for administrative reasons. | Y | Y | Y | Y |
| Instructor assigns students to groups at random. | Υ | n/a | Υ | n/a |
| Students assign themselves to groups. | Υ | n/a | Υ | n/a |
| Content | | | | |
| An instructor uploads three PDF documents, which are to be viewed by students. | Υ | У | Υ | Y |
| An instructor creates three new HTML pages, which are to be viewed by students. | Υ | У | Υ | Y |
| An instructor uploads a set of three HTML documents that contain images, local hyperlinks and links to external websites. | Υ | У | У | У |
| Variations: | | | | |

| New HTML pages contain links to the set of HTML documents. | Y | у | у | у |
|--|---|--|--|---|
| One of the HTML pages contains a link to an RSS feed. | N/A | n/a | n/a | n/a |
| Instructor uploads a standalone Flash application. | N/A | n/a | n/a | n/a |
| Instructor uploads an audio file. | N, mp3 files can't be played on the page (for chrome on windows 7, it is the same), only provide a download link | N, rich text editor didn't load, can't load mp3 files. Tried to change "format" option, but it is not working | N. mp3 file can be uploaded, although it can't play on the page (Safari page) | Y, mp3 file can be played, but the page is not loaded correctly |
| Instructor uploads a video file. | N, trying to display video in a pop up window, but then the page stoped responding | N, rich text editor didn't load, can't load mp3 files. Tried to change "format" option, but it is not working | N, a sample Youtube vide can not be displayed on the page | Y, Youtube video can play |
| Instructor uploads an unknown file type. | n/a | n/a | n/a | N/A |
| Instructor uploads template Word and Excel files. | Υ | Υ | Υ | Υ |
| Student contributions to the course material. | n/a | n/a | n/a | N/A |
| Instructors hiding/showing items of content from/to students. | Υ | У | У | Y |
| Instructor limits access to content based on: students' groups; dates and times; and students' progress through the course. | Υ | n/a | n/a | N/A |
| Instructor makes content available for open access. | Υ | У | У | Υ |
| Communication | | | | |

| An instructor enables the facility for students to initiate and engage in real-time communication with other members of the cohort. | N, the browser doesn't support the chat tool | Y, chat window launched successfully | N: chat window does not launch , ps: chat window is not activated in Chrome in windows 7 as well | chat window launches successfully |
|---|--|--------------------------------------|--|--------------------------------------|
| An instructor enables asynchronous discussion between students in a cohort. | Y | Y | У | У |
| An instructor posts an announcement to a cohort of students. | Y | Y | Y | У |
| An instructor adds an entry to the calendars of the students in a cohort. | N/A | N/A | У | У |
| Variations: A student views a transcript or recording of a synchronous communication session. | N | N | n/a | n/a |
| A student views a read-only archive of an asynchronous discussion. | n/a | N/A | n/a | n/a |
| Instructor amends, hides or deletes an inappropriate discussion post. | Y | Y | У | У |
| Instructor privately contacts an individual student in response to a post by the student. | Υ | Υ | У | У |
| An instructor creates private "spaces" for students to discuss their group project work. | Y | Y | У | У |
| Assessment | | | | |

| An instructor creates a self-test facility containing multiple choice questions for a student cohort. | Y | Y | У | У |
|---|-----|-----|-----|-----|
| An instructor uses an online assessment for a summative testing. | Υ | Y | Υ | У |
| An instructor creates an assignment dropbox for students to submit a word-processed document by a specified deadline. | N/A | N/A | n/a | n/a |
| Variations: | | | | |
| Online assessment including a variety of question types. | Υ | Υ | У | У |
| Online assessment is based on questions selected at random from question banks. | Y | Y | У | У |
| The assignment requires students to submit both a Word document and an Excel spreadsheet. | Υ | Υ | У | У |
| Assignments are checked for plagiarism. | N/A | N/A | n/a | n/a |
| Assignments are marked anonymously. | N/A | N/A | n/a | n/a |
| Assignments are double marked. | N/A | N/A | n/a | n/a |
| General | | | | |
| Instructors and students access an overview of current activity and forthcoming deadlines across all of their courses/sections. | Υ | Υ | Υ | Υ |

| An instructor accesses an overview of how students in a cohort are performing. | Y | Y | Y | Y |
|--|-----|-----|-----|-----|
| An instructor adds custom data fields for students in a cohort. | Υ | Υ | Υ | Υ |
| A user adds details of their interests to their personal profile. | Y | Y | Y | Y |
| Variations: | | | | |
| Instructor populates a custom field with data for a cohort. | N/A | N/A | n/a | N/A |
| Instructor populates all fields for an individual student. | N/A | N/A | n/a | N/A |
| User adds a photo to their profile. | Υ | N/A | Υ | Υ |