Instructional Design and Technology Proposal

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**Abstract: Statement of Purpose**

This is an instructional design and technology proposal developed specifically for The Colleges’ Time Management pre-course that is developing for its new students.

This proposal outlines a new framework and technologies as additional solutions for the College to consider implementing in this course. The technologies proposed focus on cost-benefit for the College and improving social learning outcomes for new students.

**Introduction**

**Design and Management Problems**

This proposal presents emerging technologies, highlights limitations of the current LMS and shares additional improvement options for design and management solutions such as integration, engagement, format and interactivity.

*Design and Management Problems*

The College currently uses Cloud Based LMS with Amazon Web Services for its LMS platform. The advantages to this is that it is low cost and low maintenance. However, the advantages are that there is no social learning opportunities within the platform, it is not considered “fun” or engaging by current students, and it does not provide personalized learning.

*Impact*

In terms of impact, adopting these proposed technologies could affect both the College and students in a number of both positive and negative ways. Some examples for stakeholders could be increased cost of doing business, increase of student engagement out of the gate, and improvement student graduation rate. For student users it could create a stronger first impression, provide more immediate support and increase collaboration.

In the following, we present the emerging tools and technology of Yuja and Moodle that we believe will improve the current state of instruction, development, delivery, and learning management for the Time management course the College wants to give to new students.

**Tool Evaluation**

This proposal offers two tools. Yuja as a video authoring tool to enhance social learning and Moodle as a the LMS.

**Yuja**

This is a social learning and video platform that creates collaboration among fellow students and instructors with features such as group messaging, course chat rooms, and document sharing. It provides real time whiteboards with live annotations and video. http://www.yuja.com/video-classrooms/

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| **Usability Guidelines** | **Description/Comments** |
| Use of standard graphic user interface (GUI) controls | The controls are vertical on the left side of the screen which is less familiar for most users. More graphic icons are used then text. |
| Consistent screen elements | There seem to be consistent screen elements within the application. |
| Written for on-screen viewing | There is not much text as writing the text is part of the application. |
| Minimalist design | The design seems minimalist as the instructor or user provides most of the content |
| User control options | There are icons to help the user control , although there are only about 7 |
| Recovering from error | There is a “?” provided on the screen and it’s unsure if this goes to text or support. |
| **Other Comments/Observations** | |
| **Selection:** This technology is amazing! It brings together synchronous and online learning. It is engaging and offers multiple ways of delivering instruction. It can most definitely improve the current state of online instruction and blended learning.  **Innovation & Creativity:** This tool is highly innovative as it transforms online learning from stagnant to live conversations and interactions. Information can be shared on the Whiteboard just like it is in the traditional classroom on the Blackboard. Additionally, this tool goes the extra mile and allows for social interaction after the instruction has been delivered. | |

**Learning Management System Evaluation**

## Heuristics Evaluation of Moodle

1. **Visibility of System Status**

* Always keep users informed about what is going on.
* Provide appropriate feedback within reasonable time.

***Evaluation***

Moodle You can see spinning animations at many places on the Moodle website which indicates to the learner the system is still loading. This feedback feature is great in reducing frustration with wait times (Lee, n.d.)

Additionally, Moodle has currently upgraded to 3.3 and this version provides updates for students as soon as they log in. They have the option to sort by date or course. This is the same for teachers when they login.

1. **Match Between System and the Real World**

* Speak the users’ language, with words, phrases, and concepts familiar to the user, rather than system-oriented terms.
* Follow real-world conventions, making information appear in a natural and logical order.

***Evaluation***

Moodle seems to be very user friendly in this way. The design is clean and the wording is simple and straightforward.

Additionally, The Moodle website has a calendar on the left of the front page and the calendar is in the same form of the real world calendar. The uses of calendar on the Moodle website are very similar with the uses of the real world calendar. Users are able to know how to use the Moodle calendar intuitively (Lee, n.d.)

1. **User Control and Freedom**

* Users often choose system functions by mistake.
* Provide a clearly marked “out” to leave an unwanted state without having to go through an extended dialog.
* Support undo and redo.

***Evaluation***

Moodle has a menu on the left side of the dashboard that does not go away once you click into a resource or link. This is very helpful for navigating back and forth through materials and not having to have a back button. Since the menu stays the same throughout clicks, the learner can learn the menu and quickly go to where she/he needs to.

Additionally, One of the most important functions of the Moodle website is the forum. Students are encouraged to write their opinions on the forums. To prevent from deleting words by mistake, many word processors provide “undo” and “redo” functions (Lee, n.d.) as does Moodle just like learners are used to using when writing a paper in Word.

1. **Consistency and Standards**

* Users should not have to wonder whether different words, situations, or actions mean the same thing.
* Follow platform conventions.

***Evaluation***

The convention/format seems to stay the same with Moodle. Since there are not a lot of words to confuse and the links are clear from the menu display, users should be confused.

Additionally, like Blackboard, Moodle can include, “Breadcrumb” that indicates where the user currently is, usually at the top of the bar (Lee, n.d.).

1. **Error Prevention**

* Even better than good error messages is a careful design that prevents a problem from occurring in the first place.

***Evaluation***

I think that Moodle eliminates many problems by placing the menu static on the left side. Because the design is simple and straightforward, learners should not be making too many errors once they have learned the platform.

Additionally, in Moodle when the learner clicks the back button on your browser while writing a post, they will see a pop-up message that says “Are you sure you want to leave this page?” It asks you to select either “Stay on Page” or “Leave Page.” This pop-up message prevents you from leaving a webpage that you are working on by a click mistake (Lee, n.d.)

1. **Recognition Rather Than Recall**

* Make objects, actions, and options visible.
* User should not have to remember information from one part of the dialog to another.
* Instructions for use of the system should be visible or easily retrievable whenever appropriate.

***Evaluation***

Moodle seems to excel in this criteria. The menu that they have makes it easier for the learner to find what they need and get there quickly. Since the menu stays there, they never need to feel lost or unsure of where to go next.. It could be helpful if there was a “read more” or “?” click for new users.

1. **Flexibility and Efficiency of Use**

* Accelerators (unseen by the novice user) may often speed up the interaction for the expert user so that the system can cater to both inexperienced and experienced users.
* Allow users to tailor frequent actions.

***Evaluation***

As stated before, additional instructions could be embedded for new users while experienced users would not need to see them.

Additionally, Moodle website does not provide shortcuts for expert users (Lee, n.d.)

1. **Aesthetic and Minimalist Design**

* Dialogs should not contain information that is irrelevant or rarely needed.
* Every extra unit of information in a dialog competes with the relevant units of information and diminishes their relative visibility.

***Evaluation***

Moodle definitely uses a very succinct dialog. Most links are 7 words or less. There is a lot of scrolling that needs to be done so extra units of information could be competing with different parts of the screen.

However, Moodle tends to show everything that it has. However, the users might not want to see every piece of information whenever they access the Moodle website. Therefore, the Moodle website should provide a function that hides older information selectively. It will help the website maintain aesthetic and minimalist design (Lee, n.d.).

1. **Helping Users Recognize, Diagnose, and Recover From Errors**

* Use plain language (no codes).
* Precisely indicate the problem.
* Constructively suggest a solution.

***Evaluation***

I do not see any code the Moodle uses and seems to use very straightforward language. I do not see a place that shows what to do for solutions. There is no FAQ or help page.

Additionally, Moodle website shows the error message is “Can not find data record in database table forum discussions.” This does not seem easily understand by the learner (Lee, n.d.). There could be a link added to a Help page in this error box.

1. **Help and Documentation**

* Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation.
* Help information should be easy to search and focused on the user’s task. It should list concrete steps to be carried out and should not be too large.

***Evaluation***

This is a key element that seems to be missing from Moodle. I cannot locate a place that provides help or documentation. It does not seem to be listed in the Menu or above or below.

**Plan for Implementation**

*Incorporating these New Tools and Technology*

This proposal supports incorporating Moodle as the LMS and Yuja a video platform tool that enhances social learning for the Time Management pre-course. To achieve a successful implementation of these, it is suggested to focus on the tools and technology being (Edutopia, 2017):

* Routine and transparent
* Accessible and readily available for the task at hand
* Supporting the curricular goals, and helping the students to effectively reach their goals

For routine and transparency, all new students should be involved in using the new tools and technology. Directions should be made simple and straightforward and not need previous knowledge to understand them. For accessible and available, the pre-course should be delivered to new students upon their enrollment as a student and they should be able to access it immediately. Technology support for both the LMS and learning tools should also be readily available to students through chat and telephone service. Lastly, the LMS and tools should focus directly on helping adult students successfully start their degree program and help them to build strong academic habits. The LMS and technology should work together in providing a valuable experience for all new students.

Since Moodle is a free LMS, focus should be placed on making it easy for new students to navigate and learn. Video tutorials should be made available along with video/chat sessions. Yuja can be used to connect students together in learning how to use the LMS. Since Yuja is a paid-for tool, the support and resources they offer can also be offered to students.

*Managing Change*

Implementing this will cause change for both the students and the organization. The learner’s needs are to be considered and accounted for in this proposal. These new students will need substantial technology and staff support when starting this pre-course. Online learning may be new to them and they may need extra videos, 1:1 troubleshooting and help with learning how to use the new technology tools. It should be assumed that they will need more support in the beginning. For this reason, this proposal includes the expansion of the Support Team and resources available to students. Instead of one video being made available for all students, smaller videos that break down into chucks of information can be made. Students can then choose how much support they need to access.

For the organization, this change will bring along new technology issues. Staff should be trained in both Moodle and Yuja and not just expected to know these. Training should focus on “how to help a student who needs…” The organization may need to hire additional staff to support these new students in getting started.

**Conclusion**

This proposal offers the College technological solutions to meet their current needs. The College needs a cost-effective LMS to launch its new Time Management pre-course. Moodle is offered as a low-cost LMS that will provide the College with what it needs for its students. Additionally, this proposal offers Yuja as a technology tool to the College for enhancing the course to increase social learning and engagement among students. Yuja uses video software to offer an array of options for students to form learning connections. Using both of these should make the new Time Management course both cost-effective and engaging for students.

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