

EDID 6509 - Designing Learning and Performance Solutions

Component B - Individual Assignment

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Stint 2: PBL Stint

Brief Description and Discussion on Individual Contribution

To solve the problem ‘How can technology be used to identify students’ learning paces in order to cater to the needs of diverse learners?’ I proposed a digital task-based book that features authentic science experiments for learners to complete in small groups. Each module promotes inductive reasoning, self-reflection and decision making in the form of scenarios through Short Sims. The book should report information to instructors or embed learning analytics software so that the instructor can visually observe where learners are with their learning. Lastly, an interactive tool should be included where students could measure their own performance using objectives or the learning outcomes.

Justification

Aldrich (2020) maintained that Short Sims encourage experiential learning, learner-control, interactivity and role play. Tasks allow for meaningful real-world experiences to occur and engage learners in their constructive and cognitive skills to complete tasks (Thomas & Reinders, 2010).

Reflection on what I would do differently and why

In hindsight, I can detect where a lot of my initial knowledge and concepts were developmental and where I was caught up with a trend. For instance, when teachers were informed of learners’ progress, how would it solve the problem? There is a need to change the group’s selected problem and I would tackle that issue first. As it is a myth and incapable of being proven, any design developed would be faulty, superficial and useless to the client.

Secondly, in the original design, learners were overly guided and pre-empted with resources and essentially told what and how to learn. Through discussions in the learning community, it was revealed that this positivist approach would not yield learners to develop the necessary language, cognition nor ability that an expert might have in the field. Taking this into account, going forward, the instructor's role would transform to be that of a coach. My enhanced, individual environment would allow learners to find resources, tools and build artefacts independently and collaboratively.

Discussion on proposed changes

I decided to select my initial individual problem 'How to get students to eat and grow local fruits and vegetables?' because of its simplicity and for its nexus to other problems that it could solve including childhood obesity, hunger, famine and so on.

Moreover, by articulating what I would do differently, led to the design of a virtual course that allows learners to collaboratively complete tasks which when pieced together, would solve the problem. Minimal scaffolding is given and the coach only communicates instructions. Learners read and interpret instructions, collaborate with peers and find resources, set their own objectives and use their own problem-solving strategies to solve problems. In the virtual course, groups are given opportunities to solve different tasks simultaneously or assume different roles of the same piece of the puzzle and regroup in order to discuss and share key ideas of lessons learned. By the end of the course, learners should be able to apply and integrate what they learned collaboratively to individual tasks. By doing this, learners demonstrate the initial influence of collaboration as well as their own unique achievement of adopting the correct language and cognition to solve the problem. Select [here](#) for a simulated experience.

Stint 3: CSCL Stint

Brief Description and Discussion on Individual Contribution

Second Life, an immersive and simulated environment for second language learners does not foster cooperative learning. To remedy this, I proposed a 'pre-activity feature' so that learners can suggest necessary vocabulary and skills that would be needed. Students would be assigned different roles and would revise individual deliveries and discuss in a collaborative activity.

Justification

Learning is achieved when there is positive interdependence and each member shares responsibility for each other's learning (Johnson, Johnson & Holubec 2002).

Reflection on what I would do differently and why

I find the environment to be a fitting one for its ability to allow learners to complete cooperative and collaborative tasks and engage in dialogic exchanges in a situated context. With these experiences, I believe learners will acquire knowledge, skills and attitudes adequately. However, I have noticed that an environment of this type does not sufficiently advanced learners' knowledge. What they know is essentially what would be outputted thereby almost nullifying the cooperative activity. I would like to change this in my future design and incorporate it with one of the theories that I was influenced by in the latter designs.

The current environment offers a linear way of learning and does not challenge the language learner. Having been exposed to other theories which purport learning from technology and networks, I am encouraged to include these elements in my design as it fosters a post-

positivist way of learning. These changes should cause a disruption in learning, allow learners reflect and self-regulate their learning, critique, evaluate and negotiate meaning to name a few.

Discussion on Proposed Changes

Since the original design contained key and appropriate features of a CSCL environment, there was a need to broaden learning opportunities in a disruptive manner for learners. The original design almost has a closed approach to learning; that is, that it should only exist in the CSCL environment.

Therefore, one element that was included in the enhanced design was a repository of online resources. Learners are now provided with links where they could refer to external sources. Due to the fact that these are external sources, most elements such as YouTube videos, consulting native-Spanish speakers, an online dictionary reference, would not have the same goals as the language learner. As a result, the learner is challenged to think critically and deeply about the information he or she is acquiring and sharing with peers.

Moreover, this would allow learners to actively acquire knowledge and create connections beyond their CSCL immersive environment. Kop (2011) stated that in creating a networked learning environment, students develop critical thinking literacy. Learning is interrupted by a process of comprehending the intricacies of the network, searching for, using and adding information. They are also placed in a situation where they have to deliberate on which information is relevant or accurate according to the task (Kop, 2011). This perspective promotes the theory of connectivism which allows learners to acquire knowledge and skills from external sources including networks and technology (Siemens, 2005). Select [here](#) for a simulated experience of the CSCL environment.

Stint 4: PSS Stint

Brief Description and Discussion on Individual Contribution

Quick Guides Support System was designed to solve emergencies that occur on a farm. It is a knowledge-based system that gives users direct information at the point of need. Once selected, it displays three options in its menu. Users are given the option to peruse Frequently Asked Questions, watch instructional videos or chat directly to an expert/ the boss, affording users access to information in multiple modes. It is important to note too, that information in these sections are broken down into short steps. Quick Guides Support System also has personalised reminders and checklists embedded which allow performers to keep track of their tasks in solving an emergency. Information can be easily searched for and accessed at the time of need. Due to the need of the application, users rely on having immediate information; therefore, search is responsive to questions, dialectal words and phrases.

Justification

The design is aligned to Cognitive Information Processing theory which states that individuals are only able to retain small bits of information in their short term memories at any given time (Miller, 1952). In addition, the theory of connectivism emerges which states that learners acquire knowledge from technology and other external sources (Siemens, 2005). Siemens (2005) further purported that having that direct connection to the right knowledge at the time of need, enhances all learners within the network.

Reflection on what I would do differently and why

Quick Guides Support System is a viable solution to the problem at hand. However, one of the changes that I would make is demonstrating cross-functional relationships at the company within the system. Currently, the support system seems appropriate for solely performers who

directly work with the hens but when cross-functional relationships are taken into account, performance increases (Stolovitch & Keeps, 1999).

Firstly, I would link urgent and disasters to the boss and the order and delivery department. With this linkage, performers can readily communicate and exchange critical and important information including cancellations, notifying customers, rescheduling and so on. Ultimately, in the checklists section, when employees have completed all tasks, senior management can be notified. This then could be seen as a way to motivate employees.

Discussion on Proposed Changes

Initially I proposed two suggestions of changes for including cross-functional relationships. Whilst I was able to passably include these elements, I think more could have been done especially with the urgent and disaster emergencies section. I believe that my personal experiences with disasters on the issue may have been limited and therefore, whilst I may have covered the essential components such as cancellation of orders and notifying the boss, there may be more cross-functional duties and distributable tasks that I may not have explored or demonstrated in the design. Thus, it is my belief that this section would entail interviewing performers in different departments and finding out what they currently do and their needs for performance support in times of disasters or urgent emergencies. Nonetheless, I do believe that the simple functions and changes made could still increase productivity and motivate learners. Select [here](#) for a simulated experience of a PSS environment.

References

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