

LESSON WRITING: INNOVATIONS IN PROBLEM DESIGNING

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Abstract

Educators at all levels have embraced online technology as a teaching tool in today's era. It is irrelevant to speak of the effects of 'Web' without understanding how it is entwined with instructional design. Lesson writing now has shifted from the traditional way to an online setting taking into consideration communication, human interaction and learning paradigms. Lesson Writing Web-based instruction is mainly dependent upon content expandability, content adaptability and visual layouts. Design thinking as an innovation is a methodology for practical and creative resolution of problems. Multimedia Documents and Multimedia On-Line Services represent an evolution of documents as they deliver several audio-visual electronically organized media. Information and Communication Technologies are breaking down traditional distinctions between Public, Academic, National and Special libraries as far as media handling and access is concerned. A growing number of media collections is available via internet as Digital Libraries, Digital Library Federation, Directory of Digitized Collections and Open Archives Initiative. Instructional designers design learning content with media elements like text, images, videos and audio clips etc. Animations and learning environments are designed with the components as interactive learning content, quizzes, activities and discussion forums etc. It is difficult to design online learning material for distance learners but it is the instructional designer's responsibility to design learning components and learning contexts with appropriate media elements to facilitate learning. Higher education is currently undergoing in its most significant change from 'Distance Education to Distributed Learning Surviving and Thriving'. Today distributed learning is serving on-campus as well as the off-campus students traditionally served by distance education. Distributed learning combines the most advanced forms of distance learning technologies with aspects of conventional and campus based education. A distributed learning environment is a learner-centered approach to education. The model is based on blending a choice of appropriate technologies with aspects of campus-based delivery, open learning systems and distance

education. Digitizing as an innovation in lesson writing represents the object, image, sound, document or a signal by a discrete set of its points or samples. Old slides can be digitized at home by photographing their projections using a slide projector, tripod and digital camera. Recent innovations of telecommunication technologies such as compressed interactive video systems etc. have lowered equipment and transmission costs, making two-way video feasible for small colleges, businesses, classrooms, libraries and even homes. Interactive Video (IV) is an effective method of delivering information to remote distance educational settings. Video and audio media are normally provided on a checkout basis with packets of printed materials and work assignments. They constitute over 3/4th of the recent and current innovative approaches. 'Internet' as an interactive instructional delivery and communication system redefines some aspects of distance learning. Video Model is most popular distance learning approach. 'Wrap-Around' is the term used to describe what is done with a pre-produced educational video in distance education. Managing electronic course materials, student participation, student achievement, and course evaluations have already become part of the revision exercises formulation. Thus Design Thinking as an innovation in lesson writing refers to the methods and processes for investigating ill-defined problems, acquiring information, analyzing knowledge and positing solutions in the design and planning fields.

Keywords: Instructional design guidelines, On-line learning, Instructional designers, Electronic course materials

Introduction

Lesson planning is a special skill that is learned in much the same way as other skills. There are fundamental components of all lesson plans that needs to learn, to write, revise and improve. The old usage 'Practice doesn't make perfect; perfect practice makes perfect' is at the core of learning lesson writing skill. 'ADPRIMA' website is very popular among these days concerned with lesson writing. Effective lesson plans communicate and teachers create lesson plans to communicate their instructional activities regarding specific subject-matter. All lesson plans developed by teachers contain student learning objectives, instructional procedures, required materials and some written description of how the students will be evaluated. Many experienced teachers often reduce lesson plans to a 'Mental Map' or 'Short Outline. New teachers, however, usually find detailed lesson plans to be indispensable. Design thinking in lesson writing as a methodology for practical and creative resolution of problems looks for an improved future result. It is a form of solution-based, or solution-focused thinking that starts

with the goal or what is meant to be achieved instead of starting with a certain problem. Currently, there is a momentum to create awareness about design thinking in lesson writing among designers and other professionals by teaching design thinking in higher education. In problem designing innovative practices Wicked Problems are sorted out as opposed to ‘**Tame**’ or ‘**Well-Defined**’ problems where the problem is clear and the solution is available through some technical knowledge. Broad use of Internet and increasing popularity of ‘Lean philosophy’ has also increased the use of ‘Digitizing’ to describe improvements in the efficiency of organizational processes. Lean process simplifies the process activities and implements new ‘Lean and Mean’ processes by digitizing data and activities. Kling (2001) asserts that Design and Implementation processes must be relevant to the actual social dynamics of a given site of social practice.

Objectives

- to describe the various issues involved in programme designing
- to encourage use of computer for incorporation of graphics and figures etc. in lesson designing
- to explain instructional design guidelines in designing

Adprima Views: Lesson Plan Designing Innovative Practices

- Mistakes in writing lesson plans and how to avoid them: Nip your problems in the bud.
- Lesson Planning: Teaching Questions , a set of questions that will help you provide a more effective and meaningful learning experience for your students.
- How to Write Behavioral Learning Objectives?
- Rationale for Behavioral Learning Objectives: A little background on behavioral objectives can deepen your understanding.
- How to write an assessment based lesson planning?

On- line Learning Environment Design : An Innovation

Online learning content should be designed according to some sets of design principles. Design of an Online Learning Environment (OLE) and presentation of content in a distance educational programme is a major factor in success or failure of the learning programme. Role of instructional designers who design online learning environments for distance learning programmes has become demanding. In order to support instructional designers to do their work effectively they are provided with instructional design guidelines. Instructional designers can design learning content with media elements like text, images, videos, audio clips and animations etc. Learning environment can be designed with components such as interactive learning content, activities, discussion forums and quizzes. It is instructional designer’s responsibility to design learning components and learning

contexts with appropriate media elements to facilitate learning. However, it is difficult to design online learning materials for distance learners who are not supposed to have regular contacts with teachers. Instructional designers need to design the learning material not only with target subject content but also with appropriate guidance and support. Therefore, it is important to study the design components and features of well designed learning materials of distance learning programmes that lead to student satisfaction and learning effectiveness.

Different Learning Styles In Designing

A student's designing learning style preference can be a significant factor contributing to his/her academic achievements (Cassidy & Eachus, 2000). Four categories of learning styles are called **Activist, Theorist, Reflector and Pragmatist**. Honey(2007) has given the latest views concerned with these learning styles as:

- **Activists:** like to learn by doing, take challenges, experience new things, try out exercises and participate in activities without thinking of the consequences.
- **Reflectors :** learn by observing and thinking, listen carefully to everyone, think over all ideas and repeat the learning when they get a chance to do it.
- **Theorists :** like to see concepts, models, and overall image of the lesson.
- **Pragmatists:** learn best when they are given a chance to practice and enjoy experimenting with new ideas.

The development of **Learning Style Questionnaire (LSQ)** is also being used as a valid instrument by many designers.

Instructional Design Guidelines

Design of OLE and its content focuses on three main aspects as Structure of the learning content, Presentation of learning content with multimedia and Design of learning activities and evaluations.

1. **Structuring learning content:** Dividing the learning content into small units and placing them on an appropriate navigational system organizes the learning content from general to detail using hyperlinks.
2. **Multimedia learning content:** Digitizing represents the object, image, sound, document or a signal by a discrete set of its points or samples. It simply captures an analog signal in digital form. Old slides can be digitized at home by photographing their projections using a slide projector, tripod, and digital camera. It takes into consideration as Process, Examples, Analog signals to digital, Implications of digitization, Collaborative digitization projects, Library preservation, Lean philosophy, Fiction. Recent innovations of telecommunication technologies such as compressed interactive video systems etc. have

lowered equipment and transmission costs, making two-way video feasible for small colleges, businesses, classrooms, libraries and even homes. **Interactive Video (IV)** is an effective method of delivering information to remote distance educational settings. They constitute over 3/4th of the recent and current innovative approaches. ‘Internet’ as an interactive instructional delivery and communication system redefines some aspects of distance learning. Video Checkout Model is most popular distance learning approach. ‘Wrap-Around’ is the term used to describe what is done with a pre-produced educational video. According to Krebs (2004), participants of online courses tend to view online learning environment as enabling them to study at their own pace, to be actively involved in the learning activities, to improve their intrinsic motivation to learn and to practice self-study compared to those attending traditional face-to-face classes. Development of Computer and Internet have made distance learning distribution easier and faster thus has given rise to the '**Virtual University**. In today's era a popular 3D virtual world as '**ACTIVE WORLD**' is used for synchronous and asynchronous learning. Active World provides opportunities for students to work collaboratively. Programme delivery in a virtual university is administered through information communication technology such as web pages, e-mail and other networked sources.

Designing the text

Designing the text needs to limit the amount of text to make it readable to the students. Design guidelines that are used to design text content takes into consideration as Limiting the amount of text on one page, Dividing the text area into blocks of text , Using simple English language. Creation of digital texts take into consideration the different practices as tutor-student communication, formative feedback through reflective weblogs, assessing collaborative writing in wikis , assessing multimodal and hypertextual work , student-nominated assessment criteria and co-creating courses through discussion.

Deciding media elements/clips

Designers of online learning content add audio clips with narrations to their learning materials to support the learners. **Graphics** are being used to create interest, promote learning and simplify communication. It has been considered important to maintain a repository of media content used to design the learning content. It helps the design team to share and reuse what it produces. **Animations** has also proved a significant innovation to gain attention, demonstrating the flow of information, creating simulations and handling the learner-content interactions.

Virtual learning environment (VLE)

Virtual Learning Environment (VLE) is an education system based on the Web that models conventional real-world education by integrating a set of equivalent virtual concepts for tests, homework, classes, classrooms and other external academic resources. It includes student and teacher 'Meeting' online through a synchronous web-based application. Collaboration and Communication between teachers, students and parents is essential and allows for individualized learning.

Designing learning activities and evaluations

Complex Learning Activities are provided through scaffolding as in the beginning of a lesson the activities are provided with guided or help text and at the end of the lesson without guided or help text. The type of designing concerned with the learning activities and evaluation along with innovative practices has also proved beneficial to the students. Interactive learning content, desired learning objectives and quizzes etc. provide an opportunity for the students to evaluate their learning achievements by themselves. These practices include the tutor-student communication and formative feedback through reflective weblogs, assessing multimodal and hypertextual work etc.

Summary

Indeed, Design Thinking is a great tool for teaching 21st century skills. Participants must solve the problems by finding and sorting through information, collaborating with others and iterating their solutions based on real world, authentic experience and feedback. Practitioners of design thinking take into consideration the different steps depending on their needs as Identify Opportunity, Design, Prototype, Get Feedback, Scale and Spread and Present relevant views. Creative writing lessons can be used for revision as well. In fact, teaching writing style becomes more effective with revision. Revision exercises formulation in lesson writing concerned with the innovation takes into consideration the following aspects as Instruct students to read their rough draft, Instruct partners to listen for telling signal words: am, is, are, was, were, be, being, been., rewriting using the news reporter formula. Quality writers always possess the style. It's a deliberate creation of the 'Style' combined with the discovery while engaged in the revision exercises formulation creative process. Revision exercises formulation becomes more effective by taking into account the following aspects as Lesson plan to create characters that come to life, using imagery, using connotation to Improve word choice and using sentence structure effectively to improve writing style.

Conclusion

On - line learning environment (OLE) is reported as successful in achieving learner satisfaction and learning effectiveness. **'A-Ha' Moment**

has been considered a very crucial step in problem design thinking. It is the moment where there is suddenly a clear forward path. It is the point in the cycle where synthesis, divergent thinking, analysis, convergent thinking and the nature of the problem all come together and an appropriate resolution has been captured. The process may seem nebulous, hazy and inexact prior to this point but after this point the focus becomes more and more clear as the final product is constructed. A-Ha Moment is usually described as a **‘Gut Feeling’**. Designers move from novice to expert in their field as the exact point where the A-Ha Moment occurs is increasingly recognizable. It happens through the practice of actual doing and the reflection upon their design process. Thus Design thinking has its roots in the innovation/design sector and the process itself can be used anywhere . Good lesson plans do not ensure students that they will learn what is intended but they certainly contribute to it. Lesson plans also help new or inexperienced teachers to organize content, materials, and methods. Developing your own lesson plans by having new ideas also helps you **‘Own’** the subject matter content you are teaching and that is central to everything good teachers do. Thus Lesson writing innovative practices ‘Technical work’ have been found useful in describing social reality. Thus Brainstorming, Creativity, Creative power and Problem solving are some of the key words. Special education students with different kinds of disabilities have underlying behavioral or processing disorders. Therefore, researchers have struggled to identify these problems along with designing the new ways. Technology can be the great equalizer in a classroom with diverse learners. Incorporating technology increases student’s motivation to learn and personalizes lessons to a student’s individual needs. Incorporating technology increases student’s motivation to learn and personalizes lessons to a student’s individual needs e.g. LEARN NC, a program of the University of North Carolina at Chapel Hill School of Education, finds the most innovative and successful practices in K–12 education and makes them available to the teachers and students of North Carolina and the world. In the same way, in Promaxbda conference, i.e. The International Association For Entertainment Making Professionals, Los Angeles, it was mainly taken into consideration that how **‘Designing Ordinary Objects with a Social Commitment brings Innovation and improves Quality of material’**. It indicates that any kind of innovation must have social commitment. On January 25, 2011, in his State of the Union Address, President Barack Obama asked for innovation and creativity in his speech. He addressed that our educational system needs to recognize that children have different skills sets, are at different stages in their cognitive development, exhibit different types of intelligences and possess various learning styles. Thus , it indicated that innovation in **‘Designing’** the things depends upon various ‘Learning Levels Environment.’ Therefore ,

Innovation is a broad term as it is deeply rooted in the observation, analysis and critical thinking skills that students need to succeed. Lesson writing can be used to strengthen student's processing skills. Thus Lesson Writing Module should consist of Seeing, Mapping, Understanding and Believing etc.

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