Storyboarding issues in online course production process

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Abstract

This paper presents some issues in online course development process. Online course development takes for a long time and it is a comprehensive process. A web developer makes a scenario from the content which is sent by the field expert or the author. The scenario process is named storyboarding. Participants were selected among experts who involved in production of online courses. Data were collected by the semi-structured and open-ended individual interviews. According to data analyses storyboarding issues can be collected into six main categories: content, time, author(s), web developer, control and management issues.
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1. Introduction

Online course development takes for a long time and it is a comprehensive process. Content can be published after it is passed through a production process. Web developers and instructional designers play an important role in this process. A web developer makes a scenario from the content which is sent by the field expert or the author. The scenario process is named storyboarding. One of the web developers' roles is storyboarding. Storyboard includes descriptive elements and a purpose about assignment. Storyboard is a guide for online course which will include components. These components can be animation, sound, picture, text, graphic and interaction etc. In which steps what kind of interaction will be is described. Amount and positions of these elements should be planned in storyboarding. On account of this storyboarding important step it needs to be done before online course production.

Different content can be produced for different e-learning environments. Therefore each of content needs different design. Storyboard plays a structural role between authors and web developers before production process. Owing to the structure, the designer and the author have to look at the online course plan and if any mistakes are corrected. Misconceptions or disrupted integrity of course sections can be eliminated. Otherwise elimination of errors takes time and disrupt when online course production process began. In this context, storyboarding provides impetus in the way of controlling and correcting mistakes before production. In addition to being an important process, storyboarding also brings some issues.

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Web developers make storyboards from raw e-learning contents. This content must be brought into a format that will be available on the web. In this sense web developers may encounter a number of problems.

2. Problem Statements

What are the problems that take place when preparing storyboard in online courses production process?
How can these problems be solved?

3. Purpose

The main purpose of this study is to have an idea about storyboarding issues in online course development process. Research questions of this study were;
- What is storyboard and which items does it include?
- Where is the storyboarding in online course development process?
- What are the stages of preparing a storyboard?
- What are differences in storyboards?
- What are the problems that take place when preparing storyboards?
- How can these problems be solved?

4. Importance

At the end of this study, obtained information points
- Identification of storyboard process in online course development,
- Identification of problems,
- Suggestions for solutions,
- Provide guidance.

5. Methods

5.1. Research Design

This study adopted a qualitative research method. Researcher collected qualitative data via individual interview technique. Data were analyzed through qualitative data analysis.

5.2. Participants

The participants of the study were purposefully selected among experts who involved in production of online courses. There were 5 volunteer participants (4 women and 1 man) in this study. These experts produce different online course and educational materials.

5.3. Data Collection

The data were collected by the semi-structured and open-ended individual interviews. Each participant was interviewed once. The researcher interviewed all participants face-to-face. Interviews lasted approximately 11 minutes. Interviews were recorded with permissions of the participants using voice recorder.

5.4. Data analysis

In the analysis process, content analysis method is used in order to examine the data in depth. After the data collection was done each interview was transcribed. The following analysis plan was developed (Patton, 2001).
- Coding data

- Finding patterns
- Labeling themes
- Developing category systems.

6. Finding and discussion

The views of the participants were organized in six main categories. In the context of research questions the following themes have been identified. Each theme is discussed in a detailed way below.

Storyboard and Properties

Views of the participants about the storyboard and properties can be classified into four categories: scripting, visualization, guiding and process.

Scripting: Storyboard is a preliminary study of a film which will be shot or an online course which will be produced.

Visualization: Storyboard is a visual scenario from previous content production process. It is visual format customized of the content.

Guiding: Storyboard is a guide and a roadmap in online course design.

Process: Storyboard is a step in online course development process. As a process, step by step each mission is defined. In the process, it is a transition plan between team members.

Role and Importance

According to the data analysis participant emphasized facilitation and production dimensions.

Facilitation: Preparing storyboard not only facilitates production but also control whole process. Besides, a visual expression ensures that cannot be expressed verbally. Consequently it makes a visual facilitation.

Production: Participation impressed that storyboard is the main resource for developer team. Thereby more than one person can work on the same thing at the same time. Team members easily work around like a roadmap. In this way development or production stages are very well planned. The emergence of the desired product is achieved. Web developer also give a point to this is a condition of effective and efficient production. In terms of accountancy, it saves time by showing all the process.

Stages

According to participants' views, stages can be collected in three main categories: control, decision and synchronization.

Control: It is used for suitability of scenario for online educational material producing. First job is checking content whether it is appropriate for storyboarding. Stability of text, visuals and other items are provided in storyboards.

Decision: In this step decision of which educational software components will be used is made. Tables, information buttons, texts, photos, images, animations, short movies, movies, music, graphs, simulations, experiments, videos, reading texts, quizzes, exams, practise are determined. Decision is made about on-screen items.

Synchronization: The harmony between items is controlled. Timings are set and sequences are determined.

Differences

Another point that participants impressed is differences between storyboards. These differences can be accumulated in two main categories.

Properties of course: Some course can be verbal whereas some can be numerical. On the other hand courses can have different contents. Visual density can be different; some content may not be too much visual. On account of this, storyboards vary. According to participants another point is each course can have different tools. Numerical courses have calculator tool for all whereas verbal courses have dictionary, map and sound.

Person: In web developers' view content must be understood before producing storyboard. If content is parallel with the web developer's field then storyboard production may be easy. In addition field experts have different writing languages.

Issues

In agreement with participants, storyboarding issues can be collected into six main categories: content, time, author(s), web developer, control and management issues.

Content issues

A main issue in storyboarding is about content. Some contents have not main components as reading texts, quizzes, exams. Because of this, contents may be unsuitable for storyboard. Some contents have confusion. Same writing language could not be used in different units. In content too much visual or text makes storyboarding difficult. In visual density less courses is required to be more creativity. Very long scenarios damage integrity and make loss of meaning. Scenario incompatibilities occur between book and content when main material is book. Lack of titles in a unit damages integrity and outline are not clear. Titles have not integrity within themselves. Relations between titles in a course or other course are not clear.

Time

Contents aren't sent by author to web developer in time. This retardation cause long period storyboarding and production. Besides of this, web developers have routine task in their department and this block adequate time for storyboarding. In account of this, storyboards are produced according to time and labor while it should be written according to content and topic. Web developers sometimes involve in object (sound, animation etc.) production process because of some reasons and it also shortens the time allocated for storyboard.

Author(s)

Different writing styles, languages and methods occur when content is written by multi authors about a course. Authors cannot agree on a common point for writing content. Authors cannot understand difference between online course content and book. Online environment require different content. Online content shouldn't be the same with book content. Content authors cannot estimate how will a product be because of some authors don't have online course content experience. Some of them are unfamiliar with online course content production. On the other hand some authors don't come to the informative meeting about storyboard which is prepared before online course production between authors and web developers. Storyboarding and production phase require very long time and power, but it cannot be understood by field experts. After sending the content online course production is expected immediately. Sometimes authors adjust time according to their own workload and ignore online course production team.

Web Developer

Primarily web developer or designer needs to understand the content before storyboarding. When web developer's profession is different from content then it causes difficulty with understanding. This situation leads to allocate more time for writing storyboard. When product doesn't like designers imagine then storyboard will change. Sometimes differ imagine and product in accent of this web developer must design storyboard again. Besides all these, web developer cannot explain adequately how a product will be after production.

Control

Storyboards are controlled by field experts or authors. If there is any demand about change designer makes it. Approved storyboard is ready for production. However authors' change request about approved storyboard causes loss of time and effort. Moreover some authors intervene about storyboard design beyond content. Authors cannot understand storyboard is final version before production process.

Management

In-service training is insufficient for field expert or author. They need more information about online course material production process. Importance of storyboarding process cannot be explained to them. Besides of these there is a lot of workload on web developers while there is no training of labor force. There are good but unavailable resources on Internet because of copyright issues. Consequently all components are produced in online course department and this takes a long time. In general, storyboarding issues are such as Domino.

Solutions

According to participants' views, solutions can be collected in three main categories: author(s), web developer (designer) and general.

Author(s)

Online media is different from face to face learning environment, authors should understand this difference. Content must be formatted so as it can be published on the web. Authors should prepare content which covered topics in most appropriate level to students. Authors can remove unnecessary text in scenario and modify it more likely a summary content. Online environment requires different activities for learning, for this reason author should produce activities different from books. Authors should tell content in deeply to web developer. Thence more meaningful content is concerned.

Web Developer (Designer)

In storyboard preparing process designer should be more creative thinking. Web developer should be clearer about content format. Web developer should describe online courses scenario different from book scenario. In this context, more detailed meeting should be done between authors and web developers. What kind of product will be occur at the end of production should be expressed and showed with details. Web developer should show to author different online course samples and finished storyboards. According to one participant another point is 'written agreement'. Between web developer and author a written production plan agreement should be prepared. How many units will be sent to web developer? How long does it take for production? Which components are included in scenario? All questions must be identifying in agreement and the process should go according to this plan.

General

Organizational learning activities should be increased for creativity in design team. New ideas and templates should be shared via brain storming in focus group meeting. On the other hand according to one participant talk about author (s) can be learn how storyboard makes. May be in-service training process facilitate learning for authors. In this context, author can write storyboard while thought himself as a web developer. Department manager should distribute the courses according to web developers' field. Workload and labor force should be considered. Manufacturing plant ideas should be given up in online media production process.

7. Conclusion and Suggestions

This study intended to explore issues in storyboarding. According to findings, designers meet different problems. The major problem is online course content. When content is unsuitable for storyboard, designers face complications. This situation causes a long time period for completing the process. Shortness of time is another issue with respect to participants. Some courses need more time for preparing storyboard because of its nature. Author(s) or field experts sometimes don't meet a common point for content writing. This reason affects all production stages, mainly in storyboarding. Web developers are sometimes unfamiliar with the content because of they cannot understand adequately course content. In control stage authors' new change demand about approved storyboard is another issue. In this situation the designer falls into a difficult situation as revising, modifying, even preparing a new storyboard again. Copyrighting, insufficient training for authors, workload, are other issues in management level.

According to these issues some solutions can be developed. Especially content author(s) should be informed about online learning process. Then a harmony occurs between author and designer. Online course needs more creative approach for establishing a meaningful learning environment. On account of this, web developer should try more effort for storyboarding. Web developer can prepare a map for author which includes time management, web media selected, production time etc. In this way course production process would be facilitated both for authors and designers.

References

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