Identification of Motivational Strategies in Web-based Teaching with an Emphasis on the Role of Teacher and a Model

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Abstract

Background/Objectives: In this article the motivating factors in web-based teaching with an emphasis on the role of the teacher is investigated. Methods/Statistical Analysis: To identify the motivational factors of qualitative research written documents related to web-based learning environments; teachers and students views were used. For the analysis of qualitative data from inductive content analysis was used. After selecting cases for analysis, the semantic components based on content analysis unit was called, then was assigned to each tag or code. Then juxtaposing the same with each other sub-categories of the main research issues were revealed. Findings: Based on data analysis three main categories were social presence, cognitive presence, and management and web-based support as motivation in teaching have been diagnosed that application of these categories and sub-categories of teacher straining and web-based learning environment can affect learning arousal. Applications/Improvements: Motivational strategies in web-based teaching are proposed for Iranian teaching with an emphasis on the role of teacher and a model. It shows the effectiveness of approach in improving the teaching efficiency.

Keywords: Model, Motivational Strategies, Teacher, web-Based Teaching

1. Introduction

In¹ defined motivation as a person to motivate and stimulate action by the state to one or other group or set conditions for the activity in terms of objectives, or the excited state of the people under appropriate conditions, behavior or conduct in connection with the objectives. “Urges us to do some things is like waking up early to go to work, to study new things stimulates. When do we reach our goals we will also attempt multiple encourages motivation². According “Motivation is a concept that makes it one of the essay questions: What reasons do our business?”. In³ also defined motivation as power factor, guidance and support behavior.

Above definitions demonstrates that a common definition of motivations not accepted. But according to what has been said motivation can be the driving force of the activities of the cognitive, affective and psychomotor at his work process more attractive and makes more determined to reach goal.

2. Research Methodology

This research is based on qualitative approach. Qualitative research methods of qualitative content analysis were used. In this study, both qualitative content analysis of written sources (books, articles, thesis and other writings in this field) and interviews with experts in the field of e-learning content that the teachers and students in web-based learning, respectively, were studied.

In this study, the content analysis of written documents and interview content analysis was used to collect data.

To analyze the content of written documents related to the key word content analysis identified, then in the data base that is specified, these key words were searched.

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Article selection criterion is one of the key words in the title of the paper. Because of the large number of articles, essay analysis of priority with those who from 2001 onwards were indexed in the data base. Since some articles' indexed data bases are not known, or access to them is not possible, they were searched in Google Scholar5,6.

Criteria for the selection of articles for the period 1992 to 2015, in terms of more substantive review are in electronic form. However, 23 paper to analyze, from the very beginning were not specified. But on further communication on the subject of targeted research, the article was selected; content analysis and other articles were analyzed7,8.

So theoretical saturation in some of the categories has been selected the next article. It should be noted that the selection and analysis of the articles after books analysis has been done, the paper was theoretical saturation.

As well as a key word searching data bases that can be downloaded books through 15 books in the field. Books are chosen for special focus on “motivation”. For this purpose the list of books to be carefully examined, with the restriction, 9 books were selected.

For content analysis of interviews with three people (professors, students and experts) were interviewed. To select the way they were targeted action and continued to the critical saturation. A total of 28 people were interviewed on the field. The interviews ranged from 20 minutes to an hour time. After the execution of each interview, files convert to text to be heard and for the next interview, interview questions were modified.

As well as in the implementation process by semi-structured interview was held, the interviewees could be the basis for the next question. After the interviews, content analysis with text analysis, the final issues to shape them ode emerged.

First qualitative content analysis of all the documents published in the scientific bases of science direct, Eric, ebsco, proquest theoretical samplings common technique in qualitative research method, based on Key words sampled. This sampling will follow the principle of gradual selection. In this sample, the researcher constructs of the events, persons, entities or categories based on their potential contribution to development and test sampling the theoretical. This sampling process is repeated.

That researcher takes a prototype and analyzes data. Then further to refine the categories and theories emerging from new takes. This process continues until the researcher reaches saturation stage. That is the point at which any new insights and ideas spread more samples can be made9.

For interviews with experts in the targeted approach of the three categories of teachers, students and professionals who were selected field of e-learning. In this study, 28 patients were interviewed using semi-structured. The duration of the interviews ranged from 20 minutes to an hour.

Method of inductive content analysis was used for analysis of qualitative data. After selecting cases for analysis, the semantic components based on content analysis unit was called, then for each label or code were considered. Then same code was placed in a sub-category. Sweep with constant change between data and code with in their work.

Then juxtaposing the same issue with the main research issues was revealed. In this study, software of inductive content analysis was used Maxqda version 20. It should be noted that this application is classified and sort code performs the following diagnostic categories and concepts based on data obtained from qualitative content analysis the researcher.

### 3. Result

The main questioning this research is that a teacher in web-based teaching and learning environments, using the elements and strategies can be motivated learners and are taught how to be motivational model. According analysis of interviews and written sources, three main categories of social presence, cognitive presence, and management as identified motivational strategies and a model was developed to motivate (Figure 1). The following describes the model and pay categories and sub-categories.

According to the principles of motivational and use of model language and meaning is important that teachers feel motivated learners to learn and participate in classroom activities are not enough. In the event theta lack of motivation in learners learning, teachers need to analyze learner’s motivational problems.

Profiling students’ motivation, motivational interviewing or questionnaire cans elect the appropriate motivational strategies that went on to explain, we will help each of them. Table 1 shows the main strategy and sub motivational strategies.
### Table 1. Web-based teaching strategies and sub motivational strategies

<table>
<thead>
<tr>
<th>Cognitive presence</th>
<th>Social presence</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debate</td>
<td>Immediacy</td>
<td>Time management</td>
</tr>
<tr>
<td>Facilitate</td>
<td>Interaction</td>
<td>Explaining expectation</td>
</tr>
<tr>
<td>Discussion</td>
<td>Feedback</td>
<td>Modeling</td>
</tr>
</tbody>
</table>

### Figure 1. Motivational model for web-based teaching with the role of teacher.

3.1 Cognitive Presence

Cognitive presence is the ability to create structures and means of sustainable thought and discourse conceptualized (conceptualized) in four stages. When it identified an issue (release event triggering event), the exchange of ideas or information on the subject (expansion exploration), to communicate ideas (combined integration) and finally to apply new ideas to other tissues (the decision of the resolution) it is said that the debate has reached a high level of cognitive presence.

Engaging learners in terms of mental and cognitive understanding are effective and complete. The cause of cognitive learning strategies and the interiors motivating for learners. Achieve the objectives and cognitive skills of the learners pass the idea that they are more worthy, which in turn, increases self-efficacy and perceived control.

As a result, challenging learning activities involved is an important factor in the creation of knowledge and this helps them to maintain intrinsic motivation.

In research literature various strategies intended to create the knowledge that three of the most important design discussions, skillful execution of strategies to facilitate, and the debate.

3.1.1 Discussion

Choose a topic is very important because the structured learning activities and guides. Discussions that are inherently learners to progress through the stages of cognitive and decision led in combination were more successful. It seems discussions problem-oriented and project-oriented compared to the traditional item-response strategies that promote high levels of integration and decision. In the following three strategies have been proposed to explain further explains.

3.1.1.1 Problem-based Discussion

Discussions of the issue are the basis of the content are and asking the students to discuss and work together for the development of late to be associated with them. For example, the discussion centered on research include learners who have assumed the role of as district committees and collective intervention to solve the issue of their choice. This task requires students to compare the advantages and disadvantages of alternative steps. While the problem largely created by the teacher, students may solve both the problem and the cause.

3.1.1.2 Project-based Discussion

Similar problem-based learning, project-based learning requires learners to create work around for problems. However, learner's products or artifacts they create are involved in solving the problem. The researchers based their study several proposals to create effective learning environments they include:

- Use of complex design issues that alternating cycles of refinement draw.
- Create a project that guides learners through the cognitive process.
- Motivate learners to reflect on their learning at the beginning of each stage.
- Provide more convenience to the next stage of project development for advanced learners in the decision.
3.1.2 Debate
One of the strategies debate is broadly to strengthen the presence of high levels of cognitive and motivate learners often used and referred to in the literature\textsuperscript{14,16}. In a debate learners in a position to agree or disagree with the arguments in an attempt to persuade others to adopt similar view expressed. For example, the impact of the duty is based on the structure of a negotiation in which learners study for specific arguments for or against the statement was late. They found that high levels of decision strategy, development, and integration created\textsuperscript{14}.

3.1.3 Facilitation
Facilitation is one of the most effective strategies for access to higher levels of cognitive presence\textsuperscript{14,17–19}. It also has been shown to interact more with the guidance of the facilitator will be clearer. Questioning and challenging statements challenging stance are strategies to facilitate effective.

3.1.3.1 Questioning
The question is often raised as best practices to facilitate the research literature. It was found that in the absence of the facilitators raised questions asked learners about the steps leading to the achievement of high levels of cognitive presence. They suggested that this technique is effective because the questions can guide learners through the cognitive presence\textsuperscript{14}. At this stage, facilitators details for speech problems and learning to think they are more motivated.

3.1.3.2 Challenging Sentence
A similar approach to questioning is choosing sentence most challenging in the debate to motivate the learner to learn. For example, teachers may have to defend their position to challenge learners, learner high light different perspectives, or encourage learners to consider alternative perspectives\textsuperscript{20}.

3.2 Social Presence
In research literature many definitions of social presence which is one of the most dominant definition that of their social presence. They believe that social presence as the medium of communication features and the level at which people are interacting through social media are aware of each other. The simplest definition of social presence “is being felt by each other”.

Research dominant social presence online is the link between social presence and learning online learning environment payments\textsuperscript{21}. This indicates that more research on the relationship between the variable scope of social participation and satisfaction levels of learners and learning progress. Recently, more researchers are interested in examining the relationship between two variables of motivation and interest in teaching.

In\textsuperscript{4} found that perceived social presence can be to participate in online discussions, though, the online community is perceived in terms of decline. In a study\textsuperscript{22} stated that social participations an important feature of successful earning activities, especially in digital learning environments. Without understanding the social, learners may lose motivation, lack of interest in education, and even fail.

The teacher who seeks to use the skills and techniques related to the formation of social presence is likely to haven impact on perceptions of students. In the following three main strategies to foster social presence in online learning environments are discussed.

3.2.1 Immediacy
Immediacy refers to physical and verbal behaviors that reduce the distance between people and improve physical and psychological motivation of learners in the learning environment. Two levels of immediacy were identified: Verbal and nonverbal. Nonverbal is immediacy behaviors, including physical abuse, (for example, touches another, look out for other eyes, hand gestures, etc). While verbal immediacy behaviors are verbal behavior (For example, praised the request expressed views, humor, self-disclosure).

Web-based training courses, because of the prevailing and their environment can support the verbal immediacy. Personalized dialogue in such a way to increase social participation and active involvement of the learner’s motivation and psychological interactions needed to enhance process understanding.

Immediate behavior includes the creation of verbal discussions, ask questions, use self-exposure, learning to name-calling, using personal pronouns (we, us), and repeated contacts with learners over time, intermittent response to learners, sanctuary the focus is communication\textsuperscript{21}. 
The researchers also noted that visual cues (e.g., color, graphics, video or teacher) sign indicates expressiveness is availability, conflict and politeness. Online learning environment allows teachers immediate verbal behavior easily with accurate design course content and interaction with learners integrate text.

### 3.2.2 Interaction

According to\(^{23}\) is a two-way interaction event that requires at least two objects and two actions. Interaction occurs when these objects and events mutually influence each other. Interaction provides the possibility to do various tasks.

Three primary official of learner-learner interaction, learner-teacher, are learner-content. When learners have enough interactive experiences, both motivation and learning happens. Other studies have also found that the reduction of social interaction can lead to a loss of motivation and satisfaction among learners and feelings of isolation, frustration, failure to increase the risk\(^{24-26}\).

Of the three types of interaction, interaction teacher-learner and learner-learner Interaction is very important in motivating learners that we will describe below.

#### 3.2.2.1 Learner-Learner Interaction

Learner-learner interaction is an important aspect of learning motivation. In support of this kind of interaction\(^{27}\) in survey of 207 doctoral students study found that those who had been accepted to a university in the training of the failure, the more meaningful and constructive peer feedback received.

In another qualitative study of 32 undergraduate and graduate\(^{28}\) found that participants relied on the relationship learner-learner. This type of connection in period reduced the perceived threat of poor performance. Based on these findings, learner-learn interaction plays an important role in the supervised learner motivation is online.

Based on research results mentioned learner-learner interaction based on the level and type of motivation of the learner (level of education and age) is variable\(^{28}\). So teachers and designers in developing the online courses should consider the following priorities:

- Learner-learner interactions asynchronous to synchronous. Learner-learner interaction in online courses takes place simultaneously or asynchronously.
- Although each of them alone can be the best kind of interaction, but online teachers should be teaching preferences and priorities learner-learner to choose the best type of interaction.
- Learner preferences and consent of learner-learner interaction based on the level and type of learner and simultaneous and asynchronous interaction is variable. Online teachers have different characteristics and conditions interaction of learners consider in the selection and choose a form of interaction that can meet learners’ needs and preferences\(^{29}\).

#### 3.2.2.2 Learner-Teacher Interaction

While learner-learner interaction plays an important role in motivating online learners, learner motivations one of the best predictors of prevalent (prevalence), quality, and accuracy of the time (timeliness) is associated learner-teacher.

As noted teacher and convenient access to timely and appropriate feedback to learners is very important during the period. Creating an active interaction between learner-teachers may help learners to reach a lasting impression and integrity in the online learning environment. This interaction can also be interaction of individual\(^{28}\).

#### 3.2.3 Feedback

Considering that feedback provides the opportunity for learners to achieve and reach their goals become aware of the important role in the motivation of learners. Monitoring learner progress in achieving their goals by the teacher for most of them is encouraging\(^{30}\).

While corrective feedback on the content of a particular task focuses, motivational feedback focused on learning. Individual differences affect learning on their motivation and these differences affect feedback on needs\(^{31}\). The first way, in which the feedback will be motivated learners, responding to educational goals. Educational target learner or teacher is created by providing feedback requires learners to achieve success.

So feedback encourages learners to meet their goals. Motivational feedback, in order to change the look of the learner to the subject that goal should be to focus on learning and work performance. Also, help the learner to refer unremitting efforts despite difficulties and obstacles. Motivational feedback can help learners gain a sense of control over the learning environment\(^{12}\).
Use personal interest in feedback, increase motivation, and a sense of control leads to internal motivation to engage learners in the learning process, helping learners to accept success or failure of their efforts, motivational feedback to learners’ personal relationship and the property.

3.3 Management
Teacher management behavior and decision points out that the potential problems and prevent the possibility of learning and learner provides better performance. In fact classroom management activities are to prevent potential problems. By creating such a situation, surely motivate learners to learn and been courage to stay in this environment.

Time management, modeling, and expressed expectations of management are among the key strategies to consider and implement them can be more motivating learners to attend and persistence in the classroom. The following are explanations of each of them.

3.3.1 Time Management
To facilitate the learning experiences of this group of learners, an online teacher should organize courses in a way that requires advanced time management skills among learners. Learners in terms of time management has different features and capabilities. So in relation to learners who have good ability, the teacher should intervene in the e-learning activities and ways to remind or homework. This intervention and reminders may be more motivated to continue teach.

Providing information and contenting small pieces, put the printed pages, browse online content effectively includes impel descriptions, calls, and the like, offer suggestions and tips on how to time during the period, setting a dead line for homework, specify the time to respond to messages, providing certain times to communicate with the students, giving enough time for homework of the most important strategies for time management in web-based learning environments.

3.3.2 State of Course Expectations
When students are learning in their course with seriousness and hard work pay, usually earn a higher rank. Many students think that conditions and standards in e-learning courses and expectations at a low level is easy. Such an attitude should be corrected at the beginning seriously otherwise affect student performance in the course. Define standards and criteria for evaluation of the student’s participation in realizing the expectations of a positive impact on their students.

Reassure the students to monitor their work, the educational expectations of website pages, take into consideration individual performance, providing feedback to the whole class, and performance-based assessment that can improve the quality of learning motivation for the learning environment Web-based help, because it helps students understand the value of time to plan.

3.3.3 Modeling
One of the best ways to encourage learners to participate and improve motivation, behavior modeling is a teacher. If the teacher when addressing learner or when sending messages addressed to them by name, learners will follow from this dominant model and was worried about how they will interact with more motivation.

Teachers also need to have what it expects in the state of online learners and learners can follow in line with expectations. Teachers also receive and provide concrete examples in the online learning environment, a good example of how partnership provides learners.

Teacher attitudes and beliefs about teaching and learning in the classroom through the model is spread strongly. If teachers apathy and reluctance to show what they teach, motivate learners will be practically impossible. Mention expression such as (I know this stuff is boring, but we have to learn it) or (This is not my favorite) does not follow any useful purpose and motivation is very destructive.

On the contrary, the most boring topics can be interesting for learners air and if the teacher’s own interest to dramatize them. Mention expression such as (I strongly from that I like) or (teaching this subject is too much pleasure, can learn to create learner motivation) 11,14.

In the implementation of the most appropriate template or guide lines motivational strategies will be discussed. Given the characteristics of learners in a classroom setting and has a great impact on the success of implementation strategies. For example, the use of multiple communication tools in a web environment, the motivation of learners, the volume of content, according to learners’ cognitive and social characteristics of the
important things that need to be considered in the process of implementing the model.

The last stage of the model proposed evaluation strategy. To evaluate the motivational strategy can questionnaire assessing learners' motivation to learn our motivation changes. As shown in the model of the information about the motivation of learners gained in the implementation of the strategy and analysis motivation can, again resulting in the use of motivational strategies more suitable to be used.

4. Conclusion

The importance of motivations a positive impact on learning in the research literature confirmed. Several studies show that cognitive engagement and motivation in learning control is an impact on the learning process. Major part of these related to the educator or teacher. Given that Iran or other countries often have content ready to be virtual teachers and they have no power and a major role in changing the content, motivational strategies that emphasize only the teacher is very important.

Equipping teachers with these strategies learners and motivational problems can be solved very poor content even cover weaknesses. According to the study, which identifies motivational factors in web-based teaching with an emphasis on the role of the teacher in this study with qualitative approach was used to identify these factors and to motivate model was presented. After interviews with experts, teachers and students virtual learning environments, web-based incentive three main categories of social presence, cognitive presence, and management have been identified.

Social presence, to put it simply felt together and the teacher plays an important role in creating this feeling. Many teachers are trying to support and positive online environment similar to what can be found in the classrooms face. Online teachers are concerned that the lack of common sense and lack of balance may cause learning in online environments is raised. Feedback, interaction, and immediacy are three important factors in creating effective social presence.

Because feedback allows learners to know how they can improve their performance improves motivate them. While attitudes are essentially in the form of assignments in all courses are graded, in an online class, learners often want instant feedback when needed. This type of feedback helps them measure their performance and to maintain or improve the quality of their work motivates them.

Several studies also have shown that interactions in web-based learning environment play an important role in the development of learners' motivation and retention. Learner-learner interaction, teacher-learner and learner-content are three main forms of interaction between the interaction teacher-learner who has a significant impact on creating motivational.

A teacher can create a significant impact, control, and monitoring learner-learner interaction and learner-content. Online teachers have different characteristics and conditions interaction of learners consider in the selection and choose a form of interaction that can meet learners' needs and preferences.

One of the most important factors that can create and enhance intrinsic motivation and challenge learners to engage learners in mental and cognitive research has been referred to as the cognitive presence. Several research and its impact on improving the motivation of learners. The main implication of recognition for online media to the coach and the organization is learning from him.

Although by default, a learner-centered-learning is that it is, may be it is in conflict. However, the purpose of organizing the learning environment by teachers should not mean that unstructured learning space left. Lack of attention to this, the learner can digress into other spaces, getting the learner to information over load and a lack of motivation to continue learning.

Proper management of learner and teacher on web-based learning environment can have a significant influence on the motivation of learners to continue. Teacher management behavior and decision points out that potential problems and prevent the possibility of learning and learner provides better performance. Several factors may be involved in the management of the virtual classroom, but modeling, time management and explain the objectives and expectations of the most important factors are.

Coach intervention in critical situations to resolve differences, avoid the domination of discussions by some of the students, make a decision to reduce information over load, put the learner in the learning objectives of other strategies for management.

Applying the model and identify the elements and strategies of web-based learning environments can be effective when teachers and learners have an
understanding of the environment. Web-based learning environments prompted by various factors such as the characteristics of the cognitive, social, cultural, economic and even depend learners and implementation strategies to create or improve incentives may not necessarily detected.

Appropriate and accurate design and analysis of learner motivation needs to be an important factor in the selection and use of strategies to help teachers is identified.

5. References

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