A SMART FRAMEWORK FOR EFFECTIVE SELF-REGULATION IN ELEARNING PARADIGM

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ABSTRACT-*This study examined the distance instructional learning and self-regulation toward student learnings to distinguish student regulation toward learning abilities prescient of intellectual achievement in an eLearning and blended learning framework. Five managerial elements toward oneself credits were judged prone to be projecting of scholastic efficiency: suitability for learning and performance, environment study, intrinsic goal orientation, time management, administration, looking for help, and Internet availability. Oral capacity was utilized as a device to control the measurement. Enactment was operationalized as ultimate course score and ranking. Fact and figures were gathered from 172 Student's in a mixed under-graduate and graduate courses at eLearning University, in Computer Science department. Through Regression analysis examined and uncovered that verbal capacity and reasonability toward self-efficacy related considerably to execution efficiency, together, clarifying 10 percent of the fluctuation in course scores and rankings. Feasibility toward self-efficacy for learning and efficient execution alone represented 5 percent of the variance.*

Keywords: Self-regulated learning; Blended learning; Distance learning, eLearning

INTRODUCTION

Electronic Learning (eLearning) becomes more effective for students that covers beyond the boundaries of the institution and countries [1]. Internet provide the facilities that were not present before 10 years now students can learn from e-learning by using smart phone, workspace or there are at their home. As in real time environment time zones are in education question answering approach is being used from a long time but quality of return answer to student is yet not being achieved. In this regard different approaches like natural language processing also fail to achieve real time demand because of huge computing. If time zone is not considered, then ant time ant where students query answering become tougher.

Factor Influences the learning

Motivation can play lead role in improving distance learning capability for better success rate, whereas, is not so in many cases. Due to that it's necessary to highlight and separate important part of motivation which actually enhances one's ability to take on goal up ahead in his course of study. These parts of motivation are personal perception and goal orientation are considered both important in successful distance learning.

Now we will look at different other attributes of motivation self-efficacy which can help in providing better results. Information technology skill – technology these days plays an important part for online learners. Time Management – this is important factor for distance learner to manage time for learning effectively for utilizing the available resources [2]. Study Environment Management – it is important to not only manage time for learning in distant but also keep track of the environment. Due to non-controlled class like environment a learner should make physical space available where no social disturbance can make impact. Learning Assistance Management – another crucial point is seeking proper assistance and help in support of learning. This can involve

different channel like online materials, books, emails, chat rooms, blogs and tutorial etc. keeping learning updated and motivated.

Literature Review

Personal perceptions is the crucial element under the self-efficacy for motivation [3, 4]. According to Bandura (1997) self-efficacy is to improve one's judgment achieve goal through plan and behavior. Leaners can adopt through academic skills and learning abilities which is known as adaptive self-efficacy by Linnenbrink and Pintrich [5, 6].

Among both these elements for motivation goal orientation is seem to have more impact through a study made by C.J. Miller [7, 8]. Goal should be chosen carefully and specific as poor goal orientation can lead to fail in achieving interesting learning results. Learner himself can judge the outcomes of these factors utilization and no outside agent can help in this respect. This concludes that motivation is a key attribute toward autonomous learning. Person's goal orientation is another important element for successful distance leaner ability. This shows one's intent to achieve a task through general goal oriented study and skills. Goal orientation can be seen either in the form of intrinsic or extrinsic. In intrinsic goal orientation, it includes learner ability in participation towards achieving goal by facing challenges, one's interest and improve leaner own capability. Whereas, in extrinsic involve some sort of rewards at the end of achieving goal instead of intent to improve one's own capabilities.

Traditional differs in many ways from the distance learning as eLearning paradigm always required interactive mode[9]. The student involvement is the major issue that would be increased in interactive lectures instead of traditional approaches [10]. The difference in traditional lecture characteristics with the interactive lecture characteristics is given in Table *2*.

Table 1: A Comparison High and Low Risk Active Learning Strategies

Attributes	High Risk	Low Risk
Class Time Relatively	long	Short
Degree Structure	Less	More

Degree Planning	Spontaneous	planned
Subject Matter Relatively	abstract	concrete
Prior knowledge of the Subject informed	Less informed	Better
Prior Knowledge of the Teaching	Unfamiliar Technique	Familiar Technique
Prior Experience with the Teaching	Limited Teaching Experience	Considerable Teaching Experience
Interaction Pattern	Students-Student	Students-Teacher

Table 2: Traditional versus interactive lectures

Traditional Lectures	Interactive Lectures
Students-Instructor talks face to face interaction	Students-Instructor no face to face interaction
with less disruptions	Periodic pauses in instructor and disruptions
Concentration of the student starts to dropping after 12-15 min.	Students concentration begins to decrease more frequently
Structured activity in-class is not frequent.	Structured activity in-class is necessary
Queries are mostly verbal	Queries are mostly written
	Instructor 's questions require responses
Students 'responses to questions are made by pupils through hands	Students 'responses to made by using an IF-at Answer Sheet or a clicker
Student-student talk is dejected	Student-student talk is stimulated
Students mostly listen	Students often work with partners.
Notes are prepared independently	Notes are prepared in groups
Student understanding during the lecture is not monitored explicitly	Student understanding during the lecture is assessed directly
Correction to misunderstandings are not provided routinely	Correction to misunderstandings are periodically
High absenteeism in student's repeatedly	High attentiveness in student's.

Table 3: Self-regularity Attributes and related process for the eLearning Autonomy

Sr. No.	Attributes	Process
1	Time Management	Time should be managed effectively and productively in learning experiences.
2	Motivation	Self-Reliance in performing the specific learning tasks. Goal oriented tasks for engaging the leaner.
3	IT skills	Confidence in using and exploring the internet technologies for the learning.
4	Learning Assistance	Identify need of help, when where and how, the sources of help, acquiring help, evaluation of help accepted.

MATERIAL AND METHODS

Distance education included the both theoretical and practical research which leads the new horizons for the future generations. There are a number of areas in distance education, but only focuses on three major areas like distance class versus face to face education, individual educator characteristic learning outcomes and different programs for the distance education. These areas are commonly lacking of pedagogically with relevancy to theoretical and practical framework that will be helpful in generating the advance teaching and learning theories with the implementation is shown in Figure 1.

This approach will enhance the efficiency, minimized the delay and hurdles faced by the educator or learner [11]. It will be more helpful for the eLearning, distance learning and blending learning frameworks. Moore's hypothesis comprises of three essential unmistakable variables: association (dialogue), structure, and self-governance. He thought that these three interrelated variables are normal for all separation programs. While collaboration and structure concern fundamentally how a distance educational subjects and courses are composed and led, and thus "have a place" to the course architects and teachers, the third variable, independence, is focused on separation learners themselves and their capacity to control their own learning. The self-regularity attributes and related process for the eLearning autonomy are shown in Table 3.

Student engagement is the most important factor to enhance the learning curve. If the learner is aggravating, then curve goes down and behavior will be irritating that ultimately leads to block the leaning. Learning experience is always depends upon the engagement of leaner.
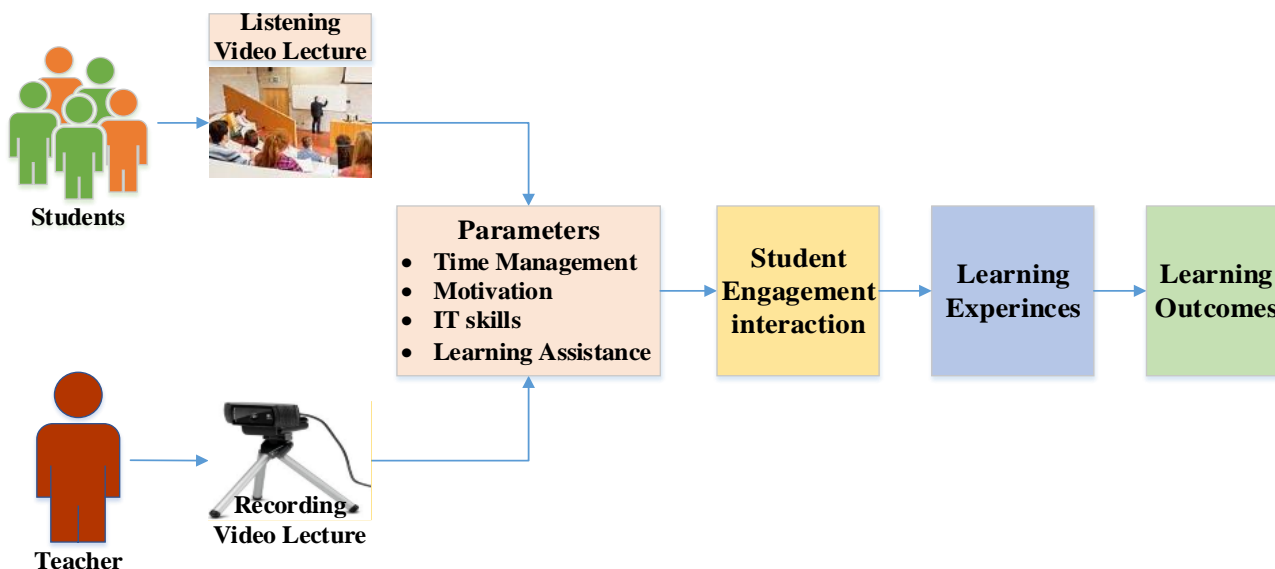
Figure 1: Self-Regulation Effectiveness model for eLearning Paradigm

By mathematically it can be denoted as:

$\forall \exists X \in EL \,||BL$

$LE \propto SE$ --- (1)

Which is further related to learning outcomes

$LO \propto LE$

Where as

    EL stands for eLearning

    BL stands for Blended learning

    LO stands for Learning Outcomes

    LE stands for Learning Experience

    SE student Engagements

It also presented the educator skill that play very vital role to teach the students. Especially in eLearning paradigm where leaner has no eye contact with educator and no direct questioning and answering for the student satisfaction.

The participants of this research are learner of the eLearning in Virtual University of Pakistan and formal student in University of Engineering and Technology Lahore. They are belonging to both undergrad as well as postgrad student. Total numbers of participants take part in this research are (n=180) belongs to eLearning University. The students are given full choice to select either eLearning or Blended learning environment. The student participation ration is almost 60 percent in eLearning and 40 percent in a blended learning environment. The lecture schedule is updated weekly based. Every weak 3 lectures are delivered; each has 60 Minutes duration in an eLearning environment. While in blended mode 2 lectures are delivered each has 90 minutes' duration per week. The lecture is delivered with the help of TV stations and uploaded on the website.

Appraisal comprised of four components: two midterm tests worth 40 percent of the last grade for which the material tried was taken from the online modules; class interest, 5 percent; an advertising recreation, 25 percent; a feature gathering venture, 30 percent. The data sample is collected from different student groups which are fragmented on their traits motivation.

of the current semester, age group, gender and living areas. The education level is fragmented b among 4 groups from 1 to 4 and each has two semesters.The sample of age range is fragmented in 5 groups. 15-20 (27) which is 15 percent, 21-25 (90) which is 50 percent, 26-30 (34) which is 18 percent, 30-40 (20) which is 11 percent, 40+ (6) which is 3 percent of the overall strength.

RESULTS AND DISCUSSIONS

The study employed both descriptive and inferential statistics. The descriptive analysis included an overview of the demographics of the sample and means, standard deviations, and simple correlations of the variables investigated in the study, as well as reliability analysis of the subscales. The inferential analysis was a stepwise multiple regression run on SPSS Version 9.0. The level of significance used for the analyses was .05.

The reliability analysis exposes the truth that all subscale contributed well. All the parameters had the good internal consistent reliabilities which are: time management (.80), learning assistance (.67), motivation towards the goal (.93) and information technology efficacy (.82). The simple correlation among the variables under investigation are shown in

Simple correlations of all the variables in the study (see Table 2) revealed that self-efficacy for learning and performance and verbal ability correlated significantly with final grades at r=.29, p<.01 and r=.26, p<.05 respectively. The correlations of the variables in this research is represent that time management, motivation, IT skills and learning assistant ability correlated significantly with final grades at r=.29, p<.01 and r=.26, p<.05 respectively. The significant correlation between time management and motivation is as (r = .47, p<.01), which reflected the association between them as   attributes   of

Table 4: Pearson Product-Moment correlation of the Variable N=172

Sr. No.	1	2	3	4	5
1. Time Management	-	.467	.314	.118	.157
2. Motivation	.467	-	.324	.044	. .921**
3. IT skills	.314	.314	-	.0128	.146
4. Learning Assistance	.118	.044	.0128	-	-.102
5. Final Grades	157	.921**	.146	-.102	-

*Note: Correlation Significant is at the 0.05 level (2-tailed). **Correlation is significant at the 0.01 level(2-tailed)*

The noteworthy correlation of time and study environment management with IT skills (r = .31, p<.01) and learning assistance (r = .32, p<.01) indicated the relationship between learner motivation and the behavioral strategies involved in learner control of study time and study environment.

These four components of learner autonomy are self-regulatory learning attributes that have been identified in the self-regulation literature as important factors in classroom-based learning. They have also been cited in the distance education literature as important elements of distance learning success. The purpose of this research was to investigate whether they are also significant predictors of academic success in a blended (part face-to-face, part online) learning context. It is important to note, that these are not the only variables that contribute to self-regulatory behavior, merely those that have been selected for investigation in this study based upon their prominence in the distance education literature. There are other self-regulatory attributes, both motivational and behavioral, that comprise self-regulated behavior. These include such components of motivation as the value learners assign to specific tasks, locus of control beliefs, and affective factors. They also include cognitive and meta-cognitive learning strategies such as rehearsal, organization, critical thinking, and elaboration, among others. Any of these self-regulatory attributes also may be potentially significant aspects of online learning success.

I.   CONCLUSION

The aim of this study to present that self-regulation in eLearning paradigm is firmly dependent upon the discussed variable and parameter. These parameters are time management, motivation towards goal, information technology awareness and learning assistant. Theses parameter are positively proved to be affective to enhance the learning curve of students. The investigation of the research indicates that the self-efficacy in eLearning and blended learning paradigm strongly based upon the factors. In future these techniques are implemented for the various blended learning model the employs the diverse technologies with different online delivery of contents and different blends of face-face learning. The significant of the self-efficacy parameters influence on the learning of the student with different blends of the subject in the field of information technology science, and social sciences. Moreover, the research will be extended towards the control learning, effectiveness and dependency on these factors.

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