RESEARCH ARTICLE

LEARNING ENVIRONMENT AND STUDENTS' ACHIEVEMENT IN NEPALESE BUSINESS SCHOOL

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ABSTRACT

The study determined how students assess the various components of their learning environment. It also identified how the learning environment affects students' learning achievement. A sample of 152 MBA students randomly selected from a population of Tribhuwan University, Kathmandu University, Pokhara University and Purbanchal University's students. Data analysis was done using descriptive statistics, Pearson correlation, regression analysis, Multicollinearity and F-test. Findings revealed that students could assess the four components that contribute to their academic performance, which is: curriculum activities (6 items), Management (10 items), learning process (6 items) and faculty (10 items) factors. The result showed that there is positive relationship between students' achievement and curriculum activities learning styles, and faculty. The findings are discussed with a view to improve the quality of the learning environment and students' achievement.

INTRODUCTION

The learning environment includes interactions with teachers, students, principals, and learning activities. Many factors affect teaching learning activities include teachers' qualification, experiences, availability of teaching learning resources, physical facilities, students' own cognitive, and other abilities, and their socio economic environment. Warwick and Riemers (1992) found that teachers' qualifications and subject knowledge had a strong correlation with students' achievements of students. Deal and Peterson (1999) shows college culture is one of the important factors that influence academic achievement between school with a good school climate and those with a poor school climate. Saeed (1997) identifies that school prestige, principals' leadership style, monetary rewards, better working conditions and parental encouragement were major predictors for secondary school teachers' job satisfaction which in turn had a positive impact on students' learning. Positive learning climate had brought higher academic achievement of students (Hirase, 2000). Education converts human from parrot to poet. Lifelong learning process needs to inculcate install human values, knowledge and skills with giving proper environment at the learning place to engulf individual innate potential. The breakthrough in new information technology brings with it global economy and new challenges for human kind. Education helps prepare to cope with this challenges (Chen, Sok and Sok; 2007).

Johnstone, 2001 (as cited in Chen *et al.* 2007) mentions that higher education is deemed important to national economy growth and for individual to prosper. However, "even develop countries still face problems as some universities are not accredited or recognized by the government (American Teacher, 2004)". Learning process in the individual starts with their birth. It begins at home by imitating the elders and observing their activities. Thought the student learns many basic skills at home, but he or she needs to learn more to face complexities of life and perhaps education institutions are the best sites for his or her further career development. The colleges are the institution of socialization of individuals which helps them in developing certain competencies and find ways for their adjustment in the society. College environment is the result of interactions of teachers, students, principals, and learning activities with prime goal of preparing young generation for having successful future. But numbers of factors affect the learning process or success interactions. Holdsworth, Wyborn, and Thomas (2007) explains that higher education address the social and environmental problems currently face, a new way of educating our students is required; on that empowers them with the capabilities and skills to seek out and examine their own framework for thinking. This change can only be achieved through changes to curriculum and teaching practice. Within Australian universities, program is needed to develop greater understanding regarding pedagogy, program content and structure, to support a much deeper development of curriculum and learning outcomes within the student body (p.146). Rogers' emphasis on the importance of positive learning environments parallels the time when educational

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researchers began systematically studying the impacts of the environment on students' learning. Over the last forty years, extensive analysis and evaluation of the impacts of classroom environments have influenced the teaching and learning process (Fraser, 1986; Fraser, 2002; Moos, 1979; Vahala, 1994; Walker, 2003). Walker (2003) stated, "The learning environment has a strong influence on student outcomes and plays an important role in improving the effectiveness of learning from the level of the institution down to the level of the individual classroom". Instructors who seek to improve the effectiveness of teaching and learning should view the learning environment as a critical component of students' overall educational experience (Fraser, 1986). Learning environment research encompasses a broad range of disciplines, from the architectural design of institutions to the psychological and social climates that exist within individual classrooms (DeYoung, 1977; Fraser, 1986; Moos, 1979; Vahala and Winston, 1994). The majority of research on classroom environments has been conducted in elementary and secondary school settings (DeYoung, 1977; Fraser, 1986; Treagust and Fraser, 1986a and 1986b; Vahala and Winston, 1994).

Prior to the late 1970's, few studies attempted to analyze the impact of the learning environment in higher education classrooms. In these studies, researchers emphasized the quality of the instructor rather than the social, psychological and intellectual development of students (DeYoung, 1977). Over the past twenty years, researchers have begun directing their focus towards the college classroom learning environment and its influence on students' learning, social development, satisfaction and personal growth. Most researchers study students' perceptions of psychosocial dimensions of the classroom environment based upon Moos' conceptual framework (Fraser, 1986; Myint, 2001; Moos, 1979; Vahala and Winston, 1994; Walker, 2003). Fraser (2002) offered further explanation, "Classroom environment dimensions have been used as criterion variables in research aimed at identifying how the classroom environment varies with such factors as teacher personality, class size, grade level, subject matter, the nature of the school-level environment and the type of school" .
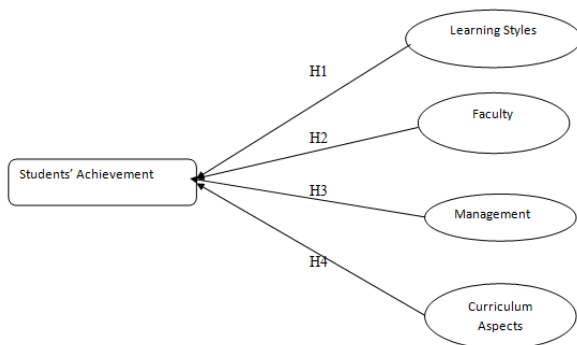
Statement of the problem: The growing educated unemployment day by day has been increased MBA degree in Nepal. The Mitzberg identified qualified human resource has conceptual skills, interpersonal skills and technical skills. Considering traditional annual system of master of business studies has high theoretical and low in practical market based exposure. Acharya (2008) argues that approximately 31 per cent pass in undergraduate level. The reasons are uncertainty in examination, irregular teaching activities in colleges and disturbance in teaching learning high level of politics in college (UGC, 2008). Therefore students want to excel education considering master as a last university degree. Market opportunity and scope, MBA holders can fit any industry either commercial or governmental. Admission in MBA is flexible in nature where students from any discipline can join. Herrington (2010) appears that the traditional MBA has reached or is close to reaching market saturation. This may perhaps explain the increasing number of institutions offering Executive programs – a nontraditional format catering to nontraditional markets – as well as the large number of MBA degree programs being delivered at extended sites (e.g., corporate locations) and/or via distance learning formats.

It is identified several trends likely to affect the growth and development of the MBA including: a greater proportion of students completing the MBA degree on a part-time basis; increasing competition from MBA programs located in foreign countries; a decrease in the number of international students seeking MBA degrees in the U.S.; and growing acceptance of online delivery. Henn and Andrews (1997) stress that integration education learning is missing to the crucial skills of putting the various subjects in perspective on their own, in the home or on the job, and are not provided with the skills to critically reflect on this knowledge and questions the implications of their decisions. They advise education needs to think building a whole person- sprit, hands and body that follows authentic tradition of education to equip the young for lives of through and purpose. Education in higher education focused on systematic, holistic and complex thinking that recognizes the interdependence between nature and people facilitated the paradigm change required to achieve a more sustainable future. Nepal has three problems under higher education. First problem is in access of higher education because TU has only 600 colleges. First problem is inadequate college in Nepal that makes problem in access of students in higher education especially in MBA degree. Second realities show that high percentage of students is failed under annual based master degree courses comparison with semester and trimester MBA. Teaching learning process within the MBA is also different under trimester and semester MBA. So that difference is found in teaching learning and exposure provides under affiliated and university. Third, meeting Nepal teaching learning standard with international level is also found inconsistent to build education to develop as a whole person. This study is covered to find teaching learning practices under different university's business schools.

Review of Literature and Theoretical Framework: Classroom environment research has a varied and diverse history. Much of the research in this field has been conducted on the role of the learning environment in meeting student learning outcomes in the classroom, throughout the curriculum, and at the institutional level (Fraser, 1986; Fraser, 1998). Fraser (2002) stated, "The strongest tradition in past classroom environment research has involved investigation of associations between students' cognitive and affective learning outcomes and their perceptions of psychosocial characteristics of their classrooms". Fraser (1986) emphasized that future research is needed designing "experimental studies in which the environment is deliberately changed in specific ways in order to establish more clearly the causal effects of these changes on students' outcomes". Research findings thus far indicate the need to continue focusing on the impacts of various types of learning environments in an effort to improve student learning outcomes (Fraser, 2002). Learning environment research remains vibrant and active within the education literature; however, much remains to be done in higher education settings. Future research is needed using multiple methods including experimental designs, qualitative and quantitative research designs, and the combination of external observers and student perceived observations (Aldridge, Fraser, and Huang, 1999; Fraser, 1986; Fraser 2002). Kemp, Morrison and Ross (1998) identified that it is important for the effectiveness of teaching environments to take account of group or individual learners' characteristics, competence and experiences (pre-learning) throughout the process of planning learning environments.

Though all human beings have common bio-psychological and social characteristics in learning process, individual preferences concerning the ways of giving meaning and acquiring information may vary. Even identical twins who share the same environment may give meaning in different ways the phenomena and events which have common characteristics. All information which becomes the subjective life of an individual after giving meaning process may have individual-specific differences in ensuring permanence of learning and remembering. One of these individual-specific differences is the learning style which is the topic of this study.

Conceptual Framework of the Study: The study is intended to establish the impact of learning environment on students' achievement. Basically, it is conducted to have an effect of curriculum aspects, faculty characteristics, infrastructure, learning styles and management on students' achievement (Dunn, 1983; Fairhust and Fairhust, 1995; Deal and Peterson, 1999).

Hypotheses Formulation of the study: Dunn (1993) found that dramatic improvement in students' achievement in cases where learning styles have been taken into account show that the way things are taught had a greater impact than the content covered in a course of study. It is believed that teachers are able to analyze the differences and needs of their students; the educational process is likely to become optimized for both teachers and students (Fairhust and Fairhust, 1995). Learning styles are among the concepts that are postulated by researchers to show learners' differences and varied needs. As a result, the study concluded that learning styles have significant impact on overall student's achievement. Thus, it can be hypothesized as

H1: There is significant impact of learning style on students' achievement

Darling-Hammond (2000) demonstrated that effective teachers are an important component of an effective students' achievement. Hattie (2009) grouped 59 of the 183 variables in two categories labeled teacher and teaching and identified that teachers have significant impact on students' achievement. Capraro (2001) and Ziegler and Yan (2001) found that students taught by teachers who were high in constructivist beliefs (i.e allowing students opportunities for meaningful exploration and discourse) had better problem-solving skills than students taught by teachers with low constructivist beliefs. Thus, it can be hypothesized as

H2: There is a significant impact of teachers' characteristics on students' achievement

Stockard and Mayberry (1992) noted that the specific physical environment of the school could influence on students;

achievement and found a strong tie between the management. In Virginia, both Cash (1993) and Hines (1996) concluded that secondary students' in both rural and urban areas performed better in higher quality school management. Lemasters' (1997) meta-analysis of studies since 1980 identified aspects of the management that had a positive effect on students' achievement. Thus, it can be hypothesized that

H3: There is significant impact of college management on students' achievement.

Recent studies (Freketich, 1998; Waldrope and Bayless, 1999) have recommended that corporations and higher institutions expand their dialogue and cooperation to collaborate on an MBA curriculum design that will meet employer needs and students' achievement while fulfilling the educational mission of an academic institution. In addition, it is essential that the two groups share what they view as the challenges, facing twenty-first century corporations, what sills MBA graduates require to address those challenges, and how effectively the current MBA curriculum prepares its graduates in those skills. Thus, it can be hypothesized that

H4: There is a significant impact of curriculum aspects on achievement

Methods

Exploratory, descriptive designs as well as survey research design have been used to establish the empirical data on learning environment on students' achievement in Nepalese business school. A survey research design has been used to investigate, assess opinions and preferences in educational issues and problems. This research design is considered the most appropriate methods to measure attitudes, beliefs or personality structures in a natural setting through tests or attitudes scales or questionnaires (Leedy, 1993). Common problem in Nepalese university are unable to conduct examination due to high level of students, TU administrative and outside politics. University schedule is rarely maintained. Uncertainty in result publication has also compelled to find to go either study abroad or study such business school in Nepal. Schedule university examination had also cancelled many time and extended schedule. This type of outside climate affect inside teaching learning activities in Nepal. Therefore, based on this prior information further research variables and questions have been developed in Nepalese context. The research is descriptive because it explains the status of college position in the market, how employer/ market perceive and analyze Nepalese MBA graduate in terms of skill, knowledge and attitude.

Population and Sample Selection: Five best MBA colleges have been selected as a sample to know learning environment and students' outcome as skills, knowledge and attitude. The sample universities are Pokhara, Purbanchal and Kathmandu University. In pokhara university both Apex and Ace College have been selected because these colleges receive highest number of application during admission period. Similarly Purbanchal University is also another alternative to pursue MBA for students. Thus, Whitehouse International and Kathmandu Don Bosco College have also been taken as a sample from Purbanchal University.

Variables of the study: Learning environment includes internal colleges are teaching and learning process in the class

Table 1. Descriptive Statistics

S.N	Attributes	Sample Size	Mean	S.D.	Minimum	Maximum
1	Curriculum Aspects (CA)	152	3.79	0.76	1	5
3	College Management (MAN)	152	4.09	0.82	1	5
4	Faculty Characteristics (FA)	152	3.65	0.67	1	5
5	Learning Style (LP)	152	3.44	0.82	1	5
6	Students' Achievement (SA)	152	4.16	0.79	1	5

Table 2. Reliability and Standardized Loadings

Construct	Indicators	Standardized loadings	Ave	Cronbach's Alpha
Curriculum	CA1	0.81	0.79	0.78
	CA2	0.79		
	CA3	0.83		
	CA4	0.72		
	CA5	0.8		
Faculty Characteristics	FA1	0.63	0.69	0.85
	FA2	0.71		
	FA3	0.78		
	FA4	0.63		
Learning Process	LP1	0.59	0.72	0.83
	LP2	0.75		
	LP3	0.82		
	LP4	0.71		
Extra Activities	MAN1	0.69	0.68	0.87
	MAN2	0.66		
	MAN3	0.58		
	MAN4	0.8		
Students' Achievement	SA1	0.56	0.67	0.84
	AS2	0.71		
	SA3	0.65		
	SA4	0.75		

Table 3. Inter Construct Correlation and Square Roots of AVE Constructs

Factor	CA	FA	LP	MAN	SA
CA	0.79				
FA	0.31	0.69			
LP	0.27	0.41	0.72		
MAN	0.33	0.36	0.48	0.68	
SA	0.45	0.57	0.51	0.53	0.67

Table 4. Fit Statistics of Structural Model

Model Name	Chi-square	CMINDF	NFI	IFI	CFI	GFI	RMSEA
Model	237.13	1.73	0.92	0.95	0.96	0.91	0.04

Table 5. Path Analysis and Standardized Regression Estimates

Hypothesis	Path Coefficents	P-value	Supported(Yes/No)
H1: There is significant effect of curriculum on students' achievement	0.49	0.001	Yes
H2: There is a significant effect of faculty characteristics on students' achievement.	0.26	0.001	Yes
H3: There is a significant effect of learning process on students; achievement.	0.42	0.001	Yes
H4: There is a significant effect of management on students' achievement.	0.16	0.001	Yes

room, assessment, teaching learning management in colleges and administration, instructional role, placement, outreach program, industry exposure, learning styles, curriculum aspects, college management, infrastructure, community involvement in college activities, and physical facilities and career counseling. Students' achievement has been measured in terms of knowledge, skills and attitudes.

Instrumentation: Both primary and secondary data have been used under this study. Primary survey based data has been collected to examine the impact of learning environment on students' achievement.

Secondary data has been used to identify number of students passed with highest grade under different business schools and universities. In the initial screening procedure in constructing

the learning environment and students' achievement in Nepalese business school, a number off factors were taken into consideration. These included five learning environment and their associated traits, cues and explanation. Studies conducted by researchers like Dunn (1983), Reid (1987), Brown (2000), Kolb (1984), Guild and Garger (1985) and Deporter and Hernacki (1992) are closely attended to. At the same time, the researchers also looked into several published sources which contained established questionnaires and inventories that had been tested and re-tested in their validity and reliability effectiveness. Some of the published sources include Reid (1987), Dunn and Price (1985), and Kolb (1984), as well as some other sources. It was observed that most of the instruments for measuring each of the learning environment contained items which were quite related to each other in terms

of their content. Five point rating scale has been used to measure classroom teaching and learning processes, classroom assessment, principals' administrative,, instructional role, coordination, external exposure, parental relationship, physical facilities of the class room, infrastructure, career counseling and placement and community (outreach program). Fifty items at 5 point rating scale (Likert Scale) ranging from "1" strongly disagree to "5" indicating strongly agree has been constructed to measure the impact of learning environment on students' achievement in Nepalese business school.

Limitations of the study: This study is administered under KU, Pokhara University and Purbanchal University under its business schools. Sample is only MBA students. Study questions are taken based upon the international practices as well as problem identification based upon few colleges as a pilot study. This study is perception based upon college students, principals/coordinators and employers. Changing perception among them could change in result in learning environment in the colleges.

RESULTS

Table 1.1 describes the descriptive frequency of variable taken under investigation in the research. The mean vale of variables seem to be greater than 3 which reveals that the students are positive towards different variables and they have its impact on students' achievement in Nepalese business school. Besides, the value of standard deviation has found to be less than 1 which reveals that data is consistent with minimum value 1 to maximum value 5. After data collection, a two-step structural equation modeling (SEM) procedure proposed by Anderson and Gerbeing (1998) was employed for the data analysis. The first step was to examine the scale validity using Confirmatory factor analysis (CFA), while second step was developed to test hypothesis using structural equation modeling. The absolute fit indices used to evaluate the overall model fitness are: chi-square to degree of freedom ratio (Wheaton *et al.*, 1977), goodness of fit index (GFI) (Hoelter, 1983), comparative fit index (CFI), the root mean square error of approximation (RMSEA) (Steiger and Lind, 1980) should close or above 0.9 (Hoelter, 1983). where threshold values for CMINDF should be in between 1 to 3 (Carmines and McIver, 1981), GFI values should be close or above 0.9 (Hoelter, 1983). Comparative fit index (CFI) is an incremental index used to calculate the improvements over competing models (Benenler, 1990). The CFI value should be less above or close to 0.9, which indicates a good fit (Hair*et al.*, 2009). Likewise, the value of root mean square of error approximation (RMSEA) should be less than 0.1 to be acceptable fit index. The overall goodness of fit indices has been shown in the table 2. The CMINDF value is 1.73 which is less than 2; CFI and GFI have recorded to be greater than 0.9; RMR is lower than 0.05; RMSEA is 0.02 which is less than 0.10. It indicates that the models are satisfactory (Hatcher, 1994). The cronbach alphas for all constructs have found to be greater than 0.7, satisfying the general requirement of reliability for research instruments. Besides, all factor loadings have also been recorded to be greater than cut-off point 0.5, showing all indicators can effectively measure the construct and supports convergent validity (Anderson and Geibing, 1988; Hair *et al.*, 2009). The validity of the constructs is measured by analyzing the Average Variance Extracted (AVE) and and inter correlation matrix. First, Average variance extracted (AVE) value of each construct is greater than 0.5 which signifies a satisfactory

degree of convergent validity (Fornell and Larcker, 1981). Second, square root of AVE (the diagonal in Table 2) of each construct was higher than the intercorrelations of the other constructs (off-diagonal elements in the Table 2) support discriminant validity (Fornell and Larcker, 1981). Therefore, construct validity of the measures is adequately supported.

Structural Equation Modeling and Hypothesis Testing: The absolute fit indices of the structural model have been analyzed to validate the conceptual framework of learning environment and students' achievement in Nepalese business school as shown in Table 3. The overall fit of the integrated model was assessed by the goodness of fit test using multiple fit criteria under investigation. The key goodness of fit indices used in the study are CMINDF statistics (1.73) suggests a good fit to the data (Carmine and McIver, 1981), Goodness of fit statistics is 0.91 which is above the thresholds of 0.9. Comparative fit index (CFI) is basically used to calculate improvement over competing models and having value of 0.96 suggest good fit of the model. The increment fit index (IFI) is 0.95 and normed fit index (NFI) used to estimate the model fitness based on small sample sizes (Bentler, 1990) is 0.92 imply a good fit to the data. The root mean square error of approximation (RMSEA) has obtained to be 0.04 which falls within acceptable range of less than 0.10. The goodness of fit statistics of the structural model are found to be within acceptable range which suggests the suitability of the model where parameters are estimated and interpreted readily.

Curriculum aspects, faculty characteristics, learning process and extra activities havs shown significant and positive impact on overall students' achievement in Nepalese business environment based on R-squared and estimated path coefficient for the structural model. Table 4 shows the standardized estimates for each path 9regression coefficient) and the corresponding p-value at 0.05 level of significance. The result reveals that there is a significant and positive impact of curriculum aspects on student achievement in Nepalese business school (b = 0.49, 0< 0.01). Likewise, the result resembles that there is a significant and positive impact of faculty characteristics on students' achievement (b = 0.26. p < 0.01). Accordingly, the result concludes that there is a significant and positive impact of learning process on students' achievement (b = 0.42, p < 0.01). Finally, the result shows that there is a significant t and positive impact of extra activities on students' achievement (b = 0.16, p < 0.01).

Standardized Direct Effects: The direct effect of curriculum aspects on students' achievement is 0.49. It is also concluded that there is a direct effect of faculty characteristics on stduents' achievement is 0.26. Accordingly, there is a direct impact of learning process on students' achievement and is recorded to be 0.42. Likewise, there is a direct effect of extra activities on students' achievement and is found to be 0.16. All paths are significant and statistically supported. Therefore, the result is supported by (Hattie, 2000; and Elliott, 2007; Capraro, 2001; Ziegler and Yan, 2001; Hattie 2009; Stockhard and Mayberry, 1992); and Holtz Frank, 2004; Dunn, 1983 and Felder, 1995).

Conclusion

Curriculum aspects have its significant impact on students' achievement in Nepalese business school which supports the findings of curriculum (Hattie, 2009 and Elliot, 2007). Faculty

characteristics have significant impact on students' achievement which supports the findings of (Hattie, 2000; and Elliott, 2007; Capraro, 2001) and Ziegler and Yan (2001). Learhning process has significant impact on students' achievement in Nepalese business school which is in the line of (Capraro, 2001; Ziegler and Yan, 2001). Management has significant impact on students; achievement which is in the same line of (Holtz Frank, 2004; Dunn, 1983 and Felder, 1995).

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