

# Investigating Valuable Factors of the Learning Environment in the Student Community

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## ABSTRACT

This study aims to examine the three dimensions that should exist in a learning community, namely Student Cohesiveness, Integration, and Task Orientation. From the purpose of this research, this study seeks to justify the value of a learning environment that should exist in the learning community at the Faculty of Economics, Universitas Negeri Medan. Respondents of this study were undergraduate students who were involved in the learning community at the faculty. By using simple random sampling, this study collected 105. Data were collected using a 5-scale Likert questionnaire. The collected data is then tabulated and analyzed using the second-order factor analysis. The results indicate that three dimensions are equally important to developing a conducive learning environment in the student community. This study recommends higher education to manage non-formal learning for certainly supporting the achievement of learning outcomes. Therefore, the head of the study program needs to govern the student community and advise them better direction. The direction should be fitted to the learning agenda of the study program.

**Keywords:** *student community, learning, knowledge management, business, economics*

## 1. INTRODUCTION

Some higher education researchers in the field of accounting have offered a shift in learning styles in higher education to lead to a learning process that can develop an understanding related to accounting and business concepts and principles rather than merely technical aspects [1]. Students need broader ideas regarding the practice and implications of accounting knowledge. It certainly creates new challenges because of the limited time allocation during the lecture. In previous studies, Hafsah, Sagala, and Ramdhansyah [2] offered the use of learning community as informal learning that supports formal learning activities in the classroom.

Students need the strengthening of knowledge outside the classroom through directional discussions with colleagues in terms of completing assignments, projects, minisets, and so on [2]. The learning community can accommodate the discussion so that it can complement learning in the classroom. In the forum, students were able to explore the practical aspects and their implications. Learning capabilities also provide space for students to develop their competencies, specifically in the process of solving problems, conducting projects, and mini-research.

Interestingly, Universitas Negeri Medan (Unimed) through the chancellor's regulations has accommodated these assignments, such as Routine Tasks (RT), Journal Reviews (JR), Mini-Research (MR), Projects (PJ), Critical Book Reviews (CBR), and Generating Idea (GI). However, the practice of learning outside the classroom will be more productive with the existence of a learning community that is a place for students to exchange ideas and discuss. The concept of this community has been widely developed in the field of knowledge management [3]. Hafsah, Sagala, and Ramdhansyah [2] and Hasibuan et al. [4] have also revealed that the learning community has a significant impact on academic performance and student capabilities in mastering computer-based statistics. Furthermore, to maximize the quality of learning, there is needs to be explored further in terms of what learning environment should be accommodated in the community. So that, the learning community can be instrumental in improving academic performance and expertise in specific fields. Therefore, this study seeks to explore the dynamics of learning that occur in learning communities sheltered in the Faculty of Economics.

This study aims to analyze the main factors in shaping a conducive learning environment within the learning community at the Faculty of Economics,

Medan State University. Several studies reveal that activities such as learning community should be carried out with some control carried out by lecturers or facilitated by the campus even though learning runs informally [2,4,5,6]. Thus, in the community, students can learn more than just textual knowledge but also the implications of their experience as well as dynamics, culture, and dynamic learning environments that become miniatures of real work-life [6-8]. This study seeks to provide an overview of the environment that should be existed in the learning community that has been running at the Faculty of Economics, Medan State University. Thus, the study program manager can control the direction of discussion and activities in the learning community so that it is entirely in line with the achievement of learning objectives of the study program.

**2. METHOD**

The subjects of this study were all students who were members of the learning community at the Faculty of Economics, Universitas Negeri Medan. Researcher using simple random sampling technique to collecting the data. The sampling technique was chosen to avoid response bias due to differences in the characteristics of respondents, both gender, majors, and semester levels. The unit of analysis in this research is the individual so that the representation of the results will refer to individual perceptions.

Data for all variables in this study were collected using a questionnaire with survey methods. The survey is a measurement process used to gather information in a well-structured interview, with or without the interviewer [9]. Researcher have collected 105 data using snowball technique. The technique used to ensure the implementation of random sampling and guarantee the independencies of respondents. Respondents were voluntarily deciding whether or not to become respondents. The instrument in this study was designed with a 5-Likert scale. The instrument was adapted from Nguyen et al. [6]. The instrument includes student cohesiveness, integration, and task orientation variables.

The collected data then analyzed using second order factor analysis. Data analysis was performed using software named SmartPLS 3.0. The result of data analysis was explained in the further part.

**3. RESULT**

This study has collected 105 data. The data is then tabulated and analyzed. Data tabulation in the sample demographics shows that out of 105 respondents, there were 25 (23.82%) male respondents and 80 (76.19%) female respondents. The figure shows that women dominate the respondents. It cannot be controlled because women indeed dominant in the demographics

of students in the Faculty of Economics. In terms of age, respondents are represented from the age range of 19 to 23 years. It is good because the respondent represents each grade so that the responses obtained can indicate the response of students of the Faculty of Economics in general related to their involvement with the learning community.

**Table 1**Demography of Sample.

	n	%
<b>Gender</b>		
Male	25	23,81%
Female	80	76,19%
Total	105	100,00%
<b>Age</b>		
19	28	26,67%
20	18	17,14%
21	27	25,71%
22	25	23,81%
23	7	6,67%
Total	105	100,00%

Furthermore, researchers tested the construct validity by cross-loading to measure convergent validity, Root of AVE and correlation matrix to measure discriminant validity, and Cronbach's Alpha to measure reliability [10,11]. The results of cross-loading measurements are presented in Table 2. The result of the cross-loading shows that each loading has a number > 0.7, and there is no loading has a number above > 0.7 in more than one construct [10]. Thus, no measurement items are dropped, and each dimension meets convergent validity.

Discriminant validity is measured by reviewing the root of AVE numbers that entered into the correlation matrix diagonally. The root of AVE must be higher than the number of correlation coefficients on the inside [10,11]. In this study, the root of AVE is higher so that the discriminant validity has fulfilled. Then, reliability is measured by reviewing Cronbach's Alpha (CA) numbers with an indicator > 0.8 [10]. Based on the results of the reliability test in table III, the three research constructs, namely Integration (INT), Student Cohesiveness (SC), and Task Orientation (TO) have reliability.

**Table 2**Cross-Loading Factor.

	Integration	Student Cohesiveness	Task Orientation
INT1	0,808		
INT2	0,829		
INT3	0,859		

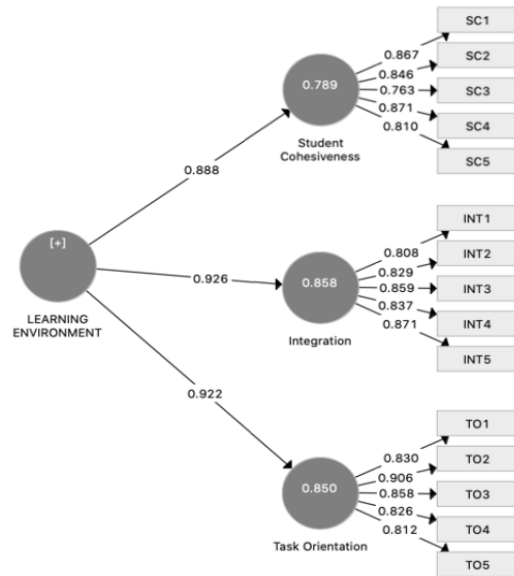
INT4	0,837		
INT5	0,871		
SC1		0,867	
SC2		0,846	
SC3		0,763	
SC4		0,871	
SC5		0,810	
TO1			0,830
TO2			0,906
TO3			0,858
TO4			0,826
TO5			0,812

**Table 3** Reliability and Discriminant Validity.

Dimension	Reliability		Discriminant Validity		
	CA (α)	AVE	INT	SC	TO
Integration	0,897	0,708	0,841		
Student Cohesiveness	0,888	0,693	0,729	0,832	
Task Orientation	0,901	0,718	0,800	0,715	0,847

After the construct validity is fulfilled, the analysis continues on factor analysis. This study uses a second-order factor analysis to review which dimensions are critical to the formation of a learning environment conducive to the learning community at the Faculty of Economics. The factor analysis used is Confirmatory Factor Analysis (CFA). CFA was chosen because the construct used had been built by previous researchers [6], while this study further confirmed its suitability with the situation at the Faculty of Economics, Universitas Negeri Medan.

The results of the second-order factor analysis can be observed in Figure 1. In the second-order factor analysis, the coefficients of each dimension are treated as loading factors [12]. In Figure 1, it can be seen that the coefficient dimensions of student cohesiveness, integration, and task orientation have loading numbers > 0.8. Thus, all three dimensions have good validity to forming the learning environment construct. Furthermore, in terms of the number of dimensions, the integration dimension has the highest loading number, followed by the task orientation and student cohesiveness dimensions. This number is not far adrift, but can still be given attention related to what aspects of my priority in the management of the learning community.



**Figure 1** Research Model

#### 4. DISCUSSION

This study seeks to explore the dynamics of learning that occur in learning communities in the Faculty of Economics. The learning dynamics are reviewed by a learning environment construct with three dimensions in it, namely student cohesiveness, integration, and task orientation. This study uses a second-order factor analysis to achieve these objectives. The results of data analysis indicate that the three dimensions powerfully illustrate the construct of the learning environment, which tested at the Faculty of Economics, Universitas Negeri Medan.

This study complements previous studies conducted by Hafsah, Sagala, and Ramdhansyah [2], and Hasibuan et al., [4]. Hafsah, Sagala, and Ramdhansyah [2] revealed that the learning community had a positive effect on computer-based statistical acceptance of accounting students. Furthermore, Hasibuan et al. [4] found that students who were involved in the learning community had better academic performance in comparison with students who were not involved in the learning community. Meanwhile, this study explores further dimensions of the learning environment that should exist in the learning community. So that the existence of the learning community in the Faculty of Economics, Medan State University can be managed sustainably and certainly can affect student academic performance. This study offers Student Cohesiveness, Integration, and Task Orientation as dimensions that should be of concern to the head of the study program in assisting the learning community.

This study also complements previous research findings, which have proven that the learning

environment is an essential instrument in producing excellent academic performance [6,13,14]. Primarily when it is formed in the community, behavior, and learning are consequences of the context of the social environment, which subsequently becomes culture [15]. That is, a community must produce student cohesiveness to learn and explore themselves academically. With the existence of student cohesiveness, it is expected that a conducive learning culture will emerge in the student community in general.

Furthermore, Nguyen et al. [6] argue that a connection is needed between the material discussed in class and the assignment given so that discussion in the community can be directed to the contexts discussed in class. It is called integration. Then, the learning agenda in the community must also lead to planned project completion that is aligned with the subject of learning in the classroom; it is called task orientation [6]. The current study has tested that framework and found that the three dimensions offered by Nguyen et al., [6] became the main dimensions of the learning environment in the learning community at the Faculty of Economics, Universitas Negeri Medan.

#### 4. CONCLUSION

This study found that student cohesiveness, integration, and task orientation are the main dimensions of the learning environment. The learning environment in this study is a representation of the learning environment in the learning community at the Faculty of Economics, Universitas Negeri Medan. This study contributes to complementing previous research findings related to group dynamics that occur in the learning community, so bring more insight into the field of learning and knowledge management.

Theoretically, this research also contributes to mixing the theory of knowledge management that developed in the business sector into the concept of learning that originated in higher education.

Practically, this study recommends the management of non-formal learning in higher education. In managing the learning community, the head of the study program should pay attention to aspects of student cohesiveness, integration of discussion material in the learning community with subject material in class, and soft skill-oriented assignments that can be formed in the learning community.

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