



<http://www.eab.org.tr>

Educational Research Association
The International Journal of Research in Teacher Education
2020, 11(2): 61-77
ISSN: 1308-951X



<http://ijrte.eab.org.tr>

Students' Responsiveness to Peer-Led Team Learning and Its Contributing Factors in Bahr Dar and Gondar Universities

Ayetenew Abie¹

Abstract

This manuscript intended to investigate students' responsiveness to Peer Led Team Learning (PLTL) pedagogical initiative and its contributing factors in HEIs. The study employed mixed method concurrent parallel design. 163 participants fill in the questionnaire. Focus group discussion was done with PLTL group leaders. Interviews and field observation were also used for data collection. One sample t-test findings (mean of means 3.3742, mean difference -0.6258, $P < .001$) proved all predictors and the DV illustrated statistically significant mean difference below the set test value (4.00) imply the perceived practice status of variables were below expectation. ANOVA test did not demonstrate significant difference of student responsiveness to PLTL among departments. All involved predictor variables and the DV demonstrated statistically significant relationship or common variance ($r > 0.20$) between predictors or between predictor and the DV. Independent sample t-test findings confirmed that there were no significant PLTL difference between male and female students; Bahrdar and Gondar universities; II and III year students. Stepwise regression demonstrated that 56.2 % students' responsiveness to PLTL was explained by students' attitude, perception, modular instruction, PLTL outcomes and communal culture jointly by the model $F(4,157) = 52.517$, $P < .001$. The univariate analysis of variance proved the interaction effect of covariates by university 1 and 2 on DV became significant and strong without significant difference of effect between the two universities. The qualitative data proved: CL/PLTL principles and pre, during and post instruction student roles are essential for successful implementation and goal achievement although their perceived practice statuses are below expectation. By implication, success on change initiative rely on awareness, attitude, practice and outcome, of the change agents or beneficiaries together with their understanding and practice of appropriate change management strategies, work culture and instructional model for achieving educational change initiatives like PLTL.

Keywords: organizational culture, Cooperative learning, peer led team learning, Bahr Dar university, Gondar university

Received: 04 November 2019 **Accepted:** 13 May 2020 **Publish:** 30 June 2020

¹ Lecturer, Psychology, Policy and Leadership in Education, Bahrdar University, ORCID ID: 0000-0002-2501-5124, Email: ayetenewat@gmail.com

Introduction

Background of the Study

Education reforms, transformative or innovative change initiatives' implementation and performance for achieving desired institutional improvement depends on how much instructors, leaders and students are change responsive (MoE, 2004). Instructors, leaders and students in universities accept or resist change initiatives as a result of many factors including: The attributes of peer led team learning change initiative like perception or knowledge, feeling or attitude and practice of major stakeholders like students, instructors, and educational leaders. The nature and type of organizational culture exercised in the university affect PLTL change initiative (Abdul Rashid, 2004). The effectiveness of change initiative strategies used to carry out transformative and innovative change initiatives have an effect on the achievement of desired change initiatives (Markee, 1997). Similarly, instructional delivery modalities as conventional or modular has an effect on Peer lead Team Learning change initiative (Hand et al., 2000).

Cooperative learning is one of the widely applied learning modality in the current modern world (Laal & Laal, 2012). It became in to theory and practice before decades in Ethiopia. However, its practice in many of HEIs and schools encountered several challenges that hinder achievement of desired outcomes from various types of cooperative learning models. These challenges determine stakeholders' specifically students' responsiveness to PLTL in HEIs. The operation of PLTL activities often failed due to resistance and lack of suitable work environment.

Statement of the Problem.

The literatures on organizational change have identified reforms, transformative and innovative educational changes as major contributors for productivity improvement in terms of quantity and quality. Innovations i.e. the creation of new products and services as well as new methods of production that increases efficiency are the driving force for improvement, growth and development of organizations (Falch & Mang, 2015). The extent of practice of innovations in education is determined by availability of critical thinking, skill and change responsiveness behavior on the workforce which in turn influences innovative capacity of industries, employer organizations, and nations generally (Falch & Mang, 2015). On the other hand, the practice of educational innovations in universities depends on how genuinely students and staff realize and practice transformative and innovative change initiatives. For instance, modularization, peer led team learning, BSC, e. learning, DBR, etc were some of the transformative and innovative change initiatives in HEIs in which their actual practice and output vary from what is planned and expected depending on extent of staff and student responsiveness for them. Particularly, this study focus on investigating the influence of students' perception, attitude, modular instruction model, organizational culture and change management strategies on students' responsiveness to peer led team learning change initiatives in HEIs.

According to MOE (2012), in the reengineering of the teaching learning core process, in 2012/2013 academic year, modularization was proposed as a best way for the implementation of curricula and student centered instructional innovations including: large student workload, more group based assignments and receiving frequent feedback that fosters cooperative learning. (Hand et al., 2000).

Peer led team learning model has been a recent educational innovation in HEIs which focused on cooperative group learning who are sharing what one is doing with others, asking for support, posing questions and receiving answers and feedback (Abiy, 2015, Johnson & Johnson, 2017). It is also called collaborative or reciprocal learning in opposition to independent/individual or solo learning which causes rote memorization. Group work can help graduates develop particular generic skills sought by employers such as teamwork skills,

Students' Responsiveness to Peer-Led Team Learning and Its contributing factors in Bahr Dar and Gondar Universities

analytical skills, collaborative skills ,organizational and time management skills, complex reasoning skill, debating skill, reduce disparities on high and low achievers and builds more positive heterogeneous relationships or realize diversity well(Felder and Brent,2006).

However how well peer led team learning model has been properly conceptualized and implemented in Ethiopian universities and how much the graduates have benefited from peer led team learning is debatable. How well students became responsive to peer led team learning change initiative and what contributes more for it is a point of discourse.

Johnson and Johnson's views and principles of small group learning take the largest share of guiding the operation of peer led team learning in HEIs and schools. Hence, this study focus on examining the perceived practice status of PLTL and major predictors for this status including the challenges and outcomes of cooperative learning.

Generally, the study attempts to answer the following basic questions and hypothesis

1. Do the variables portray significant performance status difference from the set t-test value?
2. Do the inter-relationship between organizational culture(OC), modular instruction, students' attitude and PLTL outcomes on students' responsiveness to PLTL change initiative demonstrate statistically significant correlation value?
3. Which predictors' and categorical factors' interaction effect in the model contribute more for students' responsiveness to PLTL change initiative?
4. Do independent variables significantly predict students' responsiveness to PLTL change initiative?
5. What are the major challenges affecting responsiveness of students on PLTL change initiatives?
6. Are there significant PLTL responsiveness differences between BDU & GoU; II & III year students and female and male students?

Delimitation of the Study

This study is delimited to investigating the contributions of attitudes, change initiatives' outcome on beneficiaries, instructional models, organizational culture, and change management strategy on students' responsiveness to peer led team learning change initiative in HEIs of Bahr Dar and Gondar universities. The Study was delimited to 2018 academic year college of education and behavioral sciences students in BDU and GoU.

Significance of the Study

This study could help instructors, educational leaders and students to develop a better responsiveness or acceptance for reform, transformative, and innovative change initiatives. The study may also help the above stakeholders to identify major contributing factors for students to be responsive or resistant for change initiatives specifically peer led team learning initiative. The study would serve as a reference source for further researches on reform, innovative and transformative change initiatives specifically PLTL pedagogical initiative, their practices and students' responsiveness to cooperative learning or PLTL change initiatives. The study help students and other stakeholders to appreciate the roles of attitudes, change initiative outcomes, instructional models, organizational culture, and change management strategy to make stakeholders responsive for change initiatives in educational settings.

Operational Definition:

Stakeholders' responsiveness to change initiatives: Willingness of change agents, users and implementers to accept and practice change initiatives or innovations such as Modularizations, Peer led learning, BSC, DBR, etc as desired so as to attain goals and bring institutional success. It can be measured through measuring the perceptions, attitudes and practices of stakeholders

Students' Responsiveness to Peer-Led Team Learning and Its contributing factors in Bahar Dar and Gondar Universities

(students, instructors and leaders) towards reform, transformative and innovative change initiatives. The determinant factors that affect acceptance or responsiveness otherwise resistance of stakeholders to change initiatives can be also identified and measured using scale.

Cooperative learning (CL): is the instructional use of small groups based on social interdependence and influence among members such that members work together to maximize their own and others' learning goal (Johnson and Johnson, 1989, 1999; Deutsch, 1962; Smith, 1996).

Peer Led Team Learning (PLTL) is a form of cooperative learning involving small group based learning i.e. 1 leader with 4 members peer grouping found in HEIs of Ethiopia.

Research Design and Methods of The Study

Research design: Mixed approach specifically concurrent parallel mixed research design was employed to assess the contribution of organizational culture, leadership style, change mgt strategy and modular instructional delivery on students' responsiveness to PLTL change initiative.

Target Population and Sample Size : The participants (subjects) of this study were CEBS' students at BDU and GU.

Both probability and nonprobability sampling methods were employed to select participants involved in the sample for the study. From total 450 students of CEBSs in BDU and GoU 170 students were selected from 2nd and 3rd year batches using stratified sampling. First year students were excluded since their PLTL experience in the campus was low. The stratum was made based on university (BDU=95, GoU=75), departments and study years i.e. II year (N=70) and III year (N=100). These students were selected by using simple random lottery sampling technique. 163 students were correctly responded to the questionnaire while 7 were rejected due to errors at the time of participants responding.

For focus group discussion, eight participants were selected one from each department and student batch purposefully for obtaining in depth data benefits. It was conducted within the two universities.

Field observation sites were also selected purposefully to conduct systematic field observation for actual data collection. Around college of education and behavioral sciences office and class rooms in the campus, some PLTL study sites with circular seat furniture were prepared under each large trees found in the study sites. So, the researcher used 3 sites for observation.

Instruments, Variables measured and Procedures

A questionnaire was developed for measuring main variable and sub variables using likert scale or rating scale. For instance: Students' perception towards PLTL change initiative sub scale embraced 6 items with Likert scale options of 1=strongly disagree to 5= strongly agree ($\alpha = 0.766$) and students attitude to PLTL change initiative sub scale contained 6 items with the same likert scale options ($\alpha = 0.756$).

Modular versus traditional instruction scale involved 20 items with Likert scale options of 1=strongly disagree to 5= strongly agree. The reliability index measure was $\alpha = 0.899$.

Organizational culture scale $\alpha = 0.871$ was measured using 13 items with rating scale options of 1=very low to 5= very high. It comprises 4 sub scales with some items for each as: fragmented culture sub scale include four items, $\alpha = 0.738$, communal culture subscale incorporate 5 items $\alpha = 0.811$, mercenary culture subscale consisted of 3 items $\alpha = 0.652$ and networked culture subscale contain 3 items $\alpha = 0.665$

Moreover, Focus group discussion was done with 8 participants selected purposefully from each department and study year. Field observation in the natural settings of the participants were

Students' Responsiveness to Peer-Led Team Learning and Its contributing factors in Bahr Dar and Gondar Universities

done based on check list. Available and relevant documents were also examined to collect robust data for the study. For instance, PLTL student's weekly plan, mentors weekly plan, deans and the university plan were investigated for its adequacy and sufficiency.

Validity and reliability of instruments were proved through content and face validity techniques and through internal consistency measurement technique for their reliability. The reliability index measures demonstrated the internal consistency of responses of respondents in the instruments. By doing so, the validity and reliability of instruments was secured so that enable to collect valid and truthful data for the study.

Regarding the procedures of questionnaires' administration, the researchers distributed the questionnaires to the participants with descriptions on how to fill in their responses and then collected as soon as participants completed the questionnaire.

Data Analysis Tools Used in the Study

One sample t-test was employed to decide on the status of variables in involved in the study.

One way ANOVA test also used to investigate the appearance of statistically significant difference of student responsiveness to PLTL change initiative among departments. More over independent sample t test was used to examine whether statistically significant difference emerged between the means of respondents across gender, study years and sample universities.

Pearson correlation coefficients were used to examine the magnitude and direction of relationship between or among predictor variables. Likewise, the relationship between students responsiveness to peer led team learning and the predictor variables were also investigated using correlation.

In addition, Step wise multiple regression was used to determine whether statistically significant contribution exist independently, in group interaction or combined effects by the predictors used such as attributes of PLTL change initiative(perception, attitude, outcome), modular versus conventional instructional delivery, organizational culture (fragmented, networked, mercenary, and communal),

Data Analysis, Interpretation and Discussion

Data Cleaning Issues

As soon as data collection were completed, First round pre-data analysis activities like mechanical data cleaning, avoiding incomplete questionnaire, correcting simple respondent errors were carried out, then data were entered into a computer with the help of the 20th version Statistical Package for Social Sciences(SPSS).

After completion of data entering in to the SPSS, second round data cleaning activities were done using statistical tools like skewness and kurtosis tests, histogram, missing cases, Outliers, and multicolinearity tests before running descriptive or inferential statistical computation.

The findings revealed that there is no risky missing for each variables and cases in the data. The skewness and histogram statistics for normality test indicated the data was normal that is in between -1 and 1. The Kurtosis test in the data indicated that the distribution is normally distributed from the mean value zero at the center of normal probability curve. Extreme low and high values exist for few variables although not that much risky. Univariate outlier test of the data indicated that one variable involve few outliers that did not bring risk so that tolerated for analysis. The Mahlenobis distance test showed that few multivariate outliers exist which are not risky so that tolerated in the analysis. Multi-co linearity test of the data indicated that all variables involved VIF statistic value less than 10. and tolerance value greater than 0.1. Hence, the researcher is confident that there is no excessive correlation coefficient or relationship between the variables used. The graph of scatter dots showed that the data are evenly distributed from the mean with no pattern. hence decided confidently to run any

Students' Responsiveness to Peer-Led Team Learning and Its contributing factors in Bahr Dar and Gondar Universities

computation in the analysis. linearity check also indicated existence of linearity rather than pattern distribution of score. Homoscedastisity check indicated that data are evenly distributed from the mean so the researchers are confident that there is no risk in the analysis.

Results or Findings of Quantitative Data

Perceived performance status of Variables in the study

Table 1. One sample t-test for determining the status of variables in the study

Variables	Descriptive statistics		One sample t-test, test value=4.00, N=163			
	mean	SD	T	Df	sig	Mean diff.
Students' responsiveness to PLTL	3.4083	.68272	-11.066	162	.000	-.59175
total mean attitude PLTL	3.2922	.87755	-10.264	162	.000	-.70552
Students' perception to PLTL	3.4959	.7755	-8.277	162	.000	-.50409
Modular instruction	3.4556	.65815	-10.529	161	.000	-.54444
PLTL Outcome	3.3403	.74211	-11.386	162	.000	-.66181
organizational culture communal	3.2531	.75688	-12.584	162	.000	-.65455
Overall Total mean	3.3742	.7488	-	162	.000	-.6258

scale: 1=strongly disagree, 2= disagree, 3=slightly agree, 4=moderately agree, 5= strongly agree

The overall mean performance status of dependent and independent variables involved in the study(3.3742) showed statistically significant mean difference below the set test value(4.00) which implies the practice status of each variables were less than institutional expectation. For instance, students' responsiveness to PLTL($T(162)=-11.066, P<.001$) entail that many students did not exercise PLTL pedagogical initiative as expected by students or the institution. Similarly, mean value of institutional work culture ($t(162)=-12.584, P<.001$), students perception($t(162)=-8.277, P<.001$), and attitude($t(162)=-10.264, P<.001$) to PPLTL became statistically significant difference under the set test value.

Is there significant difference on students' Responsiveness to Peer Led Team Learning by department, gender and years of study

The assumptions to be considered for ANOVA are checked before the analysis such as participants responded independently within each groups so every data are independent of one another and sufficient number of participants at least 20 in each group used. Homogeneity of variance assumed within each groups. The distribution of data was typical to normal curve distribution. Therefore, ANOVA test analysis was done as followed.

Students' Responsiveness to Peer-Led Team Learning and Its contributing factors in Bahr Dar and Gondar Universities

Table 2. Descriptive statistics and One Way ANOVA test on students responsiveness to PLTL change initiative by department.

Descriptive statistics				One way ANOVA					
Departments	N	Mean	Std. Deviation	Sources of variation	SS	d f	MS	F	Sig.
EdPM	52	3.5152	.69257	Between groups	1.450	3	.483	1.038	.378
AECD	36	3.3232	.77823						
Psychology	39	3.2960	.62905	Within groups	74.060	159	.466		
TECS	36	3.4572	.61311						
Total	163	3.4083	.68272	Total					

Cross- case Analysis: Students' Responsiveness to PLTL in Departments of BDU and GoU. The one way ANOVA test finding in table 2 demonstrated that there was no statistically significant difference of students' responsiveness to PLTL change initiative among departments in both Bahr Dar and Gondar universities. The overall obtained mean 3.4083 and mean comparison of each department revealed that the responsiveness performance was within the interval of slightly agree scale which implies students' acceptance and practice of PLTL was below "agree" scale which is considered as desired expectation of students and the organization. Hence, it needs attention of both students and the educational leaders to think critically towards the reaction or responsiveness of students to PLTL change initiative.

The qualitative data support this finding that the researchers observed the actual PLTL practices in the field observation which affirmed that students engaged in PLTL when assignments were given by their instructors. They cooperatively discuss and carry out assignment tasks more than engaging on regularly planned PLTL activities to be carried out in the weekly time schedule of study. Generally qualitative data were triangulated to check the findings of the above ANOVA test on students' responsiveness performance and statistically insignificant differences among departments in CEBS of Bahr Dar and Gondar universities. For instance, focus group discussion participants were asked to comment on the extent of supports and facilities provided for them to carry out PLTL change initiative activities. They affirmed in their response that PLTL group activities were not get sufficient support by instructors, mentors and deans except assignments given to students by instructors, weekly report requested by mentors and preparation of group study cite with some furniture by deans. Students did not perceived visible changes or outcomes in the learning culture of the university as a result of the PLTL change initiative. In addition, They affirmed that teachers' and mentors' follow up shall play a crucial role for positive effects of peer-led team learning. They also said that a guideline shall be established to make the program participatory and successful. The teachers' and students' attitudes towards peer-led team learning shall be improved. The outcome of PLTL shall be attractive in terms of

Students' Responsiveness to Peer-Led Team Learning and Its contributing factors in Bahr Dar and Gondar Universities

improving achievement, and overall competence.

Why students revealed low responsiveness to PLTL in both universities and all departments need further in depth investigation. Some of the reasons may be the character(relevance, responsiveness and clarity) of the change initiative itself, the leadership style practiced, the problem of teachers' responsiveness to PLTL, lack of effective and supportive instructional delivery models and so on.

In the focus group discussion participants believe the following problems causing low student responsiveness to PLTL change initiative as: Practicing fixed grouping of collaborative learning instead of varying student grouping. inadequate reference materials; low Students' participation; Instructor's guidance and follow up is by far lower than what is expected by students. Peer leader's support or the role played by the peer leader is minimal. All these findings were supported by scholars like (Abiy,2015, Kavanagh & Ashkanasy, 2006).

Table 3. Independent sample t-test on PLTL by gender

	Males, N=70		Females, N=93		Df	T	Sig
	Mean	SD	Mean	SD			
Responsiv to PLTL	3.4779	0.65348	3.3558	.70286	161	1.131	0.260

The average means for both males' and females' responsiveness to PLTL change initiative that is 3.4779 and 3.3558 respectively were laying with in interval of slightly agree scale which implies that acceptance of PLTL change initiative is below expectation. The mean difference between males and females responsiveness ($t= 1.131$, $P=0.260$) did not show statistical significance. This implies also the problem is common for both gender. This may be due to both students share, feel and practice various PLTL experiences from the same context, value and cognition.

Inter Correlation Analysis among predictors (IVs) and between IV and responsiveness to PLTL change initiative as DV.

Inter-correlation coefficients were calculated by means of Pearson's Product Moment and the results shown in table 5. The Pearson Product Moment correlation coefficient was squared and the results multiplied by 100 ($100r^2$) to calculate the coefficient of determination. It represents the percent of the variance in the dependent variable explained by the independent variable i.e. the common variance between dependent and independent variable.

Table 5. Correlation of Predictor variables and students' responsiveness towards PLTL change initiative. N=163

Responsive PLTL		(.811)			
O r g a n i z a t i	COC	.497**	(.811)		
	MrOC	.478*	.675*	(.652)	
	FrOC	.295*	.475*	.380**	(.738)

Students' Responsiveness to Peer-Led Team Learning and Its contributing factors in Bahr Dar and Gondar Universities

o n a l c u l t u r e	NOC	.363*	.604*	.554**	.464*	(.365					
	TOC	.510*	.894*	.776**	.755*	.756**					
P L T L f e a t u r e s	Perc	.644*	.392*	.439**	.265*	.316**	.431** (.766)				
	Attitu	.646*	.378*	.360**	.179*	.292**	.373** .927** (.756)				
	Outcom	.601*	.527*	.570**	.344*	.370**	.564** .533** .480** 1				
Mod.Vs Con. ins		.639*	.473*	.439**	.332*	.366**	.504** .668** .627** .588** (.899)				
	Resp . PLT L	COC	MrOC	FrOC	NOC	TMOC	Percep t	Attitud	outcom e	Modular Instructio	
Organizational culture							PLTL features				

** Correlation is significant at 0.01 significance level. $r > 0.20$

* Correlation is significant at 0.05 significance level. $r < 0.20$

($\alpha =$) reliability coefficient, internal consistency of the scales in the diagonal bracket

Table 5 depicted that all predictor variables demonstrated statistically significant relationship or common variance among the predictors (IVs) at 0.01 significance level with $r > 0.20$ except $r = 0.179$ for fragmented organizational culture and students' attitude to PLTL variables which is statistically significant at 0.05 significance level. Likewise, all predictors revealed statistically significant relationship with students' responsiveness to PLTL change initiative i.e. the (DV) at 0.01 significance level. For instance, Students' responsiveness to PLTL change initiative was moderately and positively correlated with modular instruction model $r = 0.639$, $r^2 = 0.4083$ which is 40.83% common variance. This implies that students' responsiveness was explained 40.83% by practicing modular instruction modality in teaching learning process. Similarly, PLTL features like students' perception, $r = 0.644$, $r^2 = 0.4147$ which implies 41.47% students' responsiveness is explained by students' perception that is awareness to PLTL. Students' attitude $r = 0.646$, $r^2 = 0.4173$ which implies 41.73% students' responsiveness to PLTL was explained by students' attitude to PLTL. Moreover, organizational culture such as fragmented, communal, mercenary and networked culture types together $r = 0.510$, $r^2 = 0.2601$ which comprises 26.01% common variance demonstrated moderate and direct relationship with student responsiveness to PLTL change initiative. This implies improvement in each predictors can also improve students responsiveness to PLTL change initiative. In contrast, the findings revealed that lack of adequately exercising the above predictors cause failure of PLTL change initiative.

To what extent do the independent variables predict student responsiveness to PLTL

Multiple Regression analysis was conducted to test the degree of contribution effected by each

Students' Responsiveness to Peer-Led Team Learning and Its contributing factors in Bahr Dar and Gondar Universities

scale and subscale on students' responsiveness to PLTL change initiative. Stepwise multiple regression was carried out with scale and subscales such as students' responsiveness as dependent variable and all other scales and subscales as independent (predictor) variables. Tabachnick & Fidell (2007) define multiple regression as a statistical method that relates one dependent variable to a linear combination of one or more independent variables. They further explain that this procedure enable researchers to determine how much each independent variable explains or relates to the dependent variable. Ordinary least squares regression was computed in stages using stepwise multiple regression. In this study, the researcher drawn sequential organization of IVs as: students' attitude entered first. Instructional delivery model i.e. modular instruction came second. PLTL outcome on students entered third. Finally, Organizational culture with its sub scales entered in 4th sequences respectively based on correlation coefficient value.

Table 6. Stepwise multiple regression on Students' responsiveness towards PLTL initiative

Model		Unstandardized Coefficient	Standardized Coefficient	T	Sig.	Correlations		
		B	Beta			ZO	Partia	part
4	(Constant)	.612		2.938	.004			
	Students' attitude to PLTL	.268	.345	5.050	.000	.647	.374	.267
	Modular instruction	.211	.229	3.289	.001	.639	.229	.154
	PLTL Outcome on students	.230	.221	2.941	.004	.600	.254	.172
	organizational culture communal	.128	.142	2.245	.026	.498	.176	.117

Note: Model summary: R=.756, R²=.572, Adj. R²=.561 ANOVA: F(4,157)=52.517, P<.001

Based on STEPWISE method as indicated in table 6 model 4, 56.1 % students' responsiveness to Peer led team learning initiative was explained by students' attitude, perception, modular instruction and communal organizational culture jointly in the model F(4,157)=52.517, P<.001. The Beta value regression coefficients for each predictors include; students' attitude (t=5.050, P<0.001; modular instruction model (t=3.289, P<.001; PLTL outcomes (t=2.941, P<.001) and communal organizational culture (t=2.245,P<.05)) found to be significant. On the Other hand, organizational culture variables like networked, mercenary and fragmented cultures were excluded in the model list because their contribution became statistically insignificant for students' responsiveness to PLTL change initiative.

Unique contributions of each predictors have been illustrated by zero order, partial and semi partial correlations in the table. Since partial correlation is more suitable for stepwise regression, the researcher select it to explain unique contributions as attitude(Pr=.374, 37.4%), modular instruction(Pr=.229, 22.9%), PLTL outcome(Pr=.254, 25.4%) and communal culture(Pr=.176, 17.6%) of students' responsiveness to PLTL pedagogical initiative variance shared by predictors.

Univariate Analysis of variance on PLTL performance differences in the two universities.

How much the interaction effect of predictors and the two universities as categorical factor IV predict PLTL in the two universities can be investigated in this analysis. Pair wise comparisons detect PLTL performance differences in the universities. Students' responsiveness in BDU

Students' Responsiveness to Peer-Led Team Learning and Its contributing factors in Bahr Dar and Gondar Universities

(M=3.4275, SD=.64142, N=85) and GoU (M=3.2900,SD=.93580, N=78) revealed minor differences observed between the two universities.

The Leven's test of equality of error variances ($F(1,160)=1.072, P=.302$) confirmed that the error variance of the dependent variable is equal across the two universities.

Tests of between- subjects effects indicate intercepts of the equation value(378..068, $F(1,162)=1609.867, P<.001, \eta^2=.910$) implied the intercept model is good to compute the interaction effect of predictors on students' responsiveness to PLTL. Predictors interaction effect in the equation(university* attitude*mod.instruction*PLTL outcome*institutional culture) model value=38.118, $F(2,162)=81.157,P<.001,\eta^2=.505$ implied the interaction effect was significant and strong.

Table 7. Parameter estimates of univariate analysis of variance on students responsiveness to PLTL.

Parameter	B	Std.Error	t	Sig.	η^2
Intercept	2.706	.067	40.123	.000	.910
BDU * attitude to PLTL * Mod Instr.* PLTL Outcome * OC	.005	.000	12.089	.000	.479
GoU* attitude to PLTL * Mod Instr. * PLTL outcome * OC	.004	.001	8.062	.000	.290

The interaction effect of BDU and predictors $B=.005, t=12.089, P<.001, \eta^2=.479$ proved that interaction effect was significant and more strong than other comparison groups in the table.

Pair wise mean comparisons of the two universities(BDU to GoU, $MD=.058, P=.414$) did not illustrate statistically significant difference between BDU and GoU.

Discussion

Overall, the stated hypotheses received moderate to high support from the data. The variables that demonstrated significant contribution for students' responsiveness to PLTL change initiative are discussed below.

Students' Perception and Attitude for Students' Responsiveness to Educational Change Initiatives like PLTL pedagogical initiative.

The students' responsiveness or resistance of PLTL pedagogical initiative depends on the perception, and attitude of students towards PLTL. Students expect significant positive PLTL outcome in terms of improving academic achievement, cognitive and non cognitive skills in order to increase students' responsiveness to PLTL. However one sample t-test findings proved that the status of students' perception, attitude and PLTL outcome on students were below expectation although they play significant role for students' responsiveness or acceptance of PLTL initiative or peer assisted learning in learning-teaching process.

Students perception and attitude to PLTL can be affected by several factors in and outside of the university. University work culture, leadership style, and change management strategy are the major variables influencing the perception, attitude and responsiveness of various change initiatives including PLTL in HEIs.

Institutional presidents, directors, college deans and program leaders often encounter resistance to their efforts to redirect and implement change initiatives in the university. Academic staff and student resistances are responsible for the majority failures of change initiatives. Therefore, the underlying causes for students' resistance to institutional change initiatives especially PLTL pedagogical initiative may be the low status of communal work culture, democratic leader, low

Students' Responsiveness to Peer-Led Team Learning and Its contributing factors in Bahr Dar and Gondar Universities

awareness and attitude to the initiative and low response outcome from the newly practiced initiative for beneficiaries (Kavanagh and Ashkanasy 2006).

Organizational Culture and Students' Responsiveness to Change Initiatives like PLTL

Organizational culture refers to the institutions' enduring beliefs and core values, which are shared by leaders, the staff and students that will influence staff and student perception, attitudes and behavior or action in terms of achieving institutional or pedagogical initiatives and over all goals (Schein, 2003). Institutional culture directs its employees' day-to-day working relationships and guides them on how to behave and communicate within the organization, as well as guiding how the company hierarchy is built (Tseng, 2010) especially when cultural values, beliefs, and actions are widely shared. This culture is said to be a strong or powerful one. However, when a certain value (culture) has been accepted by a very specific group rather than majority stakeholders like instructors, students, parents, support staff etc in education cases, institutional initiatives and their goals cannot become successful (Claver et al., 2001). For instance, two links between institutional culture and educational change initiatives have been made in the higher education institutions (Kazar & Eckel, 2002). First, HEIs need to have a culture that genuinely encourage and carry out pedagogical change initiatives like PLTL to achieve its goal. In this regard, students' responsiveness to PLTL pedagogical initiative needs to involve the pre-instructional tasks such as: both the course instructor and students specify academic and social skill objectives, decide on group size and composition, assign member roles, arrange class rooms and prepare text material. Such activities were expected to be carried out aligned with strong support of mentor instructors and educational leaders at different levels. Moreover, during instruction tasks like: explain PLTL tasks for learners, monitor magnitude of understanding, structure positive interdependence, structure positive cooperation and creating individual as well as group accountability are very essential roles. In addition, specify social skills in the form of forming i.e. decide on how much time members stay with the group. Students also do formal functions so as to contribute and encourage others in group life. Likewise students engage in formulating function for summarizing and elaborating what they discussed in group. Finally, fermenting function is created for criticizing ideas and asking for justification. The post instructional tasks including monitor, intervene and evaluate success play vital role for success of initiatives (Johnson, Johnson, & Smith, 2006; Johnson & Johnson, 2010).

Properly applying PLTL principles such as positive interdependence, individual accountability, group accountability, collaborative work and group leading skills, face to face promotive interaction and group processes (regulate constructive and distractive behaviors of members) as the institutions day to day shared cultural value became challenge for the two HEIs. Second, key institutional elements that shape culture i.e. vision, mission, values, leadership, positions, professionals and other details shall be modified in line with change initiative process/strategy.

In this case how much the above PLTL culture elements genuinely support the implementation of institutional change initiatives like PLTL become essential requirement in the process of achieving the goals of institutional initiatives. (Johnson and Johnson, 2010)

Goffee and Jones (1998) suggested that there are four main types of corporate culture as seen from sociability and solidarity culture dimensions, namely the communal culture, fragmented culture, networked culture and mercenary culture. In this framework, culture is a community or the way in which people relate to each other.

Sociability can be defined as friendliness in relationships between people in an organization. It is valued for its own sake and independent of its impact on the performance of the organization. Through friendships, ideas, attitudes, interests and values are shared. Reciprocity is a hallmark

Students' Responsiveness to Peer-Led Team Learning and Its contributing factors in Bahr Dar and Gondar Universities

of friendship; so that actions are taken that favor others with no expectation of immediate payback.

On the other hand, solidarity is the ability of people to pursue shared goals efficiently and effectively for the larger good of the organization without much regard on the impact on individuals and the relationships between them. Solidarity is favorable in the sense that it generates single-minded dedication to the organization's mission and goals, quick response to changes in the environment, and an unwillingness to accept poor performance. In this type of culture, work roles are defined and understood and everyone is working for the overall good and everyone held to the same high standards. People in high-solidarity organizations often trust their employers to treat them fairly, based on merit, with resulting commitment and loyalty to the firm (Abdul Rashid, 2004). Furthermore, Cameron and Quinn also have defined four different types of organizational culture. These are represented as adhocracy, clan, hierarchy, and market. They have suggested the different leadership styles or managerial Styles pertaining to the respective organizational culture. When an organization is dominated by the hierarchy culture, the leadership style shown is that of organizing, controlling, monitoring, administering, coordinating, and maintaining efficiency. When an organization is dominated by the market culture, the managers are good at directing, producing results, negotiating, and motivating others. When the organization is dominated by the clan culture, the most effective leaders are parent figures, team builders, facilitators, nurturers, mentors, and supporters. Effective leaders in organizations Dominated by the adhocracy culture tend to be entrepreneurial, visionary, innovative, creative, risk oriented, and focused on the future. Adhocracy leaders are rule breakers, for example, whereas hierarchy leaders are rule reinforcers. Clan leaders are warm and supportive, where as market leaders are tough and demanding (Masood, Dani & Backhous,2006).

The rhetoric of quality culture for success of change initiatives in HEIs often refers to the elements or activities that constitute searching for the change initiatives' excellence(Martensson & Roxa,2016). The European Universities Association(EUA) "quality culture" project 2000-2006 stated that every change initiative's culture of excellence was viewed based on two distinct elements. first, the quality of established set of shared values, beliefs, expectations, and commitments towards new initiative. Second, the structural/ managerial element with well-defined processes that enhance quality and coordination effort toward success of the new initiative. More specifically, the culture of PLTL initiative involved moderate shared values, beliefs and commitments as well as managerial coordination efforts for its success as seen from the ANOVA test and obtained mean performance.

Culture of Change Management Strategy for Students' Responsiveness to Change Initiatives: For instance PLTL pedagogical initiative

Developments in higher education institutions and achievements of several educational change initiatives including PLTL are determined by application of proper and adequate change management strategy as culture of the institution. Burtonshaw-Gunn and Salameh, (2007a) state six change management strategies which are essential to implement change initiatives so as to achieve desired goals and improvements. For instance; directive strategy focus on leaders right to impose change initiatives which results in more resistance. Educative strategy leads to creating wining minds and hearts while expert strategy focus technical problem solving. Negotiation strategy hubs bargaining to adjust relationship with others (followers, customers) about change initiative, and participative strategy centers on getting all involved institutionalization and implementation of the change initiative.

Cooperative Learning and PLTL implementation and outcomes on students' competence

Cooperative learning is small group instructional initiative that involve certain learning principles, pre, during and post instruction student roles like goal setting, active participation in

Students' Responsiveness to Peer-Led Team Learning and Its contributing factors in Bahr Dar and Gondar Universities

discussion, evaluating daily activities...and conducive learning environment i.e. suitable reading place, furniture, materials and technology(Johnson & Johnson,2005). Although there is a clear consent on the importance of cooperative learning/ peer led team learning for students' retention of learning, there is no common understanding of its nature and applications (Laal & Laal, 2012). As a result, its conceptions and practices may vary from time to time and from place to place. In this study the perceived practice status in the two universities remained below expectation supporting these events. The principles of cooperative learning and PLTL also involve positive interdependence, individual and group accountability, group processing, collaborative work skills and face to face promotive interaction that should be strongly considered in the PLTL implementation process to achieve learning goals.

Moreover, most scholars believe that small group learning improves retention of knowledge and higher order thinking in HEIs and schools (Quitadamo, Brahler & Crouch, 2009; Johnson & Johnson 2005). The detail implementation and outcome statuses of CL/PLTL principles and outcomes were discussed in the qualitative data protocol as follow

Table 8. Summary of the perceived practice statuses of cooperative learning/PLTL initiative in sample universities from interview, FGD and field observation data

Focus	Activity	Sample universities performance		
		Bahr Dar University	Gondar university	Dilla University
Students	Formal, informal and team based cooperative learning small groups formation for each class	Good	Good	Good
	Do instructor mentors assigned for each class?	Yes	Yes	Yes
	Do student mentors who completed the task(course) assigned as leader?	No	No	No
	Do peer group clever students serve as leader?	Yes	Yes	Yes
	Do heterogeneity maximized in PLTL small groups?	Yes	Yes	Yes
Instructors	Research project groupings and practice	Good	Good	satisfactory
	Course chair based groupings and practice	Good	Good	good
	Peer academic discourse groups and practice	satisfactory	satisfactory	satisfactory
	Seminar/ forum Academic discourse groups and practice	Good	Good	Satisfactory
Students	Positive interdependence practice	Low	Low	low
	Individual accountability	Low	Low	low
	Group accountability	Low	Low	low
	Collaborative work and group leading skills	Low	Low	low
	Face to face promoting interaction	Low	Low	low
	Group processes(regulate constructive and distractive behaviors of members)	Low	Low	low

Students' Responsiveness to Peer-Led Team Learning and Its contributing factors in Bahr Dar and Gondar Universities

students	Collaborative, cooperative and social skills achieved	Low	Low	low
	Leadership, team work, and negotiating skill achieved	Low	Low	low
	Higher order thinking improved	Low	Low	low

As indicated in the above table, the practice of carrying out the principles of cooperative learning by students and instructors were generally low. desired goals (objectives) of cooperative learning/ PLTL were also low for students and instructors. Moreover, the practice of implementing pre-during and post instruction tasks by instructors and students were also limited to moderate to low. Hence, PLTL pedagogical initiative require rigorous efforts of stakeholders to make vital interventions as suggested in this study or further by other studies for its improvement.

The Challenges for Students' Responsiveness to PLTL Change Initiative in BDU and GoU.

Procrastination that is cancelling of already arranged programs by group leaders and some students look their peers scornfully when they fail to respond to questions or participate in the group. In addition, some students are careless, groups are poorly organized (in some cases homogeneous members are grouped together), and teachers burden students with too many tasks. Other problems include disagreement stirred up among students, lack of responsibility and levying the entire burden to group leaders, and less attention given by students and teachers to peer-led learning. Lack of reference books to do activities and non-conducive study area for peer led team learning are part of the problems rose by the focus group discussion.

Low facilitation(leadership) roles of agents like deans, mentors, and instructors were mentioned as a challenge in the open ended questionnaire items. Low perception and attitude of beneficiaries or students towards the PLTL and lack of commitment by students were also take in significant share of the challenges. Lack of budget to effectively run PLTL change initiative was also among the challenges. The lack of clear strategy and guide to implement PLTL change initiative was repeatedly mentioned challenge by participants in the questionnaire. The PLTL change initiative has low relevance to students with less benefit to students, less adaptable and It is not free of threat to students like its' boring, and time consuming character, with lack of tolerance for other's misbehavior.

Conclusion and Implication

Students' Perception and attitude to PLTL, modular instruction model, PLTL outcomes on students and Organizational culture with some of their specific subscales significantly predict students' responsiveness to peer led team learning as demonstrated in stepwise multiple regression, the common variances in the correlation analysis and focus group discussions. Communal organizational culture demonstrated statistically significant prediction better than fragmented, mercenary and networked culture environments for effecting better student responsiveness to PLTL change initiative. Culture of change management strategy shall focus on: educative strategy that leads to creating wining minds and hearts on employees; negotiation strategy hubs bargaining to adjust relationship with others (followers, customers) about change initiative, and Participative strategy centers on getting all involved institutionalization and implementation of the change initiative rather than applying directive strategy i.e. leaders right to impose change initiatives on employees which results in more resistance and expert strategy focus technical problem solving.

Students' Responsiveness to Peer-Led Team Learning and Its contributing factors in Bahr Dar and Gondar Universities

Students in the focus group discussions have commented that teachers' and mentors' follow up should play a crucial role for positive effects of peer-led team learning. They also said that a guideline should be established to make the program participatory and successful. The teachers' and students' attitudes towards peer-led team learning should be improved. The output and outcome of PLTL should be attractive in terms of improving achievement, and overall competence respectively.

References

- Abiy, Yigzaw (2015) Students' perception and practice of writing through peer led learning(PLL) at Bahr Dar university. *STAR Journal of Wellega University*, Ethiopia, 4(1) 197-202.
- Albulushi, A., & Hussain, S. (2008). Transformational leadership takes Majan to the top of the class. *Human Resource Management International Digest*, 16, 2, 31-33.
- Al-Z'bi, Hasan, Ali (2011). Investigating the relationship between corporate culture and organizational change: An empirical investigation. *Journal of Emerging Trends in Economics and Management Sciences (JETEMS)* 2(2):111-116 (ISSN:2141-7024)
- Austin, Michael and Claassen, Jennette (2008) Impact of organizational change on organizational culture: Implications for introducing evidence based practice. *Journal of Evidence based Social work*, Vol.5 N. 1/2 p.321-359 DOI: 10.1300/J394v05n01-12
- Burtonshaw-Gunn, S.A. and Salameh, M.G. (2007a) Change management and organizational performance. ICAFI University press.
- Cameron, K. S. and Quinn, R. E. Diagnosing and changing organizational culture, 1999 (Addison-Wesley Longman, Reading, Massachusetts).
- Falch, Torberg and Mang, Constantin (2015) Innovations in higher education for better skill and higher employability. European Expert Network on Economics of Education (EENEE), Analytical report No. 23 prepared for European Commission.
- Goffee, R., Jones, G. (1998). *The Character of a Corporation: How Your Company's Culture Can Make or Break Your Business*. Harper Business, London.
- Hand, L., Knowles, V., Pybus, L., Scivier, J. & Simpson, S. (2000). What are we learning? About 'Developing Learning' modules? Nottingham Business School Teaching & Learning Conference, Nottingham Trent University
- House, R. J. (1999). *Transformational Leadership: A response to Critiques*. San Diego, CA: Academic Press.
- Kavanagh, Marie H; Ashkanasy, Neal M. (2006) The Impact of leadership and change management strategy on organizational culture and individual acceptance of change during merger. *British Journal of Management* 17(SI) SI81-SI103, DOI 10.1111/j.1467-8551.2006.0080.x
- Johnson , David ; Johnson , Roger & Smith, Karl (2006) *Active Learning: Cooperation in the College Classroom*
- Johnson , David & Johnson , Roger (2010) The impact of cooperative, competitive, and individualistic learning environments on academic achievement. *International handbook of student achievement*.
- Johnson , David ; Johnson , Roger & Smith, Karl (2013) Cooperative learning: Improving university instruction by basing practice by validating theory. *Journal on Excellence in University Teaching*.
- Kazar, Andrinna; and Eckel, Peter D. (2002) The impact of institutional culture on change strategies in higher education. *The Journal Higher Education*, Vol.73, No. 4. by the Ohio
-

Students' Responsiveness to Peer-Led Team Learning and Its contributing factors in Bahr Dar and Gondar Universities

state university.

- Leithwood, K. (1999). *Transformational Leadership Effects: School Effectiveness and School Improvement*. New York: Kluwer.
- Martensson, Katarina & Roxa, Torgny (2015) Leadership at local level-Enhancing educational development. *Educational Management, Administration and Leadership Vol.44(2), 247-262 DOI:10.1177/1741143214549977 Emal Sage Pub. comp.*
- Ministry of Education.(MoE). (2004). Report on the proceedings and results of the ESDP 6th annual review meeting, Addis Ababa, Ethiopia.
- Masood, S. A. Dani, S.S Burns, ND and Backhous, CJ (2006)Transformational leadership and organizational culture: the situational strength perspective. *Journal of Engineering and Manufacturing, Vol.220.*
- Laal, M., & Laal, M. (2012). Collaborative learning: What is it? *Procedia–Social and Behavioral Sciences, 31*, 491-495. doi:10.1016/j.sbspro.2011.12.092
- Lo, May-Chiun ; de Run, Ernest; Cyril, Ramayah, T.(2010) Does transformational leadership style foster commitment to change? The case of higher education in Malaysia, *Procedia Social and Behavioral Sciences 2*, 5384–5388, doi:10.1016/j.sbspro.2010.03.877
- Schein, E. (2004). *Organizational culture and leadership* (3rd ed.). San Francisco: Jossey-Bass.
- Siciliano, J. I. (2001). How to incorporate cooperative learning principles in the classroom: It's more than just putting students in teams. *Journal of Management Education, 25*, 8-20. doi:10.1177/105256290102500103
- Tichy , N. (1985). *The Transformational Leader: Building a Vital Force in Organizations*. Thousand Okas, CA: Sage.
- Tsai, Yafang (2011) Relationship between Organizational Culture, Leadership Behavior and Job Satisfaction. *Bio-Medical center cervices research, Vol.11.*
- Tseng, Shu-Mei (2010). The correlation between organizational culture and knowledge conversion on corporate performance. *Journal of Knowledge Management, 14 (2)*, 269-284
- Walumbwa, F. O. and Lawler, J. J. (2003). Building effective organizations: transformational leadership, collectivist orientation, work-related attitudes, and withdrawal behaviors in three emerging economies. *International Journal of Human Resource Management, 14*, 1083- 1101.
- Walumbwa, F. O., Lawler, J. J., Avolio, B. J., Wang, P., & Shi, K. (2005). Transformational leadership effects on work-related attitudes: The moderating effects of collective efficacy and self-efficacy across cultures. *Journal of Leadership and Organizational Studies, 11*,3-16.