

## **EFFECTS OF CLASSROOM GOAL STRUCTURES ON THE LOCUS OF CONTROL OF JUNIOR SECONDARY SCHOOL STUDENTS**

**Odumodu Nkeonyelu Cynthia & Unachukwu G.C. Prof**

Department of Educational Foundations  
Nnamdi Azikiwe University, Awka

### **Introduction**

Over the years, educators have come up with different innovations in teaching/learning. One of such innovations is the emphasis on classroom goal structure. Classroom goal structures are defined by Wolters (2004), as the prevailing instructional policies and procedures within an academic setting, such as a classroom or school which accounts for the physical, verbal and nonverbal interactions between students-students and students-teachers in working towards the accomplishment of instructional goals.

Choosing an appropriate goal structure became a critical decision affecting students locus of control. Kolawole (2008) opines that, of all the components of instruction, it is teachers' skills in choosing and implementing the appropriate goal structures that are the most important and which have been mostly ignored. There is a great deal of evidence that the process by which students learn (i.e. the way in which students interact and behave in a learning situation) and their locus of control are both largely determined by the goal structure implemented by educators (Johnson & Johnson, 2004).

There are three fundamental types of goal structures that can be implemented in the classroom: cooperative, competitive, and individualistic (Siegel, 2005). However, this study is concerned with only cooperative and competitive classroom goal structures. Cooperative learning is an approach of organizing classroom activities into academic and social learning experiences. Students must work in groups, brain-storm and peer-tutor to complete tasks collectively. The teacher's role changes from giving information to facilitating students' learning. This means that the students are active participants who construct knowledge on their own. An important goal of students in a cooperative classroom is to encourage and enable other students to succeed. Hence, team work is emphasized.

In a competitive classroom goal structure the mode of learning in this context is the lecture method with an emphasis on competition. The teacher explains all the concepts to be learnt while the students listen and take down notes. Learners understand that they are rewarded based on their comparisons with other learners. Class work is carried out individually and the students are

encouraged to out-perform each other. The goal of students in a competitive classroom is to do better than their classmates.

Nauta, Epperson, and Waggoner (1999) found that the type of locus of control prevalent among students in a learning environment will go a long way to determine the amount of effort students will put into learning. Locus of control is a person's perceived control over his or her own behaviour (Rotter 1966 in Chen & Silverthorne, 2008). It is the orientation that a person holds as to where control over life events is relative to the self, that is to say, a person may give life events internal/external meaning, or a person may believe events are self-controlled/other controlled. It is also defined by Patten (2005) as a psychologic concept that defines people as having either an internal or an external locus of control, depending on whether they are more self-reliant and independent or more communally focused and dependent on others. The classification internal locus indicates that a person feels in control of events while external locus indicates that others are perceived to have that control.

According to Weiner (1986) Causal Attribution Theory, ability, effort, task difficulty, and luck are perceived as casual factors for an individual's explanation of success and failure. Students who have internal locus of control are those students who take responsibility for their success and failure. These are students who attribute their success mainly to effort and their failure is perceived as lack of effort. Such a student will put in extra effort to succeed a second time thereby enhancing his/her academic achievement. On the other hand, students with external locus of control are students who attribute their success to ability or luck and will blame their failure on task difficulty or bad luck.

The interest of this study is to manipulate the variable of goal structure to investigate its effect on students' locus of control.

The purpose of the study was to determine the effects of classroom goal structures (competitive and cooperative) on junior secondary school students locus of control. Two research questions and one hypothesis guided the study, which are:

- What proportion of students with external locus of control taught under the competitive classroom goal structure changed to internal locus of control?
- What proportion of students with external locus of control taught under the cooperative classroom goal structure changed to internal locus of control?
- There is no significant difference in the proportion of students taught in a cooperative classroom goal structures whose locus of control

changed from external to internal locus of control when compared with those taught in a competitive classroom goal structure.

**Method**

The design is a quasi experimental design with the use of intact classes from two different schools. The study was carried out in Awka Education Zone, Anambra State of Nigeria, which comprises of sixty-one (61) government owned secondary schools. The population of the study comprised 3716 students in junior secondary school II (JSS2) in the 26 State Government owned Secondary schools which offer Computer Education in Awka Education Zone of Anambra State in the 2011/2012 academic session. From the 26 schools that offer Computer Education in Awka Education Zone, two schools were randomly selected. One school was used as the experimental group while the other became the control group using 30 students in each of the classes. The instrument which was used for data collection was a Locus of Control Scale (LOCS). The instrument was carefully validated by three experts, two in Educational Psychology and the other in Measurement and Evaluation and its reliability tested on 20 JSS 2 students of Krosa Academy Amawbia, Anambra State. The reliability co-efficient of the CEAT was determined through test, retest method. A value of 0.84 was obtained. As a result of the high reliability coefficient, the instrument validators considered it reliable for the study. The instrument was administered by the regular Computer Education classroom teachers (research assistants) of both schools used for experimental and control groups. The research questions were answered using mean while the HO was analyzed using ANCOVA at 0.05 level of significance.

**Results**

**Table 1:**

*Proportion of Students Taught in the Control Group Whose Locus of Control Changed From External to Internal.*

Locus of control	No	No			Propo.
		Pretest	Posttest	Ext. to Int.	
Internal locus	10	18			
External locus	20	12		8	0.4

The table showed that the 10 students taught under the control group had internal locus of control at the pre-test stage while 20 students had external locus of control. At the post test stage, 18 students had internal locus of control while 12 students had external locus of control. The table also showed that 8 students moved from external locus of control to internal locus of control after the post test. The proportion of students whose locus of control changed from internal to external locus of control is 0.4.

**Table 2:**  
*Proportion of Students Taught in the Experimental Group Whose Locus of Control changed from External to Internal.*

Locus of control	No Pretest	No Posttest	No Ext. to Int.	Propo.
Internal locus	8	28		
External locus	22	02	20	0.91

The table showed that the 8 students taught under the experimental group had internal locus of control at the pre-test stage while 22 students had external locus of control. At the post test stage, 28 students had internal locus of control while 02 students had external locus of control. The table also showed that 20 students changed from external locus of control to internal locus of control after the post test. The proportion of students whose locus of control changed from internal to external locus of control is 0.91.

**Table 3:**  
*Summary of ANCOVA on Cooperative and Competitive Groups' locus of control change.*

Source	type III sum of squares	df	Mean square	F	sig.
Corrected model	661.278	2	330.639	46.453	.000
Intercept	.002	1	.002	.000	.987
Pretest	455.928	1	455.928	64.056	.000

Groups	154.955	1	154.955	21.770	.000
Error	405.706		57	7.118	
Total	6849.000	60			
Corrected total	1066.983	59			

---

a. R Squared .620 (Adjusted R Squared .606)

Table 3 above shows a significance of .000 which is < 0.05 significance level. This means that there is a significant difference in the proportion of students taught in a cooperative classroom goal structures whose locus of control changed from external to internal locus of control when compared with those taught in a competitive classroom goal structure. The null hypothesis was therefore rejected.

**Discussion**

The result of the data analysis indicated that both groups had students whose locus of control changed from external to internal after the study. However, the proportion that changed indicates that those taught in a cooperative classroom goal structure had the greater number of students whose locus of control changed from external to internal. As a result, the study recorded a significant difference in the proportion of students taught in a cooperative classroom goal structures whose locus of control changed from external to internal locus of control when compared with those taught in a competitive classroom goal structure.

The students in the cooperative class brain stormed and peer tutored which made learning more practical and assimilation/ understanding of concepts easier as they constructed knowledge on their own. Also, the students were made to believe that the failure of a group member results in the failure of all group members, therefore the more capable peers in each group tried so hard to pull the less capable peers along so that they do not fail the group they belonged to. As a result of this, students’ performance enhanced and these students were confident enough to attribute their recent success to personal effort on studies. This led to the high increase of students’ locus of control from external to internal in the cooperative classroom.

This finding is in agreement with the findings of Chi-chau Lin (1997) who carried out a study on the effects of goal structure on Chinese elementary school students’ goal orientation, achievement, intrinsic motivation and beliefs about success/failure. Chi-chau Lin found that children in the cooperative group significantly attributed success to the effort than children in the competitive group. This accounted for the reason why the children number in

the cooperative group with internal locus of control was greater when compared with those in the competitive group.

### **Conclusion**

There was a significant difference in the proportion of students taught in a cooperative classroom goal structures whose locus of control changed from external to internal locus of control when compared with those taught in a competitive classroom goal structure. Empirically, it is shown that cooperative classroom goal structure enhances students' achievement and locus of control.

### **Recommendations**

Based on the findings of this study and their implications, the following recommendations were made:

1. Government, educationists and stake holders in education should help teachers learn the skills of cooperative strategies through organizing in-service programmes such as seminars, workshops and conferences.
2. Teachers must emphasize and reward effort and not ability of students. That way the teacher will encourage the students to put in extra effort to learn especially when they fail and when they are having a hard time at mastering tasks.

### **References**

- Chen, J.C. and Silverthorne, C. (2008). The impact of locus of control on job stress, job performance and job satisfaction in Taiwan. *Leadership and Organization Development Journal*, 29(7), 572-582.
- Chi-chau Lin, B.A (1997). *Effects of goal structure on Chinese elementary school students goal orientation, achievement, intrinsic motivation and beliefs about success/failure*. (Ph.D thesis) submitted to the Graduate Faculty of Texas Technology University, Texas
- Kolawole, E.B. (2008). Effects of competitive and cooperative learning strategies on academic performance of Nigerian students in Mathematics. *Educational Hand Review*. 3(1), 033-037.
- Johnson, D. W. & Johnson R. T. (2004). Instructional goal structure: competitive, cooperative and individualistic. *Review of Educational Research*. 74(18), 213.
- Nauta, M. M., Epperson, D. L., & Waggoner, K. (1999). Perceived causes of success and failure: Are women's attributions related to persistence in engineering majors? *Journal of Research in Science Teaching*, 36(6), 663-676.

- Patten, M. D. (2005). An analysis of the impact of locus of control on internal auditor job performance and satisfaction. *Managerial Auditing Journal*, 20(9), 1016-1029
- Siegel, C. (2005). Implementing a research-based model of cooperative learning. *The Journal of Educational Research*, 98(6), 339-349.
- Weiner, B. (1986). *An Attributional Theory of motivation and emotion*. New York: Springer-Verlag.
- Weiner, B. (1992). *Human motivation: Metaphors, theories, and research*. London
- Wolters, C. (2004). Advancing achievement goal theory: Using goal structures and goal orientations to predict students' motivation, cognition, and achievement. *Journal of Educational Psychology*, 96(8), 236–250.