



## Constructivism in Classrooms: An Evaluation of Group Activities by the Stakeholders

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### Abstract

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Effective classroom management is the creation of a learning environment in which learners express appropriate behaviors and adequate learning take place. The present study analyses how the secondary school students and teachers evaluate the group activities in the classrooms. Participants of the study include 117 secondary school students and 30 teachers. Students and teachers agree in the success of constructivist approach with respect to the group learning, sharing of ideas, evaluate and accept others' idea, modify one's own cognition etc. But students are dissatisfied in aspects like facilities to express abilities, isolating in groups, less interest in learning, rote learning etc. Teachers' suggestions to improve the classroom practices include reduction of class size and content as well as adoption of more student friendly strategies

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Education is the one and only one process which touches all the aspects of human life. It is education that determines the philosophy of a nation and mould up citizenship in accordance with that philosophy. Education must therefore find a golden mean between individual life and social life. The individual should co-ordinate his development with that of the community. Such a development enables a person to live happily and effectively.

How one perceives knowledge and what is the process of acquiring the knowledge are the pertinent questions of Education. The traditional lecture method and behavioral psychology was conditioning the observable behavior of the learner to the desired level. They viewed mind as an empty vessel to be filled with knowledge that the teacher transacts, where the learners receive information passively which they feel outdated. Here problem solving was considered as one of the major goals of education so that the students will be efficient problem solvers and solve the numerous problems in the classroom which they even do not felt. Hence the behaviourist approach to education is being criticized as too narrow, specialized, isolated and intrapersonal in standpoint.

Constructivism emerged as the leading metaphor of human learning by the 1980s and 1990s as interest waned in behaviourist and information-processing perspectives. Learning becomes meaningful when students are able to construct their own knowledge and also to transfer and use it in new learning situations. Constructivism is an educational perspective that explains how knowledge is acquired from the experiences. It is a theory of knowledge with roots in philosophy, psychology, and cybernetics. The constructivist approach is subjective and contextual. Here the learner constructs knowledge in a social and cultural environment where they live (NCERT, 2005).

Constructivism brought a major observable change in the classrooms as it give complete academic freedom to the students, encourages co-operative learning and sharing of thought among the students. The teachers' role changed to a facilitator, investigator, manager and explorer of knowledge, whereas the role of students changed from receiver of knowledge to



constructor of knowledge. In the classroom students design experiments, test hypotheses, draw conclusions, compare results with others etc. Here the democratic environment ensures meaningful learning and facilitates social interaction.

Constructivism ensures learner's active participation and it dismisses passive perception, rote memorization, and all the mechanical learning methods in traditional didactic lecturing. Learners should constantly be challenged with tasks that refer to skills and knowledge just beyond their current level of mastery. This captures their motivation and builds on previous successes to enhance learner confidence. This is the major idea behind Vygotsky's Zone of Proximal Development (ZPD), which can be described as the distance between the actual developmental level and the level of potential development.

Social constructivism suggests that knowledge is first constructed in a social context and is then integrated into the individual's mental structure. According to social constructivists, the process of sharing each person's point of view (collaborative elaboration) results in understanding the idea that would not be possible or effective if interacted alone. Here the learning is viewed as an active process, where learners should learn to discover principles, concepts and facts for themselves. People together as members of a group invent the properties of the world (Vygotsky, 1987).

Constructivist class room and related concepts are getting more attention from the part of researchers. Rekha and Vijayakumari (2013) in a meta-analysis of the studies in the area suggested many areas of constructivist approach in which researches are urgently needed. Studies already conducted in the area highlight the importance of constructivist approach in enhancing student achievement, ability to construct knowledge in a group by themselves and encouraging active and meaningful learning and promoting responsibility and autonomy (Srinivas, 2013; Gautam & Kulshrestha, 2011; Kacharayil & Bindhu, 2013). Some studies stresses the need for constructivist approach for making the learners autonomous to inquisitive thinkers who question, investigate and find reason, but at the same time put forward the difficulties that a traditionally trained teacher may face in the constructivist approach (Devi, 2012; Sehrawat & Roy, 2013). The change in the role of teachers in constructivist classroom is a real challenge before teachers.

Teaching means arranging a congenial environment in the classroom where optimum level of learning occurs in the case of each learner. Effective classroom management is the provision and procedures necessary to establish an environment in which teaching and learning can occur. It focuses on better student learning and not blocking or reducing misbehavior. Effective classroom management is the creation of a learning environment in which learners express appropriate behaviors and adequate learning take place.

Glasser's theory of classroom management is a mixture of interactionist, humanist and behaviorist approaches. Glasser (1986) supports power sharing classroom meetings. Students are to be allowed to discuss any topic without the fear of contamination to reach at an agreement to the problems. The control theory by Glasser emphasizes three aspects for effective learning viz., Students need to have a sense of belonging, need to feel important and need to have fun and freedom.

Social constructivism encourages students working in small groups and this will help them to gain a sense of belongingness, develop motivation and hard working, satisfy their needs/perform according to their abilities, feel worth-fullness, be independent in learning, select appropriate study habits, work hard for improving group performance and sincerely involve in the learning activities.

Glasser (1986) emphasises the use of learning-teams in schools to capture the excitement and commitment, students display in sports but rarely in the classroom. He



translates control theory into a productive, classroom model of team learning with emphasis on satisfaction and excitement. Working in small teams, students find that knowledge contributes to power, friendship and fun. He emphasizes the importance of realization of students about the expected outcomes of their action.

Kerala is a state in which constructivism is experimented in the classrooms. Any system need feedback from the stake holders for its improvement and it is time to know what the students and teachers think about the activities going on in their classrooms. Such a study will surely contribute to the improvement of the entire education system. Hence present study is an attempt to analyze the view of two major stakeholders of this approach viz., teachers and students about the group activities organized in the classrooms. The findings of the study will give a feed back about the current practices and will contribute for the betterment of classroom management in schools of Kerala.

### **Objectives**

1. To know how the secondary school teachers evaluate various aspects of group activities in class room.
2. To know how the secondary school students evaluate various aspects of group activities in class room.

### **Method**

The study used survey method.

### **Participants**

The participants of the study are 117 secondary school students and 30 teachers of secondary schools of Malappuram district in Kerala. The sample was selected using stratified sampling method and type of school management and locale were the strata considered.

### **Instrument**

Data was collected from the participants using a rating scale. Ten aspects of classroom activities based on Glasser's approach to classroom management were listed. Three options viz., 'Not at all', 'Moderately' and 'Highly' for each item were given. The respondent has to mark his/her response by a tick mark. Separate rating scales were used for students and teachers but the items included were the same. Difference between the two includes the instructions and a column to write the suggestions by teachers.

### **Procedure**

Participants of the study were selected randomly from five schools of Malappuram revenue district of Kerala state. The rating scales were distributed among the respondents and after completing their responding, the sheets were collected back. The number of responses under each category viz., 'Not at all', 'Moderately' and 'Highly' were recorded separately for students and teachers. Then percentage of responses under each category was calculated for the items.

### **Results and Discussion**

Percentage of students and teachers who have responded under each category viz., not at all, moderately and highly for different aspects of classroom teaching-learning process are given in table 1.

Table 1

*Percentage of responses for different aspects of group activities in class rooms*

Item No	Description	Participant (students-117, teachers-30)	Percentage of responses		
			Not at all	Moderately	Highly
1	Develop group feeling	Students	0.90	53	46.10
		Teachers	0.00	56.70	43.30
2	Develop motivation in learning	Students	0.00	33.30	67.70
		Teachers	0.00	16.70	83.30
3	Express abilities	Students	2.60	53.80	43.60
		Teachers	0.00	46.70	53.30
4	Isolated from the groups	Students	65.00	30.80	4.20
		Teachers	70	30	0.00
5	Loss interest in learning	Students	54.70	35	10.30
		Teachers	86.70	13.30	0.00
6	Hard working for group development	Students	4.30	23.90	71.80
		Teachers	0.00	66.70	33.30
7	Independent learning	Students	1.70	41.00	57.30
		Teachers	50	46.70	3.30
8	Select appropriate strategy for learning	Students	0.00	46.20	53.80
		Teachers	0.00	93.30	6.70
9	Avoid rote learning	Students	11.10	64.10	24.80
		Teachers	6.66	66.67	26.67
10	Ensure participation in learning	Students	1.70	23.10	75.20
		Teachers	0.00	26.70	73.30

Percentage of responses under each category of responses for different aspects of group activities reveals the following.

*Develop group feeling:* It was perceived that the activities are developing group feeling by 99 percent students out of which 53 percent evaluate it as moderate where as 46 percent view it as highly capable of developing group feeling. Only 0.9 percent perceives it as a failure to develop group feeling. But all teachers under study are of the opinion that current practices develop group feeling, approximately 57 percent as moderate and 43 percent as high.

*Develop motivation in learning:* Learning becomes meaningful when the learners are motivated and involve wholeheartedly in the learning process. No students or teachers are observing teaching learning process as not capable of motivating the students. Almost 67 percent of students see the classroom activities as highly motivating where as 33 percent feel it at moderate level. Approximately 17 percent of teachers are of the view that these activities develop motivation to a moderate level where as 83 percent evaluating it as high.

*Express abilities:* Constructivist classroom is considered as a stage in which learners' various abilities can be expressed, not only academic but non-academic also. Approximately three percent of students found that classroom practices as failure to express abilities of learners. All the teachers and 98 percent of students found it as successful and among this approximately 44 percent students and 53 percent teachers perceive current classroom practices as highly suitable for expressing student abilities whereas approximately 54 percent students and 47 percent teachers perceive it as moderately encouraging expression of student abilities.

*Isolated from the groups:* Approximately 65 percent student's and 70 percent teachers are of the opinion that current practices do not isolate students from their groups. Almost 30 percent of students as well as teachers observe that these activities are isolating the students to

some extent. But a small group of students (four percent) evaluate these activities as highly isolating students from group.

*Loss interest in learning:* No teachers are of the view that the current practices reduce interest in learning but 10 percent of the students are of this opinion. 35 percent of the students and 13 percent of the teachers view the activities causing loss in interest in learning among learners to a moderate level. Approximately 55 percent of the students and 87 percent of teachers are of the opinion that the current activities are not reducing interest in learning.

*Hard working for group development:* Approximately 72 percent of students and 33 percent of teachers rate the current practices as highly enabling the learners work hard for group development. 24 percent students and approximately 67 percent teachers rate it as moderate. No teachers find it as failure in this aspect, but approximately 4 percent of students find it as not at all encouraging to working hard.

*Independent learning:* Approximately two percent of students perceive the activities as not facilitating independent learning. But half the teachers under study rated the activities as making students more and more dependable. Almost equal percentage of teachers and students rate it as moderate. But Approximately 57 percent of students view it as highly capable of making students independent in learning where as only three percent of teachers are of this opinion.

*Select appropriate strategy for learning:* All the students and teachers view the current class room practices as appropriate for selecting suitable learning strategies among students. More than 93 percentage of teachers and 46 percent students view it at a moderate level. 54 percent of students and seven percentage of teachers rate it as high.

*Avoid rote learning:* Eleven percent of students and approximately seven percent of teachers are of the opinion that the current class room practices not at all avoiding rote learning. But 64 percentage students and 67 percentage teachers rate it moderate whereas 25 percent of students and approximately 27 percent of teachers rate it high.

*Ensure participation in learning:* No teachers and only two percent of students view the current class room practices are incapable of ensuring students participation in learning. 23 percent of students and approximately 27 percent of teachers rate it moderate whereas 75 percent of students and 73 percentage teachers rate it high.

Suggestions by teachers to improve the current practices include reducing class size to 1:30 instead of present status of 1:50. They are of the opinion that present curriculum can be effectively transacted only if the content overload is reduced. They are in need of more student friendly strategies in classrooms.

### **Conclusion**

One major aspect of constructivist approach is that the learners develop the ability to work in group and learn together instead of learning in separate shells. The ability to share ideas, evaluate and accept others ideas and modify one's own cognition are very much important in social living. As per the responses of students and teachers of secondary schools, this purpose is satisfied at a moderate level in the classrooms. No teacher is against constructivist approach with respect to the effectiveness of the practices in developing group-learning abilities. Students are also supporting the current practices, against group being very negligible in size.

But students feel dissatisfaction in some aspects like facilities to express abilities, isolating in groups, less interest in learning, rote learning etc. Results show that though, teachers and students. The major suggestion put forward is to reduce teacher-pupil ratio into 1:30 and reducing the over burden in the content. Some other creative suggestions include student's teacher practices. Peer tutoring and co-operative learning can be practiced periodically. Student participation in learning process can be increased by strictly monitoring the activities.

To make group activities more effective a democratic, student friendly, fearless, but





goal-oriented classroom practices are to be organized by the teachers.

### **Educational Implications**

The study focuses on innovative and democratic classrooms. A constructivist classroom should provide opportunities for the learners to explore, inquire, discover and experiment. A wide variety of learning experiences can be given where the child learns to construct his own knowledge. Activities such as projects, readings, visits, reports, discussions, field work etc. can be given in order to nourish hands-on-experience. Pupil preferred activities are to be given in which they have a scope to share their knowledge among peers and reconstruct their knowledge relatively. The learning environment is to be designed to support and challenge the learners' thinking.

Teachers must take extreme care in grouping students. It is very difficult to group the students in a mixed ability class. Sometimes the teacher need to put the weaker and stronger students in same group, sometimes mixing them, sometimes tasks are to be given according to their ability. This is a problem for the teachers, especially in a large class. To improve the classroom practices class size need to be reduced.

No students should feel isolated from others in the class or sit detached in from learning activities. They must ensure equal opportunities and complete participation in learning activities by the students. They must be capable of motivating even the most backward student with the help of interesting group activities. Also recreational activities can be used for arising and maintaining interest in learning activities. Rote learning is to be avoided and a meaningful understanding of the concepts and principles is to be ensured in the classroom which will lead to better reproduction and inventions.

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