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INFLUENCE OF "ICE-BREAKS" INVOLVING "MULTITASK TEACHING MODEL" ON THE PERFORMANCE OF GEOGRAPHY STUDENTS IN UNDERGRADUATE LEVEL

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ABSTRACT

    Diversity in the classroom teaching provides maximum capabilities of learning by students. According to scientific advances and technology in the present age, educational aids as an interface have been able to play its role well. Co-teaching or team-teaching is going to serve a lot to orchestrate the classroom teaching through this "Ice-Breaks" involved "Multitask Teaching Model" to achieve the goal of learning by students. Two or more educators or teachers work together to plan, organize, instruct and make assessments on the same group of students, sharing the same classroom. This approach can be seen in several ways. Teacher candidates who are learning to become teachers are asked to co-teach with experienced associate teachers, whereby the classroom responsibilities are shared, and the teacher candidate can learn from the associate teacher. Regular classroom teachers and special education teachers can be paired in co-teaching relationships to benefit inclusion of geography students in undergraduate level with special needs.

KEYWORDS: *MTTL; Tasks; Icebreakers; audiovisuals .*

INTRODUCTION:

    An instructing technique contains the standards and strategies utilized by instructors to empower understudy learning. These procedures are resolved halfway on topic to be instructed and mostly by the idea of the student. For a specific instructing strategy to be fitting and proficient it must be in connection with the trait of the student and the sort of learning it should achieve. Proposals are there to plan and choice of instructing strategies must consider the idea of the topic as well as how understudies learn (Westwood, 2008). In the present school the pattern is that it supports a great deal of innovativeness. Human progression comes through thinking. This thinking and unique idea upgrades innovativeness. The methodologies for instructing can be extensively characterized into educator focused and understudy focused. In Teacher-Centered Approach to Learning, Teachers are the principle authority figure in this model. Understudies are seen as "unfilled vessels" whose essential job is to inactively get data (through talks and direct guidance) with a ultimate objective of testing and evaluation. It is the essential job of instructors to pass information and data onto their understudies. In this model, instructing and appraisal are seen as two separate elements. Understudy learning is estimated through unbiasedly scored tests and appraisals. In Student-Centered Approach to Learning, while educators are the position figure in this model, instructors and understudies assume a similarly dynamic job in the learning procedure. The instructor's essential job is to mentor and encourage understudy learning and in general understanding of material. Understudy learning is estimated through both formal and casual types of appraisal, including bunch ventures, understudy portfolios, and class interest. Educating and evaluations are associated; understudy learning is

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ceaselessly estimated during instructor guidance (Neeraja, 2011). Usually utilized instructing strategies may incorporate class cooperation, show, recitation, remembrance, or mixes of these.

The models of teaching deals with the ways in which learning environments and instructional experiences can be constructed, sequenced, or delivered. If you are a practicing educator at any level, you may not yet realize this, but you need not reinvent the wheel when you are looking for effective ways teach. There are literally hundreds of models of teaching and learning. To reiterate, simply put models deal with the ways in which learning environments and instructional experiences can be constructed, sequenced, or delivered. They may provide theoretical or instructional frameworks, patterns, or examples for any number of educational components — curricula, teaching techniques, instructional groupings, classroom management plans, content development, sequencing, delivery, the development of support materials, presentation methods, etc. Teaching models may even be discipline or student-population specific (Hyman, 1970). Model of teaching can be defined as instructional design which describes the process of specifying and producing particular environmental situations which cause the students to interact in such a way that a specific change occurs in their behavior. https://www.slideshare.net/competents2011/models-of-teaching-6719537

Models of teaching and learning are critical pieces to instructional planning and delivery because they helping for qualitative teaching – learning process through:
1) Developing highly tuned and more varied professional repertoires (Joyce, *et al*, 2008).
2) Allowing them to reach larger numbers for students more effectively (Kauchak, and Eggen, 1998).
3) Creating either more uniform, or varied, or effective instructional events, guided by targeted subjects, content, or processes(Kauchak, and Eggen, 1998).
4) Understanding curricular foci better, especially as different models can be matched specifically to both learning outcomes and/or targeted learning populations (Miller, 1990).
5) Gaining needed insights into why some methods work with some learners, while others do not (Joyce, *et al*, 2008).
6) Radically modify or redesign existing methods of teaching and instructional delivery so that emerging or altered instructional techniques may better meet the needs of today's students (Miller, 1990).

An icebreaker is a facilitation exercise intended to help members of a group begin the process of forming themselves into a team. Icebreakers are commonly presented as a game to "warm up" the group by helping the members to get to know each other. They often focus on sharing personal information such as names, hobbies, etc. (Brown and Race, 1995). An icebreaker should be related to the subject or the purpose of the meeting. For example, if a collaborative learning environment is needed for a training project, then an icebreaker exercise that promotes collaboration could be chosen. If the subject of the meeting is literature, then the subject of the meeting could be introduced through an exercise that revolves around a participant's favourite books. Icebreakers should be relaxing and non-threatening (Doctoroff Landay Susan, 2011). For example, icebreakers in a professional setting should not require people to reveal personal information or to touch other people, as this may be stressful or culturally inappropriate. They should not embarrass the participants or make them feel compelled to participate. They should also not show disrespect for any social and professional hierarchies in the group, as this can be uncomfortable for participants. At the end of a well-executed icebreaker exercise, the facilitator should be able to summarize for the group what was learned during the exercise. There are many different types of icebreakers. Some of the most common are:

INTRODUCTORY ICEBREAKERS:

Often, when people get together for the first time, they do not all know one another. Introductory icebreaker games and activities not only help people begin to know each other, but also help them recognize and appreciate differences and similarities. Introductory icebreakers can be as simple as asking each person to tell the group their name and one fact about themselves, or they can be complicated exercises designed to build trust and a desire to work together.

Getting-to-know-you Icebreakers:

Icebreakers are frequently presented in the form of a game to "warm up" a group by helping the members to get to know each other. They often focus on sharing information such as names, personal facts, hobbies, etc. Getting to know you icebreakers also help people who already know each other become more acquainted.

Team-building Icebreakers

Many icebreaker games are intended to help a group to begin the process of forming themselves into a team or teams. Some teamwork icebreakers, such as building activities, aid group dynamics by building trust, communication, and the ability to work together.

Party (fun) Icebreakers:

Party icebreakers introduce guests to one another. Use icebreakers that are simple and entertaining to coax people to converse and laugh. This sets the right mood for the rest of the party.

Icebreaker Questions:

As the name implies, icebreaker questions simply elicit information from people in an effort to get them comfortable and relaxed. Icebreaker questions can be serious or funny. The best icebreaker questions are designed specifically for an identified age and purpose and prepare people for activities or experiences that follow.

Multi-task teaching-learning (MTTL) is a subfield of teaching- learning in which multiple forms of teaching units are handled in a single classroom. The tasks are solved at the same time, while exploiting commonalities and differences across tasks. This can bring about improved instructing learning proficiency and forecast precision for the assignment explicit models, when contrasted with different models independently (Baxter, 2000; Thrun,1996 and Caruana, 1997). Early forms of MTTL were classified "clues" (Suddarth and Kergosien, 1990 and Abu-Mostafa, 1990). As per Caruana (1997), Multi-task educating learning (MTTL) merit following huge characters:

(A). Perform multiple tasks Teaching-Learning (MTTL) is a way to deal with inductive exchange that improves speculation by utilizing the space data contained in the preparation sign of related assignments as an inductive inclination. It does this by learning errands in parallel while utilizing a mutual portrayal; what is found out for each undertaking can enable different assignments to be adapted better (Caruana, 1997).

(B). In the order setting, MTTL expects to improve the presentation of different arrangement undertakings by learning them mutually. One model is a spam-channel, which can be treated as particular however related order undertakings crosswise over various clients. To cause this increasingly concrete, to think about that various individuals have various dispersions of highlights which recognize spam messages from genuine ones, for instance an English speaker may locate that all messages in Russian are spam, not so for Russian speakers. However there is a clear shared trait in this characterization task crosswise over clients, for instance one normal element may be content identified with cash move. Tackling every client's spam order issue mutually through MTTL can give the arrangements a chance to educate one another and improve execution. Further instances of settings for MTTL incorporate multiclass order and multi-name grouping (Ciliberto, 2015).

(C). Perform multiple tasks learning works since regularization actuated by requiring a calculation to perform well on a related errand can be better than regularization that anticipates overfitting by punishing all unpredictability consistently. One circumstance where MTL might be especially useful is if the assignments share critical shared traits and are commonly somewhat under tested. Nonetheless, as examined underneath, MTL has additionally been demonstrated to be helpful for learning inconsequential undertakings (Romera-Paredes, et al , 2012).

Creating an educational system capable of training people to live in a changing world is the priority of modern society. So it is not surprising that many school systems are planning new educational technology

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in teaching and learning processes to operate as a system of advanced training and advanced training as a result of their nation. On this much background, study has been planned.

MATERIAL AND METHODS:

The study attempt was carried out through the steps, which include: designing the teaching methods; sample selection; Task oriented teaching; Ice breaks; performance of participant students and statistical analysis of data collected. The independent variables in the study were teacher-centered teaching method, student-centered teaching method and teacher-student interactive teaching method. The dependent variable was student test scores.

(I).Designing the Teaching Methods: Considering overall objectives, the attempt was designed. The instructional objective of the attempt was "At the end of the attempt, student is going to solve the problem; apply the knowledge in different circumstances and write the appropriate answers for questions asked in the test". Use of cooperative teaching was the pace making planning for the attempt. In order to facilitate transfer of knowledge, computer based infrastructure was developed. Method of giving oral instructions to student participants was developed. Teaching through one of the teaching aid and asking questions on same topic, but in exclusively different "Modified Teaching Aid" was developed. The most reluctant audiovisual clip for about seven minutes was prepared. The objective is to facilitate a interactive knowledge base, accessible to technology and sense enhancing. Role of each teacher was finalized.

Design of the Multitask Teaching – Learning (MTTL)

| Introduction of teachers to students | (2 Minutes) |

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| Short Introduction About the Activity | (1 minute) |

| Session I :(Problem Solving Teaching-Learning) | (25 Minutes) |

| The First   ICE BREAK | (05 Minutes) |

| Session II :(Teaching-Learning through Teaching-aids) | (25 Minutes) |

| The Second   ICE BREAK | (05 Minutes) |

| Session III: (Teaching-Learning Through Audi-visual Aids) | (25 Minutes) |

| The Third   ICE BREAK | (05 Minutes) |

| Students Performance Assessment Through Written Test | (25 Minutes) |

| Concluding Session | (05 Minutes) |

(II).Sample selection:

The undergraduate female students from first year science degree class were selected for present attempt. Total number of participant students was twenty four (n = 24). They were selected randomly from the class of hundred. They were divided into four different groups, each with six individuals.

(III).The Multi-task teaching-learning (MTTL) model of teaching was selected. Three tasks were selected for teaching-learning include: Problem Solving Teaching-Learning; Teaching-Learning through Teaching-aids and

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Teaching-Learning Through Audi-visual Aids. Each task was for thirty minutes. After each task, there was "Nicely Planned Ice Break" for ten minutes.

(A). Problem Solving Teaching-Learning:

In Problem Solving Teaching-Learning task, teacher taught the steps of solving through the principle of "Perseverance". Perseverance means persistence in doing something despite difficulty or delay in achieving success (trying again and again). Students were encouraged for their participation. Both teacher and students used "Blackboard and Chalks" for the completion of their attempts. The teacher expected to put pieces together in a logical way, in order to arrive at the correct solution of the puzzle. Through the use of clues, teacher inspired students for solving the problems.

(B).Teaching-Learning through Teaching-aids:

In this session, sphere of earth was shown to the students. Teacher explained "The system of rotation of earth around sun". It was followed by asking the questions on "Effect of rotation of earth around sun". Through the use of answers of students, teacher established the "Solar System on Black Board". For the purpose to help to understand the concepts like Longitudes and Latitudes; Day and Night; Eclipse; Day of complete 24 hours; ...., Teacher explained the natural facts through the use of sphere of earth. Students were instructed to answer the questions keeping in view "Earth were as if Cube like". This was for the purpose to improve the imagination capabilities of students.

(C). Teaching-Learning Through Audio-visual Aids:

Video is also a popular tool used to engage learners and enhance a learning experience. In this session a short clip on "Raman Effect" was shown. The attempt was to demonstrate "seven colors of sun light are appearing through the scattering process". In this video clip, questions like

Why sky is blue ?
Is sea is reflecting the color of sky ?
Is sea with color of it's own ?

Were raised. The short biography of C. V. Raman and purpose of celebration of "Indian National Science Day" was narrated in this film. Students were expected to observe the film carefully and answer the questions on process of scattering of light.

(D). Performance of Participant Students; Feedback and Statistical Analysis of Data:

A test or examination (formally, examination) was arranged on the topics learned by students. A written test was administered, on paper. The paper with questions and suitable space for attempt were supplied. Questions were relying upon memory to respond to specific items.

Answers were assed soon after the completion of the written test. A test scores were interpreted with regards to a norm, criterion and occasionally both. The norms were established independently, and by statistical analysis. This written was meant to test a student's knowledge or willingness to give time to manipulate that subject. Feedback form from each individual participant were collected.

Data thus collected was subjected for statistical analysis

RESULTS AND DISCUSSION

Results on the attempt entitled, "Influence of "Ice-Breaks" involved "Multitask Teaching Model" on the performance of students" are summarized in Table- 1 and Figure-1 and Figure-2.They are explained away parameter-wise. The parameters include: Academic Performance; Task-wise feedback and feedback for icebreakers activities.

Academic Performance: Academic achievement or (academic) performance is the extent to which a student have achieved their short term learning goals. Scholastic accomplishment is usually estimated through assessments or consistent appraisals however there is no broad concession to how it is best

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assessed or which angles are generally significant—procedural information, for example, abilities or explanatory information, for example, realities (Annie Ward, et al, 1996).The scores of the student participants of Group "A" in the present attempt on teaching for Problem Solving Teaching-Learning task; Task on Teaching-Learning through Teaching-aids and task Teaching-Learning Through Audi-visual Aids were found 36 (±4.258); 50 (±7.392) and 60 (±8.136) respectively (Table – 1 and Figure – 1).

The scores of the student participants of Group "B" in the present attempt on teaching for Problem Solving Teaching-Learning task; Task on Teaching-Learning through Teaching-aids and task Teaching-Learning Through Audi-visual Aids were found 35 (±6.786); 48 (±5.523) and 56 (±6.815) respectively (Table – 1 and Figure – 1).

The scores of the student participants of Group "C" in the present attempt on teaching for Problem Solving Teaching-Learning task; Task on Teaching-Learning through Teaching-aids and task Teaching-Learning Through Audi-visual Aids were found 34 (±8.013); 56 (±11.712) and 58 (±9.642) respectively (Table – 1 and Figure – 1).

The scores of the student participants of Group "D" in the present attempt on teaching for Problem Solving Teaching-Learning task; Task on Teaching-Learning through Teaching-aids and task Teaching-Learning Through Audi-visual Aids were found 30 (±11.074); 44 (±10.111) and 54 (±9.957) respectively (Table – 1 and Figure – 1).

The scores with reference to the Task-wise Feedback Response from the student participants, the scores for Problem Solving Teaching-Learning task; Task on Teaching-Learning through Teaching-aids and task Teaching-Learning Through Audi-visual Aids were 29.000; 34. 926 and 36.074 respectively.

Scores with reference to the Feedback Response from the student participants For Icebreakers Activities from the student participants, the scores for Make-up; clapping and mimicries were 36; 40 and 24 respectively. The best feedback response for the "Make-up" activity as icebreaker used in the study appears to be the best. As all the student participants were women, credit of "Best" feedback for "Make-up" goes to the situation. Teachers have to plan the icebreakers according to situation. Clapping was next to "Make-up". This may be due to easiness of the clapping activity. Mimicry icebreaker was found inconclusive results over which individual factors successfully predict the results. Due to time constraints, it was not possible for students to work individually for mimicry. The technique for participation of student in learning through mimicry should be developed.

Icebreakers whether short activities in the classroom help promote to boost brain health. Engaging students in clapping like activities increases blood flow and oxygenation in the brain, boosting neural connectivity and stimulating nerve cell growth in the hippocampus, the center of learning and memory. Icebreakers actually changes the structure of our brains, with a number of benefits: improved attention and memory, increased brain activity and cognitive function, and enhanced mood and ability to cope with stress (https://www.edutopia.org/article/research-tested-benefits-breaks)

Co-teaching or team-teaching is going to serve a lot to orchestrate the classroom teaching through this "Ice-Breaks" involved "Multitask Teaching Model" to achieve the goal of learning by students. Two or more educators or teachers work together to plan, organize, instruct and make assessments on the same group of students, sharing the same classroom (Hartnett, *et al*, 2013). This approach can be seen in several ways. Teacher candidates who are learning to become teachers are asked to co-teach with experienced associate teachers, whereby the classroom responsibilities are shared, and the teacher candidate can learn from the associate teacher. Regular classroom teachers and special education teachers can be paired in co-teaching relationships to benefit inclusion of students with special needs.

All the sessions were appearing as if they designed for entertainment. The attempt was   so much more impactful for student participants and teachers too. The experience exert salutary influence and memorable.

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Table – 1: Performance of student participants in "Ice-Breaks" involved "Multitask Teaching Model".

Group → / Task ↓	A	B	C	D	Mean
Problem Solving Teaching	36^{*} (±4.258)	35^{**} (±6.786)	34^{**} (±8.013)	30^{***} (±11.074)	33.75
Teaching through Teaching-aid	50^{**} (±7.392)	48^{**} (±5.523)	56^{***} (±11.712)	44^{**} (±10.111)	49.50
Teaching Through Audi-visual Aid	60^{*} (±8.136)	56^{**} (±6.815)	58^{*} (±9.642)	54^{***} (±9.957)	57.00
Mean	48.666	46.333	49.333	42.666	-

-Each figure is the mean of the three replications.
-Figure with ± sign in the bracket is standard deviation.
* : $P < 0.05$;** : $P < 0.005$;   ***: $P < 0.01$

Fig. – 1: Performance of student participants in "Ice-Breaks" involved "Multitask Teaching Model".
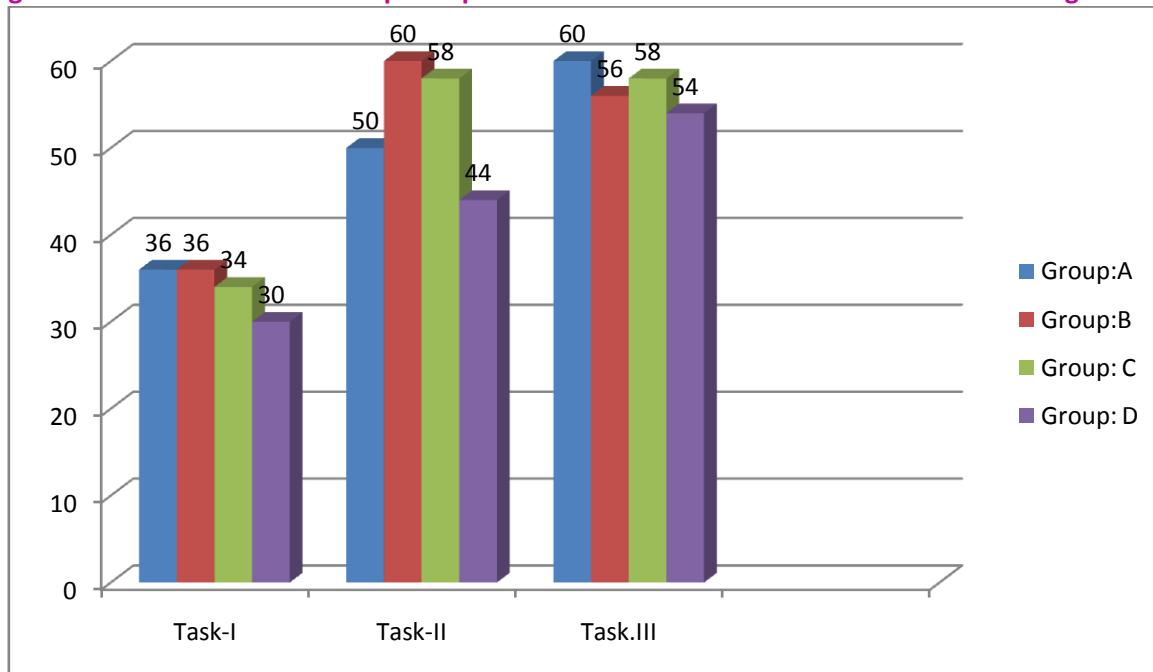

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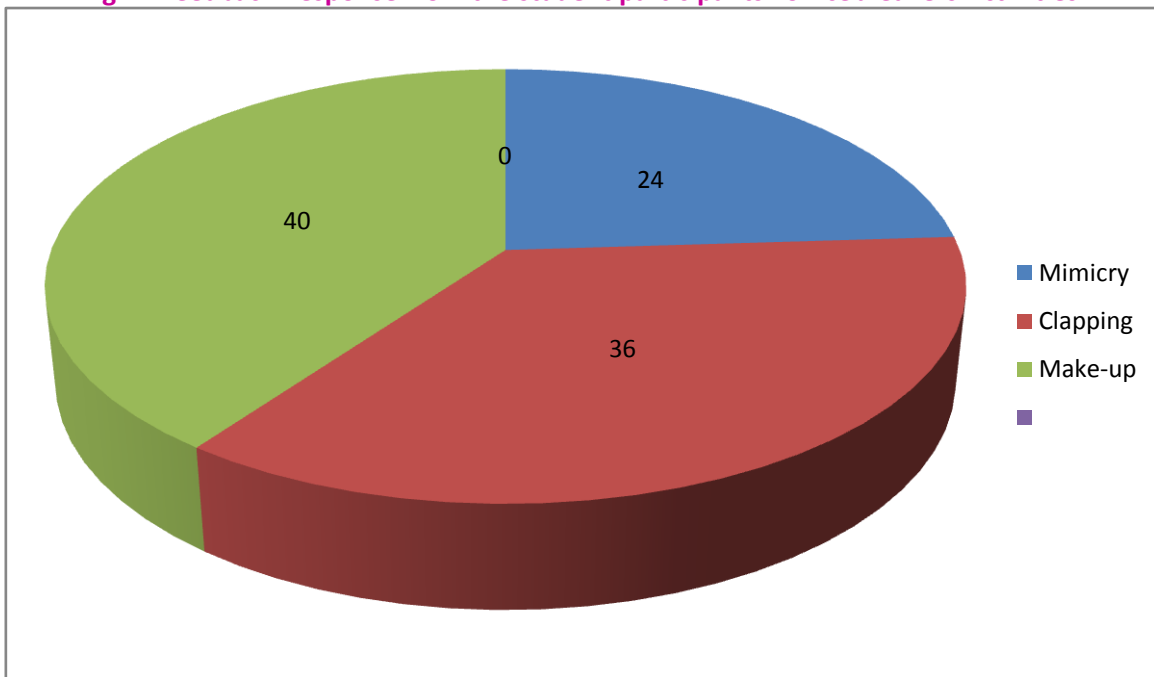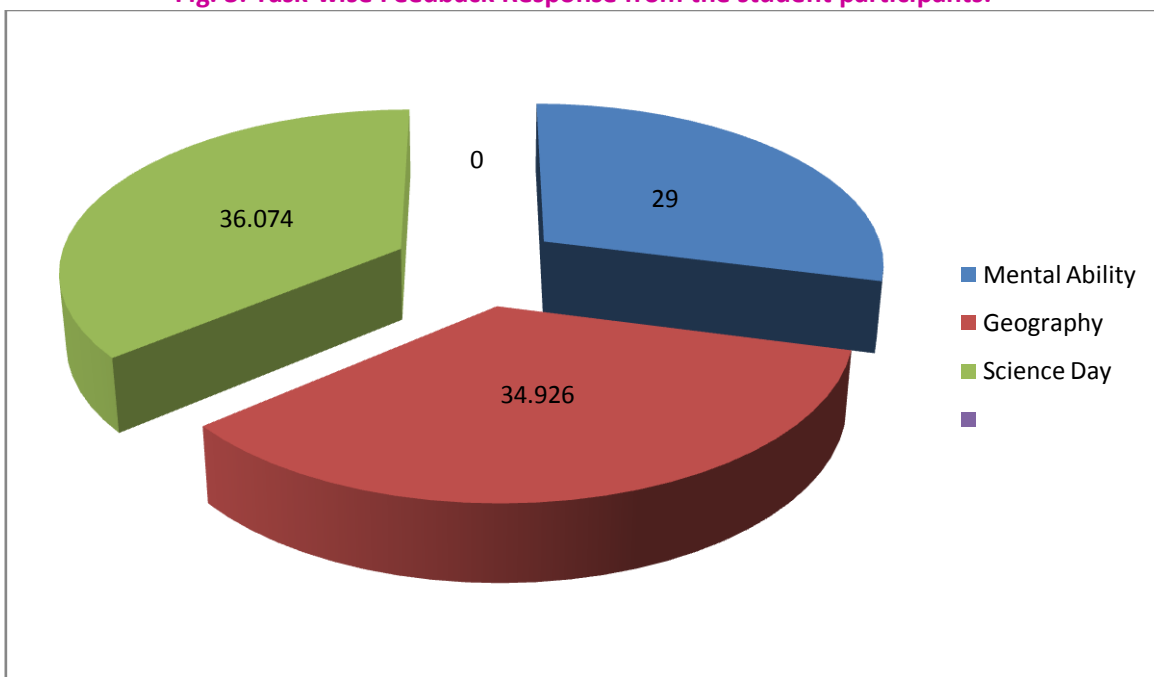**Fig. 2: Feedback Response from the student participants For Icebreakers Activities.**

Fig. 3: Task-wise Feedback Response from the student participants.

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