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Sr. Dr. Christina Augustine
Managing Editor & Publisher
Santhom Journal of Edu. RACE

EDITOR'S NOTE

As we navigate the complexities of the 21st century, the importance of innovative teaching-learning practices has never been more pressing. The world is changing at an unprecedented rate, and our education systems must adapt to equip students with the skills, knowledge, and competencies required to thrive.

This issue of Santhom Journal of Edu.RACE showcases a diverse range of innovative practices that are transforming the teaching-learning process. From leveraging technology to enhance student engagement, to incorporating experiential learning and project-based approaches, our authors share their expertise and experiences in pushing the boundaries of educational innovation.

One of the recurring themes in this issue is the need for a student-centered approach to learning. Our authors highlight the importance of empowering students to take ownership of their learning, and of creating inclusive and supportive learning environments that foster creativity, critical thinking, and collaboration.

Another key theme is the role of technology in enhancing teaching and learning. From AI-powered adaptive learning systems to virtual and augmented reality experiences, our authors explore the potential of technology to personalize learning, increase accessibility, and improve outcomes.

As we look to the future, it is clear that innovation will remain a critical driver of educational progress. At Santhom Journal of Edu.RACE, we are committed to providing a platform for educators, researchers, and policymakers to share their ideas, experiences, and research findings.

Thank you for being of the Santhom journal of Edu.RACE.We hope that this issue inspires you to think creatively about the teaching-learning process, and to explore new ways of innovating education.

Happy Reading

Dr.Shimna Paul
Chief Editor

Invitation for Articles / Research Papers

Authors are invited to contribute articles on contemporary issues in education in general and Indian education in particular for publication in Santhom Journal of Edu. RACE.

The articles may be sent as an e-mail attachment in MS Word to: stmprincipal123@gmail.com. Also send three printed / typed copies to :

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Chief Editor
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Empowering B.Ed. Trainees for Using IDEA Method in LAC Approach

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Abstract

Language proficiency is a must for learners to advance in any area of study. Language serves many simple and complex functions. It gives individuals the capacity to comprehend, analyze and to relate their own self and the world. A new concept recently developed for language learning is Language Across the Curriculum (LAC) Approach. This approach postulates that language teaching should be focused not only in the specific language subjects such as Hindi, English, Malayalam and Tamil but also in all other subjects like Mathematics, Science, History etc. and in all other activities included in the curriculum. With a view to build the ability for using LAC Approach among the prospective teachers, this approach has been introduced by many of our Universities as a common course for the B.Ed. programme. But it is felt that many of the teacher educators of B.Ed. colleges do not have a clear idea about it. To address this problem the present experimental study was undertaken. The method for the study was Posttest-only Control Group Design. In this design structure, the researcher divides participants into two groups at random. One group acts as control group and doesn't receive the stimuli being tested while the second group does receive the stimuli researchers are assessing.

Key Words : *Empowering, Curriculum, Intervention, Dramatisation, Comprehension etc.*

Introduction

Language is a system that people use to communicate or share information. It includes sounds, symbols, words, phonetics, syntax etc. for expressing a meaning, idea or thought. Language proficiency is a must for learners to advance in any area of study. To understand the subject matter well, to express ideas accurately, to engage in innovations etc. language proficiency has a high significant role.

The National Curriculum Framework 2023 (NCF 2023) for school education has elaborated the significance of language learning. In the second chapter, viz., ***Language Education***, NCF has pointed out that languages are at the center of human, social and cultural experience. Language serves many simple and complex functions. It gives individuals the capacity to comprehend, analyze and to relate their own self and the world. It mediates knowledge acquisition as well as production. It is also

mentioned in NCF that language enables effective communication, which is integral to formation and functioning of societies, of culture and of identity.

Due to the very significant roles of languages in various domains of life, including educative process, much importance is given in schools for the proper acquisition of languages by all students. Various methods and approaches are being adopted for facilitating effective learning of languages in schools.

LAC Approach

A concept recently developed for language learning is Language Across the Curriculum (LAC) Approach. It is comparatively a new approach. It was originated in Britain in the late 1970s. Its theoretical foundation relies mainly on the recommendations of the Bullock Report entitled ***A Language for Life*** appeared in 1975. The works of James Britton (1909-2003) and Douglas Barnes (1899-1990) also contributed a lot to the theoretical base of LAC Approach.

LAC approach views that in schools there are many possibilities for students to acquire language while they engage in almost all activities included in the curriculum. This approach postulates that language teaching should be focused not only in the specific language subjects such as Hindi, English, Malayalam and Tamil but also in all other subjects like Mathematics, Science, History etc. and in all other activities included in the curriculum. It means that much scope is there across the curriculum for facilitating language learning.

With a view to build this ability among the prospective teachers who are the teachers of the future, LAC Approach has been introduced by many of our Universities as a common course for the B. Ed programme. Our university, that is Mahatma Gandhi (MG) University, Kottayam has included LAC Approach as a 3-credit common course in the third semester of B.Ed. curriculum.

As per the curriculum each B.Ed. trainee in the third semester, during the internship period, has to prepare two lesson plans based on LAC approach and has to take two classes also using this lesson plans. Though these directions are given in the curriculum, it is felt that many of the teacher educators of B.Ed. colleges do not have a clear idea for empowering their trainees for the preparation of apt LAC lesson plans and in its effective implementation.

In this situation we planned to develop an effective model for empowering the B.Ed. trainees for the preparation of suitable Lesson Plans based on LAC approach and in its implementation.

Title of the Project

The project was implemented as an experimental study. The title of the project is **Empowering B.Ed. Trainees for Using IDEA Method in LAC Approach**.

Definition of Key Terms

LAC stands for Language Across the Curriculum. This concept acknowledges that language education takes place in each and every subject; in every learning activity; and across the whole curriculum. LAC emphasis

that language development in learner is the responsibility of all teachers in schools and in all subject areas.

IDEA Method

It is an innovative method designed by this institute (St. Thomas College of Teacher Education, Mylacompu) with a view to use this for developing Language Skills among secondary school students in non-language classes.

In the Acronym IDEA

I - stands for Identifying situations
D - stands for Developing activities
E - stands for Engaging in activities
A - stands for Assessing the effect

Objectives

- **Major Objective**

To empower the B.Ed. Trainees to take classes using IDEA Method for enhancing Language Skills in non-language classes among secondary school students.

- **Sub objectives**

1. To familiarize B.Ed. Trainees about IDEA Method for taking classes in non-language subjects.
2. To enable B.Ed. trainees for identifying suitable situations in the text books having much scope for language development.
3. To enable B.Ed. trainees to prepare suitable activities for developing language skills for using IDEA method in non-language classes
4. To equip B.Ed. trainees for preparing Lesson Plan for their optional subjects based on IDEA Method.
5. To build confidence among B. Ed. trainees to take classes using IDEA Method in non-language subjects.

Design of the Study

- **Posttest-only Control Group Design**

The Posttest-only Control Group Design is a basic experimental design where participants get randomly assigned to either receive an intervention or not, and then the outcome of interest is measured only once after the intervention takes place in order to determine its effect.

In this design structure, the researcher divides participants into two groups at random. One group act as control group and doesn't receive the stimuli being tested while the second group does receive the stimuli researchers are assessing. Researchers perform tests at the end of the experiment to determine the practical results of being exposed to the stimuli.

Preparatory Works

After fixing the design, various Preparatory Works were conducted for the target group. It included :

1. LAC Common Class to all B. Ed. Students

LAC is a compulsory (common) 3 credited course for the third semester B.Ed. programme. So as done in the previous years, it was planned to arrange common LAC classes for all the third semester (100) students. The duty of taking these classes were assigned to three faculties

by arranging time table as done last years.

2. Preparation of Activity Bank for LAC Classes

It consisted of ten activities which can be effectively used in their LAC Lesson Plans. The purpose of these activities were to serve as a source or examples to guide trainees while they search for suitable activities at the time of their LAC Lesson Plan preparation.

These learning activities may simple and popular. Though, normally they are not used in the non-language classes. But if creatively think and used, these types of activities have much scope in the non-language classes also. It is expected that these activities presented here will motivate the trainees to think creatively to utilize them in their LAC Lesson Plans. A brief description of the Activity Bank is presented here:

Activity Bank

i Loud Reading

Loud reading which is not used in non-language classes can be effectively utilized in a LAC class. Creative teachers can find situations for loud reading even in their Maths, Social Science or Physical Science classes. Reading loud will help students to build many language skills.

Loud reading provides practice in good speech habits among children. It helps teachers to find out whether children are able to read with correct stress, intonation and pronunciation.

ii Silent Reading

In silent reading there is no movement of lip or tongue. This practice allows children to develop reading skills as the focus is on understanding the content. It improves students' comprehension. In the teaching of non-language subjects also this technique can be effectively utilized.

iii Extensive Reading

The students may be encouraged to read a good number of newspapers, magazines, stories etc. in addition to their prescribed text books. In a LAC class also this activity can be utilized. For example, while teaching Pythagoras Theorem in Maths, the teacher can arrange or allot some time to read the life history of Pythagoras. And also, an assignment to prepare a short note on the life history of Pythagoras can be given to the students. This will help to improve the L, S, R and W aspects of language learning.

iv Reading Corners.

In many of our schools have a system of keeping reading corners in every class. But such opportunities are always used for the purpose language classes only. Actually, these reading corners can be effectively utilized for non-language classes also. For this, the concerned non-language teacher should motivate the students. For example, there are many books in regional language which gives simple and interesting description / narration about various laws and principles in science. Such books can be arranged systematically in the reading corners.

v Poster making

Poster making activity provides students with an opportunity to learn by doing, in turn strengthening the learning. This activity can be arranged in a LAC class. For example, in a science LAC class suppose the topic is about cleanliness. Among different learning activities the teacher can motivate the students to prepare a poster of cleanliness slogans. Such slogans may include:

- Keep it green and make it clean.
- Cleanliness brings happiness, but dirt makes us hurt.
- Clean habit and white rabbit give nature a clear look.
- Clean and green make perfect pair
- Be clean and healthy, then become wealthy.

This kind of poster making, in addition to the learning of science concepts, will help to develop different language skills such as L, S, R, W among students.

vi Correction Works

This can include mutual corrections, teacher corrections and self-corrections based on teacher version copy. It will help the students for improving the vocabulary, reading skills etc. This kind of correction works are mainly doing, at present, for language classes only. But actually, correction works can be given in the classes of all non-language subjects also. While doing such corrections proper focus should be given for the language aspects like spelling, grammar etc.

vii Group Discussion

In this activity a small number (say 3) of students meet face to face and do free oral interaction. It gives opportunities to originate, share and discuss ideas to arrive at a decision or solution to a problem. For example, suppose the topic of teaching in a LAC class is to prove a theorem in Maths. The teacher can give certain hints/ analytic questions and based on those hints the students can engage in Group discussions to find out its proof. Teacher scaffolding should be provided whenever needed.

viii Dramatisation

Teachers can use activities based on drama in a LAC classroom teaching. This strategy is very beneficial in social science class. For example, to introduce the concept of decentralized system of Government or local Self Government this strategy can be made use of. In dramatization, children play the roles of different real situations or personalities.

It will help them to develop listening, speaking, comprehension etc., which are related to language skills. In dramatisation, even those children do not directly participate in it but only witness it, also get opportunities for listening, and comprehension.

ix Simulations

In simulating virtual situations are created. It is imitation or enactment as of something anticipated. In a simulating classroom environment, learners are able

to participate in new and varied ways and are encouraged to ask questions, explore and experiment the content and language. In a Maths class while teaching about money matters and interest, the situation of a bank can be arranged virtually in the classroom and various transactions can be arranged there. Through these transactions students get opportunities to learn the terms, concepts, formula etc related to interest calculation. Also, much chance for the development of language skills will also be occurring there.

x **Story Telling**

Story telling technique are frequently used in language classes. But it is used very rarely in non-language classes. But if it is used creatively, it is highly useful in non-language classes also. Hence this activity can be used in a LAC class. It has much relevance, especially for introducing certain topics in non-language subjects also.

For example, in a Math's LAC class for introducing the concept of functions and relation, the teacher can tell the students the story of Sheppard and Counting Numbers. While teacher narrates this story the students will get various new words, phrases etc. which are components of language skills.

3. Construction of a demonstration LAC lesson plan using IDEA Method

Inorder to give a demonstration class on LAC Lesson Plan prepartion, a model lesson plan using IDEA Method was constructed.

4. Preparation of LAC Approach Assessment Tool

To assess the quality of the LAC Approach performed by the trainees, a tool was developed during the Preparatory Phase. This tool was constructed based on two components which are closely related with the performance in LAC Approach. Those components are:

1. Lesson Plan prepared based on LAC Approach.
2. Classroom Teaching (Lesson Plan Implementation).

For each of these two components, indicators were prepared and scores were allotted for each indicator.

Selection of Samples

In the third semester B.Ed Programme through seven optional subjects there were 100 students in total.

From these seven optional subjects English and Malayalam optional students were excluded. The remaining 63 students through five optional subjects were selected in the sample. The language optional students were not included in the sample because, it is expected that students of language optional are going to become language teachers in future.

Optional wise number of students selected in the sample are given in table 1.

Table 1

Optional wise strength of students selected in the sample

#	Optional	Strength
1	Mathematics	13
2	Physical Science	16
3	Natural Science	11
4	Social Science	18
5	Commerce	05
	Total	63

Formation of Experimental and Control Group

These sixty three students selected in the sample were divided in to two groups using random sampling procedure. Thus, in one group thirty two students and in the other group thirty one students were included. Details of students included in each group is given in below in table 2.

Table 2

Optional wise number students in the two groups

#	Optional Subject	Number of Students	
		Group 1	Group 2
1	Mathematics	7	6
2	Physical Science	8	8
3	Natural Science	5	6
4	Social Science	9	9
5	Commerce	3	2
	Total	32	31

Of these two groups, one was selected by tossing a coin and it was taken as the Control Group and the other as the Experimental Group. Further activities of the project were carried out separately in the Experimental and Control Groups. Those activities are described below under two heads.

A Activities in the Experimental Group

B Activities in the Control Group

A Activities in the Experimental Group

Various activities conducted in the Experimental Group are presented below.

a. Orientation on LAC Lesson Plan Preparation

With a view to familiarize the preparation of LAC Lesson Plan to the student of the Experimental Group a three-hour orientation was conducted for that Group. It was done on a Saturday in the morning session. That is, from 9.30 am to 12.30 pm. This orientation programme was done with the cooperation of the concerned optional teachers under the guidance and leadership of the project coordinators.

The class began by introducing the format of a LAC based Lesson Plan. Those steps were introduced with the help of PPT. In the PPT presentation, the following steps were mentioned to be included in the Lesson Plan.

Steps of a LAC Lesson Plan

- Preliminary Details
- Curricular Objectives (Focusing on Content)
- Language Objectives (Focusing on LSRW)
- Content Analysis

- Learning Outcomes (Content)
- Linguistic Outcomes
- Pre-requisites
- Learning Materials
- Body of the Plan
  - Introductory activities
  - Developmental activities (Focusing on curricular objectives and language objectives)
  - Consolidation activity
  - Extension activity

b. Qualities of a LAC Lesson Plan Activity

After introducing the steps of LAC Lesson Plan, discussion regarding the qualities for the activities of a LAC Lesson Plan was conducted. The discussion concluded that those learning activities should possess two main characteristics. They are:

- The activities should be apt for the attainment of the curricular objectives (Content) mentioned in the Lesson Plan. That is, they should be suitable for the development of their knowledge, comprehension, application ability, creativity and skills which are expected to be attained through the transaction of the particular content portion. It indicates that those learning activities should be suitable for the attainment of the terms, facts, concepts, formulas, principles, process etc. which are pre-determined to be attained through the specific content area.
- The activities should be suitable for the development of the linguistic objectives which are mentioned in the Lesson Plan. That is, those activities should be suitable for the development of Listening, Speaking, Reading and Writing (LSRW) skills also.

c. Description of IDEA Method

After the discussion on the characteristics of learning activities, focus was given to the concept of IDEA method.

d. Introducing the Activity Bank

After explaining the concept of LAC, a detailed discussion about various activities that can be effectively utilized in the LAC class was conducted. This discussion was mainly focusing on the Activity Bank which was constructed during preparatory works

e. Familiarizing the LAC Demonstration Lesson Plan

To make the trainees get acquainted with the preparation a LAC Lesson Plan using IDEA method, the Demonstration Lesson Plan already prepared during the preparatory stage was utilized.

f. Demonstration Class for LAC

The discussion about IDEA method, familiarizing of Activity Bank and Demonstration Lesson Plan etc. were completed by nearly two hours.

g. Instruction to the Trainees

After the class, the teacher (coordinator) gave two instructions to the trainees. They were:

1. Prepare a LAC Lesson Plan using IDEA method selecting a topic of own optional subject for the standard of internship class
2. Take a class using the Lesson Plan in the internship school following the time schedule given by the optional teacher.

B Activities in the Control Group

a. Orientation Class
b. Familiarizing the Demonstration Lesson Plan
c. Demonstration Class
d. Instruction to the Trainees of the Control Group

Post-test (Experimental & Control Groups)

Preparation of the LAC Lesson Plan and classroom teaching were the two components taken for post-test. As per the instruction and pre-scheduled time table, the trainees of both Experimental and Control Groups prepared the LAC Lesson Plans and took the classes in their internship schools. The Lesson Plan and classroom teaching of every trainee was assessed by the optional teachers concerned.

The assessment of the Lesson Plan and classroom teaching was done in accordance with the LAC Assessment Indicators prepared in the Preparatory Stage of the project.

Comparison of post-test means of Experimental and Control groups

The mean of the scores obtained for the total performance, that is, Lesson Plan preparation and Classroom Teaching together for experimental group was 70.72 and that of the control group was 57.59. These values show that the total performance of the experimental group in LAC classes is better than tat of the control group.

To test the significance of difference between these two means, the Critical Ratio (CR) was also calculated. Its details are given below in table 3

Table 3

Values of CR for the total scores of Experimental and Control Groups

Components	Group	N	Mean	SD	CR
Total Lesson plan + Classroom teaching	Experimental Group	32	70.72	6.13	8.21
	Control Group	31	57.59	6.72	

The value obtained for critical ratio shows that:

There exists significant difference between the Experimental and Control Group with respect to the means of total scores (total score is the total of Lesson Plan and Classroom Teaching taken together). As the CR value calculated (8.21) is grater than the table value (2.58) at 0.01 level, it is concluded that the difference is significant. Since the

mean value obtained for Experimental Group is higher and the difference is significant, it is concluded that the new input introduced in the Experimental Group is more effective than the prevailing method. As the new input introduced in the Experimental Group was IDEA Method, it is concluded that the trainees of the Experimental Group are empowered for using the IDEA Method in LAC classes.

In a similar way separate comparisons were made between the means of scores obtained by Experimental and Control Groups for Lesson Plan preparation alone and Classroom Teaching alone.

The details of the two critical ratios calculated are presented in table 4

Table 4

Values of CR for component wise comparison of Experimental and Control Groups

Components	Group	N	Mean	SD	CR
Lesson Plan Alone	Experimental Group	32	19.32	4.63	3.06
	Control Group	31	15.12	6.57	
Classroom Teaching Alone	Experimental Group	32	51.40	6.72	5.13
	Control Group	31	42.47	7.12	

The values in table 4 shows that the mean value obtained for the Lesson Plan and Classroom Teaching of Experimental Group is better than that of the Control Group. The values of the Critical Ratio reveal that the difference in the corresponding means are significant also. So, it is concluded that:

1. The B.Ed. trainees are empowered for preparing LAC Lesson plan using IDEA Method.
2. The B.Ed trainees are empowered to take LAC class using IDEA method.

Outcomes of the Project

Preparation of a Bank of Learning Activities for LAC classes was an outcome of the project. Activities in this bank are suitable to use in the LAC classes. Development of an Assessment Tool was another outcome. It can be used for assessing the quality of LAC Lesson Plan and LAC Classroom Teaching. Another significant outcome of the project was a Demonstration Leason Plan for LAC classes.

Findings and Conclusions

The major findings and conclusions of the study are summarized below:

1. The study revealed that the mean of the Total Scores obtained for the LAC classes by the students of the Experimental Group where IDEA method used was higher than that of the Control Group. The difference in mean was significant also.

2. It also shows that the B.Ed trainees of Experimental Group have well familiarized with IDEA method.
3. The B.Ed trainees were equipped to select suitable activities for LAC Approach.
4. The B.Ed trainees have become competent in the preparation LAC Lesson Plan using IDEA method and in its implementation.

Based on the above findings it is concluded that IDEA method is effective for LAC classes and the B.Ed trainees who undergone for this treatment have empowered for using this method successfully.

Educational implication of the project

The findings of the project revelled that IDEA method is an effective method for empowering B.Ed. trainees for LAC classes. So, this method can be introduced in all teacher education institutions for equipping the trainees for the LAC classes.

The result has also revealed that the Lesson Plan prepared, and Classroom Teaching following IDEA method was more effective than the prevailing methods. Hence for the preparation of LAC Lesson Plan and for the Classroom Teaching the concept of IDEA Method can be put in to practice in teacher education institutions.

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Effectiveness of Concept Mapping in Accomplishing Cognitive Instructional Objectives of Ninth Grade Physics

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Abstract

A quasi-experimental study with pretest-posttest control group design was conducted to find out the effectiveness of concept mapping accomplish instructional objectives of physics in different levels of cognitive domain of ninth standard students. Two null hypotheses were tested by collecting data from two intact classes of ninth grade students (n = 76), designated to a control group (n = 37) and a treatment group (39). The pre-intervention and post-intervention data on achievement of instructional objectives in physics at different levels of cognitive domain was measured by administering researcher made achievement test. Result revealed that concept mapping has no advantage over the activity method of teaching in attaining knowledge level, analysis level and synthesis level of instructional objectives. Gender was found exert significant differential influence on the attainment of comprehension level, application level and analysis level of instructional objectives, where the concept mapping favoured boys.

Key Words : *Activity method of teaching, concept mapping, cognitive domain, instructional objectives. etc.*

Introduction

Physics is one of the important science subjects in schools which is not only closely connected to daily life of the learners, but also with their mental development as it facilitates thinking, reasoning, problem-solving, imagination, decision-making, creativity and so on (Hadzigeorgiou, 2014; DeHaan, 2009). Physics education fosters scientific literacy, enabling individuals to evaluate and participate in discussions about scientific matters effectively (Alhusni, Habibbulloh, Lestari, Realita, Jatmiko & Deta, 2024). Enabling the learners to attain the cognitive level instructional objectives of teaching physics is the primary task of any physics teacher. Cognitive objectives focus on the acquisition of knowledge, comprehension, application, analysis, synthesis, and evaluation. These form the foundational understanding necessary for deeper learning and critical thinking in physics (Ubaidillah, Hartono, Marwoto,

Wiyanto & Subali, 2023). Without a strong cognitive grasp of concepts, it becomes challenging to progress to higher levels of understanding and application (Khan, Adnan & Raza, 2023). Physics is a discipline that heavily relies on abstract concepts, mathematical formulations, and logical reasoning. Mastery of these cognitive aspects is essential for students to navigate through the complexities of the subject effectively (Adams, 2015). A solid cognitive foundation allows students to comprehend the laws, principles, and theories of physics, enabling them to solve problems and make connections within the subject (Lestari, Budi & Budi, 2019).

In recent years the behaviouristic approach of teaching, which had conquered the school education system for many decades, has decline its popularity due to multiple reasons. This includes overemphasis on rote memorization and repetition of fact rather than deeper understanding or critical thinking, focusing primarily on observable behaviors rather than internal cognitive processes, emphasis on absorption of information by the learner rather than actively engage with it, etc (Amgalan, 2024; Clark, 2018; Moore, 2010). The school education in India, so also in many of the developed counties, is dominated by social constructivism, an epistemological view of knowledge acquisition emphasizing knowledge construction rather than knowledge transmission and the recording of information conveyed by others. The general sense of constructivism is that it is a theory of learning or meaning making, that individuals create their own new understandings on the basis of an interaction between what they already know and believe and ideas and knowledge with which they come into contact (Saleem, Kausar & Deeba, 2021).

In the physics classroom, selection of the suitable instructional strategies by the teacher depends on the effectiveness of various constructivist methods in helping students to achieve specific instructional objectives of the lesson. A review conducted in this context convinced the investigator that extensive study has been undertaken recently to demonstrate the effectiveness of constructivist strategies like concept mapping, the jigsaw technique, and reciprocal teaching in enhancing the academic performance of students in different subjects. These studies, however, do not provide any information about the relative effectiveness of different constructivist teaching strategies for a given content area. Moreover, none of the research have investigated the effectiveness of these constructivist teaching strategies on the attainment of instructional objectives at different levels, viz., knowledge, understanding, application, analysis, synthesis, and evaluation, within the cognitive domain. In this context the present study aims to examine the efficacy of concept mapping (C-map) over the prevailing activity method of teaching, in accomplishing instructional objectives of ninth grade physics in cognitive domain.

Objectives

The specific objectives of the study were:

1 To find out the effectiveness of concept mapping method in accomplishing different levels of cognitive instructional objectives in physics among ninth grade students.

2 To find out the differential influence of gender in the effectiveness of concept mapping method in achieving different levels of cognitive instructional objectives in physics among ninth grade students.

Hypotheses

The following null hypotheses were tested for the study:

$H_0$1: There is no significant difference between concept mapping method and prevailing activity method of teaching in accomplishing different levels of cognitive instructional objectives in physics among ninth grade students.

$H_0$2: Gender has no significant differential influence in the effectiveness of concept mapping method in enabling ninth grade students to accomplish instructional objectives of physics in different levels of cognitive domain.

Methodology

1 Method: Quasi-experimental research with pretest-posttest control group design was adopted for the study.

2 Population: The entire students of ninth grade class (Standard-IX), studying in schools affiliated to Kerala Board of Public Examination (KBPE), Kerala State (India) constitute the population of the study.

3 Participants (Sample): Two intact classes of ninth grade students with size n = 76 constituted the participants of the study. The intact classes with varying strengths of students were designated randomly as one Control Group (n = 37), and one Experimental Group (n = 39).

4 Variables: The study has been designed with achievement of instructional objectives in six different levels of cognitive domain (Knowledge, Comprehension, Application, Analysis, Synthesis and Evaluation) as dependent variables, and Activity Method of teaching and Concept Mapping as independent variables.

5 The Pedagogic Intervention: The groups were pre-tested for their achievement in physics, followed by pedagogic intervention of two units (Unit-I: Refraction of Light; Unit-II: Equations of Motion) from the Physics Textbook prescribed for ninth grade. The control group was taught by traditional Activity Method of Teaching, while the Experimental Group by employing Concept Mapping Method. A total number of 17 classes each of approximately 35 minutes duration were given for each group. The pedagogic intervention was followed by the post-test of achievement on the 20th day of pre-test.

6 Tools: The Achievement Test in Physics needed for the study was developed by the investigators. The classes were taken by teachers with equal qualification and experience with the help of lesson transcripts developed by the investigators.

7 Statistical Techniques Employed: One-way ANCOVA and Independent sample t-test were used to test the hypotheses.

Analysis and Interpretation

The statistical analysis performed to test the hypotheses are given under suitable sub-headings:

1 Effectiveness of Concept Mapping in Accomplishing Different Levels of Cognitive Instructional Objectives

The control group and treatment group were compared in terms of the accomplishment of instructional objectives in different levels of cognitive domain. This is done by comparing the post-test scores of achievements in each level of instructional objectives of students taught by Concept Mapping method with those taught by Activity Method of teaching, after controlling the effect of covariate (pre-test scores), by employing one-way ANCOVA. The summary of the one-way ANCOVA is given in Table 1.

Table 1

Effectiveness of concept mapping in accomplishing instructional objectives in different levels of cognitive domain (Summary of ANCOVA)

Sl. No.	Dependent Variables (Levels of instructional objectives)	Type III Sum of Squares	df	Mean Square	F	Sig.
1	Knowledge	0.559	1	0.559	0.484	NS
2	Comprehension	63.446	1	63.446	15.804	.001
3	Application	11.538	1	11.538	9.117	.01
4	Analysis	16.816	1	7.786	1.733	NS
5	Synthesis	2.617	1	2.617	2.854	NS
6	Evaluation	4.872	1	4.872	10.599	.01

The F-ratios estimated for three levels of instructional objectives in cognitive domain, viz., Comprehension ($F = 15.804$; $p<.001$), Application ($F = 9.117$; $p<.01$), and Evaluation ($F = 10.599$; $p<.01$) are significant. But the F-ratios estimated for the Knowledge level ($F = 0.484$; $p>.05$), Analysis level ($F = 1.733$; $p>.05$) and Synthesis level ($F = 2.854$; $p>.05$) instructional objectives are not significant. It shows that Concept Mapping method is more successful than the prevailing activity method of teaching in accomplishing comprehension, application and evaluation level instructional objectives of teaching physics. The Concept Mapping method and activity method of teaching are somewhat alike in achieving knowledge level, analysis level and synthesis level instructional objectives of physics.

2 Comparison of Boys and Girls Regarding the Relative Effectiveness of Concept Mapping in Accomplishing Different Levels of Cognitive Instructional Objectives

As a first step to find out the differential influence gender on the efficacy of Concept Mapping, the gain scores of achievement of instructional objectives in different levels of cognitive domain were estimated. The gain score of achievement for a given level of cognitive domain was estimated by subtracting the pre-test scores from the post-test scores for the particular level of instructional objective. The gain scores of achievement for each level of cognitive domain, calculated separately for boys and girls, were then compared to find out whether the gender groups differ significantly. The results of the independent sample t-tests performed incidentally are given in Table 2.

Table 2

Comparison of boys and girls regarding the gain scores of achievement in different levels of instructional objectives in cognitive domain.

#	Instructional Objectives	Gender Groups	N	M	ó	t-value	Sig.
1	Knowledge	Boys	17	4.29	1.160	1.344	NS
		Girls	22	3.77	1.232		
2	Comprehension	Boys	17	7.65	1.455	2.890	.01
		Girls	22	6.27	1.486		
3	Application	Boys	17	4.47	1.281	2.896	.01
		Girls	22	3.45	.912		
4	Analysis	Boys	17	9.35	1.967	2.736	.01
		Girls	22	7.59	2.016		
5	Synthesis	Boys	17	2.47	1.179	1.936	NS
		Girls	22	1.86	.774		
6	Evaluation	Boys	17	1.88	.697	0.293	NS
		Girls	22	1.82	.664		

Comparison of boys and girls regarding the gain scores of achievement in different levels of instructional objectives in cognitive domain reveals the following:

a Boys and girls do not differ significantly regarding the effectiveness of concept mapping method of teaching in accomplishing the knowledge level instructional objectives ($t = 1.344$; $p>.05$);

b There is significant gender difference in the success of Concept Mapping method in enabling ninth grade students to achieve the comprehension level instructional objectives of physics (t = 2.890; p<.01). C-mapping method is more effective with boys than with girls in the attainment of comprehension level instructional objectives.

c Gender of the learner exerts a significant differential influence on the efficacy of concept mapping method in enabling ninth grade learners to attain application level instructional objectives of physics (t = 2.896; p<.01); the boys outperformed the girls.

d Gender has a significant differential effect on the effectiveness of C-Mapping in achieving analysis level instructional objectives of ninth grade physics (t = 2.736; p<.01). Concept mapping is more effective for boys than for girls in attaining analysis level instructional objectives.

e There is no significant difference between boys and girls about the effectiveness of C-Mapping in accomplishing synthesis level instructional objectives of ninth grade physics (t = 1.936; p>.05).

f Ninth grade boys and girls are somewhat alike in their ability to attain evaluation level instructional objectives of physic when taught by Concept Mapping method (t = 0.293; p>.05).

Conclusions

The data analysis revealed that Concept Mapping method is effective than prevailing activity method of teaching in enabling ninth grade students to accomplish comprehension level, application level and evaluation level of instructional objectives of physics. Concept Mapping and activity method of teaching are somewhat equally effective in enabling ninth grade learners to achieve knowledge level, analysis level and synthesis level of instructional objectives of physics. Comparison of boys and girls regarding the attainment of instructional objectives at different levels of cognitive domain showed significant gender difference at three levels, viz., comprehension level, application level and analysis level. The boys outshined the girls in the attainment of instructional objectives in these three levels, while no true gender difference was noticed in the attainment of remaining three levels of cognitive domain when Concept Mapping was adopted.

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Enhancing Educational Wellness: Strategies and Challenges for College Students

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Abstract

Educational wellness among college students is a multifaceted issue that significantly influences academic performance, personal development, and overall quality of life. This article explores key factors affecting educational wellness, including academic stress, time management, and social support. It highlights various strategies to improve wellness, such as stress management programs, academic advising, and time management skills. Additionally, it addresses common challenges such as financial constraints and the stigma surrounding mental health, proposing potential solutions to mitigate these issues. By providing a comprehensive overview of these elements, the article aims to offer insights and practical recommendations for enhancing educational wellness in the collegiate environment.

Key Words : *Educational , Wellness, Stress management, Academic advising etc.*

Introduction

Educational wellness is integral to student success and well-being. It encompasses not only academic performance but also mental and physical health. Understanding and addressing the factors affecting educational wellness can help institutions develop effective support systems to foster a healthier and more productive learning environment. Educational wellness is a critical component of a student's academic journey and overall development. It encompasses a holistic approach to balancing academic responsibilities with personal well-being, including mental, physical, and emotional health. As students navigate the complexities of higher education, they encounter numerous challenges such as academic stress, time management issues, and social pressures. These factors can significantly impact their performance, mental health, and overall quality of life. Prioritizing educational wellness involves implementing strategies and support systems that address

these challenges, promoting a balanced and healthy lifestyle. Effective wellness programs not only help students to manage stress and improve their academic outcomes but also foster personal growth and social development. By creating an environment that supports educational wellness, institutions can enhance students' academic achievements, reduce dropout rates, and prepare them for long-term success. This comprehensive approach is essential for cultivating a supportive educational experience that addresses the multifaceted needs of students, ultimately contributing to their overall success and well-being.

Factors Affecting Educational Wellness

1. **Academic Stress**

   Academic stress is a significant factor impacting students' overall wellness. High workload, intense exam pressure, and academic expectations contribute to stress, which can affect mental and physical health. Misra and McKean (2000) highlight that academic stress negatively correlates with academic performance and overall student satisfaction.

2. **Time Management**

   Effective time management is crucial for academic success and wellness. Poor time management skills often lead to procrastination, increased stress, and lower academic performance. Britton and Tesser (1991) found that time-management practices significantly influence college grades and stress levels.

3. **Social Support**

   Social support from peers, family, and institutional resources plays a vital role in students' academic success and emotional well-being. Cutrona and Russell (1990) emphasize that having a robust social network can buffer against stress and improve academic outcomes.

Strategies for Improving Educational Wellness

1. **Stress Management Programs**

   Implementing stress management programs, including mindfulness and counseling services, can help students cope with academic pressures. Goyal et al. (2014) conducted a meta-analysis demonstrating that meditation and other mindfulness practices can significantly reduce stress and improve well-being.

2. **Academic Advising and Support Services**

   Effective academic advising and support services are crucial for guiding students through their academic journey and providing assistance with challenges. Kuh et al. (2006) argue that robust advising systems contribute positively to student success and retention.

3. **Enhancing Time Management Skills**

   Teaching and encouraging effective time management strategies can help students manage their academic responsibilities more efficiently. Macan (1994) found that time-management training improves students' academic performance and reduces stress.

Importance of Enhancing Educational Wellness among College Students:

Educational wellness is a critical aspect of student success and overall well-being. Here's why focusing on educational wellness is important:

1. **Academic Performance:**

Educational wellness directly influences academic performance. Students who experience high levels of stress, poor time management, and lack of support are more likely to struggle academically. Misra and McKean (2000) found that academic stress negatively impacts students' grades and overall academic satisfaction. By improving wellness, institutions can help students achieve better academic outcomes and enhance their learning experiences.

2. **Mental Health:**

College students are particularly vulnerable to mental health issues due to the pressures of academic life, social challenges, and the transition to adulthood. Chronic stress, anxiety, and depression can severely affect students' mental health, leading to difficulties in concentration, motivation, and overall well-being. According to Goyal et al. (2014), stress management programs such as mindfulness and meditation can significantly reduce psychological stress and improve mental health.

3. **Physical Health:**

Educational stress and poor wellness practices can have adverse effects on physical health. Students may experience issues such as sleep disturbances, headaches, and gastrointestinal problems due to stress. Chronic stress can also contribute to long-term health problems. By promoting wellness practices, colleges can help students maintain better physical health, leading to fewer health-related absences and improved overall quality of life.

4. **Social Development:**

Educational wellness encompasses not just academic and personal health but also social development. Strong social support networks, effective stress management, and time management skills contribute to healthier interpersonal relationships and a sense of community. Social support has been shown to buffer against stress and improve students' academic outcomes (Cutrona & Russell, 1990). Enhancing social wellness helps students to build meaningful connections and develop vital social skills.

5. **Retention and Graduation Rates:**

Improving educational wellness can have a positive impact on student retention and graduation rates. Students who are supported and have access to wellness resources are more likely to stay enrolled and complete their degrees. Kuh (2006) emphasize that comprehensive support services contribute to student success and retention. Institutions that prioritize wellness are more likely to see higher graduation rates and better overall student outcomes.

6. Long-Term Success:

The skills and habits developed through educational wellness programs, such as effective time management and stress management, contribute to students' long-term success. These skills are transferable to the workplace and other life areas. By equipping students with the tools to manage stress and balance responsibilities, colleges prepare them for successful careers and healthier lives beyond graduation.

7. Addressing Inequities:

Focusing on educational wellness helps address inequities among students. Students from marginalized backgrounds or those facing financial difficulties may face additional stressors and barriers to wellness. Providing targeted support and resources helps level the playing field and ensures that all students have an equal opportunity to succeed. Stone (2008) highlights the impact of financial stress and the importance of addressing these challenges to support diverse student populations.

Challenges and Solutions

1. Financial Constraints

Financial barriers can limit students' access to wellness resources, including counselling and academic support. Stone (2008) highlights the need for institutions to provide financial aid and affordable wellness services to address this challenge.

2. Stigma around Mental Health

Stigma surrounding mental health issues can prevent students from seeking help. Corrigan and Watson (2002) suggest that reducing stigma through awareness campaigns and supportive environments can encourage students to access mental health services.

Conclusion

Enhancing educational wellness among college students requires a multifaceted approach that addresses academic stress, time management, and social support. By implementing effective strategies and addressing challenges such as financial constraints and stigma, institutions can foster a more supportive and productive learning environment. Future research should continue to explore these areas to develop innovative solutions and improve student wellness. Improving educational wellness is vital for improving academic performance, mental and physical health, social development, retention rates, and long-term success. By addressing stress, promoting effective time management, and providing strong social support, colleges can create a supportive environment that fosters student well-being and achievement. Prioritizing wellness is not only beneficial for individual student but also contributes to the overall success and reputation of educational institutions.

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Knowledge Integration: Bridging Information for Innovation and Growth

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Abstract

Knowledge Integration refers to the process of combining and synthesizing diverse information, insights, and expertise to enhance understanding and drive innovation. This article examines the significance of Knowledge Integration in various domains, including organizational management, research and development, education, and policy-making. It highlights the essential elements that facilitate effective Knowledge Integration, such as collaboration, communication, technology utilization and critical thinking. The benefits of successful Knowledge Integration are explored, including increased innovation, improved decision-making, enhanced problem-solving capabilities, and a stronger competitive advantage. Additionally, the article presents practical strategies for organizations to foster a culture of Knowledge Integration, such as encouraging interdisciplinary collaboration, implementing robust knowledge management systems, and promoting an open exchange of ideas.

Key Words : *Knowledge Integration, Analogical reasoning, Mental simulation, conceptual blending etc.*

Introduction

In an era characterized by rapid technological advancements and an ever-expanding pool of information, the ability to effectively integrate knowledge has become a critical factor for success in various fields. Knowledge Integration refers to the process of combining, synthesizing, and applying diverse pieces of information from different sources to create new insights, foster innovation, and drive decision-making. This article explores the importance of Knowledge Integration, its key components, and strategies for fostering a culture that promotes effective Knowledge Integration.

Knowledge Integration

Knowledge Integration involves more than just gathering information; it requires the ability to connect disparate pieces of knowledge to generate meaningful outcomes. This process is essential in a variety of contexts, including:

1. **Organizational Settings :** In businesses and organizations, knowledge integration facilitates collaboration among teams, enhances problem-solving capabilities, and drives innovation.
2. **Research and Development :** In scientific research, integrating knowledge from various disciplines can lead to groundbreaking discoveries and advancements.
3. **Education :** In academic settings, knowledge integration helps students connect concepts across subjects, fostering a deeper understanding and encouraging critical thinking.
4. **Policy Making :** Policymakers benefit from integrating knowledge from various fields to develop comprehensive solutions to complex societal issues.

Key Elements of Knowledge Integration

1. **Collaboration :** Effective Knowledge Integration often requires collaboration among individuals or teams with different backgrounds and expertise. This can involve cross disciplinary teams that bring together diverse perspectives.
2. **Communication :** Open and effective communication is essential for sharing knowledge and ensuring that all participants understand the information being integrated. This includes both verbal and written communication, as well as the use of collaborative tools.
3. **Technology Utilization :** Modern technology plays a significant role in facilitating Knowledge Integration. Tools such as knowledge management systems, collaborative platforms, and data analytics can help organizations gather, store, and analyse information more effectively.
4. **Critical Thinking :** The ability to critically assess and synthesize information is crucial for effective Knowledge Integration. This involves evaluating the credibility of sources, identifying biases, and recognizing the relevance of different pieces of information.

Educational Significance of Knowledge Integration.

Knowledge Integration holds significant educational value for both learners and educators. Here are several key points that illustrate its importance in the educational context:

1. **Holistic Understanding :** Knowledge Integration encourages students to see connections between different subjects and disciplines, fostering a more comprehensive understanding of complex topics. This holistic approach helps learners grasp how various concepts interrelate.
2. **Critical Thinking Skills :** By Integrating Knowledge from various sources, students develop critical thinking skills. They learn to analyze, synthesize, and evaluate information, which enhances their ability to make informed decisions and solve problems.
3. **Interdisciplinary Learning :** Knowledge Integration promotes interdisciplinary learning, allowing students to draw from multiple fields of study. This approach prepares them for real-world challenges that often require diverse skill sets and perspectives.

4. **Engagement and Motivation :** When students see the relevance of what they are learning by connecting it to real-life situations or other areas of interest, their engagement and motivation increase. Integrated learning experiences can make education more meaningful and enjoyable.
5. **Collaboration and Communication:** Knowledge Integration often involves collaborative projects where students work together to combine their insights and expertise. This process enhances their communication skills and teaches them the value of teamwork.
6. **Preparation for Future Challenges :** In a rapidly changing world, the ability to integrate knowledge is crucial for adapting to new information and challenges. Education that emphasizes Knowledge Integration prepares students for lifelong learning and adaptability in their careers.
7. **Cognitive Development :** Integrating Knowledge from various domains promotes cognitive development by encouraging students to think critically and creatively. This process helps in developing higher-order thinking skills, which are essential for academic success.
8. **Cultural Awareness :** Knowledge Integration can also include perspectives from different cultures and backgrounds, fostering greater cultural awareness and sensitivity among students. This understanding is vital in an increasingly globalized world.
9. **Personalized Learning :** Educators can use Knowledge Integration to create personalized learning experiences that cater to individual student interests and strengths, making learning more relevant and effective.
10. **Real-World Application :** Knowledge Integration allows students to apply what they have learned in practical contexts, bridging the gap between theory and practice. This application reinforces learning and enhances retention. In summary, knowledge Integration is fundamental to fostering a rich educational experience that equips students with the skills, understanding, and adaptability needed in today's complex world. It encourages critical thinking, collaboration, and a deeper appreciation for the interconnectedness of knowledge across disciplines.

Strategies for Fostering Knowledge Integration

1. **Encourage Interdisciplinary Collaboration:** Promote teamwork across different departments or fields to leverage diverse expertise.
2. **Implement Robust Knowledge Management Systems:** Use technology to create centralized repositories where knowledge can be stored, shared, and accessed easily.
3. **Promote an Open Exchange of Ideas:** Foster a culture that values sharing knowledge and encourages employees to voice their insights and experiences.
4. **Provide Training in Critical Thinking:** Equip employees with the skills needed to analyze and synthesize information effectively.

5. **Create Cross-Functional Teams:** Form teams with members from various functions to work on specific projects or challenges, ensuring a blend of perspectives.

Knowledge Integration Theory

The Knowledge Integration Theory (KIT) was primarily developed by Nancy Nersessian, a cognitive psychologist and philosopher of science. Her work, particularly in the context of scientific reasoning and problem-solving, has been influential in understanding how individuals integrate diverse forms of knowledge to generate new insights and innovations. Nersessian's research emphasizes the importance of cognitive processes such as analogical reasoning, conceptual blending, and mental simulation in Knowledge Integration. Her contributions have helped shape our understanding of how scientists and other experts approach complex problem-solving tasks by Integrating Knowledge from various disciplines and sources.

Nersessian's work emphasizes several key cognitive processes that underlie Knowledge Integration, including:

1. **Analogical Reasoning:** Nersessian highlights the importance of analogical reasoning in knowledge integration, where individuals draw on similarities between different domains or concepts to transfer and apply knowledge from one context to another.
2. **Conceptual Blending:** She also emphasizes the role of conceptual blending, which involves combining and reconfiguring concepts from different domains to create new understandings and solutions.
3. **Mental Simulation:** Nersessian's theory underscores the use of mental simulation, where individuals mentally simulate or "play out" different scenarios to explore potential outcomes and test hypotheses.

Overall, Nersessian's theory provides a framework for understanding how experts in various fields, particularly in science and engineering,lintegrate Knowledge from diverse sources to address complex problems and drive innovation. Her work has contributed to our understanding of the cognitive processes involved in knowledge integration and has implications for education, research, and interdisciplinary collaboration.

The Importance of Knowledge Integration

1. **Enhanced Innovation:** By integrating knowledge from various sources, organizations can foster creativity and innovation. New ideas often emerge at the intersection of different fields or disciplines, leading to unique solutions.
2. **Improved Decision-Making:** Knowledge Integration enables better-informed decision making by providing a comprehensive view of the situation at hand. This holistic perspective allows leaders to consider multiple factors before making choices.
3. **Increased Efficiency:** Organizations that effectively integrate knowledge can streamline processes, reduce redundancy, and avoid the pitfalls of siloed information. This efficiency leads to faster problem-solving and improved productivity.

4. **Stronger Competitive Advantage:** In today's fast-paced market, organizations that excel in Knowledge Integration are better positioned to respond to changes and capitalize on emerging opportunities, giving them a competitive edge.

Knowledge integration and Innovation

Knowledge Integration and innovation are closely related concepts that play a crucial role in the development of new products, services, and processes within organizations and industries.

By integrating diverse knowledge, organizations can approach problems from multiple angles, leading to more effective and innovative solutions. Knowledge Integration fosters an environment where ideas can cross-pollinate between different domains, sparking innovation.

Organizations that effectively integrate knowledge can often innovate more quickly, as they leverage existing insights and expertise. Companies that excel at Knowledge Integration are better positioned to adapt to changes in the market and maintain a competitive edge through continuous innovation.

Knowledge Integration and problem-solving ability

Knowledge Integration and problem-solving ability are closely linked concepts that significantly enhance an organization's capacity to address challenges effectively. Knowledge Integration provides a broader context for understanding problems, enabling more accurate identification and analysis. By drawing on varied knowledge bases, teams can generate a wider array of potential solutions, increasing the likelihood of finding effective answers. Effective Knowledge Integration often occurs in collaborative environments where team members bring different expertise and viewpoints, leading to more robust problem-solving processes. Organizations that excel in integrating knowledge are often more adaptable, allowing them to pivot quickly when faced with new challenges or changing circumstances. Knowledge Integration fosters a culture of continuous learning, where past experiences inform future problem-solving efforts.

Knowledge Integration and Collective Intelligence

Knowledge Integration and collective intelligence are interrelated concepts that play a crucial role in enhancing decision-making, problem-solving, and innovation within organizations and communities. Knowledge Integration contributes to collective intelligence by providing a rich foundation of information that groups can draw upon to address complex issues. When individuals integrate their knowledge, they can collectively analyze problems from multiple angles, leading to more innovative solutions. Collective intelligence thrives on the diversity of thought. Knowledge Integration allows for the incorporation of various viewpoints and expertise, enriching the decision-making process. This diversity can lead to more robust discussions and the emergence of novel ideas that might not arise in homogeneous groups.

Effective Knowledge Integration fosters an environment where collaboration is encour-

aged. This is essential for harnessing collective intelligence. Collaborative tools and practices that promote knowledge sharing contribute to the development of collective intelligence by enabling groups to work together more effectively. Collective intelligence allows groups to learn from each other's experiences and insights, leading to continuous improvement. Knowledge Integration supports this learning process by ensuring that valuable information is shared and utilized across the group.

Knowledge integration and Adaptability

Knowledge Integration and adaptability are closely related concepts that are essential for organizations and individuals to thrive in dynamic environments. Knowledge Integration provides the information necessary for making informed decisions in the face of change. When individuals or organizations can synthesize knowledge from various sources, they are better equipped to understand the implications of changes in their environment. This leads to more strategic responses that align with organizational goals. Adaptability often requires innovative problem-solving. By integrating knowledge from diverse fields or experiences, individuals can develop creative solutions that may not be apparent when relying on a single perspective. This integrated approach allows for more effective responses to new challenges.

Adaptability is rooted in the ability to learn from past experiences. Knowledge Integration facilitates this learning by ensuring that valuable insights are captured, shared, and applied in future situations. Organizations that prioritize Knowledge Integration create a culture of continuous improvement, where lessons learned inform future actions. Organizations that excel at Knowledge Integration can respond more swiftly and effectively to changes in their environment. They can draw upon a wealth of integrated knowledge to make quick decisions that are informed by a comprehensive understanding of the situation. This agility is crucial in fast-paced industries where conditions can shift rapidly. A culture that encourages knowledge sharing and integration fosters adaptability. When team members feel empowered to share their insights and collaborate, it creates an environment where adaptability is valued and practiced. This cultural alignment supports an organization's ability to navigate change successfully.

Conclusion

In summary, Knowledge Integration is a multifaceted process that enhances understanding and innovation by bringing together diverse perspectives and information. It requires collaboration, adaptability and a commitment to continuous learning while navigating various challenges and ethical considerations. By fostering a culture that values collaboration, continuous learning, and flexibility, organizations can enhance their ability to Integrate Knowledge effectively and adapt to changing circumstances. This synergy ultimately leads to improved decision-making, innovation, and resilience in the face of challenges.

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Relationship Between Visualization in Geometry and Reasoning in Geometry of Secondary School Students

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Abstract

In geometry, visualization is the mental process of creating spatial representations or mental images of geometric objects, relationships, and transformations. It entails the capacity to mentally manipulate and perceive geometric figures, which promotes a more profound comprehension of geometric ideas (NCTM, 2000). Because of its applicability in a variety of fields and its function in fostering comprehension, creativity, and problem-solving, it is still very relevant in the twenty-first century. In geometry, reasoning is the process of applying logic to geometric concepts, relationships, and issues in order to reach conclusions, resolve issues, or support solutions. Beyond mathematics, it has an impact on science, technology, education, and daily problem-solving. The goal of the current study was to determine how secondary school pupils' geometric reasoning and visualization related each other.

Key Words : *Visualization, Reasoning, Geometry etc.*

Introduction

In geometry, visualization is essential because it gives abstract ideas concrete representations. It facilitates problem-solving, helps illustrate the characteristics of geometric shapes, and fosters an awareness of spatial relationships. It is a useful tool for learning geometric concepts and using them in a variety of contexts. Geometric visualization is crucial for developing spatial thinking abilities, which are useful in a variety of domains, including engineering and architecture, computer graphics and gaming, science, robotics and manufacturing, technology, and innovation. In summary, a solid foundation in geometry visualization can improve problem-solving skills across a range of domains and lead to a wide range of employment options. The process of applying logic to geometric concepts, relationships, and problems in order to draw conclusions, address problems, or strengthen solutions is known as reasoning in geometry. It affects science, technology, education, and everyday problem-solving in addition to mathematics.

Need and Significance of the Study

Consistent and robust correlations have been reported between spatial visualization skills and a breadth of mathematical tasks (Mix & Cheng, 2012). For example, spatial visualization skills have been linked to performance in geometry (Delgado & Prieto, 2004), algebra (Tolar, Lederberg, & Fletcher, 2009), numerical estimation (Tam, Wong, & Chan, 2019), word problems (Hegarty & Kozhevnikov, 1999), mental arithmetic (Kyttälä & Lehto, 2008), and advanced mathematics (e.g., function theory, mathematical logic, computational mathematics; Wei, Yuan, Chen, & Zhou, 2012). So it is clear that visualization relates with mathematical concepts. The researcher here by verify the reviews by precisely finding is there any relationship between Visualization in Geometry and Reasoning in Geometry?

Objectives of the Study

- To find the relation between Visualization in Geometry and Reasoning in Geometry of secondary school students for the total sample.
- To find out the difference between the relationship of Visualization in Geometry and Reasoning in Geometry of secondary school students based on gender.

Based on the objective the following hypothesis is formulated for the study.

Hypotheses of the Study

- There will be significant relationship between Visualization in Geometry and Reasoning in Geometry of secondary school students for the total sample.
- There will be significant difference between the relationship between Visualization in Geometry and Reasoning in Geometry of secondary school students based on gender.

Methodology Used for the Study

The methodology used for the study is as given below.

Method

The method adopted by the investigator for this study is 'correlation'.

Sample selected for the study

The population of the present study is the secondary school students of schools run by Department of General Education of Government of Kerala. The sample selected consists of 150 secondary school students of standard IX of various schools from the districts Ernakulam, Kottayam and Alappuzha of Kerala. Out of this sample 75 were boys and 75 were girls.

Tools used for the study

- A standardised test on Visualization in Geometry (Sheeja K.G & Jaleel S, 2023) was used for the study. Validity of the test was established through content validity and the reliability coefficient of the test was 0.97 which shows high reliability of the test.
- A standardised test on Reasoning in Geometry (Sheeja K.G & Jaleel S, 2023) was used for this study. Validity of the test was established through content validity and the reliability coefficient of the test was found to be 0.94 which shows high reliability of the test.

Statistical Techniques Used

The following statistical techniques were used for the present study.

- Descriptive statistics like Mean and Standard Deviation
- Pearson's Product Moment Correlation
- Test of significance of difference 't' test.
- Test of significance of difference between 'r' s

Analysis and Interpretation

The analysis and interpretation of the collected data is given as follows.

1. Descriptive statistics of Visualization in Geometry and Reasoning in Geometry of Secondary School Students for the Total sample

The scores of Visualization in Geometry and Reasoning in Geometry were calculated. The mean and standard deviation obtained for the total sample is given in Table 1.

Table 1

Descriptive statistics for the total sample on Visualization in Geometry and Reasoning in Geometry

Variables	Total		Girls		Boys	
	Mean	S. D	Mean	S. D	Mean	S. D
Visualization in Geometry	12.7	4.78	13.3	4.28	12.1	5.18
Reasoning in Geometry	11.5	3.8	11.5	3.47	11.4	4.13

Table 1 shows that the mean scores obtained by girls is higher than that of boys with respect to visualization in geometry and reasoning in geometry. This indicates that girls have more Visualization and Achievement in Geometry than boys.

2. The Relationship between Visualization in Geometry and Reasoning in Geometry

The relationship between Visualization in Geometry and Reasoning in Geometry and the significance of the relationship were found out for the total sample and is given in Table 2.

Table 2

Relationship between Visualization in Geometry and Reasoning in Geometry of secondary school students for the total sample

	Visualization in Geometry 'r'	Reasoning in Geometry 't'
Total	0.672	24.92
Girls	0.642	9.46
Boys	0.698	11.63

Table 2 shows that the correlation coefficient obtained for the total sample and the subsample gender are positive and represent Substantial correlation (Best and Kahn, 2006) between Visualization in Geometry and Reasoning in Geometry for the total sample and the subsample gender.

The obtained t-value for the test of significance of 'r' for the total sample is (24.92) which is greater than the table value 2.61 at 0.01 level of significance with the degrees of freedom 148. This implies that the relationship between Visualization in Geometry and Reasoning in Geometry is significant for the total sample.

For the sub sample girls it is (9.46) which is greater than the table value 2.64 at 0.01 level of significance with the degrees of freedom 73 and for boys it is (11.63) which is greater than the table value 2.64 at 0.01 level of significance with the degrees of freedom 73. This indicates that the relationship between Visualization in Geometry and Reasoning in Geometry is significant for the sub sample gender.

3. The difference between the relationship of Visualization in Geometry and Reasoning in Geometry *with respect to gender.*

The significance of the difference between the relationship of visualization in geometry and reasoning in geometry of secondary school students for the sub sample gender were found out and the results are given in Table 3.

Table 3

Difference between Visualization in Geometry and Reasoning in Geometry of secondary school students for the sub samples based on gender

	'r'	't'
Girls	0.642	1.86
Boys	0.698	

The obtained t-value 1.86 is less than the table value 1.98 at 0.05 level of significance. This implies that there is no significant difference between the relationship between the visualization in geometry and Reasoning in geometry of secondary school students for the sub samples boys and girls. This reveals that the factor gender has no role in the relation between visualization in geometry and Reasoning in geometry of secondary school students.

Major Findings of the Study

The major findings of the present study based on the analysis is were listed as follows.

1. The girls in secondary school have more Visualization and Reasoning in geometry than the boys in secondary school.
2. There exists substantial positive correlation between Visualization in Geometry and Reasoning in Geometry for the total sample and the sub sample gender.
3. The relation between Visualization in Geometry and Reasoning in Geometry for

the total sample and the subsample is significant.

4. There is no significant difference in the relationship between visualization in geometry and reasoning in geometry of secondary school students for the sub sample boys and girls.

Educational Implications of the Study

- Girls have more visualization and achievement in geometry than the boys. This demands the need of more focus on the development of these skills among boys in secondary schools.
- The variabl es Visualization in Geometry and Reasoning in Geometry are positively correlated. This focuses on the relevance of incorporating techniques of visualising geometric ideas in the teaching of mathematics for enhancing reasoning in geometry.
- There is no significant difference in the relationship between visualization in geometry and reasoning in geometry of boys and girls. This implies the importance of giving equal weightage and training to both boys and girls in the development of visualization and reasoning in geometry.

Conclusion

Innovation and technology are important in the twenty-first century. In this case, pupils benefit from geometry visualization in a number of ways. It aids pupils in comprehending abstract mathematical concepts more deeply. It develops problem-solving and spatial reasoning abilities. It encourages a comprehensive way of thinking about mathematics. All things considered, integrating visualization into geometry meets the needs of 21st-century education and gives pupils a more engaging educational experience. In addition to helping solve geometric issues, reasoning in geometry promotes critical thinking, advances technical advancement, and is essential for solving difficulties in the real world. As current innovation and technology increasingly rely on geometric notions and spatial reasoning, its significance only increases. The present study highlights a relationship between visualization in geometry and reasoning in geometry.

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Express to Impress: Enhancing Self-Esteem in Primary School Students Through Art

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Abstract

Recent research highlights the crucial link between artistic expression and self-esteem in primary school children. Creative pursuits like drawing, music, dance, etc. facilitate self-discovery, emotional expression, and confidence building. This paper examines the significance of integrating arts into primary education to boost self-esteem. By analyzing the benefits, challenges, and implications of arts-based curricula, we aim to inform educators and policymakers on creating holistic learning environments. Ultimately, the paper proposes strategies for using the arts to cultivate self-confidence in young learners, supported by relevant scholarly sources.

Keywords : *Self-esteem, Primary school students, Art etc.*

Introduction

Primary education is crucial for holistic child development, encompassing cognitive, emotional, and social growth. Artistic expression, encompassing diverse media like painting and music, uniquely contributes to this development. It provides a non-verbal outlet for self-expression, fostering self-esteem and emotional well-being in the formative primary years. Children at this age are particularly susceptible to experiences affirming their individuality, building self-awareness and confidence. This paper will explore the vital role of artistic expression in cultivating self-esteem in primary school students, analyzing its significance, inherent qualities, associated challenges, and educational repercussions. Incorporating art into the curriculum is vital for fostering resilient and confident individuals. Artistic expression, encompassing visual arts, music, dance, theater, and other creative forms, has been widely explored for its psychological, social, and educational benefits. Researchers have investigated how artistic activities support personal development, emotional well-being, and cognitive skills, as well as how they can foster empathy, social awareness, and community belonging (Winner et al., 2013). This article presents a synthesis of findings on artistic expression, analyzing its impact on individual growth, cognitive function, emotional health, and social connections.

Need and Significance of Artistic Expression in Primary Education

- Artistic expression encourages exploration and creativity, nurturing children's curiosity and imagination.
- It supports emotional, social, and cognitive growth, which are essential for overall development.
- Art helps primary students to express complex ideas and develop logical thinking and teamwork, aligning with Piaget's developmental stages.
- Artistic activities stimulate multiple senses, creating an engaging and interactive learning experience.
- They help children to retain knowledge and understand academic concepts more effectively.
- Art provides a safe environment for self-expression and personal discovery.
- It builds confidence through the accomplishment of creative tasks and projects.
- Art accommodates diverse learning styles (visual, auditory, kinesthetic) and cultural backgrounds.
- It promotes empathy, peer understanding, and inclusivity in the classroom.
- Artistic expression fosters creativity, emotional resilience, and adaptability.
- Art equips children with the skills to navigate complex social and personal situations.

Characteristics of Artistic Expression and Self-Esteem Development in Children

Artistic expression has distinct characteristics that make it an effective medium for developing self-esteem in primary school students.

- **Non-Verbal Communication**:

  Artistic activities provide a vital non-verbal outlet for children struggling to articulate complex emotions. Engaging in visual arts, such as drawing, or kinesthetic mediums, like dance, allows them to express their thoughts and feelings without the constraints of language, helping them communicate their inner experiences clearly.

- **Self-Exploration & Identity Formation**:

  Creative activities encourage children to explore their interests and preferences, fostering a sense of individuality and self-discovery. As they engage in these processes, children develop a positive self-image by recognizing and appreciating their unique strengths.

- **Emotional Release and Catharsis**:

  Engaging in artistic pursuits allows children to process their emotions and thoughts. This self-exploration helps them identify their strengths and develop a sense of personal identity, which is fundamental to healthy self-esteem.

4. **Peer Collaboration and Social Skills**:

   Collaborative art projects enhance interpersonal skills. Working together in a creative environment fosters teamwork and empathy, helping children understand diverse perspectives while strengthening social bonds. This experience contributes significantly to their personal and social growth.

- **Creative Problem Solving and Boosting Creativity**:

  Artistic activities require imagination, persistence, and adaptability, all of which build resilience and a growth mindset in children. By engaging in creative problem-solving, they learn to approach challenges with innovative thinking. This process emphasizes that mistakes are opportunities for learning rather than failures, ultimately enhancing their creativity and equipping them with essential life skills to tackle challenges effectively.

  Overall, artistic expression plays a vital role in developing self-esteem, emotional well-being, social competencies, and creativity in children.

Challenges of Incorporating Artistic Expression in Education

Despite its benefits, integrating artistic expression in primary education faces several challenges:

- **Resource Constraints**:

  Limited funding restricts access to materials, trained instructors, and proper facilities, often sidelining arts in favor of core subjects.

- **Curricular Prioritization**:
  Standardized curricula emphasize academic performance over arts, limiting opportunities for creative development.

- **Teacher Preparedness**:

  Many teachers lack training in arts education, as it affects their confidence and ability to foster creativity in students.

- **Cultural Attitudes**:

  Academic achievement is often prioritized over the arts, leading to reduced funding and undervaluation of arts programs.

- **Assessment Challenges**:

  The subjective nature of art complicates standard evaluations, resulting in less recognition and support compared to quantifiable subjects.

- **Time Constraints**:

  Tight schedules and heavy syllabi make it difficult to allocate time for arts, often pushing creative activities to the periphery.

- **Collaboration Issues**:

  Lack of coordination and support for interdisciplinary teaching hampers the integration of arts into the broader curriculum.

- **Limited Professional Development**:

  Insufficient training in interdisciplinary approaches leaves educators unprepared to incorporate the arts effectively.

- **Resistance to Change**:

  Schools often resist altering traditional practices due to a lack of awareness about the benefits of arts education.

Addressing these challenges requires collective efforts from policymakers, educators, and administrators to prioritize arts education, provide resources, and foster an environment that values creativity and holistic learning.

Educational Implications

Incorporating artistic expression into primary education creates a supportive

environment for children to explore creativity and develop vital life skills. Amid standardized testing and rigid curricula, arts offer a space for authentic self-expression through activities like painting, music, dance, and drama. These creative outlets help children connect with their emotions, articulate ideas, and discover their unique strengths, significantly boosting self-esteem and fostering holistic development. Artistic engagement teaches resilience, risk-taking, and embracing mistakes, essential for building self-worth. Collaborative activities nurture social skills, empathy, and a sense of community, while problem-solving and critical thinking abilities are strengthened through creative challenges. By integrating the arts, education becomes more enriching, empowering children to feel valued and supported. Prioritizing arts in education not only enhances personal growth but also cultivates a compassionate, innovative, and dynamic society. Some of the major implications are listed below:

- **Holistic Development**:
  Arts support emotional, social, and cognitive growth, fostering resilience, empathy, and self-awareness. Creative activities like art therapy help manage stress, process emotions, and improve mental health, especially for children facing challenges.
- **Increased Engagement**:
  Artistic activities make learning more engaging and relatable, motivating students and boosting participation. This sense of achievement enhances their confidence and self-esteem.
- **Personalized Learning**:
  The arts accommodate diverse learning styles and developmental levels, validating individual abilities and fostering a sense of self-worth.
- **Stronger Teacher-Student Bonds**:
  Creative interactions strengthen relationships, creating a supportive environment that encourages free self-expression and promotes well-being.
- **Improved Academic Outcomes**:
  Engaging in arts fosters skills like focus, discipline, and critical thinking, which enhance performance in core subjects like maths and science, demonstrating the synergy between creativity and academic success.

Incorporating artistic expression into education enriches learning while significantly boosting students' self-esteem and overall well-being.

Conclusion

Creative arts significantly bolster self-esteem in primary school children. Engaging in artistic activities fosters self-awareness, resilience, and positive social interaction. While implementing comprehensive arts programs presents logistical hurdles, the substantial documented benefits warrant proactive solutions. Overcoming these challenges allows schools to utilize artistic expression to cultivate emotionally well-adjusted and confident students, thereby enhancing both their academic and personal growth. Artistic pursuits often play a crucial

role in identity formation, particularly during adolescence. Creative activities allow individuals to explore their personal values, cultural backgrounds, and unique perspectives. A study by Easley et al. (2019) found that adolescents who engage in the arts are better able to articulate their identities and are often more resilient to social pressures. Artistic expression thus serves as a tool for self-discovery and self-affirmation, helping individuals of all ages to strengthen their sense of self and cultural identity. Artistic expression is also a powerful medium for preserving and transmitting cultural heritage. Traditional art forms, such as storytelling, dance, and visual arts, allow communities to celebrate and pass down their customs and values. Smith (2006) discusses how indigenous communities use art to maintain cultural identity and educate younger generations about their heritage. This process not only preserves culture but also fosters a sense of pride and solidarity among community members. Through this lens, artistic expression serves as both a creative outlet and a means of cultural resilience.

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Social Competence of Secondary School Students: A Crucial Factor for Success

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Abstract

Social Competence is a vital aspect of secondary school students' development that influences their academic performance, mental health, and future career opportunities. By prioritizing the cultivation of social skills through targeted programs and activities, educators can equip students with the tools they need to navigate the complexities of adolescence and beyond. Investing in the Social Competence of students ultimately contributes to their overall success and well-being in an increasingly interconnected world.

Key Words : Social Competence, Social Skills, Academic Performance, Social Situations, Interpersonal Skills *etc.*

Introduction

In today's fast-paced and interconnected world, Social Competence stands as a vital factor in determining the success of secondary school students. Social competence encompasses the ability to interact effectively with peers, teachers, and the broader community, enabling students to build meaningful relationships and navigate complex social situations. This skill is not merely a soft attribute; it directly influences academic performance, emotional well-being, and future career prospects. As adolescents transition into adulthood, their ability to communicate, collaborate, and empathize becomes critical in achieving personal and professional goals. Education systems, therefore, have a significant responsibility to nurture these abilities alongside academic knowledge.

The importance of Social Competence has grown even more pronounced in the face of modern challenges such as technological advancements and cultural diversity. In secondary schools, students encounter a melting pot of ideas and perspectives that

require heightened social adaptability. Effective teamwork, conflict resolution, and leadership are skills that extend beyond the classroom, equipping students to contribute meaningfully to society. This article explores the role of social competence in secondary education, its impact on students' overall success, and the strategies schools can employ to cultivate this essential life skill.

Dimensions of Social Competence

Social Competence is a multidimensional construct that encompasses various skills and attributes essential for effective interpersonal interactions and adaptive functioning in diverse social contexts. One key dimension is communication skills, which involve the ability to express thoughts, listen actively, and interpret verbal and nonverbal cues. These skills enable students to convey their ideas clearly and build connections with others. Another dimension is emotional intelligence, which includes recognizing, understanding, and regulating one's emotions while empathizing with others. This fosters positive relationships and helps in managing conflicts constructively.

Social adaptability is another crucial facet, reflecting a student's ability to adjust their behaviour and approach to fit different social settings and cultural contexts. Additionally, problem-solving and decision-making skills form an integral part of social competence, equipping students to navigate complex interpersonal challenges effectively. Lastly, collaborative and leadership abilities highlight a student's capacity to work in teams, inspire peers, and take initiative when needed. Together, these dimensions create a foundation for successful social interactions and contribute to holistic development in secondary school students.

Fostering Social Competence in Secondary Schools

Secondary schools play a pivotal role in nurturing Social Competence among students, equipping them with the skills needed for personal growth and societal contribution. One effective approach is through integrating Social-Emotional Learning (SEL) into the curriculum. SEL programs teach students to manage emotions, build positive relationships, and make responsible decisions, laying the groundwork for social competence. Classroom activities such as group projects, peer mentoring, and role-playing scenarios can provide opportunities for students to practice communication, empathy, and teamwork in real-life contexts.

Additionally, fostering an inclusive and supportive school environment is crucial. Schools can encourage diversity and mutual respect by organizing cultural exchange programs, community service initiatives, and extracurricular activities that promote collaboration. Teachers and counsellors also play an essential role in modelling socially

competent behaviours and providing personalized guidance. By creating spaces where students feel valued and understood, secondary schools can help them develop the social skills and confidence needed to navigate complex interpersonal situations successfully. These efforts prepare students not only for academic achievement but also for thriving in their future careers and communities.

Significance of Social Competence in Today's World

In an increasingly interconnected global landscape, Social Competence has become a vital skill influencing various aspects of personal and professional life. One of its core elements is enhanced communication skills, which allow individuals to express their ideas clearly and listen actively. In a world characterized by diverse cultures and perspectives, effective communication fosters better understanding, collaboration, and conflict resolution, which are essential in both personal and professional contexts.

Social Competence also supports the formation and maintenance of meaningful relationships. These connections, whether personal or professional, lead to robust support networks, shared learning, and emotional well-being. In an age where digital interactions often create feelings of isolation, the ability to build genuine relationships provides a much-needed sense of belonging. Closely linked to this is the role of emotional intelligence, which encompasses recognizing and managing one's emotions and understanding others' feelings. This facet of social competence promotes resilience, helping individuals adapt to challenges and manage stress effectively.

In the workplace, collaboration and teamwork have become essential for success, with many industries relying on diverse teams to drive innovation and achieve shared goals. Social Competence facilitates inclusivity and ensures all voices are valued, enhancing group dynamics and productivity. Furthermore, it equips individuals with conflict resolution skills, enabling them to navigate disagreements with empathy and respect, ultimately leading to healthier relationships and more constructive outcomes.

Beyond individual success, social competence plays a significant role in civic engagement and community building. Individuals with strong social skills are more likely to participate in community activities, volunteer efforts, and advocacy initiatives. Their engagement fosters a sense of collective responsibility and strengthens social cohesion. Additionally, Social Competence aids in adaptability, a crucial attribute in today's rapidly changing world. Whether adjusting to new cultural norms or leveraging technological advancements, socially competent individuals can navigate transitions more effectively.

Finally, Social Competence is closely linked to mental health and well-being. Strong

social skills contribute to reduced anxiety, depression, and loneliness by fostering positive interactions and encouraging individuals to seek support when needed. In essence, Social Competence is not just a desirable attribute but an indispensable skill that enhances overall quality of life in a complex and dynamic world.

Educational Significance of Social Competence

Social Competence plays a vital role in education as it equips students with the interpersonal skills necessary for effective communication, collaboration, and relationship-building. In classrooms, socially competent students are better able to work in teams, share ideas, and resolve conflicts, creating a supportive and inclusive learning environment. These skills not only enhance group learning experiences but also foster emotional intelligence, enabling students to understand and manage their own emotions while empathizing with others. Being promoting positive interactions, Social Competence helps reduce incidents of bullying and social isolation, contributing to a safe and respectful educational setting.

Moreover, Social Competence is closely linked to academic success and lifelong learning. Students with strong social skills are often more engaged, motivated, and capable of seeking help when needed, leading to improved academic outcomes. These skills also prepare students for future professional and social contexts, where collaboration and effective communication are critical. As a foundation for holistic development, Social Competence ensures that education nurtures well-rounded individuals capable of thriving in diverse environments, ultimately supporting their personal growth and societal contribution.

Social Competence and Adjustment

Social Competence refers to the ability to interact effectively with others in various social contexts. It encompasses a range of skills, including communication, empathy, conflict resolution, and the ability to understand social cues. Social Competence is crucial for personal adjustment, as it influences how individuals navigate their relationships, cope with challenges, and integrate into their communities. Individuals with high Social Competence are skilled communicators. They can express their thoughts and feelings clearly and listen actively to others. Effective communication fosters understanding and reduces misunderstandings, which is essential for building strong relationships and adjusting to new environments. Social Competence facilitates the development of positive relationships. Individuals who can engage effectively with others are more likely to form supportive networks, which are crucial for emotional and practical support. These relationships can help individuals adjust to new situations, whether in personal life,

school, or work. Socially Competent individuals can adapt their behaviour to fit different social situations. They understand the norms and expectations of various contexts, allowing them to navigate diverse environments more smoothly. This adaptability is critical for adjustment, particularly when transitioning to new schools, jobs, or communities. Social Competence plays a critical role in personal adjustment across various life domains. By enhancing communication skills, empathy, conflict resolution abilities, adaptability, and self-esteem, Social Competence enables individuals to build strong relationships and navigate challenges effectively. Developing Social Competence is essential for fostering positive interactions and promoting overall well-being, making it an important focus for education, personal development, and community initiatives.

Social Competence and Academic Performance

Academic performance, on the other hand, is typically measured by grades, test scores, and overall achievement in educational settings. The relationship between Social Competence and academic performance is significant and multifaceted. Many academic tasks require collaboration, whether in group projects, study groups, or classroom discussions. Students with strong Social Competence are better equipped to work effectively in teams. They can communicate ideas clearly, listen to others, and contribute positively to group dynamics, leading to better outcomes for the group as a whole. In any academic environment, conflicts may arise among peers or between students and teachers. Socially Competent students are more adept at resolving conflicts constructively. They can navigate disagreements without escalating tensions, maintaining a positive classroom atmosphere conducive to learning. Positive peer relationships are crucial for academic success. Students with high Social Competence are more likely to build supportive friendships that can enhance their motivation and engagement in school. These friendships can provide emotional support during challenging times, encouraging persistence in academic endeavours. Socially Competent students tend to be more engaged in their learning environments. They are likely to participate actively in class, ask questions, and seek help when needed. This engagement not only enhances their understanding of the material but also contributes to a richer learning experience for their classmates. Research has shown that Social Competence is linked to long-term academic success beyond primary and secondary education. The connection between Social Competence and academic performance is clear: students who possess strong social skills tend to perform better academically.

Social Competence and Social Development

Social Competence and social development are closely intertwined concepts that play a critical role in shaping an individual's ability to navigate interpersonal relationships and adapt to social environments.

Social competence refers to the skills and abilities that enable individuals to interact effectively with others, such as communication, empathy, and conflict resolution. Social development, on the other hand, encompasses the broader process through which individuals acquire these skills over time, influenced by family, peers, schools, and cultural contexts. Together, these aspects are foundational for fostering positive relationships and achieving personal and collective goals.

In educational settings, Social Competence facilitates collaborative learning, emotional regulation, and peer acceptance, creating a more inclusive and supportive classroom environment. Social development, as a process, is nurtured through structured activities, cooperative tasks, and interactions with diverse groups. For instance, group projects and extracurricular activities provide opportunities for students to practice and refine their social skills. This interaction not only strengthens their ability to work with others but also enhances their emotional intelligence, fostering self-awareness and empathy toward peers.

Beyond the classroom, the relationship between Social Competence and social development extends to long-term personal and professional success. Individuals with strong Social Competence often experience better mental health, higher workplace productivity, and healthier interpersonal relationships. Social development continues across the lifespan, adapting to new challenges and environments. By emphasizing both in education and socialization practices, society ensures the growth of individuals who are not only academically capable but also emotionally resilient and socially responsible.

Social Competence and Personality

Social Competence and personality are deeply interconnected, as an individual's personality traits often influence how they interact with others and navigate social situations. Social Competence refers to the ability to communicate effectively, build relationships, and adapt to social norms, while personality encompasses the unique patterns of thoughts, feelings, and behaviours that define an individual. Traits such as extraversion, agreeableness, and openness significantly contribute to a person's Social Competence, enabling them to form connections and resolve conflicts with ease. Conversely, individuals with traits like high introversion or low emotional stability may face challenges in developing these skills, though they can still enhance their competence through practice and support.

Personality plays a dual role in shaping Social Competence. On the one hand, innate traits provide a foundation for how individuals approach social situations for instance, an extroverted person might naturally seek social interactions, giving them

more opportunities to hone their interpersonal skills. On the other hand, Social Competence also influences personality development. Positive social experiences, such as meaningful friendships or mentorship, can enhance traits like confidence, empathy, and adaptability, further enriching an individual's personality. Thus, the relationship between Social Competence and personality is reciprocal, with each influencing the growth of the other over time.

Educational and developmental programs that address both personality and Social Competence can lead to well-rounded personal growth. Schools, for example, play a critical role in fostering environments where students can practice social skills regardless of their personality traits. Structured opportunities for collaboration, emotional regulation, and peer interaction help individuals with diverse personalities build competence in ways that complement their innate characteristics. By supporting both aspects, society encourages individuals to thrive in interpersonal relationships while embracing the uniqueness of their personalities.

Implications of Social Competence in Day Today Life

Social Competence has significant implications in daily life, influencing personal relationships, professional success, and overall well-being. At its core, Social Competence equips individuals with the ability to communicate effectively, empathize with others, and adapt to various social contexts. These skills enable people to build and maintain meaningful relationships with family, friends, and colleagues, fostering a sense of belonging and emotional support. For instance, resolving conflicts with understanding and empathy strengthens personal bonds, while active listening enhances mutual trust and respect in conversations.

In professional settings, Social Competence is essential for teamwork, leadership, and networking. Individuals with strong social skills can collaborate effectively, navigate workplace dynamics, and contribute to a positive organizational culture. For leaders, Social Competence is crucial in motivating teams, managing conflicts, and building consensus. Furthermore, networking opportunities often hinge on the ability to connect with others, making Social Competence a valuable asset for career advancement and professional growth.

Beyond personal and professional domains, Social Competence contributes to overall mental and emotional well-being. By fostering resilience, individuals can handle social challenges, such as misunderstandings or rejection, with greater ease. Moreover, socially competent individuals are more likely to engage in their communities, participate in civic activities, and contribute positively to society. In essence, social competence enriches daily life by enabling individuals to navigate the complexities of interpersonal

relationships, excel in their endeavours, and create meaningful connections that enhance their quality of life.

Techniques to Enhance Social Competence of Secondary School Students

Enhancing the Social Competence of secondary school students is essential for their personal and academic growth. One effective technique is incorporating collaborative learning activities into the curriculum. Group projects, peer tutoring, and team-based assignments encourage students to communicate, share ideas, and resolve conflicts, fostering empathy and teamwork. Similarly, extracurricular participation in sports, clubs, and arts programs provides opportunities for students to interact with peers, develop leadership skills, and build a sense of belonging, all of which are integral to social development.

Social skills training is another valuable approach, where students engage in workshops focused on communication, active listening, emotional regulation, and conflict resolution. Role-playing scenarios can offer a safe space for students to practice these skills, preparing them for real-life situations. Schools can also implement mentorship programs, pairing students with teachers, older peers, or community members to provide guidance and model positive social interactions. Such programs build confidence and offer students a framework for navigating complex social dynamics.

To further enhance Social Competence, schools should foster an inclusive and reflective environment. Activities that celebrate diversity and encourage open discussions on social issues help students appreciate different perspectives and build respect for others. Reflection exercises, such as journaling, allow students to process their emotions and social experiences. By integrating these techniques, schools can equip students with the interpersonal skills needed for academic success, strong relationships, and a fulfilling life.

Conclusion

In today's interconnected world, Social Competence is more important than ever. It encompasses a range of skills that facilitate effective communication, empathy, conflict resolution, and relationship-building. By actively working on these skills through practice, self-reflection, and feedback, individuals can enhance their ability to navigate social situations with confidence and ease. The development of Social Competence not only improves personal relationships but also fosters professional success and overall well-being. As we continue to engage with diverse communities and cultures, prioritizing Social Competence will enable us to connect meaningfully with others and contribute positively to our environments.

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Building a More Equitable Kerala: The Gender Park Initiative

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Abstract

Gender and gender power manifest at all levels of society. As a result, women often bear a triple burden - they are responsible for household responsibilities, provide social care, and participate in the workforce.Gender equality is absolutely necessary for the equal representation and participation of women and men in the economy, decision-making and social, cultural and civic life.Empirical evidence clearly shows that gender inequality is widespread in India. But in Kerala, the answer becomes quite difficult. According to traditional human development indicators, the status of women in Kerala has improved significantly and is even comparable to developed countries. Kerala ranks first among major Indian states in terms of Human Development Index, with women making up nearly 52% of Kerala's total population, Kerala has achieved enviable social development indicators. The literacy rates of Kerala women (91.98%) and men (96.20%) are both high and the difference between the two is relatively small.The Gender Park, is an initiative of the Government of Kerala to work for gender equality and empowerment in the state. The gender park was established by the government of Kerala in 2013, headquartered at Thiruvananthapuram.The main purpose behind the establishment of gender park is to unleash the economic potential of women and transgender persons that would empower them to become sustainable entrepreneurs. The major initiatives by the Gender park are discussed as follows are She taxi,International institute for gender and development, Women in sustainable entrepreneurship, International women's trade centre, gender library and heritage museum. All the initiatives are running successfully.Gender equality is a constitutional promise and represents a constitutional right. So it is needed to recognise that men and women are equal citizens and have equal rights and entitlements.

Key Words : *Gender Park, Gender Equality Intervention etc.*

Introduction

Gender is a social construct that gives women and men different responsibilities and rights, regardless of individual abilities or priorities. Gender and gender power manifest at all levels of society. As a result, women often bear a triple burden - they are responsible for household responsibilities provide social care, and participate in the workforce. Men, on the other hand, do not often share household

and caring responsibilities and are able to spend most of their time leisurely, engaging in productive activities, or participating in decision-making in a variety of industries. Gender equality means that "all people are free to develop their personal abilities and make choices without being restricted by rigid gender roles; the different behaviours, wishes and needs of women and men are equally considered, valued and supported.

Gender equality is absolutely necessary for the equal representation and participation of women and men in the economy, decision-making and social, cultural and civic life. Gender equality isn't just about women. Sustainable and effective change cannot be achieved without the active participation of men. Gender equality also does not treat men and women equally, because biological differences sometimes require men and women to be treated differently. The numbers of men and women are also different (though this can be important in some cases) because men and women tend to have different needs, priorities and aspirations. Gender equality does not mean that women and men are the same, but that they have equal value and should be treated accordingly. The UN states that empowering women is an indispensable tool for development and poverty reduction.

Gender Equality in Kerala

India's experience shows that our development strategy is male-centred. The analysis of various indicators of social and economic development undoubtedly proves that this unbalanced economic development is not conducive to women throughout the country. Low female literacy rates, unfavorable sex ratios, persistent female abortions, low female labor force participation despite high levels of education, and high female infant mortality are all evidence of this gender imbalance. Of course, Kerala's problems are different from the rest of the country. Empirical evidence clearly shows that gender inequality is widespread in India. But in Kerala, the answer becomes quite difficult. According to traditional human development indicators, the status of women in Kerala has improved significantly and is even comparable to developed countries. Kerala ranks first among major Indian states in terms of Human Development Index, with women making up nearly 52% of Kerala's total population. The literacy rates of Kerala women (91.98%) and men (96.20%) are both high and the difference between the two is relatively small. The health indicators were equally impressive, with high life expectancy for women (76.30) and men (71.40), and there was indeed a strong positive bias towards women. 5 However, Kerala presents a paradox when it comes to other aspects of gender equality – namely economic access and political participation. The empowerment of women is closely linked to their opportunities in education, health, economic and political participation. The government has been implementing this approach through legislative and programmatic interventions and mainstreaming gender into the development planning process. A key aspect of this strengthening was the passage of the Kerala Jayatiraj Act 2009 and the Kerala Municipalities Act 2009, which reserved 50% of seats for women in local bodies. This helps maximize the competitiveness and

developmental potential of women in our state. In this situation, an effort to know the opinion of elected members of grama panchayats on the concept of gender equality is very important as the grama panchayats are the very basic unit of developmental activities in Kerala.

Concept of Gender Park

The Gender Park, is an initiative of the Government of Kerala to work for gender equality and empowerment in the state. The gender park was established by the government of Kerala in 2013. Headquartered in the state capital, Thiruvananthapuram, its 24-acre main campus is in Kozhikode. With a key focus on gender justice, it is a platform for policy analysis, research, advocacy, capacity building, and economic and social initiative. It is located under the Department of Social Justice ,Kerala and is the first space of its kind in the world. Currently working under the Women and Child Development Department, it aspires to become a major focal point for gender-related activities.The main purpose behind the establishment of gender park is to unleash the economic potential of women and transgender persons that would empower them to become sustainable entrepreneurs.

The major initiatives by the Gender park are discussed as follows;

She-Taxi

She Taxi is one of the flagship projects of Gender Park.which is an innovative public-private partnership (PPP) that serves as a platform to promote sustainable business models by fostering entrepreneurship for women's economic empowerment, safety and security. This was achieved with very little investment from the government, through a partnership with several private sector agencies, initiated by the Gender Park. She Taxi was launched in Trivandrum in November 2013 with five entrepreneurs and the joint venture became fully operational on 1st December 2013.She Taxis is driven by women for women and provides them with safe transportation. She Taxis is equipped with safety technology to make travel safe and secure for the driver and passengers, as well as entertainment facilities such as music, playback stations and more. The fleet system enables travelers to book a taxi 24x7 via the online system or mobile phone. Passengers receive a unique identification number and a 24/7 female taxi service number. Passengers can pay by credit/ debit card/cash. Women are the basic partners in this arrangement, they are the owners and drivers of the taxis and are expected to work at least 8 hours a day and 22 days a month.The Kerala State Women's Development Corporation (KSWDC) and state-owned banks provide access to financing for women entrepreneurs. Maruti Suzuki India Ltd. is a vehicle supplier for She Taxis, offering many types of vehicles at special prices. Drivers can use a database of all emergency response systems in the city, including police, ambulances, garages, fire brigade, women's safe night shelters and hospitals, and actively monitor vehicles from the 24X7 security control room.

International Conference on Gender Equality (ICGE)

Gender Park hosts a biennial conference called the International Conference

on Gender Equality (ICGE), which aims to bring together academics, practitioners, policymakers and professionals from around the world on a common platform to explore the realization of Barriers to gender equality. Development of gender justice. The ICGE series aims to deepen the global dialogue on learning and action on the different dimensions and dynamics of gender inequality, and to showcase and share knowledge on good practices and innovative interventions. The second ICGE will be held in 2017.

International Institute for Gender and Development (IIGD)

The International Institute for Gender and Development (IIGD) is the research and learning arm of Gender Park. It is dedicated to multidisciplinary research, theorizing and policy intervention. Its mission is to conduct high-quality research and effective capacity development to provide policymakers and the public with innovative, practical advice to promote just and inclusive societies for all, in addition to educating students in gender theory and practice education. The Institute's goals are to define key issues, generate and capture the knowledge needed, and develop the data needed to develop responsive policies tailored to the specific socioeconomic contexts of the state and other developing countries, and to inform global feminism Contribution to academia. Given that IIGD is part of the Social Justice Department of the Kerala State Government, the goal of linking knowledge creation to policy making through a multidisciplinary research and learning process is particularly important.

IIGD will work through three main sectors:

- Knowledge Management Centre, which is the research arm of IIGD, will be involved in the creation and dissemination of knowledge and data in key focus areas of gender.
- Academic Management Centre, the academic centre of IIGD, focuses on providing high-quality formal short- and long-term education in gender studies.
- Centre for Capacity Development is the training arm of IIGD and will provide training and skills development modules on gender sensitivity, awareness, inclusion and diversity to a variety of private and public stakeholders, students and professionals.

Women in Sustainable Entrepreneurship (WISE)

Gender Park will launch a fellowship program, Women in Sustainable Entrepreneurship (WiSE), as the first step towards establishing the Global Institute for Gender and Development. The fellowship program is designed to enhance and strengthen the knowledge, skills and attitudes of selected fellows, known as WiSE Fellows, in establishing, operating and scaling sustainable enterprises. As part of the fellowship program, WiSE Fellows will work with nascent women entrepreneurs, known as WiSEpreneurs, who need to support the operation and expansion of their businesses. Each pair of WiSE Fellows and WiSEpreneurs will be trained and mentored by select experts from industry and academia in various stages of bureaucracy and business processes, creative thinking, marketing and customer acquisition.

International Women's Trade Center

The International Women's Trade Centre (iWTC) is an ambitious initiative to be the first trade centre to meet the specific needs of women in business. The project is Gender Park's commitment to creating a safe and sustainable environment for the development of industry, commerce, trade, lifestyle and women's cultural center.The iWTC is envisioned to be a one-stop retail and business support centre that supports and encourages women in business, ensuring their economic, social and health needs are met to facilitate their overall development.Not only providing support to encourage more women to enter the male-dominated retail and entrepreneurial market, but also ensuring they gain an international foothold in trade and positioning.

Gender Library

Gender-based libraries attempt to expose the myriad of genders and their roles to society as a whole. As the first gender-based initiative in the country, the library aims to enhance research and learning, increase gender awareness, and promote the empowerment of different gender groups in our society. Libraries will become central reference points for academic research, entirely focused on better understanding gender around us and normalizing them for further acceptance. The library has an extensive collection of books, journals, journals, and publications on gender rights, feminist literature, transgender experiences, and other gender studies. The space is accessible to people with disabilities, and the digital library will be accessible to patrons with vision or hearing impairments.

Heritage Museum

As an initiative to showcase women's historical journeys, the Heritage Museum acts as an archive that puts gender history in perspective. It focuses on the history of Kerala's outstanding women, their battles and struggles, their victories, and their contributions to making Kerala the true ideological and cultural marvelous pot it is today. The Museum Gallery is a space that preserves women's history and educates current and future generations about women's experiences and contributions through originally curated exhibitions, educational programs, and exchanges.

Conclusion

Gender equality is a constitutional promise and represents a constitutional right. Since there is gender disparity and discrimination based on unequal power relations between men and women in our society, development programmes and policies often ignore women. So what is needed is to recognise that men and women are equal citizens and have equal rights and entitlements.

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Relationship between Delegation Effectiveness and Team Cohesion among Management Students

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Abstract

Delegation Effectiveness is an effective element of any manager's job. Delegation Effectiveness range from a major appointment to one of any number of smaller tasks in everyday life of any organization from arranging an annual outing to interviewing a job candidate. If used effectively, Delegation Effectiveness provides real benefits to everyone involved Team Cohesion happens when a team remains united while working to achieve a common goal. Being a cohesive team means that not only are group goals met but everyone feels like they have contributed to the overall success of the group individuals on a cohesive team tend to focus more on the entire group rather than their individual selves and are more motivated to work towards the team goal. So it is very clear that Delegation Effectiveness and Team Cohesion is that much important in the field of management, especially management students.

Key Words : *Delegation Effectiveness, Team Cohesion, Management.etc.*

Introduction

Delegation Effectiveness can be identified as the most important quality for an effective administration. As with any other kind of work that you have to complete, we first need to learn how to manage a task properly our self, so that when you delegate it, the result will meet, if not exceed, your expectation. Communicating the activity outcomes clearly will ensure success. On the other hand, whether we work, go to school, or play sports, we have all been a part of a team at some point. Some of these teams may have been fun, effective, and successful while others were stressful, ineffective, or taxing. While many teams work well together, true success comes from being on a cohesive team. Increased Team Cohesion in the workplace has resulted in increased success, work satisfaction, team member self-esteem, and decreased anxiety.

Team Cohesion happens when a team remains united while working to achieve a common goal. Being a cohesive team means that not only are group goals met but everyone feels like they have contributed to the overall success of the group. Individuals on a cohesive team tend to focus more on the entire group rather than their individual selves and are more motivated to work towards the team goal

Need and Significance of the Study

Delegation Effectiveness of authority is a process in which the authority and powers are divided and shared amongst the subordinates. When the work of a manager gets beyond his capacity, there should be some system of sharing the work. This is how Delegation Effectiveness of authority becomes an important tool in organization function. Through Delegation Effectiveness, a manager, in fact, is multiplying himself by dividing/multiplying his work with the subordinates. Whether we work, go to school, or play sports, we have all been a part of a team at some point. Some of these teams may have been fun, effective, and successful while others were stressful, ineffective, or taxing. While many teams work well together, true success comes from being on a cohesive team. Increased Team Cohesion in the workplace has resulted in increased success, work satisfaction, team member self-esteem, and decreased anxiety

So it is very clear that Delegation Effectiveness and Team Cohesion is that much important in the field of management, especially management students. After completing the course, the management students got neglect many times only because of their poor managerial capacity. Most of the firms prefer group discussion (GD) as a part of selection, there those who are good enough to handle the situation and the crowed will be selected to the next step. This same situation is applicable to those who are in the job, so there is an emerging situation to know deeply about Delegation Effectiveness and Team Cohesion.

Through the review of literature, the Investigator found that theoretically there is a relationship between Delegation Effectiveness and Team Cohesion. But previous studies have not been able to show about exactly the significance of the relationship between Delegation Effectiveness and Team Cohesion.

Research Questions

By reviewing literature regarding the variables, fair questions provoked the thinking of investigator which discussed as follows

- Is there any relationship between Delegation Effectiveness and Team Cohesion among Management students?
- Is there any relationship between Delegation Effectiveness and Team Cohesion among Management students with respect to gender (Male, Female)?

Statement of the Problem

By keeping these questions in mind the investigator stated the problem as Relationship between Delegation Effectiveness and Team Cohesion among Management Students of Kerala'

Operational Definition of the Key Terms

Delegation Effectiveness

Delegation Effectiveness is the process of dividing one's responsibilities with others. In this study, the investigator considered Delegation Effectiveness as the scores that obtained from the Management students on Delegation Effectiveness Scale which was prepared and analysed by the investigator.

Team Cohesion

Team Cohesion is a dynamic process which is reflected in the tendency of a group to stick together and remain united in the pursuit of its goal and objectives. In this study the Investigator considered Team Cohesion as the scores which obtained by the Management students in Team Cohesion Scale developed and standardised by Dr.Vinod Dumblekar and Dr.Upinder Dhar.

Objectives of the Study

- To study the correlation between Delegation Effectiveness and Team Cohesion of Management students.
- To study the correlation between Delegation Effectiveness and Team Cohesion of Male and Female Management students separately

Hypotheses of the Study

- There is significant correlation between Delegation Effectiveness and Team Cohesion of Management students.
- There is significant correlation between Delegation Effectiveness and Team Cohesion of Male and Female Management students separately

Method Adopted for the Study.

Under descriptive research the investigator adopted Correlational Method to analyse the relationship between Delegation Effectiveness and Team Cohesion among Management students of Kerala.

Sample of the Study

The investigator selected 150 Post graduate Management students during the academic year 2020-22from the population as sample

Tools Used for the Present Study

- Delegation Effectiveness Scale prepared by the Investigator.
- Team Cohesion Scale Standardized by Dr.Vinod Dumblehar and Dr.Upinder Dhar.

Statistical Techniques Used

Mean, Standard Deviation, Pearson product moment 'r'

Analysis and Interpretation of Data

Hypothesis 1

The first objective was to study the correlation between Delegation Effectiveness and Team Cohesion of Management students. Regarding the first objective the investigator framed a research hypothesis as, there is significant correlation between Delegation Effectiveness and Team Cohesion of Management students.

To analyse the hypothesis it was changed into null form as 'there is no significant correlation between Delegation Effectiveness and Team Cohesion of Management students. The data were analysed with the help of Pearson product Moment correlation and the results are given in table 1.

Table 1

Correlation Coefficient (r) between Delegation Effectiveness and Team Cohesion of Management students

N	Variables	'r' value	Percentage of Error	Significance
150	Delegation Effectiveness Team Cohesion	-0.170	3.7.%	Sig. at 0.05 level

From the table 1, it can be seen that the r value - 0.170 which is significant at 0.05 level. The percentage of error 3.7% is lower than the limit 5%. It indicates that there is significant negative correlation exists between Delegation Effectiveness and Team Cohesion of Management students. Thus the null hypothesis 'there is no significant correlation between Delegation Effectiveness and Team Cohesion of Management students is rejected. It may, therefore be said that Delegation Effectiveness and Team Cohesion of Management students were found to be significantly related.

Hypothesis 2

The second objective was to study the correlation between Delegation Effectiveness and Team Cohesion of Male and Female Management students separately. Regarding the second objective the investigator framed a research hypothesis as, there is significant correlation between Delegation Effectiveness and Team Cohesion of Male and Female Management students separately

To analyse the hypothesis it was changed into null form as 'there is no significant correlation between Delegation Effectiveness and Team Cohesion of Male and Female Management students separately The data were analysed with the help of Pearson product Moment correlation and the results are given in table 2.

Table 2

Gender wise Correlation Coefficient (r) between Delegation Effectiveness and Team Cohesion of Management students

Gender	N	Variable	r value	% of Error	Significance
Male	85	Delegation Effectiveness Team Cohesion	-0.227	3.7%	0.05 level
Female	65	Delegation Effectiveness Team Cohesion	-0.1	42.7%	0.05 level

From the table 2, it can be seen that the r value, - 0.227 of Male management students which is significant at 0.05 level. It indicates that there is significant negative correlation exists between Delegation Effectiveness and Team Cohesion of Male Management students. Thus the null hypothesis 'there is no significant correlation between Delegation Effectiveness and Team Cohesion of Male Management students is rejected. It may, therefore be said that Delegation Effectiveness and Team Cohesion of Male Management students were found to be significantly related.

From the table 2, it can be seen that the r value, - 0.1 of Female management students which is not significant at 0.05 level. It indicates that there is no significant correlation exists between Delegation Effectiveness and Team Cohesion of Female Management students. Thus the null hypothesis 'there is no significant correlation between Delegation Effectiveness and Team Cohesion of Female Management students is not rejected. It may, therefore be said that Delegation Effectiveness and Team Cohesion of Female Management students were not significantly related.

Major Findings of the Study

- There is significant negative correlation exists between Delegation Effectiveness and Team Cohesion of Management students
- There is significant negative correlation exists between Delegation Effectiveness and Team Cohesion of Male Management students
- There is no significant correlation between Delegation Effectiveness and Team Cohesion of Female Management students

Educational Implications of the Study

- Delegation Effectiveness and Team Cohesion are very essential to get good professional record in management sector. So it is essential to improve this quality through effective training.
- Administrators should take part in training programs on Delegation
- In the syllabus of various administrative and management courses it is essential to include the topic Delegation
- Master of Education programme should include the training about Delegation because in future they may be principals of colleges
- Along with the course Group Dynamic training should be given for better group work and productivity

Conclusion

In management, delegating refers to sharing or transferring responsibilities, and typically happens from a superior (or an employer) to a subordinate (or an employee). Delegating is a critical skill for supervisors at any level and can be a major challenge for them to learn, due to concerns of giving up control or the lack of confidence in the abilities of others. Delegating is an important trait for those who work in teams, and trust plays a critical role for its success.

Being a cohesive team means that not only are group goals met but everyone

feels like they have contributed to the overall success of the group. Individuals on a cohesive team tend to focus more on the entire group rather than their individual selves and are more motivated to work towards the team goal.

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The Role of AI in Enhancing Social Science Teaching Practices and Student Engagement: Opportunities and Challenges

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Abstract

"AI can change the role of teachers and the way of teaching" (Neha, 2020). Artificial intelligence (AI) is the most popular information technology in today's environment, and it is the subject of various scientific discussions and debates. This article focuses on the role of AI in enhancing Social Science Teaching Practices and Student Engagement. The practice of technology in education has revolutionized education systems with better reach and improved execution. The introduction of Artificial Intelligence (AI) into education has transformed conventional teaching approaches, especially in the teaching of social sciences through improvised customised education, AI - driven tools like Virtual Reality (VR) and Augmented Reality (AR), improvised teaching methods like debates and discussions, assessments and feedback, creative content production etc. The integration of AI in social science education presents opportunities for immersive learning, accessibility, and multidisciplinary teaching. However, it also faces challenges, including ethical concerns, limited technological access, financial constraints, and the complexity of social science concepts. The document highlights the importance of balancing AI-driven innovations with human-led instruction to ensure equitable and effective education. By analyzing the opportunities and challenges of AI in teaching and learning, the study underscores its potential to revolutionize social science education and prepare students for a technology-driven future.

Key Words : *Artificial Intelligence, Teaching Practices, Student Engagement, Social Science, Improvised Teaching etc.*

Introduction

"By using the technology properly, we can unlock new possibilities for teaching and learning." - Dan Guo. Artificial Intelligence (AI) is a broad field encompassing various technologies that have been developed over the past 50 years (Ergen, 2019). In the modern era, our education system has been working on overcoming the challenges which exists in the present educational practices. Artificial

Intelligence, with its capacity for data processing, personalization, and interactive engagement, offers a promising solution to the challenges. AI can transform social studies education by enabling personalized learning experiences that cater to the unique needs and interests of each student (Bakare, 2024). The implementation of AI in social studies education also has the potential to enhance teacher effectiveness. AI assists educators in developing more dynamic lesson plans, analyzing student performance data to identify areas for improvement, and automating administrative tasks, thereby allowing teachers to focus more on instruction and student engagement (Ogunleye and Odetayo, 2022).

Artificial Intelligence (AI) has become a cornerstone of innovation, transforming industries and reshaping education. AI algorithms and educational robots are now integral to learning management and training systems, providing support for a wide array of teaching and learning activities. The integration of Artificial Intelligence into social studies education in India represents a significant opportunity to address existing educational challenges in order to enhance the teaching practices of social science and student engagement.

AI is the mimic expression of human cognition. The recognition of AI technology's potential in higher education predates the public introduction of generative AI models such as ChatGPT by OpenAI, highlighting the evolving landscape of educational technology and its implications for learning and teaching (Nguyen et al.,2024). AI is a tool which has immense potential for enhancing the teaching practices of social science and the student engagement in the field of education. Furthermore, the comprehensive review by Zawacki-Richter et al. (2019) emphasised AI's potential in facilitating adaptive learning systems, personalisation, and intelligent tutoring systems, underscoring the technology's capability to cater to diverse learning needs and styles. These advancements demonstrate the potential for a revolutionary change in education, creating learner-centred environments that could significantly boost student engagement. So that the effective exploration of AI can be used to create more engaging and interactive social studies lessons that capture students' interest and improve the understanding of societal, cultural, and historical concepts (Bakare, 2024).

Objectives

- To examine the role of AI in enhancing teaching practices within Social Science Education.
- To investigate the adoption and use of AI tools among students for effective learning of Social Science.
- To explore the role of AI for enhancing the student engagement in learning Social Science.
- To identify and analyze the challenges in implementing AI and its tools in Social Science teaching practices and their impact on enhancing student engagement.

Importance of AI in Social Science Teaching Practices

The introduction of artificial intelligence (AI) into education has transformed conventional teaching approaches, especially in the teaching

of social sciences. The study of Social Science, which includes Geography, Political Science, Sociology, and History, calls for a combination of theoretical understanding and real-world application. Artificial Intelligence has revolutionized the learning process by increasing its effectiveness, inclusivity, and engagement.

The following are the main points emphasizing the value of AI in social science education:

1. **Improving Customized Education**

   By examining each student's learning preferences, areas of strength, and shortcomings, AI systems help teachers customize their lessons to meet the needs of each individual student. No matter their aptitude or speed, every student will be able to successfully understand difficult social science ideas

2. **Immersion and Interactive Education**

   With the help of AI-powered tools like Virtual Reality (VR) and Augmented Reality (AR), students can investigate political systems, depict geographical phenomena, and immerse themselves in historical events. By giving abstract ideas a concrete form, these participatory techniques promote greater comprehension and long-term memory.

3. **Increasing Involvement of Students**

   Social science frequently calls for debates on current events and critical thinking. AI-driven chatbots, virtual simulations, and gamification platforms are examples of tools that can enhance learning and assist students in interactively connecting abstract concepts to real-world applications.

4. **Simplifying Feedback and Assessment**

   AI streamlines the assessment process by giving prompt feedback on tests, assignments, and quizzes. Additionally, it assists educators in pinpointing the areas in which children are having difficulty, allowing for prompt interventions and focused assistance.

5. **Fostering Inclusion and Accessibility**

   AI-powered tools, like language translation, text-to-speech, and speech-to-text, enable social science education to be inclusive of students with a range of needs, including those who have disabilities or language barriers, ensuring equal learning opportunities for all.

6. **Data-Driven Decision Making**

   AI-powered analytics give educators information about student performance, engagement levels, and learning patterns, allowing them to make well-informed decisions about curriculum design, instructional strategies, and resource allocation.

7. **Promoting Critical Thought**

   AI can assist students acquire the critical thinking and problem-solving abilities that are crucial in social science by facilitating discussions and debates on global concerns, ethical quandaries, and societal challenges.

8. **Creative Content Production**

   AI tools help teachers create multimedia content, visual aids, and lesson plans that are engaging and accommodate different learning styles. Students will have a rich

and diverse educational experience thanks to this.

9. **Promoting Multidisciplinary Education**

AI makes it possible to include information and analysis from other fields-like economics, technology,and environmental studies-into the teaching of social sciences. Students' comprehension of intricate societal issues is enhanced by this multidisciplinary approach.

10. **Future-Readiness**

Training for Students Teachers to educate students for a future that is becoming more and more influenced by technology by integrating AI into social science curricula. In order to successfully manage the opportunities and difficulties of the future, students have the ability to comprehend and critically evaluate the societal effects of artificial intelligence.

AI Driven Tools for Enhancing Teaching and Learning

Artificial intelligence has been widely applied to various educational technology platforms as follow:

a. Virtual Mentor

The function of AI which is currently quite widely applied to various educational technology platforms, especially those based online, is as a virtual mentor. Mentoring is a process in which a more knowledgeable person (the mentor) assists a less-knowing person (the mentee) in achieving a learning objective (Klamma et al., 2020). AI can provide feedback on students' learning activities and practice questions, then provide recommendations for material that needs to be re-studied like a teacher or tutor. Zhang (2016) states that Virtual Mentor (VM) is a multimedia-integrated e-Learning environment that stresses interaction, personalization, and intelligence.

b. Voice Assistant

This AI technology has similarities with virtual mentors. It's just that Voice Assistant relies more on the voice function as a center for interaction and communication. Voice assistants incorporate AI using cloud computing and can communicate with the users in natural language (Terzopoulos & Satratzemi, 2019). Several Edutech platforms have also adopted Voice Assistant technology to help students find content and materials more quickly and practically. Voice Assistant is also one of the most widely recognized and used AI technologies in various fields, including education. Examples of commonly known voice assistants are Google Assistant (Google), Siri (Apple), Cortana (Microsoft), and others.

c. Smart Content

Smart Content is an AI technology that functions to share and find programmable digital book and material content more easily and quickly. Common examples of the application of this technology are found in various digital libraries today, both in schools, universities, and public libraries. AI can find and categorize the books we are looking for quickly and structurally. We will even be given book recommendations

and other content relevant to what you are looking for. Smart Content is a summary of various learning materials, from digital textbooks to interfaces that can be tailored to our needs (Fitria, 2021).

The examples are as follow:

Cram101: It is an online service that uses artificial intelligence to read textbooks, summarize them and post highlights and key points of the material online.

Netex Learning : Netex Learning is yet another company focused on creating smart content platforms. The solution is full of AI-based features. The Netex platform also offers a personalized cloud platform with virtual training, conferences, and more.

d. Presentation Translator

AI presents many opportunities to share knowledge around the world. Using Artificial Intelligence solutions, students can study various courses and training programs. There are many platforms with interactive learning materials from the best tutors. AI also provides opportunities for students who speak different languages or have vision or hearing problems (Fitria, 2021).

e. Global Courses

This AI technology has been widely applied in various fields, including education. Simply put, Global Courses users or students can search for and take online courses from all over the world. Examples of courses that have implemented AI technology include courses on MOOCs, Udemy, Google AI, Alison, Khan Academy, edX, Udacity, Coursera, and others (Zhang, 2021).

f. Automatic Assessment

AI is widely used for online automatic assessment and question correction purposes. The use of features like this makes it easier for teachers and tutors to prepare and conduct quizzes and tests easily and practically. Teachers and tutors no longer need to make questions and correct questions manually (Fitria, 2021).

g. Personalized Learning

Personalized Learning bears some resemblance to other examples of AI technology. In essence, this AI technology allows students or users to get services like personal assistants.

Examples of the application of Personalized Learning, are those that have been implemented byKhan Academy (https://www.khanacademy.org/), Duolingo (https://www.duolingo.com/), Ruangguru (https://www.ruangguru.com/), and more.

h. Educational Games

Educational games are games that are designed to learn but can still offer play and fun. Educational games are all forms of games that are created, to provide an educational experience or learning experience to the players of the game. Examples of educational games are Duolingo, Khan Academy Kids, Quick Brain and Puzzle Kids.

Techniques that underpin the use of AI tools in Social Science Teaching Practices are:

1. Machine Learning, which is used for image and speech recognition, natural language

processing, and predictive analytics (Rahal, Verhagen, & Kirk, 2024).

2. Deep Learning is a neural network that detects specific patterns in data and improves the accuracy of information by learning from mistakes. (Barnes & Rutter, 2019).
3. Natural language processing is learning that allows a machine to understand and interpret human speech and generate answers based on previously learned data (Franzosi, Dong, & Dong, 2022).
4. Computer vision is AI that has become popular after the emergence of neural network applications that generate images on demand (Chen, Chang, Tian, Yu, & Tu, 2015).

Traditional teaching, techniques, have been profoundly changed by the incorporation of AI tools into social science education, becoming more effective, individualized, and engaging. Through interactive simulations, data-driven insights, and adaptive learning platforms, educators can improve the learning experience by utilizing AI technologies. These tools not only foster critical thinking and analytical skills but also ensure inclusivity by catering to diverse learning needs. AI empowers teachers to focus on delivering meaningful content while automating repetitive tasks, thereby improving overall efficiency.

From Passive to Active: How AI Redefines Student Engagement

The educational landscape has been undergoing extensive transformations. Due to recent and constant disruptions to physical classes, online learning is emerging as a dominant mode of instructional delivery. The COVID-19 pandemic, in particular, accelerated the shift toward digital education (Bozkurt et al., 2022; Ofosu-Ampong et al., 2024). Understanding student engagement is a pivotal aspect of educational research as it significantly influences academic outcomes and the overall effectiveness of learning environments across all levels (Aliyu et al., 2022). Engagement in educational settings is multifaceted, involving cognitive, emotional, and behavioral components that collectively contribute to successful learning experience.

Engaged students are more likely to retain information, perform better academically, and develop essential skills such as critical thinking and problem-solving (Bond et al., 2020; Li & Xue, 2023). The integration of AI in teaching and learning of social science presents a significant opportunity to boost student engagement.

By leveraging AI, educators can design learning activities that are not only informative but also engaging, encouraging active participation and continuous interaction. However, while the potential benefits of AI in enhancing student engagement are promising, there is a need for more comprehensive studies to understand its full impact. Research is essential to explore the best practices for implementing AI in online learning and to address any challenges related to equity, ethics, and effectiveness.

Opportunities in Enhancing Student Engagement through AI

The incorporation of AI technology in education to enhance student engagement

offers immersive opportunities but also presents several challenges that need to be addressed. These challenges are crucial not only for improving learning experiences but also for mitigating issues stemming from technology advancement such as an over-reliance on GenAI (Nguyen, et al., 2024).

Interactive Teaching Aids

Decades of research into Intelligent Tutoring Systems (ITS) have established that these systems employ immediate, personalised feedback and support to learners, akin to one-on-one tutoring. These systems can assess student submissions, identify errors, and provide targeted feedback to help students improve(Mousavinasab et al., 2021; Tchounikine et al., 2010). By offering support that is tailored to the student's current level of understanding, ITS can enhance student engagement and lead to learning outcomes (VanLehn, 2011).

Recently, the widespread availability of GenAI, coupled with its advanced capabilities and ease of access and adoption, has introduced new affordances to teaching and learning (Enriquez et al., 2023; Nguyen et al., 2024). This accessibility allows for broader integration into various educational settings, supporting a more dynamic and responsive learning environment.

Personalised Learning Experience and Accessibility

Personalised Learning has been acknowledged as an effective method that customises educational experiences to meet the specific needs of individual learners(Xie et al., 2019; Zheng et al., 2021), the significant resources needed to put this model into practice make it challenging to adopt on a large scale(Nguyen, Gardner, et al., 2020). The advent of technology and new learning platforms, such as Massive Open Online Courses (MOOCs), has advanced the concept of personalised learning by providing scalable educational resources(Fan et al., 2023). However, these resources are often static and do not truly cater to the unique needs of each learner.

However, much more work is needed to realize a fully personalized learning experience where an AI system can comprehensively understand a learner's profile, accurately establish their learning model, and adapt the content to best fit their individual needs. This involves not only technological advancements but also a deeper integration of educational theories and practices to ensure that AI-driven personalization enhances learning outcomes without compromising educational equity or integrity (Nguyen et al., 2024).

Challenges in Using AI for Social Science Teaching and Student Engagement

Artificial Intelligence (AI) in social science education has enormous potential to transform instructional strategies and increase student interest. But there are difficulties in putting it into practice.

The following are some of the main challenges that educational institutions and instructors encounter when integrating AI tools into social science instruction.

1. **Limited Technological Access**

   Many educational institutions lack the necessary infrastructure, including high-speed internet, cutting-edge technology, and software, to implement AI, especially those located in disadvantaged areas. The digital gap impedes egalitarian learning opportunities by causing discrepancies in access to AI technologies.

2. **Financial and Budgetary Limitations**

   Due to their expensive development, deployment, and maintenance expenses, AI tools and technologies are often out of reach for many educational institutions. This problem is made worse by a lack of funds for teacher training and AI tools.

3. **Absence of Training for Teachers**

   It's possible that educators don't have the technological know-how to successfully incorporate AI into their lesson plans. AI tools are not being used to their full potential because professional development programs on AI usage are either nonexistent or inadequate.

4. **Ethical Concerns**

   The use of AI in education raises ethical questions about data privacy, security, and bias in AI algorithms. There are concerns about the over-reliance on AI, which could undermine the human aspect of education.

5. **Complexity of Social Science Concepts**

   Social sciences involve nuanced, contextual, and interpretative analysis, which may not always align with the structured logic of AI tools. AI may struggle to replicate the depth of discussion and critical thinking required in social science education.

6. **Resistance to Change**

   Both educators and institutions may resist adopting AI due to fear of the unknown, skepticism about its effectiveness, or preference for traditional teaching methods.

7. **Integration Challenges**

   Incorporating AI tools into existing teaching practices and curricula can be complicated and time-consuming. Lack of seamless integration between AI tools and current educational technologies often hampers their effectiveness.

8. **Student Dependency on Technology**

   Over-reliance on AI tools may lead to reduced critical thinking and problem-solving abilities, as students might depend too heavily on technology for answers. Balancing AI-enhanced learning with traditional, human-led approaches is a significant challenge.

9. **Bias in AI Algorithms**

   AI systems are only as unbiased as the data they are trained on. Social science teaching may unintentionally propagate biases if AI tools are not properly designed and validated. This can lead to skewed interpretations of social issues and inequality in learning outcomes.

10. **Measuring Effectiveness**

    Assessing the impact of AI tools on student engagement and learning outcomes in social sciences is challenging due to the lack of standardized metrics. Long-term studies and evaluations are required to determine the true effectiveness of AI integration.

The reliability of the use of AI tools in teaching social disciplines requires special attention since the study of social processes in the economic, social, historical, legal, psychological and demographic planes has certain specific features related to the behaviour of individuals and social groups (Lobanova et al., 2024).

The use of AI can create a fear of replacing humans with machines in the learning process, which can affect the motivation and self-esteem of both teachers and education seekers. Thus, as (Cacioppo and Patrick, 2018) rightly emphasises, AI can be designed to put students and teachers at the centre of the educational process, avoiding the trap of using technology as a means towards this end. The need for direct and indirect human interaction is evident to any education professional and well documented.

Conclusion

Artificial Intelligence is the result of the intensive development of the information society, which can no longer be ignored, especially in the higher education system. It is the higher education system that has always been and remains an experimental platform for introducing various innovative methods and approaches. AI is no exception, and particularly competent teachers and students are already using its tools. Meanwhile, in our opinion, there is an inequality in the application of AI systems in education: they are more actively used in teaching technical and natural sciences but not enough in teaching social disciplines, including sociology, social psychology, law, political science, economic theory, history, demography and social statistics. As researchers emphasise, advances in artificial Intelligence contribute to the development of social sciences, as they allow for a deeper understanding of human behaviour and social rules (Lobanova et al., 2024).

Furthermore, we should also always remember that AI systems first and foremost, require control by humans. Even the smartest AI systems can make very stupid mistakes. AI Systems are only as smart as the date used to train them" (Kaplan & Haenlein, 2019). To succeed with AI as an enhancement to learning and teaching, we need to always center teacher educators. Practically speaking, always keep a humanistic view of teaching and we should have the capability to confidently respond "no" when asked "will AI replace teachers?". In the educational system the job of AI is not just about making teachers' jobs easier but also making it possible to do what most teachers want to do.

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Effect of QAIT Model on Achievement in English among Secondary School Students

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Abstract

Education is one of the most important necessities of our life. A man is incomplete without it. Education teaches us how to think, how to work properly, how to make decision; in short, it tells us how to lead a successful and meaningful life.English language teaching is a challenge for many teachers everywhere in the world. The teaching of English should focus on the development of the four skills - Listening, Speaking, Reading and Writing.The QAIT Model is designed primarily to clarify the take-offs involved in alternative forms of classroom organization.Because it is a teaching framework that emphasizes specific elements that teachers have direct control over quality, appropriateness, incentive, and time. These elements are hypothesized to be multiplicative related to student achievement in English and other subjects, so that multiple elements may have to be improved if classroom innovations are to produce substantial achievement gains

Key Words : *QAIT, Achievement in English etc.*

Introduction

With the beam of education, one can easily distinguish between humanity and brutality. Education is very important for an individual's success in life. It can give a big impact on human opportunity in continuing their life quality. Education is also capable to give power for them to voice out their views, expose to them their real potential, lead them to become a better person and widen their views in certain area.

The existing teaching method of lecturing, providing notes and dictating model were are to be discouraged and cooperative learning and group activity should be adopted for the effective and natural learning of English Language. Slavin has emphasized the importance of the classroom teacher in arranging the conditions that will optimize student learning. However, he has simultaneously eliminated student classroom behavior as an influence on teacher behavior. The QAIT Model suggested by Slavin has

the subcategories of teacher behavior (planning, management and instruction) are viewed as groupings of classroom practice that affect student behavior, especially Academic Learning Time. However, teacher behavior is in turn influenced by student classroom behavior, which produces the transaction cycle that is the focus of the teaching/learning process. From this perspective, both teachers and students are responsible for classroom learning. Teachers are responsible for arranging conditions and students are responsible for paying attention and striving for success.

Need and Worth of the Study

English in India has become a symbol of people's aspirations for quality in education and a fuller participation in national and international life. The visible indicator of this presence of English is mushrooming of private English medium schools. It is now a known fact that the English medium schools have become popular, as many parents want their children to study in such schools. Education being on the concurrent list of every state, the level of introduction of English has now become a matter of state policy responding to people's aspirations. This has made many states to accede to the demand of early introduction of English in state schools.

Over the last two decades the difficulties faced by students learning English was manifested in fears. The student's hesitation to speak English in addition to it faces in advocate vocabulary in pure linguistics formulation and low overall knowledge of grammatical structure. Lack of understanding of students and classroom behaviour often leads to numerous problems in the academic situation. In such a situation, Robert Slavin's QAIT Model provides simultaneous exploration of children understanding and learning.

This model gives equal importance to students' classroom behaviour and teachers' classroom behaviour. QAIT Model helps to understand a variety of Students characteristics that defines a person's unique style and impact a student's performance in the classroom and ultimately student's achievement. QAIT Model is one of the most up to date method to understand the effectiveness of the Achievements on English among Secondary School Students. Because it is a teaching framework that emphasizes specific elements that teachers have direct control over quality, appropriateness, incentive, and time. These elements are hypothesized to be multiplicative related to student achievement in English and other subjects, so that multiple elements may have to be improved if classroom innovations are to produce substantial achievement gains.

Statement of the Problem

Effectiveness of QAIT Model on Achievement in English among Secondary School Students of Idukki District.

Operational Definitions of Key Terms

QAIT Model: Robert Slavin's QAIT Model is a teaching framework that emphasizes specific elements that teachers have direct control over quality,

appropriateness, incentive, and time. It is a revision of John Carroll's Model of School Learning. Here the investigator uses this method to find out the Achievement in English of Secondary School Students.

Objectives of the Study

1. To find out the Effectiveness of QAIT Model on Achievement in English among Secondary School Students.
2. To find out the Effectiveness of QAIT Model on Achievement in English among girls of Secondary School.
3. To find out the Effectiveness of QAIT Model on Achievement in English among boys of Secondary School.

Hypotheses of the Study

1. The gain score of Experimental Group is significantly higher than that of the Control Group.
2. The gain score of Girls of Experimental Group is significantly higher than that of control group.
3. The gain score of Boys Experimental group is significantly higher than that of Control Group.

Method Adopted for the Study

Quasi Experimental Method

Members were not randomly assigned to experimental and control groups in the quasi-experimental method; instead, experimental and control groups were randomly selected from among the groups available. The investigator chose the pre-test post-test non-equivalent group design for this study.

Variables of the Study

Independent Variables

QAIT Model and Prevailing teaching Method

Dependent variable

Achievement in English.

Sample of the Study

Among the population, the investigator selected Sixty Students of Standard Eight, who follows Kerela State Syllabus during the Academic year 2021-2022 as sample.

Tools Used for the Study

1. Lesson Transcripts based on QAIT Model prepared by the investigator for Experimental group.
2. Lesson Transcript based on prevailing method prepared by the investigator for Control Group.
3. Achievement Test - Achievement test in English prepared by the investigator.

Statistical Techniques Used

Mean, Standard Deviation, t test

Analysis and Interpretation

1. Objective One

The study's initial goal was to find out the Effectiveness of QAIT Model on Achievement in English among Secondary School Students.Regarding the first objective the investigator framed a research hypothesis as, the gain score of Experimental Group is significantly higher than that of the Control Group. To analyse the hypothesis, it was changed into null form as the gain score of Experimental Group is not significantly higher

than that of the Control Group. The data were analysed with the help of independent sample 't' test and the results are given in table 1.

Table 1

Number (N), Mean (M), Standard Deviation (SD) and 't' value of the Gain Scores of Experimental Group and Control Group

Group	N	M	SD	't' Value	Result
EG	30	19.600	1.163	34.300	Sig. at 0.01
CG	30	8.333	1.373		

From the Table 1 it is evident that the t value 34.300 (which is greater than the theoretical value 2.66) is significant at 0.01 level with df 58. It indicates that there is a significant difference between the Experimental and Control group on the gain scores of Achievement in English. Thus the null hypothesis, there is no significant difference between the Experimental and Control group on the gain scores of Achievement in English is rejected. It may, therefore be said that the Experimental and Control group were significantly differed on their gain scores of Achievement in English.

The investigation of objective one reveals that instructional material based on the QAIT Model was a successful strategy for improving secondary school students' English Achievement.

2. Objective Two

The second objective of the study was to find out the Effectiveness of QAIT Model on Achievement in English among Girls of Secondary School Students.Regarding the second objective the investigator framed a research hypothesis as, the gain score of Girls of Experimental Group is significantly higher than that of the Control Group. To analyse the hypothesis, it was changed into null form as the gain score of Girls of Experimental Group is not significantly higher than that of the Control Group. The data were analysed with the help of independent sample t test and the results are given in table 2.

Table 2

Number (N), Mean (M), Standard Deviation (SD) and 't' value of the Gain Scores of Girls of Experimental Group and Control Group.

Group	N	M	SD	't' Value	Result
EG	15	19.4000	1.121	25.594	Sig. at 0.01
CG	15	8.6667	1.175		

From the Table 2 it is evident that the t value 25.594 (which is greater than the theoretical value 2.76) is significant at 0.01 level with df 28. It indicates that there is a significant difference between the Girls of Experimental and Control group on the gain scores of Achievement in English. Thus the null hypothesis, there is no significant difference between the Girls of Experimental and Control group on the gain scores of Achievement in English is rejected. It may, therefore be said that the Girls of Experimental and Control group were significantly differed on their gain scores of Achievement in English.

The investigation of objective two reveals that instructional material based on the QAIT Model was a successful strategy for improving the English Achievement of secondary school Girls

3. Objective Three

The Third objective of the study was to find out the Effectiveness of QAIT Model on Achievement in English among Boys of Secondary School Students.Regarding the third objective the investigator framed a research hypothesis as, the gain score of Boys of Experimental Group is significantly higher than that of the Control Group. To analyse the hypothesis it was changed into null form as the gain score of Boys of Experimental Group is not significantly higher than that of the Control Group. The data were analysed with the help of independent sample 't' test and the results are given in table 3.

Table 3

Number (N), Mean (M), Standard Deviation (SD) and 't' value of the Gain Scores of Boys of Experimental Group and Control Group.

Group	N	M	SD	't' Value	Result
EG	15	19.800	1.207	23.623	Sig. at 0.01
CG	15	8.000	1.512		

From the Table 3 it is evident that the t value 23.623 (which is greater than the theoretical value 2.76) is significant at 0.01 level with df 28. It indicates that there is a significant difference between the Boys of Experimental and Control group on the gain scores of Achievement in English. Thus the null hypothesis, there is no significant difference between the Boys of Experimental and Control group on the gain scores of Achievement in English is rejected. It may, therefore be said that the Boys of Experimental and Control group were significantly differed on their gain scores of Achievement in English.

The investigation of objective three reveals that instructional material based on the QAIT Model was a successful strategy for improving the English Achievement of secondary school Boys

Educational Implications of the Study

The major findings of the study and the conclusion drawn from the findings helped the investigator to some Educational Implications of the study.

1. The study's findings suggest that the QAIT Model is more effective than the current teaching technique for improving students' achievement in English
2. The study's findings demonstrated that the QAIT Model is an effective strategy for achieving English proficiency. Learning becomes relevant and simple if schools use this strategy. It also keeps a positive working relationship with the teacher and the pupils.
3. The QAIT Model is extremely beneficial in the development of students' linguistic abilities.
4. The QAIT Model should be taught in classrooms since it helps students grasp and handle the subject better.

Epilogue

The investigator would be pleased if the findings of this study led to a better understanding of the benefits of innovative teaching and learning methods such as the QAIT Model, aided students in English Language achievement and learning in a more meaningful and natural way, supported curriculum planners in developing new curriculum based on the QAIT model, and motivated researchers to conduct additional research in this area.

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The Impact of Indian Knowledge Systems on Teachers' Well- being and the Happiness Index in Education

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Abstract

The Indian Knowledge System (IKS) rooted in ancient Indian traditions, philosophies, and practices, offers a holistic framework that emphasizes balance, well-being, and ethical living. This paper explores the profound impact of IKS on teachers' well-being and the Happiness Index in education. Teachers, as the cornerstone of the educational ecosystem, often face challenges such as stress, burnout, and a lack of intrinsic motivation. IKS provides practical tools, such as yoga, meditation, and value-based principles, to address these issues. By nurturing physical health, emotional balance, and spiritual growth, IKS enhances teachers' overall well-being, enabling them to approach their roles with renewed enthusiasm and purpose.Furthermore, the integration of IKS into education fosters a more joyful and fulfilling learning environment, positively influencing the Happiness Index. Value-based education, mindfulness practices, and a focus on community and collaboration create a harmonious atmosphere where students and teachers thrive. By aligning education with nature, ethical living, and self-discovery, IKS not only uplifts individual well-being but also strengthens relationships within the educational community.

Key Words : *Indian Knowledge System, Teachers' Well- being, Happiness Index etc.*

Introduction:

The Indian Knowledge System (IKS), deeply rooted in ancient Indian traditions and philosophies, provides a holistic approach to life that emphasizes harmony, balance, and self-awareness. It encompasses diverse domains such as education, health, ethics, and spirituality, offering timeless wisdom that remains relevant in addressing modern challenges. In the context of education, IKS holds the potential to significantly influence the well-being of teachers and enhance the Happiness Index, creating a more positive and fulfilling learning environment. Teachers play a pivotal role in shaping the minds and futures of students, yet their own well-being often takes a back seat amidst demanding workloads, emotional stress, and the pressures of modern education systems. Integrating IKS practices-such as yoga,

meditation, mindfulness, and value-based principles-into their routines can provide teachers with the tools to maintain physical health, emotional resilience, and a sense of purpose.

Similarly, the Happiness Index in education reflects the overall satisfaction and well-being experienced by students and educators alike. IKS fosters a culture of joy and inclusivity by promoting experiential learning, ethical values, and a sense of community. By addressing the interconnectedness of individual well-being and collective happiness, IKS offers a transformative framework for reimagining education as a space of growth, harmony, and fulfilment. This introduction sets the stage for exploring how IKS can serve as a catalyst for enhancing teachers' well-being and elevating the Happiness Index in educational settings.

Indian Knowledge System and Teachers' Well- being

1. **Holistic Approaches to Health**:

   IKS emphasizes a balance between the physical, mental, and spiritual dimensions of life. Practices such as yoga, pranayama (breath control), and meditation can help teachers manage stress, reduce burnout, and foster resilience. These practices also promote better physical health and emotional stability, creating a positive ripple effect in their teaching.

2. **Self-Reflection and Inner Growth**:

   The Indian philosophical tradition emphasizes self-reflection (svadhyaya) and inner growth. When teachers incorporate such practices, they can cultivate mindfulness, enhance self-awareness, and can build a better emotional intelligence. This, in turn, improves their interactions with students and colleagues.

3. **Value-Based Living**:

   IKS advocates ethical living through principles such as ahimsa (non-violence), satya (truthfulness), and dharma (righteousness). When teachers align their lives with these values, they experience a greater sense of purpose and satisfaction, which contributes to their overall well-being.

Indian Knowledge System and Happiness Index in Education

1. **Joyful Learning Environments**:

   IKS encourages experiential and participatory learning methods that are engaging and interactive. Incorporating storytelling, art, and music rooted in Indian traditions can make learning enjoyable for both teachers and students, increasing overall happiness in the classroom.

2. **Emphasis on Relationships**:

   Indian traditions highlight the importance of nurturing respectful and meaningful

relationships. By promoting teacher-student bonds based on mutual respect and care, IKS fosters a supportive environment that enhances the happiness quotient in education.

3. **Inclusivity and Community**:

IKS teaches the interconnectedness of all beings, promoting inclusivity and community spirit. When schools adopt these principles, they create a sense of belonging and collective growth, leading to a happier educational ecosystem.

Need and Significance of the Indian Knowledge System (IKS) on Teachers' Well-Being

The Indian Knowledge System (IKS) encompasses holistic philosophies, practices, and values rooted in ancient Indian traditions. These elements emphasize a balanced and meaningful approach to life, which can be transformative for educators. Teachers, who play a crucial role in shaping young minds, often face physical, emotional, and mental challenges in their professional and personal lives. Integrating the principles of IKS into their routines can significantly enhance their well-being, fostering resilience, purpose, and inner peace.

Importance of IKS in Teachers' Well-Being

1. **Managing Stress and Burnout**:

- Teachers face increasing stress from heavy workloads, administrative responsibilities, and student needs.
- IKS offers stress management tools like yoga, pranayama (breathing exercises), and meditation, which help reduce anxiety and improve focus.

2. **Cultivating Emotional Balance**:

- The emotional demands of teaching can lead to fatigue and frustration.
- Practices derived from IKS, such as mindfulness and the philosophy of equanimity (samatva), enable teachers to maintain emotional stability and respond calmly to challenges.

3. **Addressing Physical Health**:

- Long hours of teaching and sedentary work often take a toll on teachers' physical health.
- Ayurvedic principles and yoga promote physical well-being, strengthen immunity, and enhance energy levels.

4. **Fostering a Sense of Purpose**:

- Modern teaching can sometimes feel transactional, leading to a loss of connection to its deeper purpose.
- IKS emphasizes **dharma** (righteous duty) and **seva** (selfless service), encouraging teachers to view their work as a meaningful contribution to society.

5. **Promoting Self-Development**:

- Teachers are lifelong learners, and self-reflection is key to personal and professional growth.

- Concepts like **svadhyaya** (self-study) and introspection help educators better understand themselves and refine their teaching practices.

Importance of IKS on Happiness Index

1. **Addressing Rising Stress Levels**:

- Modern lifestyles and competitive education systems often lead to stress and anxiety.
- IKS provides tools like yoga, pranayama, and meditation, which help individuals manage stress, improve focus, and maintain emotional balance.

2. **Bridging the Gap Between Knowledge and Wisdom**:

- Education today often emphasizes academic achievement over character development and life skills.
- IKS promotes value-based education, encouraging ethical living, compassion, and mindfulness, essential for holistic happiness.

3. **Fostering Emotional and Social Connectivity**:

- The fragmented nature of modern societies has led to isolation and a decline in interpersonal connections.
- IKS emphasizes sangha (community) and collaboration, fostering inclusivity, empathy, and stronger relationships.

4. **Promoting Purpose and Meaning**:

- The pursuit of material success often leaves individuals unfulfilled.
- Concepts like swadharma (one's unique purpose) and seva (selfless service) encourage individuals to align their actions with their values and aspirations, enhancing long-term satisfaction.

Effects of IKS on Teachers' Well-Being and Happiness Index

1. **Holistic Development**:

   IKS focuses on the interconnectedness of physical, mental, emotional, and spiritual well-being, ensuring comprehensive growth and happiness.

2. **Inner Peace and Mental Clarity**:

- Philosophies from ancient Indian texts, such as the Bhagavad Gita, teach detachment from unnecessary stressors and focus on inner peace.
- These teachings enable teachers to navigate conflicts and challenges with a calm and balanced mindset.

3. **Creating Balanced Educational Ecosystems**:

   By integrating IKS principles into schools and colleges, institutions can foster environments where both students and educators feel motivated, valued, and supported.

4. **Improved Relationships**:

- Teachers who adopt IKS principles often display greater empathy and understanding, improving their interactions with students and colleagues.
- Emphasis on respectful communication and mutual growth fosters positive relationships in the school environment.

5. **Encouraging Lifelong Learning and Self-Reflection**:

   IKS emphasizes svadhyaya (self-study), inspiring individuals to continuously grow and introspect, which is essential for personal fulfillment and happiness.

6. **Aligning Education with Nature**:

   Concepts from IKS promote sustainability and environmental harmony, allowing individuals to connect with nature, which has been proven to enhance mental well-being.

7. **Instilling Resilience and Mindfulness**:

   Philosophical teachings like those in the Bhagavad Gita and Upanishads offer insights into cultivating resilience, mindfulness, and equanimity, helping individuals navigate life's challenges with positivity.

Conclusion

The Indian Knowledge System offers a timeless framework for cultivating happiness, balance, and purpose in education. By promoting holistic development, reducing stress, and fostering strong community bonds, IKS creates an educational ecosystem where students and teachers thrive. Integrating its principles into modern education not only enhances the Happiness Index but also nurtures compassionate, resilient, and self-aware individuals capable of contributing to a more harmonious society.The Indian Knowledge System offers timeless wisdom that aligns with modern aspirations for happiness and well-being. By addressing the need for stress management, ethical living, and purposeful action, IKS provides a foundation for enhancing the Happiness Index in personal, educational, and societal contexts. Its integration into daily life and institutional practices can pave the way for a more harmonious and fulfilling existence, fostering joy and balance for individuals and communities alike.

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