SIES School of Learning and Leadership Development
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Teaching Learning Innovations

Edited By: Dr A K Sengupta

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Dr A K SENGUPTA

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PREFACE

Innovation has become the norm of the present-day context in any area of endeavour. This is the only way in which one can become competitive and achieve excellence. Teaching profession is no exception to this. Innovations in teaching-learning processes enable the faculty members to remain ahead of others while keeping the students actively engaged inside the classroom.

The innovations in teaching-learning can take many shapes and forms from simple process orientation like innovating a new teaching methodology to keep the students engaged inside the classroom to as exhaustive as experiential learning and outdoor visits including global exposure. The introduction of simulations, AR / VR and other technological breakthroughs are making such innovations mind-boggling and exciting. Inspiring teachers believe in constant and continued innovations in whatever they do, big or small, in the classroom or outside. And that makes them different and unique.

Many teachers of SIES institutions have embraced the philosophy of innovations in their teaching-learning processes. At SIES School of Learning and Leadership Development (SIESSLLD), we thought of

capturing some of them through the compilation of such innovative efforts. This is the background of bringing out this book. Higher Education Forum (HEF), being one of the largest think tanks in the space of education, has supported this venture.

We are highly grateful to the Management of SIES for supporting this endeavour. We thank all the contributors who have taken their time out and shared their own experiences of teaching-learning innovations. This documentation will go a long way in strengthening academic rigour at SIES.

I personally put on record my deep appreciation to my colleague Suma who has made all the efforts in collecting the articles from various SIES faculty besides writing her own experience. I also thank our new colleague Sharanya who has put in lots of effort in handling the manuscript and editing process.

Happy reading!!

A K SEN GUPTA

March 2025

CONTENT

1

COLLABORATIVE LEARNING: THE CORNERSTONE OF ENGAGING CLASSROOMS

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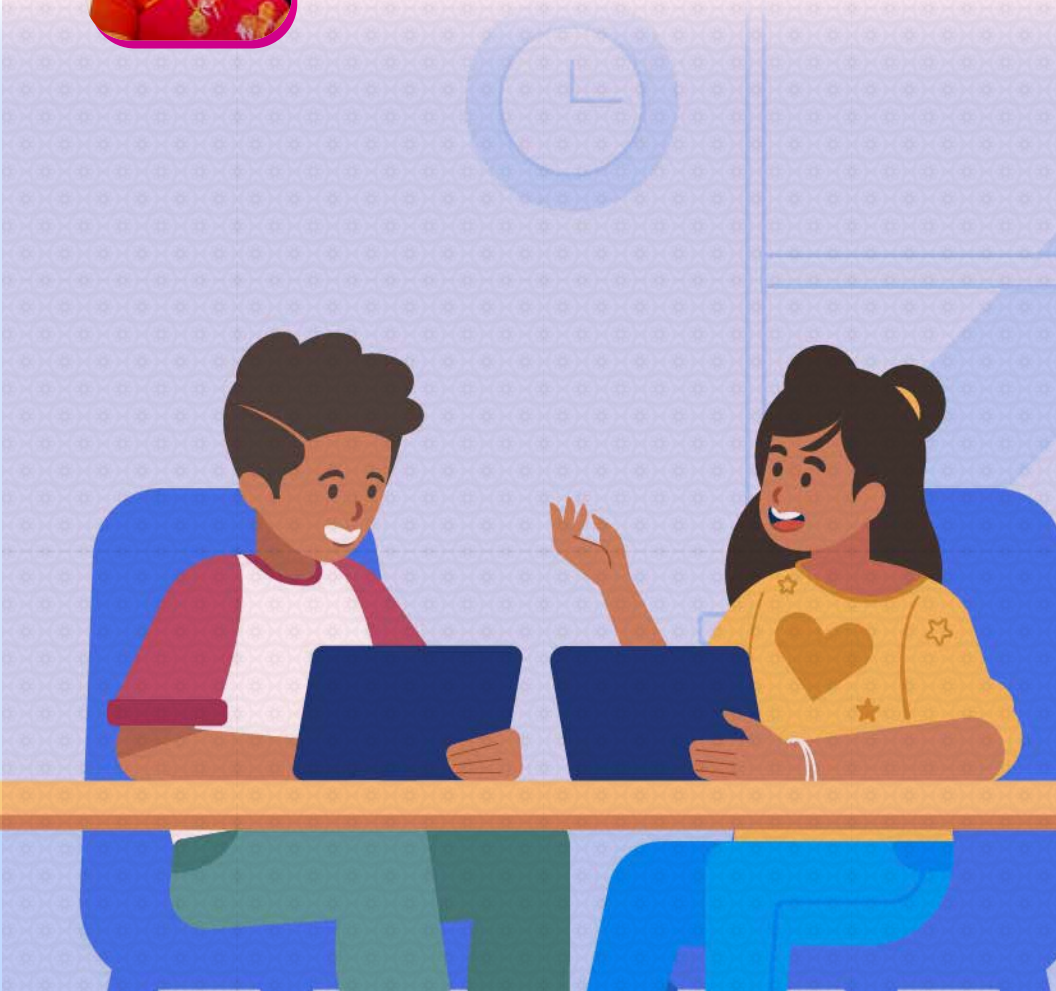

Target Group: KG to PG

Desired Outcomes

Deeper learning is a result of engaging, active, social, contextual, and student-owned educational experiences, according to research. It goes way beyond academic accomplishments. The following are some advantages of collaborative learning:

- Improvement in speech communication, leadership, self-management, and higher-order thinking.
- Fostering communication between teachers and students.
- A rise in responsibility, self-worth, and student retention.
- Being exposed to and gaining a deeper comprehension of various viewpoints.
- Promotes positive attitudes towards learning.
- Getting ready for social and professional settings in real life.

Introduction

The Cambridge Dictionary defines collaborative as involving two or more people or organizations working together for a particular purpose. Collaborative learning is an educational strategy that encourages learning through cooperation. Peer learning, often known as peer instruction, is a kind of cooperative learning in which students exchange ideas or work through issues in small groups or pairs. Learners cooperate to solve problems, finish assignments, or pick up new ideas. Rather than having students memorize facts and figures by heart, this method actively engages them in the processing and synthesis of information and concepts. Thus, learners will acquire a deeper understanding as a group than they might as individuals through clarifying their points, listening to opposing views, defending their positions, and reframing concepts.

Methodology Particulars

Pointers to keep in mind while implementing collaborative learning:

- Early in the semester/term, plan with the teaching team the collaborative experiences that can be given to the students.
- Assign group or peer work to establish expectations for the students.
- At times, choose the group to counter strengths and weaknesses.
- Define the guidelines/ground rules for involvement and participation.
- Arrange every phase of the group project.
- Give your students a thorough explanation of how peer discussions and groups will function, as well as how grades will be assigned.
- Use real-world problems.
- Assist students in acquiring the abilities necessary for success, for example, by introducing self-reflection techniques or team-building activities.
- Include peer and self-evaluations so that group members can examine their own and other people's contributions as part of group activities.

- Also evaluate each group for its merit.

How does one commence a collaborative learning activity?

- Give the task an introduction.
- Give students enough time for them to concentrate on the assignment. As you go about, answer any queries that come up.
- Recapitulate the discussion. Invite a couple of students to present an overview of their findings. Clarify any unclear points or dispel any misunderstandings. Allow questions to come up.

For larger groups, the following points can be kept in mind:

- With the help of icebreakers, team-building activities, and reflection exercises, provide students the chance to build rapport and cohesiveness within the group.
- Give students enough time to organize their group work so they may assign tasks to each other and make plans for meeting deadlines.
- Students should set ground rules. Students can draft a contract that each participant can sign. There may be agreed-upon penalties under this contract for people who break their commitments.
- Assign each group member a role, and then swap them out on a regular basis. For instance, a student may take on the roles of coordinator, note-taker, summarizer, and planner of the following actions.
- Permit students to evaluate the caliber and volume of each other's contributions. When assigning individual grades, use these assessments; however, do not let them significantly influence the student's final grade. Make it clear how grades will be affected by peer assessment.
- Periodically check in with groups but urge them to resolve their problems before approaching you for help.

Examples of Collaborative learning activities:

The following are examples of collaborative learning activities that can be carried out at various educational levels:

S. No.	Name of the activity	Class where it can be used
1	Jigsaw reading	Primary to P.G.
2	Think-Pair-Share	K.G. to P.G.
3	Group presentations	K.G. to P.G.
4	Roundtable discussions	Primary to P.G.
5	Peer tutoring	K.G. to P.G.
6	Gallery walks	K.G. to P.G.
7	Debate	Primary to P.G.
8	Role plays	K.G. to P.G.
9	Group research projects	Upper Primary to P.G.
10	Collaborative writing	Primary to P.G.
11	Joint blogging	Upper Primary to P.G.
12	Problem-based learning	K.G. to P.G.
13	Simulation games	K.G. to P.G.
14	Case studies	Secondary to P.G.
15	Group brainstorming	Primary to P.G.
16	Cooperative quizzes and games	K.G. to P.G.
17	Peer evaluation	Middle school to P.G.
18	Group reflection	Middle school to P.G.
19	Peer editing	Secondary to P.G.
20	Cooperative learning circles	Primary to P.G.
21	Socratic Seminars	Higher Secondary and above
22	Cross-age interaction	Mixed-age and class groups
23	Cooperative learning activities	K.G. to P.G.
24	Team teaching	Secondary to P.G.
25	Service learning	Secondary to P.G. and above

Impact Analysis and Conclusion

In conclusion, collaborative learning is an effective, intentional, and well-planned activity that can foster an environment that is inclusive and develop a classroom community. It can take many different forms, such as team-building exercises, project work, and games in the classroom. Care must be taken to foster a spirit of participation rather than competition

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2

CROSSWORD PUZZLE: A GAME-BASED PEDAGOGY IN TEACHING ENGINEERING COURSES

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Target Group: UG/PG students

Desired Outcomes

Develop leadership skills, team-building skills, the ability to work with the team, managerial skills, and technical subject knowledge.

Methodology Particulars

Game-based learning uses various games such as simulations, role-play games, puzzles, word games, video games, crosswords, etc. These games help to engage students effectively in classroom teaching. The teacher needs to identify a suitable game depending on the class size. The main idea behind implementing game-based learning is to make students work towards the goal, choose the options think effectively, and experience active learning instead of passive learning.

Using crossword puzzles, students will learn how to collect the data. How to communicate? How to work with the team. Pedagogy is used for studying concepts and applying logical reasoning to solve the puzzle. As a professor, teaching courses like “Wireless Networks” for Information Technology is a challenging task, as this subject is not a core subject. Conducting this type of activity creates interest in learning.

1. The crossword is designed in a 15x13 grid, and the terms and phrases used in the crossword puzzle are taken from the theory of Wireless networks, a subject of third-year engineering at the University of Mumbai. The proposed activity is conducted in the regular lecture on an online platform. In the proposed activity, the students are grouped in teams of 18 members per team, namely E1, E2, E3, and E4. It has been informed to all the teams that one student from each team is to come forward to act as team leader for his/her team by typing his/her name on the chat.
2. All the students were informed to coordinate with the respective team leaders. The team leader is informed to coordinate with the team to complete the crossword puzzle and post it in the chat. It

was informed to the teams that they would be disqualified if any team member other than the team leader posted anything on the chat. Team Leaders are advised to post the completed crossword puzzle and informed that a second chance will not be given to them once they post the puzzle. The team that posts the right answers within the minimum time will be declared the puzzle winner. The crossword was posted on the chat and the teams were to start the game.

3. The proposed format of the crossword puzzle is shown in Figure 1(a).

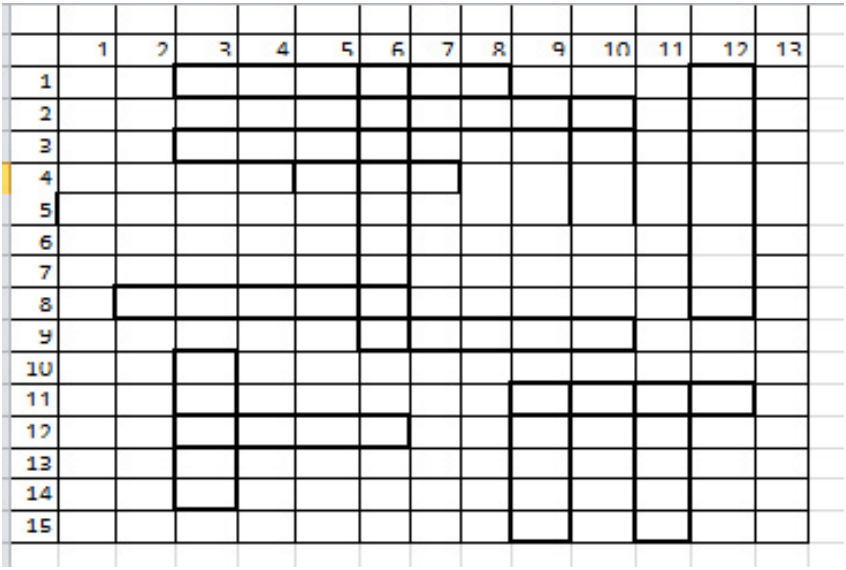

Figure 1(a): Format of the crossword puzzle

Across:
1. IEEE 802.15.4 Standard(6)
2. Access Point Protocol in Cisco Unified Network.
3. This unit is responsible for Authetication and Radio resource Management in WLL.
4. It is a security Algorithm for IEEE 802.11 Wireless Networks.
5. Switching Technolgy used in Mobile Adhoc Networks
8. This is the subform of Mobile Adhoc Networks
9. This protocol is used in Email security
11. This Unit is responsible for Air Interface in WLL
12. This is one of the first generation Cellular Networks.
Down:
3. In Clustered Network Architecture, This protocol is uesd.
6.IEEE 802.15.1 Standard 9. IEEE 802.16 Standard
10. This protocol is a set of communication rules that govern the secure implementation of virtual private networks.
11. This is an email encryption and signing industry standard widely used by corporations to enhance email security.
12. It is a communication protocol (created by extending Internet Protocol, IP) that allows the users to move from one network to another with the same IP address.

Figure 1(b): Crossword Puzzle

Feedback from Students:

The students coordinated among themselves and finally posted their solved puzzles on the chat. The evaluation has been carried out after announcing the solution key as shown in figure 2. The evaluation of each team's puzzle is done by the other team leader, and the winner is announced as shown in Figure 3. Students gained the subject knowledge, team building, leadership, and management skills from this activity. The feedback of the students is shown in Figure 4.

	1	2	3	4	5	6	7	8	9	10	11	12	13
1			Z	I	G	R	F	F				M	
2						L	W	A	P	P		O	
3			W	A	N	U				P		B	
4					W	F	P			I		I	
5	P	A	C	K	F	T				P		I	
6						O						C	
7						O						I	
8		V	A	N	E	I						P	
9						H	I	I	P	S			
10			I										
11			C						W	A	S	U	
12			A	M	P	S			I		M		
13			C						M		I		
14			H						A		M		
15									X		F		

Figure 2: Solution key

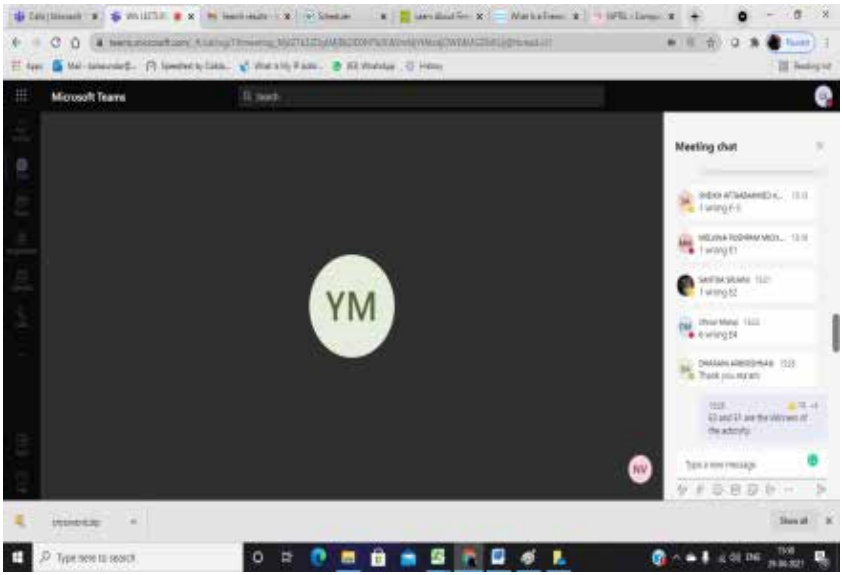

Figure 3: The winner was announced on chat

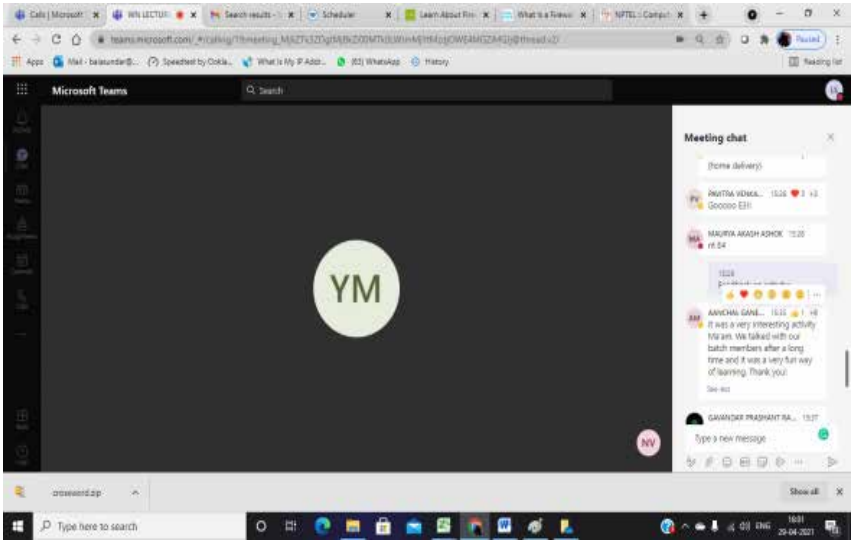

Figure 4: Students' feedback

Impact Analysis and Conclusion

Students understood the concepts well, and this exercise helped them to perform well in exams.

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3

INNOVATIVE TEACHING: HYBRID MODE OF TEACHING-LEARNING

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Target Group: Students from grades 9-12

Desired Outcomes

The outcome of the pedagogy used here enables:

1. Teachers to manage time effectively.

2. Impart skill-based learning to students.

Introduction

Education is the development of the mind, body, and spirit. It is a systematic process through which a child or an adult acquires knowledge, experience, skills, and a sound attitude. Education in the true sense must be such that it helps the students to stay on par with changing times in terms of skill development, values, ethics, and soft skills. The traits of Gen Alpha appear to be different from Gen Z. Generation Alpha has grown up in a world where knowledge is readily available online. Innovation and modern technology appear to dictate the pace of human existence and shape human personalities. Alpha children are drawn towards cutting-edge technology, and over a period, they tend to adopt it as their way of life. However, it is also important to have in-person interaction in the classroom. The connection between the teacher and the student can at no time be done away with.

Thus, it is time to adopt alternative and innovative teaching methods that will help our current generation of students to stay on par with the times and, at the same time, face life in the real sense of the term with a human heart.

Use of Digitalization in Today's Generation:

Digitalization is entering every walk of life and changing the world scenario in a big way. The field of education cannot be kept away from this concept of digitalization. Digital education stands out as the most important and revolutionary idea that could change the method of teaching and learning in a big, positive manner. The innovative use

of digital technology is beneficial to both teachers and students. By exploring new ways, educators too come up with better and more advanced forms of teaching so that the desired learning outcome is achieved.

Digital education refers to the use of technology in education by way of the usage of digital tools, online platforms like MS Teams, Zoom, etc., and interactive content to give everyone access to high-quality education and raise a generation with a wide range of skills for a globally connected world. Therefore, there is a strong need to devise and implement innovative teaching strategies that will bring the desired outcome to the learner. Studies reveal that the finest methodology for our students is the Hybrid teaching-learning process. This comprehensive method combines the best aspects of in-person and online learning, thereby creating the ideal teaching-learning environment.

Fig 1: Hybrid Mode of Learning

Methodology Particulars

The purpose of the current study is to understand the performance of secondary school students under the traditional teaching style and the hybrid mode of teaching. Random Sample method was used for this study.

In the best interest of our students, we at SIES High School Matunga have tried the hybrid method of teaching as an experiment, wherein all the students of Std 9 were taught the history chapter "Empowerment of

Women" through the online mode. This class consisted of PowerPoint presentations, YouTube videos, newspaper cuttings, etc. All the students were found to be engaged and attentive. Immediately a small online test was taken at the end of the session via Google Form. The other classes that would have been utilized to complete the theory in the traditional chalk-and-talk method were now utilized to conduct various in-person activities in the classroom. We had debates on current topics, quizzes, etc., which helped the students enrich their knowledge of current affairs and increased their thirst for reading. They learned the rules of debating and increased their creativity.

Feedback from Students:

Feedback was taken from students through a Google form. It was found that 50% of students enjoyed learning using audio-visual aids. 56% felt that concept clarity is high when technological aids are used. 59% of students felt that experiential learning leads to higher learning outcomes. 55% of students felt that learning outcomes are high when an online class is followed by face-to-face activities.

Impact Analysis and Conclusion

We at SIES High School observed that this form of hybrid education helped the students in the following ways:

1. It provided a better learning environment; they could attend the theory class from the comfort of their homes.
2. Students were kept engaged in the classroom. They saw the various presentations and videos about the chapter in the theory class and answered the questions asked during the lecture.
3. Students' performance could be tracked through analytical data. Students could see through the bar chart how many questions were answered correctly and by what percentage of students.

4. More students can be enrolled through the hybrid mode of teaching. During the chalk & talk class, 40 to 50 students could be taught at a time, but in an online class, all 5 divisions, i.e., 250 students, were taught at a time.
5. This approach allows students to learn without any worry about physical migration.
6. This mode of learning gives the teacher & students more time for skill development.

Educators must try to devise and use alternative and innovative methodologies to teach Gen Alpha. These innovative methods must ensure that they not only make constructive use of time but also captivate the interests of students. The hybrid mode of teaching is one such method that seems to be student-friendly and helps to achieve the aims and goals of education.

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4

EXPERIENTIAL LEARNING: A BLEND OF MOOCS, PROJECT-BASED LEARNING, AND INTERNSHIPS

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Target Group: Students of Undergraduate Level

Desired Outcomes

Develop project-based learning techniques amongst students to develop research acumen among students

Introduction

Experiential learning, in its simplest form, is learning by doing or by experience. It immerses students in an experience first, then promotes reflection on the encounter to help them acquire new skills, attitudes, or ways of thinking. The purpose of providing students an opportunity to "learn by doing" is to develop various skill sets in students required for industry upon graduation. Internships, lab projects, student presentations, and field projects play crucial roles in facilitating experiential learning. In this paper, we reviewed the advantages of integrating Massive Open Online Courses (MOOCs), Project-Based Learning (PBL), and internships into the traditional curriculum of undergraduate students.

MOOCs, such as SWAYAM, Coursera, EdX, Udemy, Khan Academy, Udacity, etc., are open-access, web-based courses that provide cost-effective, self-paced learning opportunities. Their integration into traditional curricula serves as a complementary experiential learning resource, accommodating various learning styles and needs. In India, this trend has gained momentum, particularly after the implementation of the National Education Policy (NEP), which mandates offering a broad range of open electives to students. Many universities have established agreements to license MOOC content for campus-based courses and now accept MOOCs for academic credit. At SIESASCS, as a SWAYAM-NPTEL local chapter, students are awarded additional credits in line with UGC guidelines as incentives for completing these courses. The institute also recognizes and celebrates the achievements of course toppers and top-performing mentors, fostering motivation among students and faculty. Top performers in the NPTEL course "Tissue Engineering" from our college have been invited to pursue a 4-week summer internship at

IIT Madras in May-June 2024. Such opportunities enhance students' skill development and provide hands-on experience in the field. Besides this, mentors have observed a marked improvement in the performance of students who participated in these courses compared to their peers in regular and competitive exams. However, the impact on students' success in entrance exams and admissions to prestigious institutions is yet to be fully quantified.

Additionally, Project-Based Learning (PBL) is a pedagogical strategy that can enhance several competencies such as academic achievement, critical thinking, problem-solving ability, creativity, and independence, and it also offers the capacity to view situations from a better perspective. It enables students to acquire retrievable and usable knowledge, develop cognitive skills appropriate for reasoning, and equip them with self-learning skills. In PBL, the teacher acts more as a facilitator of student learning than being in complete control. Thus, the enthusiasm of teachers is very crucial for the successful implementation of such blended technologies.

Methodology Particulars

In our survey-based research on 126 participants representing different colleges, the impact of the introduction of PBL at the undergraduate level was correlated to various graduate attributes and Learning outcomes like organizational, communication, and computational skills; ability to read and understand research papers; work in a team, etc. We reported an overall increase in different skill sets achieved, of which laboratory skills ranked the highest. A significant difference in the competencies was noted across semesters concerning communication skills and understanding of research papers. The total skill sets developed were found to be a function of the number of individuals involved in the research group. 90% of the respondents opined that the choice of selecting a research topic/guide can have a better impact on learning attributes (Yoosuf et al, 2020).

Research internships are also a form of experiential learning that integrates knowledge and theory learned in the classroom with

practical application and skills development in a professional setting and hence play a crucial role in building a successful career. It enables students to develop technical as well as essential soft skills like communication, teamwork, problem-solving, time management, etc. "Online Internship Program for college students", facilitated by the Indian Women Scientists Association encourages students to take up and execute science projects from their homes. We were fortunate to have collaborated with them for this program. This collaboration motivated the teacher mentors from our college to 'think out of the box' and design novel experiments for students. The students were driven to present their data, design posters, and create booklets and brochures for school students thus enhancing multiple skills. These skill-based project presentations were reviewed and evaluated by scientists and industrialists of both national and international repute. This enabled the presenter a deep learning through the preparation, presentation, and defending of his/her arguments. The participants gain effective communication skills and an open mind to various viewpoints (Menon and Amudan, 2016).

Impact Analysis and Conclusion

The outcome of this program was that the students not only gained the confidence to present their data on a public forum but also came up with an award-winning research project and a publication in a UGC care-listed journal.

Certificate in recognition of excellence in “Seaweed – The Ultimate Savior of the Aquatic World US-Indo exchange for accelerating progress towards sustainability and a net-zero world” and the publication https://doi.org/10.47815/apsr.2024.10350 bear testimony to this fact. Hence, we believe MOOCs, projects, and internships should be an integral part of the undergraduate curriculum. Indeed, these present a tremendous opportunity for the teacher to encourage active learning and kindle passion for research.

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5

CROSSOVER TEACHING: FOSTERING CREATIVITY, CRITICAL THINKING AND COLLABORATION

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Critical Thinking in Education: Fostering Problem Solvers

Target Group: Educators, Administrators, Policymakers of Pre-University and Higher Education

The target audience for this Learning Pedagogical Tool comprises educators, administrators, and policymakers working in Pre-University and higher education settings. This Learning tool is specifically curated for Teachers and instructors who are willing to explore innovative approaches of teaching, School administrators and education leaders who are focused on enhancing student success, Researchers and scholars investigating methodologies for teaching and learning, and Curriculum specialists and department chairs who develop interdisciplinary programs and courses.

Desired Outcomes

This approach trains students to apply multiple disciplines in addressing complex problems, recognizing that real-world challenges often require multidisciplinary solutions. It fosters innovative problem-solving by encouraging students to view issues from diverse perspectives, uncovering hidden connections between disciplines, and demonstrating how they complement and inform each other. By enhancing critical thinking, it helps learners effectively analyze, evaluate, and synthesize knowledge. Additionally, it supports multidisciplinary research, inspires students to develop original solutions through creative entrepreneurship, and prepares them to tackle global challenges.

The primary goal is to examine the impact of interdisciplinary teaching on student learning, critical thinking, and problem-solving skills. Identifying the challenges and advantages of implementing interdisciplinary teaching, creating a framework for designing and delivering interdisciplinary programs, and shaping educational policy and practice in this area are among other goals.

Methodology Particulars

Effective teaching in interdisciplinary settings requires unique strategies, such as establishing shared goals across disciplines, creating flexible schedules to facilitate collaborative workshops or classes, assembling teams of instructors to design and deliver lectures that integrate diverse fields, and maintaining consistent communication. This Teaching-Learning Pedagogy adopts a mixed-methods approach, integrating qualitative and quantitative techniques. The interview method is extensively used to understand the effectiveness of this teaching tool. Case studies are analyzed through narrative and content analysis methods.

Discussion

Picture a classroom where science and language arts coexist, math and art collide, and economics and history interact. The core of crossover teaching is one where traditional topic boundaries erode to provide a complex and integrated learning environment.

Educators from several topics collaborate in crossover teaching to create a cohesive learning environment. This method trains students to use a variety of disciplines to solve complicated problems, acknowledging that real-world issues frequently call for multidisciplinary solutions. To a symphony, crossover instruction brings together a variety of instruments to produce a harmonic whole. Teachers with varying specialties work together to create lessons that truly speak to their pupils. This strategy encourages original problem-solving motivating pupils to consider problems from

several angles, reveals hidden connections by illuminating how many subjects complement and inform one another, and enhances Critical Thinking by assisting learners in efficiently analyzing, assessing, and combining knowledge.

For example, history and economics teach them how historical occurrences like the Industrial Revolution and globalization affect the economy, students use algorithms and code to create music, during a geometry course, students use concepts from math, such as symmetry and tessellation, to produce artwork.

Some unique strategies should be employed for effective teaching like establishing common goals between disciplines, establishing adaptable timetables to enable collaborative workshops or classes, assembling groups of instructors to create and present lectures that bridge diverse areas of study, constant communication, etc.

Crossover education has far-reaching effects outside of the classroom. It is useful in Multidisciplinary research, encourages students to create original solutions through innovative entrepreneurship, and takes up global challenges.

Challenges like scheduling issues, disciplinary differences, and assessments which are faced by the majority of teachers can be tackled by viewing them as opportunities for learning. When multiple teachers from different disciplines evaluate the same work, they can assess it in totality.

Crossover teaching offers a transformative approach to education, dismantling disciplinary silos and preparing students for real-world challenges. By adopting this method, we can create a more integrated, relevant, and engaging learning experience. As educators, let's collaborate to develop innovative crossover teaching strategies that inspire and empower our students.

Findings

The findings of this study underscore the significance of interdisciplinary teaching in fostering a more comprehensive and integrated learning environment. By combining multiple disciplines, educators can create a rich and nuanced learning experience that mirrors the complexities of real-world problems. The survey and interview data revealed that students who participated in interdisciplinary courses demonstrated improved critical thinking and problem-solving skills, as well as enhanced collaboration and communication abilities.

Moreover, the case studies highlighted the importance of effective coordination and collaboration among educators from different disciplines. When educators work together to design and deliver interdisciplinary courses, they can create a cohesive and engaging learning experience that leverages the strengths of each discipline. However, the study also revealed challenges in implementing interdisciplinary teaching, including difficulties in coordinating across departments and disciplines, limited resources and support, and challenges in assessing student learning outcomes.

Despite these challenges, the benefits of interdisciplinary teaching far outweigh the costs. By providing students with a more holistic and integrated learning experience, educators can better prepare them for the complexities of the real world. Furthermore, interdisciplinary teaching can help to break down silos and foster greater collaboration and communication among educators from different disciplines. As one educator noted, "Interdisciplinary teaching allows us to tap into the collective expertise of our faculty and provide students with a more comprehensive and nuanced understanding of complex issues."

The study's findings also have implications for education policy and practice. To support the implementation of interdisciplinary teaching, educators and administrators will need to work together to develop new assessment frameworks, provide professional development opportunities, and allocate resources to support interdisciplinary teaching initiatives. Additionally, policymakers will need to consider

the potential benefits of interdisciplinary teaching when developing education policies and allocating funding.

Impact Analysis and Conclusion

This article demonstrates the potential of interdisciplinary teaching to transform the learning experience and better prepare students for the complexities of the real world. While there are challenges to implementing interdisciplinary teaching, the benefits far outweigh the costs. By working together to support interdisciplinary teaching initiatives, educators, administrators, and policymakers can help to create a more holistic and integrated learning environment that prepares students for success in the 21st century.

6

ENHANCING STUDENT DEVELOPMENT THROUGH OUTBOUND MANAGEMENT TEAM BUILDING ACTIVITIES- AN EXPERIENTIAL LEARNING

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Target Group: Post Graduate MBA Students

Desired Outcomes

- **Principles and Theories:** Understand the principles and theories of effective team building and analyze the importance of communication and collaboration within a team.
- **Application of Strategies:** Apply team-building strategies to foster trust, collaboration, and creativity within a team.
- **Impact Assessment:** Assess the impact of individual attitudes and behaviours on overall team performance.
- **Implementation:** Develop and implement comprehensive team-building plans applicable to real-world organizational settings.

Introduction

To enhance students' teamwork, problem-solving, creativity, and leadership skills, we organized a one-day outbound experiential learning program. The objective was to place students in various groups to tackle a series of challenges and games designed to test and develop key competencies.

During the program, students participated in a range of activities, including obstacle courses and creative problem-solving tasks. Designed as a one-day immersive experience, the program aimed to enhance key competencies such as teamwork, problem-solving, critical thinking, creativity, and attitude through engaging activities Facilitators

were present throughout the event to observe the students' performance and provide constructive feedback.

Methodology Particulars

Games Played During the Outbound Training:

The outbound training featured four dynamic activities designed to enhance various skills:

1. Bus Activity: Teams used newspapers and tape to build bridges capable of supporting the weight of two books. This activity encouraged creativity and teamwork while students worked under the constraints of time and limited materials.
2. Your Pace or Mine? (The Obstacle Race): A physically demanding obstacle course required teams to navigate various challenges, promoting coordination and strategic planning. The task tested how well team members communicated and collaborated under pressure.
3. Land on Fire: Teams used planks, tyres, and cardboard to cross an area without touching the ground, simulating a "burning" surface. This activity emphasized problem-solving and teamwork, as teams had to balance and transport items while avoiding ground contact.
4. Pass the Ball: In this game, blindfolded participants passed balls diagonally across a line of team members to reach the last participant, who then threw them into a bucket. This activity tested precision, teamwork, and the ability to work effectively under blindfolded conditions.

These activities aimed to build essential skills such as collaboration, creativity, and problem-solving through engaging and interactive challenges.

Methodology for Evaluation:

1. **Teamwork:**
   - **Observation:** Faculty members observed students participating in team activities, focusing on collaboration, communication, and contributions to team success.
   - **Assessment:** Evaluate students based on their engagement, cooperation, and interaction quality with team members.
2. **Attitude:**
   - **Observation:** Faculty assessed students' professionalism, responsibility, and willingness to engage within the team.
   - **Assessment:** Evaluate students on their commitment, respect for others' ideas, and ability to maintain a positive, supportive attitude throughout the course.
3. **Problem Solving:**
   - **Observation:** Faculty observed students' approaches to problem-solving tasks, noting their ability to analyze situations, identify root causes, and propose effective solutions.
   - **Assessment:** Evaluate students based on their problem-solving effectiveness, critical thinking skills, and collaborative approach to resolving challenges.
4. **Creativity and Analytical Thinking:**
   - **Observation:** Faculty assessed students' ability to generate innovative ideas, think creatively, and apply analytical thinking in team-based activities.
   - **Assessment:** Evaluated students on the originality and quality of their solutions, their capacity for creative thinking, and their analytical skills in complex situations.

Impact Analysis and Conclusion

1. Feedback and Guidance: Faculty observations provided valuable feedback, highlighting strengths and areas for improvement in teamwork, attitude, problem-solving, creativity, and analytical thinking. This feedback aided students in understanding their capabilities and areas for growth.
2. Individual Development: Observations helped students to identify personal strengths and weaknesses, guiding their efforts to enhance competencies and fostering both professional and personal growth.
3. Performance Assessment: Faculty observations contributed to a comprehensive assessment of students' performance, offering a qualitative view of their abilities and ensuring a fair evaluation of learning outcomes.
4. Continuous Improvement: Observations identified trends and patterns in student performance, enabling faculty to refine the curriculum and instructional methods. This iterative process facilitated continuous improvement of the program to better meet students' needs.

The Outbound Management Team Building Experiential Learning program offered a valuable one-day immersive experience that provided students with long-lasting benefits. Awards and prizes distributed acted as a motivator to the students for their efforts and achievements. By developing essential skills in teamwork, problem-solving, critical thinking, and creativity, students are now well-prepared for future career success.

7

ACTIVE LEARNING STRATEGIES TO ENHANCE TEACHING LEARNING EFFECTIVENESS

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Target Groups: Engineering Students

Desired Outcomes

1. To explore various active learning strategies to overcome traditional teaching problems.
2. To enhance students' critical thinking ability by incorporating active learning strategies.
3. To improve student engagement and learning in large classrooms in online mode.

Introduction

The twenty-first century is known as the "Age of Digital Technology and Knowledge". ICT will assist teachers in meeting the global demand for technology-based teaching and learning tools and facilities to replace traditional teaching techniques. ICT integration in the teaching-learning process has good results and a great impact on students and teachers. It is a typical scenario that while giving a lecture in class, the students are largely unresponsive, except for one or two students who are exceptionally bright and attentive. Instructors will sometimes try to keep the lecture engaging by asking some questions. ICT

integration in education refers to the incorporation of computer-based communication into the daily classroom teaching process. The Think-Pair-Share-Strategy is designed to allow students to think about a given topic by enabling them to formulate individual ideas and share them with other students.

Clicker Questions have been used in educational settings to engage students and encourage active class participation. This study explains the effectiveness of the TPS active learning strategy and Clicker Mechanism for the course Database Management System of Computer Engineering for undergraduate programs.

Methodology Particulars

I) Think Pair Share Activity:

Problem Statement: Draw the ER diagram for the Bank Management System.

Database Management System course focuses on the creation of database schema from a given ER model and then creating a database and executing queries to retrieve data from the database. For example, the problem posed to students while teaching ER diagrams and assuming that students know all basic components for construction or E-R diagrams.

ER diagram of the Bank Management System has the following description:

- The bank has Customers.
- Banks are identified by the name, code, and address of the main office.
- Banks have branches.
- Branches are identified by a branch no., branch name, and address.
- Customers are identified by name, cust-id, phone number, and address.

- Customers can have one or more accounts.
- Accounts are identified by acc_no., acc_type, balance.
- Customer can avail loans.
- Loans are identified by loan_id, loan_type and amount.
- Accounts and loans are related to the bank's branch.

The solution to the above problem is for students will construct an E-R diagram by considering all attributes that are given in the problem statement as well as mapping cardinality.

- **Think Phase:** Students will draw an ER diagram by identifying different entities, attributes, and relationships as well as incorporating different constraints.
- **Pair Phase:** Discuss the answer with a neighbour. Students will Identify parts of the answer that they have missed out on and then discuss which answer is better. The teacher will take a round in class to check whether the discussion is on the right track.
- **Share Phase:** Participate in discussion of their solution with others. Students will share their solutions as well as criticize other's solutions. The teacher will explain the correct solution so that students can identify their mistakes.

II) Clicker Questions:

- Interactive response systems, are more commonly referred to as clickers.
- Most clicker questions are framed as multiple-choice questions, the options can be expanded.
- The anonymity of clickers enables participation from students who might otherwise hesitate to verbally answer questions in class.

- During many lectures on DBMS, such clicker-type questions in the form of multiple-choice questions are conducted using polls everywhere and Mentimeter quizzes.

III) Activity Conducted:

- During many lectures in DBMS, clicker-type questions in the form of multiple-choice questions are conducted using polls everywhere. At the end of each chapter, MCQs are conducted through Google Forms.
- Student's responses are shown to students' analysis is performed by the instructor and appropriate action is taken in the form of a revision lecture.

IV) Advantages of TPS & Clicker Mechanism:

- Total involvement – Highly collaborative.
- Generate a lot of ideas quickly.
- Small groups can have quality discussions.
- clicker questions can provide a powerful tool for engaging students who are typically less confident about raising their voices in class and those who may feel hesitant about their knowledge of the material.

V) Rubric for TPS Activity:

Marks Range	Number of students In the marks range	% of students in the range
4 to 5	10	40 %
3 to 4	10	40 %
Less than 3	05	20%

Rubric for evaluation:

Learning objective	4 to 5 marks	3 to 4 marks	Less than 3
Design ER model for given enterprise application.	Design ER model with appropriate relationships and mapping cardinality	Design ER model with entities, attributes, relationships.	Identify different entities, attributes, relationships and mapping cardinality

Impact Analysis and Conclusion

Students understand thoroughly the ER modelling concept and they can apply this knowledge to solve real word problems.

The Think-Pair-Share technique is one way to incorporate cooperative learning into a classroom to allow students to actively process and develop a meaningful understanding of class material. TPS activity is useful to articulate what students have learned and their conceptual understanding of DBMS concepts. Clicker Questions are useful, in terms of student engagement, understanding of the course content, making class fun, and providing immediate feedback.

8

MARKCREATIVE JOURNAL

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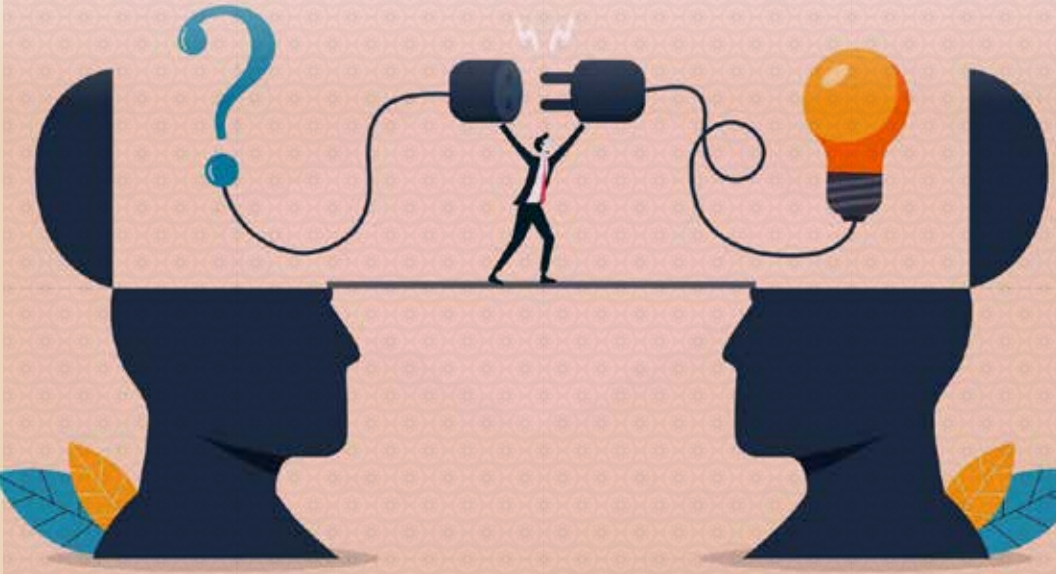

Target Group: Post Graduate Management Students

Desired Outcomes

For a management degree pursuant the right kind of skills along with the right kind of knowledge and the right kind of attitude play a pivotal role in grooming them to be better business leaders and better human beings. Through this intervention, the objective is to either develop or sharpen diverse skills in our postgraduate students that in due course act as a differentiator as well as give a competitive edge to them. Skills like creativity, comprehension, written presentation, memorizing, applying lateral thinking, design thinking, recall value, act as a ready reckoner during preparation for exams, interviews for summer internships, and final placements.

Methodology Particulars

In the first session of the beginning of the course/Trimester/Semester a brief is given to the students by the faculty about what is expected out of them in that particular subject. In this case, the subject is marketing management for trimester I and marketing management/ advanced marketing management in trimester II. The students are expected to prepare a journal" **MARKCREATIVE JOURNAL"-**in which they are expected to describe concepts (key takeaways) in their own words concerning every lecture conducted in a trimester/semester with examples other than the ones taken in the class, towards the end of the course/trimester/semester, the students are expected to submit a handwritten spiral journal with aesthetic appeal. This is evaluated and students are scored on content creativity and regularity in lectures.

The students also get to know the work of other classmates and peer-to-peer learning happens as to how and in what way other journals are better and how they can incorporate all or a few of those ideas shortly to make it better.

Since there is not a very rigid format except for a few basic guidelines' students can use their creativity to the maximum in presenting their learnings.

Feedback from Students:

Let's hear from a few of the students what they have to say about the **"MARKCREATIVE JOURNAL"**

"Shalini ma'am thank you so much for making us do this Journal-very Innovative and Unique method of helping us remember our Concepts. No other Teacher does this"

Rashmi Mahadik PGDM batch2022-24

"Ma'am I referred our MARKCREATIVE JOURNAL for my final placement Interviews. It was very helpful as I had everything in one place only. No need to refer to so many books and also since I had written my examples, I was able to recall them better "

Ritik Suwalka PGDM batch2022-24

"Shalini Ma'am I'll keep this Journal in my Office now; so that I can refer to it whenever needed during my work assignments. Ma'am thanks for this innovative way of making us write as we have lost that habit of writing down with our hands and we remember better when we write it"

Swaroopa Umare PGDM batch2021-23

Impact Analysis and Conclusion

These testimonials are enough to understand the Impact (whether Moderate or heavy) that it has created in the journey of a student not only at SIESCOMS SIESSBS but even beyond when they are there in their Corporate Life.

9

TEACHING THROUGH EXPERIENTIAL LEARNING

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All from SIES Institute of Comprehensive Education

Target Group: Teachers teaching in Early Childhood Care and Education of the SIES Institute of Comprehensive Education (SIES ICE)

Desired Outcomes

1. To increase retention, in-depth understanding of the concept
2. To apply learnings in the real-world scenario
3. To focus on process of learning rather than outcomes
4. To enhance critical thinking and problem-solving skills
5. To make learning more engaging
6. To increase collaboration amongst the students
7. To improve communication skills
8. To emphasize the interactive and participatory nature of learning
9. To develop personality and a positive self-worth
10. To foster all round development

Introduction

Experiential learning is a process of learning from real-life experiences. A dynamic approach to education, experiential learning places a strong emphasis on learning by doing and on getting hands-on experience. Through hands-on learning, students are encouraged to actively engage with the subject, as opposed to passively absorbing it from lectures or textbooks. It focuses on "learning by doing" and reflection. Experiential learning can best be defined as: "developing personal understanding, knowledge, skills and attitudes through the analysis of, and reflection on, activity".

Experiential Learning Theory was developed by David A. Kolb. His framework describes how people learn through experience. Learning happens everywhere and is a lifelong process. The method of

experiential learning facilitates learning, growth, and performance enhancement. David Kolb described the ideal process of learning in a four-step Experiential Learning Cycle:

Experiencing – Reflecting – Thinking – Acting.

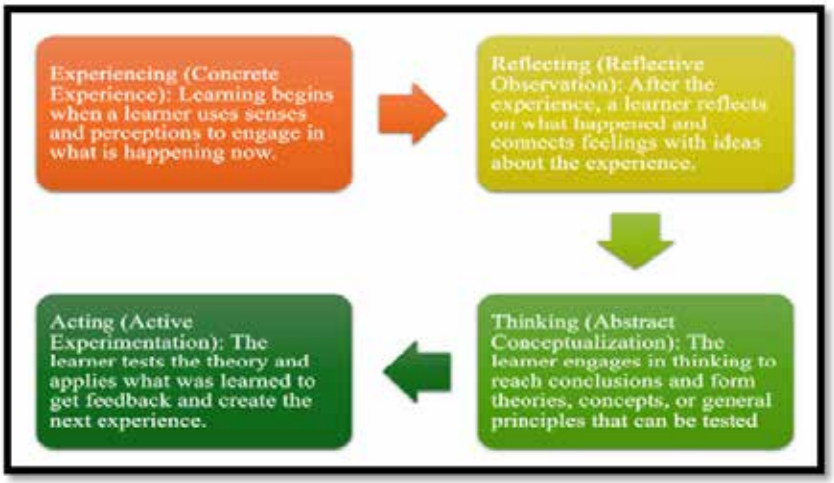

Fig.1: David Kolb. Theory of Experiential Learning

Methodology Particulars

In Experiential Learning, there are no barriers due to age, education, experience, ability, background, or culture.

At SIES ICE we believe in providing varied experiences to our teacher training students for their optimum growth and development. Learning becomes more effective by following various teaching methods –

Puppetry - This method provides a multisensory and interactive learning experience. The teacher training students are first taught to make several puppets followed by planning and presenting a value puppet show for preschool and primary children.

Project-Based Learning - Project-based Based Learning is the pragmatic outcome of John Dewey's philosophy. This method helps to explore, understand, and emphasizes inquiry, research, and collaboration. Teacher training students prepare, organize, and carry out a ten-day

project covering subjects that can be covered in a preschool classroom.

Workshops - This method provides them with hands-on experience, uses different materials, and observes the outcome. We provide a plethora of workshops at SIES ICE to give each one of our students the chance to grow both personally and professionally. Workshops on topics like music and movement, team building, enhancing self-esteem, goal setting, etc. for personal development of students. For academic development workshops like creative writing skills, numeracy, literacy, science is fun, concept attainment model, rhyme recitation, story narration, action song singing, lesson planning, and games workshops to name a few are conducted.

Role play - This method helps in enhancing understanding and application of theoretical knowledge to practical situations, and improves communication and social skills. Role plays on theory-based topics to understand the implications of various theories in classroom teaching.

Internship - This method provides practical experience to teacher training students, helps in developing class management skills, and develops cooperative education. We provide internships to first- and second-year students. First-year interns spend 75 days teaching in preschool classes, whereas second-year interns spend their time teaching in daycare centres and grades I and II.

Field visits - educational visits give students the chance to experience real-world settings and participate in practical activities. Students undergoing teacher training are taken to various schools to see various classroom settings. This aids in obtaining a general understanding of how schools operate. Community outreach programs are organized too, it help students reflect on their learning experiences.

Classroom activities – Various experiential activities are planned in class on topics like sensorial learning, play, listening, speaking, reading, writing, readiness for children, mathematics, and science.

Experiential activities for teachers teaching in foundational years help

them engage in class, improve their skills, and provide a holistic and enriching environment for children.

Feedback from Students:

"I learned valuable strategies for classroom management and student engagement. The practical teaching sessions allowed me to apply new techniques and receive constructive feedback."

-Harniit Dhawaan

"I have gained the confidence to handle children and take care of their different needs. We are taught the nitty-gritties of teaching which makes us ready to tackle anything that we may face in our teaching career."

- Mitali Joshi

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1. What Is Experiential Learning? - Institute for Experiential Learning (experientiallearninginstitute.org)
2. Understanding Experiential Learning: Definition, Benefits, And Examples - Mind VaultMastery

10

TEACHING THE TEACHERS THROUGH ACTIVITY

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Target Group: Teachers teaching in Early Childhood Care and Education of the SIES Institute of Comprehensive Education (SIES ICE)

Desired Outcomes

The activity-based approach when used to educate the teacher trainees, helps them understand child psychology. When it can be so much fun for adults, why not for children? It helps them to see from a child's perspective. Helps them understand the importance of learning through activity. Even a complex concept can be understood simply and effortlessly.

1. Helps them to plan interesting, innovative, feasible, economical, and enjoyable activities for their class children when they become teachers.
2. Helps to gain improved Academic Results because:
    a) Understanding: Increased understanding and retention are the results of active participation.
    b) Critical Thinking: Students consider options, assess results, and examine issues.
    c) Development of Skills: Relevant skills are sharpened through practical exercises.
3. It helps to increase interest and motivation: Students are motivated by engaging in activities that make learning enjoyable and intrinsic.
4. Helps to develop curiosity: Interactive learning stimulates interest and promotes investigation.
5. Helps to create a desirable learning atmosphere in the classroom:
    a) Positive Atmosphere: An engaging, dynamic classroom is fostered by active learning.

b) Decreased Boredom: During class, students are less likely to experience boredom.

6. Helps in the development of the Whole through:

   a) Social Skills: Cooperation improves teamwork and communication.

   b) Emotional Well-Being: Mental health benefits from active learning.

7. Helps to understand the practical difficulties while planning activities:

   a) Time Constraints: Planning and performing actions demand greater time.

   b) Resource Availability: It can be difficult to get resources and technology.

Introduction

Living in an age where we talk about the play way method as the best method to help in achieving the goal of Holistic development in children, makes one wonder whether the same method is applicable in the training of the teachers who would be responsible for the Holistic development of these children. Wouldn't it be nice if the teachers were exposed to activities related to their curriculum, in their training, making their learning to teach fun and resulting in an approach learned for a lifetime? The play-way approach involves activities where active engagement, inquiry, and problem-solving are the main focuses of the activity-based education approach. This method incorporates group projects, experiments, and practical exercises in addition to lectures. Below are some salient characteristics:

- Deeper understanding is fostered by students' active engagement with the material.
- Tasks applicable in the real world and practical exercises reinforce concepts.

- Group exercises foster critical thinking, communication, and teamwork.
- Students investigate original ideas and cultivate innovative reasoning

Methodology Particulars

The following are the activities that comprise the theoretical lecture and how they are executed:

1. **Creative work:** When they use creative techniques in the classroom, the trainee teachers become acquainted with them.
2. **Class assignments:** After learning about certain ideas, trainees are expected to conduct research on related subjects within the classroom and provide their findings immediately. This can be completed alone or as a group.
3. **Presentations:** When the trainee instructors are divided into groups and required to give presentations on various subjects, they encounter a lot of difficulties. How they presented, how much of the subject they could cover, how well the audience understood the subject, whether the visual aids and other teaching tools were appropriate and engaging, and whether the team members had enough experience to confidently deliver the subject. These and

other similar probing inquiries enable the trainees to address their weaknesses in the current work and make necessary changes for subsequent presentations.

4. **Lesson demonstrations:** An essential component of hands-on instruction. In front of their colleagues, the trainee instructors rehearse presenting their classes. Through this exercise, they can assess their degree of readiness, whether the allotted time is kept, whether their lesson is engaging, appropriate for the child's level, and other factors.

5. **Workshops and other events:** Participatory activities and tasks assigned during events significantly raise confidence and morale.

Impact Analysis and Conclusion

teaching preprimary teachers using an activity-based approach enables them to construct engaging, child-centered classrooms that promote holistic development.

11

PRESERVICE INTERNSHIP AS AN AID TO MAKE THE STUDENT INDUSTRY-READY

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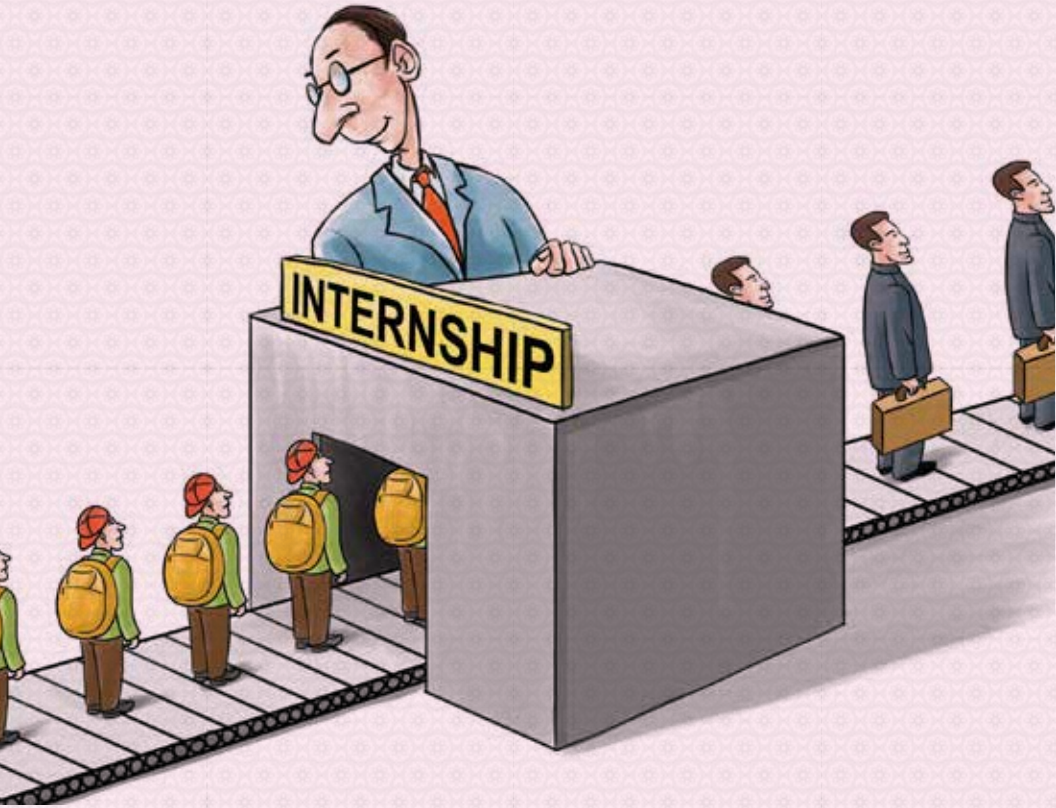

Target Audience: Students & recent graduates, Parents and guardians, Employers and HR Professionals

Desired Outcomes

The study of Internships can help students make informed decisions about aligning industry placement with their career goals

Methodology Particulars

Internships offer significant benefits for job readiness, particularly for pre-service teachers and other students on the cusp of entering the professional world. Internships serve as a bridge between academic studies and professional employment, preparing students for the demands of the workplace and increasing their chances of securing meaningful employment after course completion. This is because it enhances professional skills.

Internship plays a pivotal role in honing industry-relevant skills for students pursuing professional programs.

Types of Skill sets that develop through internship opportunities

1. People handling skillset – Communication, Accommodation, Adaptability, Teamwork, Understanding, Empathy, Collaboration, Critical thinking, decision-making, problem-solving, leadership, and constructive feedback for performance enhancement.
2. Technology skillset – Use of relevant technology – understanding computer operating systems and use of software.
3. Subject-specific skillset – For e.g., for a teacher trainee voice modulation, facial expression, gestures, and articulation are necessary. For an H.R. professional, listening skills, understanding expressions both verbal and non-verbal, and interpersonal skillsets are essential.
4. Life skills – Flexibility, leadership, initiative, self-control.
5. Initiative and self-direction: Manage time frame, independent and group work, self-disciplined.
6. Research skills to analyze, create, and deliver effectively.

21st Century skills for internship – these are skills necessary for the transition from college-level training to the workforce and employment.

The 4Cs necessary today are communication, Collaboration, and Critical Thinking. Creativity.

Creativity: can be nurtured in the learning environment. To escalate from routine work and create engaging lessons by breaking down complex topics into simple ones.

Academic knowledge – become a lifelong learner to embrace opportunities for updating knowledge and skills.

Collaboration: Team-based approach to bring out the efficacy of collective minds in problem-solving. Make adjustments for team productivity.

Critical thinking: Workplace exposure through inquiry-based learning and problem-solving activities, become avid thinkers and good

communicators. Think critically to give workable suggestions by assessing a situation and anticipating the future.

Students need to adapt/adjust to different circumstances, learn new tools, and develop resilience.

Hands-on learning / experiential – converting the classroom knowledge to hands-on learning through project-based activities.

Cultural competency skills (i.e. Communication Skills) – to interact with students from other backgrounds that can fuel future growth in the global arena. Strong and effective communication skills both oral and written.

Internship hones digital literacy: ICT is the quintessential tool of the 21st century. Today, our world has become smaller because of technology but digital and media literacy with AI tools, is the cornerstone of learning to interpret, analyze, and question the credibility of facts about information published online to differentiate real from fake.

Internship prepares you to become work-ready and prepared for life – develop of career by learning professional and work ethics – Adapt to change, take on varied roles and responsibilities.

From the 3Rs (Reading, writing, and Arithmetic), we now have the 3Cs (Critical thinking/Problem solving; Creativity and Innovation; Collaboration and leadership) additionally Cultural Understanding, Communication, and ICT- media literacy provide a career for life; which is a handy formula for success.

Impact Analysis and Conclusion

Schools welcome students who have completed on-the-job training during their course of study. It's a win-win situation for both organizations as well as graduates seeking jobs since they have the potential to execute practical knowledge, concepts, and skills.

12

POTENTIAL OF PEER TEACHING AND COLLABORATION IN IMPACTFUL LEARNING IN MATHEMATICS AND STATISTICS

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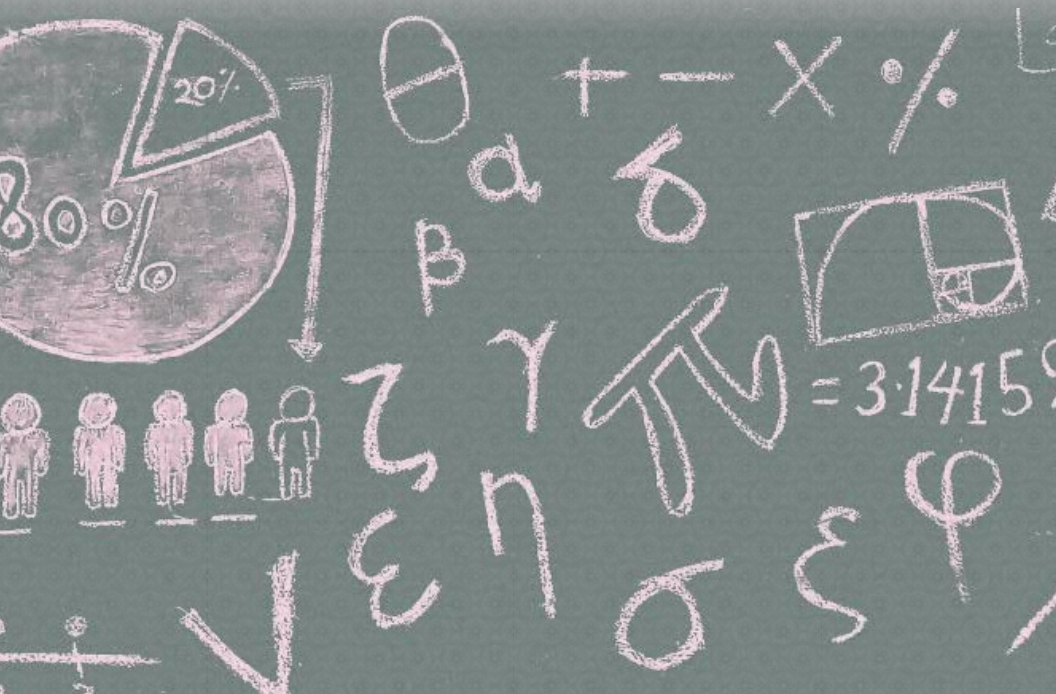

Target Group: First Year Students of BCOM having an Interest in Mathematics and statistics in SIES Nerul (Autonomous) College of Arts, Science and Commerce

Desired Outcomes

To handle the actual data and learn the interpretation of it. To encourage students to teach and learn from the discussion which builds deeper understanding of the subject through discussion.

Methodology Particulars

The online Test through Microsoft form was circulated under monitored time to the students' group of FYBCOM to check Mathematical and Statistical basic knowledge. From students who got more than 50% marks in a test, 50 students were chosen for the Peer Teaching and Collaboration. One hour thrice a week handling, and comparing data and its interpretation was conducted using MS Excel. Basic Excel formulae used.

Topic Consumer Price Index (CPI) from the syllabus taken. The website link Ministry of Statistics and Program Implementation was shared with the students to study and compare the Inflation Rate, Consumer Price index, and Consumer Food Price Index for different groups in different states, same state for Rural, Urban, and combined sectors.

Consumer Price Index (CPI) is designed to measure the changes over time in the general level of retail prices of selected goods and services

that households purchase for consumption. The Consumer Food Price Index (CFPI) is compiled as a weighted average of the indices of the ten subgroups, out of 12 sub-groups contained in the 'Food and Beverages' group, excluding 'Non-alcoholic beverages' and 'Prepared meals, snacks, sweets, etc.'. The CPI and CFPI are compiled at the All-India level for the Rural, Urban & Combined Sector.

Students learned more about the Inflation Rate, Consumer Price index, and Consumer Food Price Index.

The base period for calculation used is 2012. The time covered of data is from 2012 onwards.

Data Source: Price Statistics Division, Ministry of Statistics & Programme Implementation, National Metadata Structure (NMDS) for Statistical Products

Feedback from Students:

The information on the government website was very organized and sophisticated for the first-time visitor.

The use of MS Excel was excellent.

It was engaging and interesting.

It was helpful to replicate our knowledge with actual numbers for different states and sectors.

We need such learning for more topics from the syllabus.

Impact Analysis and Conclusion

To fortify knowledge of a particular subject little more effort than only traditional teaching is required. Peer teaching encourages students to understand the subject more deeply. Due to peer discussion abilities like critical thinking, and problem-solving capabilities, effective communication is fostered. It motivates students to understand real-world situations.

13

GLOBAL IMMERSION PROGRAM: PERSPECTIVE FOR MANAGEMENT INSTITUTES

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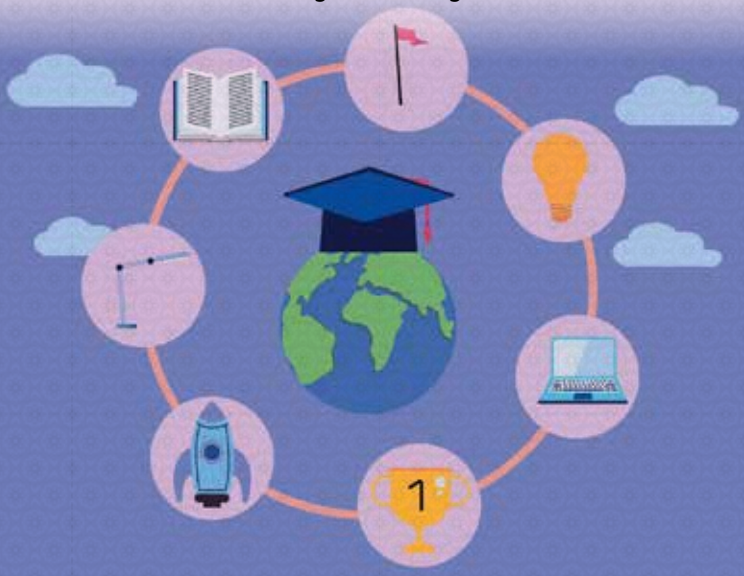
All from SIES College of Management Studies



Target Group: Post Graduate MBA Students

Desired Outcomes

Develop an international perspective among students through exposing them to international culture and working

Methodology Particulars

Markets are becoming increasingly international and inter-connected. In this landscape, it is necessary that the students particularly at the MBA level are exposed to the international style of working and culture so that they develop skills & competencies to become "global employees" as well as "global citizens". Immersion programs are meant to achieve these goals. This can only happen when the students are taken out of their home country and placed in practical situations in an alien nation, both in academic as well as corporate set up. It is more relevant for MBA students as the likely job markets and roles could be in different countries of the world and they should be well aware of the global working styles / culture. Thus, a global immersion program (GIP) is a structured approach of exposing the students to a different and unique country culture and its work settings.

The typical schedule of such an immersion program contains four distinctive aspects:

a. Visit to select educational institutions

b. Visit to few corporate houses

c. Holding alumni meet with those working at the place of visit

d. Leisure visit to some places of sight seeing

The above structure is designed to achieve the objectives stated above within the time constraints.

SIES College of Management Studies (SIESCOMS) started its journey of the global immersion program (GIP) in the year 2015 with a batch of 11 students visiting UAE for a weeklong trip. The structure was well-designed so that the students could have exposure to both the academic as well as corporate landscape. The trip included a visit to academic institutions like the University of Dubai and the American University of Sharjah. The schedule here comprised interaction with foreign faculty/students to get in-depth exposure to the academic set-up. The schedule also included a talk by the faculty of these institutions on the subjects like culture of UAE and history of growth of Middle East. The other aspect, i.e. the corporate exposure comprised visiting some of the big corporate giants like Transworld Shipping, RAK Cements, etc.

In the subsequent year (2016) a batch of 20 students along with faculty went to Malaysia for GIP. During this trip, SIESCOMS signed an MoU for students and faculty exchange programs with PUTRA Business School, Malaysia. This was an important additional achievement of the trip.

In the subsequent years, the students have been going to Singapore & Dubai.

The next stage of the immersion program would be a course or semester in a different country alongside the students of different countries studying together in a class. Empowering students through immersion programs helps in developing a global workforce for organizations. Such employees can adapt and become productive for multinational and multicultural companies with minimum teething trouble. It enables them to deal with complexity, diversity, and the capacity to function effectively in various roles or environments. In short, such students can showcase diverse skillsets and competencies.

Impact Analysis and Conclusion

Both formal and informal feedback from the students who went for GIP shows that they highly appreciated the program. It helped them to understand and appreciate international culture and made them more confident as management students. Due to the exposure given to the students in these trips and networking, the students collaborated and managed to get “international internships”. This was a positive impact. It is hoped that the benefits of GIP become sustainable at the institute

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TRADE

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Target Group: Std 9 (SSC Board)

Desired Outcomes

After completing the topic 'Trade', grade 9 students should achieve the following:

1. Understanding of Key Concepts:
    - o Grasp basic trade concepts like exports, imports, trade balance, tariffs, and trade barriers.
    - o Explain the significance of international trade and its impact on economies.
2. Application of Knowledge:
    - o Analyze real-world trade scenarios.
    - o Create and manage a mock business, plan trade routes, and engage in trade negotiations.
3. Critical Thinking and Problem-Solving:
    - o Develop solutions to trade-related challenges and present reasoned arguments.
4. Collaboration and Communication:
    - o Collaborate effectively on group projects, demonstrating teamwork.
    - o Present findings clearly and confidently in both written and oral formats.
5. Technological Proficiency:
    - o Navigate online resources to gather information on trade-related topics and current events.
6. Interdisciplinary Integration:
    - o Integrate knowledge from different subjects to gain a holistic understanding of trade.
    - o Connect historical trade practices to modern-day scenarios.

7. Awareness of Global Trade Dynamics:
    - Understand the roles and functions of major global trade organizations like the WTO.
    - Stay informed about the current global trade landscape, including major trade hubs and recent agreements.
8. Practical Experience and Industry Insight:
    - Reflect on insights gained from guest speakers, field trips, or virtual reality experiences.
    - Develop an appreciation for the complexities and real-world applications of trade.

Methodology Particulars

To achieve the desired outcomes, the following methodologies can be implemented:

1. **Project-Based Learning (PBL):**
    - Project Outline: Design projects where students create a mock international business, researching product demand and devising marketing and logistics strategies.
    - Assessment Criteria: Evaluate projects based on research thoroughness, creativity, logistics feasibility, and presentation quality.

2. **Simulations and Role-Playing:**
    - Trade Simulation Tools: Use online platforms like "Marketplace Simulations" for virtual trade.
    - Role-Playing Activities: Assign roles (exporter, importer, government official) and have students negotiate trade deals or resolve disputes.
3. **Technology Integration:**
    - Interactive Software: Use tools like Google Earth to visualize trade routes and interactive quizzes on trade concepts.
    - Virtual Reality (VR) Tours: Use VR headsets to explore global trade hubs and ports.
4. **Collaborative Learning:**
    - Group Research Projects: Investigate different countries' trade policies and present findings.
    - Peer Reviews: Incorporate peer feedback sessions where groups evaluate each other's work.
5. **Guest Speakers and Industry Visits:**
    - Guest Lectures: Invite industry professionals to share their experiences and insights.
    - Field Trips: Visit local ports, businesses involved in international trade, or trade fairs.
6. **Case Studies and Current Events:**
    - Case Study Analysis: Analyze case studies on historical and contemporary trade events.
    - Current Events Discussions: Discuss recent news articles related to trade.
7. **Competitions:**
    - Trading Competitions: Simulate trading stocks or commodities, aiming for the best portfolio performance.

8. Flipped Classroom:

- Pre-Class Assignments: Assign video lectures, articles, or interactive modules for students to review at home.
- In-Class Activities: Use class time for debates, group work, and problem-solving exercises related to trade scenarios.

Implementation Plan:

1. Introduction Week:
   - Introduce the topic with lectures and interactive discussions.
   - Assign preliminary readings and videos.
2. Exploration Weeks:
   - Conduct simulations and role-playing exercises.
   - Arrange guest speakers and VR sessions.
3. Project Development Weeks:
   - Guide students through project-based learning activities.
   - Facilitate group research and presentations.
4. Application and Review Weeks:
   - Engage in gamification and trading competitions.
   - Conduct case study analyses and current events discussions.
5. Assessment Week:
   - Present projects and peer reviews.
   - Conduct summative assessments through quizzes, tests, and project evaluations.

Feedback from Students:

Students enjoyed the activities and their participation.

Impact Analysis and Conclusion

Implementing these innovative teaching methods is expected to:

1. **Enhance Understanding and Retention:**

   Foster deeper learning and long-term retention through interactive and practical approaches.

2. **Develop Critical Thinking and Problem-Solving Skills:**

   Enhance analytical and problem-solving abilities through case studies and simulations.

3. **Increase Engagement and Motivation:**

   Boost student participation and enthusiasm through gamification and technology.

4. **Improve Collaboration and Communication:**

   - Develop teamwork and presentation skills through group projects and presentations.

5. **Build Practical and Real-World Skills:**

   Improve technological proficiency and business acumen through practical projects and simulations.

6. **Broaden Global Perspective:**

   Increase cultural awareness and economic understanding through exposure to global trade scenarios.

7. **Enhance Academic Performance:**

   Led to better academic performance and higher assessment scores through engaging teaching methods.

8. **Prepare for Future Studies and Careers:**

   Equip students with the skills and knowledge needed for future studies and careers in related fields.

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FOCUSING ON L.E.A.R.N

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Target Group: Higher education level - Management Students

Desired Outcomes

Collaborative learning, developing enthusiasm in learners, inculcating research-based learning in students, and enhancing the competency level of students.

Introduction

In today's fast-paced world, academicians constantly seek innovative ways to capture the attention of students and foster a love for learning. With my teaching experience have developed an acronym used L.E.A.R.N-Lively, Eager, Attention, Receptive, Natural which educators and learners should possess. The **energy** of the teacher to maintain a continuous spark among the learners is essential, this energy unfolds in the classroom. **Eager** - Encouraging every child to ask questions, and addressing the curiosity as required will yield better results. **Attention** – the unique techniques generate attention in classroom participation. **Receptive** – Every student becomes receptive most of the time when they are involved equally through flip classroom, games. **Natural** – The effortless approach towards knowledge enhancement is a natural process.

Through the article would like to share three such techniques used in class by management students and have received successful responses. By aiming for student engagement, we can create more dynamic, interactive, and enjoyable learning environments for students of all ages. The three techniques are flip classroom, story-telling, and games like puzzles, crosswords, and quizzes.

Methodology Particulars

Flip Classroom, Games, and Storytelling: Flipped learning has garnered substantial attention as a potential means to enhance student engagement, improve learning outcomes, and adapt to the evolving

educational landscape. As the name suggests Flipped classroom is a pedagogical approach where traditional classroom activities are inverted. In this method students conduct class and the teacher is a facilitator and observes the learning shared.

Students are divided into groups and topics are provided for each group. Students were given suggestive reading material, presentation notes, and videos to watch basis which they had to come and conduct the class for fellow learners. It was remarkable to see the enthusiasm of students taking classes and the power of ONE DAY TEACHER. Different groups incorporated different teaching-learning styles, some groups also used technology AI with the right prompts for creating videos for class interaction, and the best team continuously engaged learners in a similar way to the teacher which was appreciated by all. This allowed students to creative thinking, collaborative learning, and utilizing class time for working on activities. The student's feedback for each group activity and self-reflection on the preparation done for the flip classroom was outstanding.

Games: Games have been associated with fun and learning with fun is key USP for effective teaching and learning process. Building

vocabulary is important for all levels of education. For higher education students from the perspective of employability-good communication, critical thinking is one of the required competencies. Therefore, it is essential to enhance the student's competency by way of upgrading the vocabulary concerning the subject and general context. Word games help to build vocabulary, I have used word games like puzzles, rebus, and crosswords, related to the subject and general context during the class to ensure active learning. It also facilitates students' attention, helps them to memorize easily, and builds on concepts.

Story Telling: Listening to stories encourages engagement, sharing real-life organization scenario experiences in the form of stories connects students to the subject and develops interest in learning. After the narration questions are given for discussion where analytical and

critical thinking ability is urged on. It also prepares students to rethink how theory and practical connections can be developed.

It gives a feeling of contentment when students share their eagerness to attend the next class since they enjoy the learning.

Feedback from Students:

MMS_HR:

a) Flip classroom was one of the best activities. It helps us to understand the concept very well and know the different sides of the classroom.

b) Detailed knowledge about different learning and development topics. Very engaging, and it was an amazing activity to experience.

c) The way we were able to understand concepts differently altogether was very good. I enjoyed taking classes with the help of activities rather than all theory knowledge. Should have this type of lecture (flip classroom) more often

d) Through flip classroom getting a new perspective for explaining concepts to friends. I learned to coordinate with the group and explore engaging methods of sharing knowledge with friends. Coordinating with the group and working on the content of the topics to be shared. More such sessions are preferred.

Impact Analysis and Conclusion

Students attend all classes and actively participate.

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STEPPING STONES

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Target Group: Students of High School

Desired Outcomes

1. Teachers impart 21st century skills, life skills and value- based experiences.
2. Determine the learning experiences provided by teachers for the overall development of students.
3. Demonstrate innovative pedagogy, educational tools and techniques adopted by teachers.
4. Provide proper direction to the teaching-learning process.

"A student taught by a high-quality teacher achieves maximum learning potential." (Hanushek, 1992)

The educational scenario in the 21st century is rapidly evolving with the advent of new technologies and pedagogy is changing substantially in the tools and methods used in the learning environment.

"School is a building which has four walls with tomorrow inside." – Lon Watters.

Innovation in teaching methods in education brings excitement to the classrooms.

Introduction

'Education' is the main means of social transformation. 'Education' is a system that makes life flourish and takes it forward on the highway of humanity. Education creates 'man'. To create a 'man', a process of holistic development is required; which is possible only through 'education'. Therefore, universal high-quality education is the best way to develop the individual, society, nation and the world.

After independence, special attention was paid to education policies in India. In the coming few years, India will be a country with the youngest population in the world. It is necessary to make efforts to make India's

future even brighter than today by providing them with high-quality educational opportunities. Teaching-learning and evaluation processes are important for overall development.

"Children's learning in school depends on the pedagogical practices and content mastery of their teachers, and the success of a school depends on the quality of the teachers it provides." (Goldhaber and Brewer, 2000 and 2005, Wright, Horn and Sanders, 1997)

Methodology Particulars

- **Up-to-date knowledgeable teacher:**

  Teachers play the most important role in the achievements of students in school related activities. To make a student skilled, it is essential for the teacher to be skilled, trained and updated.

  Teachers should read as many reference books as possible keeping in mind the mental ability and pedagogical level of the children; so that the teacher remains aware of the changes in the subject matter. While teaching the children, share the experiences of higher education so that the children get inspired. Give social examples so that the children think socially. Anecdotes, stories and experiences of great personalities who overcame their circumstances and established ideals in the society, should be imbibed by the teachers. The various workshops organized by SIES, have helped in keeping oneself updated and it feels as if the purpose of life is being achieved when the children are guided on the innovative path being done by oneself.

- **Inspiration of Learning :**

  If any work is started with positiveness, then even the toughest tasks can be easily achieved with success, and in school, the 'future' exists. Therefore, if the students of higher secondary level are motivated with inspirational examples during their growing age, then they will remain motivated throughout the year and become efficient. To keep the students motivated, inspirational quotes should be pasted on the walls. When the children come

to school every day, inspirational quotes and videos that inspire them to make their goals successful directly through positivity should be shown. Inspirational movies of famous personalities should be shown to the children to inspire them to become skilled and value-based person in life.

- **Skill Development :**

  Inculcating values like '6C' along with listening, speaking, reading and writing skills in the students for language development in language subjects at the middle school level (Class 6th to 8th) and secondary school level helps in promote overall well- being of the students.

  'Language' is the most reliable medium of expression. Language has been evolving along with society. It is always changing. To

pass on this change to the next generation in the right manner, linguistics is also needed in language study so that they can enrich their language and develop themselves.

While teaching prose or poetry in the class for classes 6th to 8th, as per continuous assessment activities, by making groups of students in the class and giving them different challenges, projects like 'Selfie with success', 'learning with friends', 'subject friend' were implemented; so that children started doing the teaching-learning process very easily and with interest in an enthusiastic environment.

For those children who are not able to develop their reading skills, a new experiment was conducted to develop their reading and speaking skills. Children made a video of a passage or a stanza of any one page by reading it in front of a video recorder or camera for a month and evaluated it themselves under the guidance of a teacher and developed their reading and speaking skills to some extent.

This experiment proved to be very beneficial for the reading development of those students who could not recognize letters, who could not read due to fear and whose reading speed was slow. The interest of the students increases even more in this experiment because they themselves become witnesses to the evaluation of this reading development. Whenever they feel like it, they can look at their previous videos and understand the progress they have made till now.

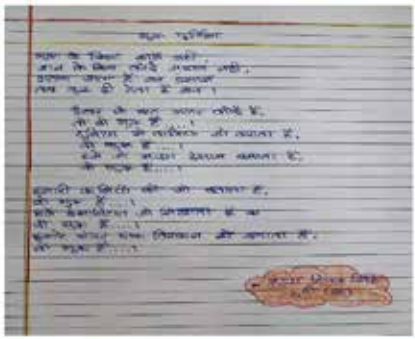
The students of std.9th and 10th were motivated to read newspapers in Marathi and Hindi to improve their language skills like listening, speaking, reading, and writing. While reading to the children, the importance of publications, year, edition was emphasised so that they can understand the changes according to the edition and its truthfulness. The spirit of research also develops in children.

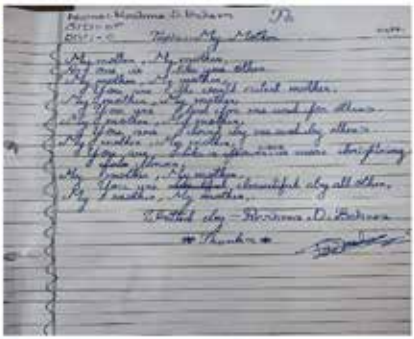
In order to develop writing skills, the students of class 9 were motivated to write on a specific topic in a limited time on a

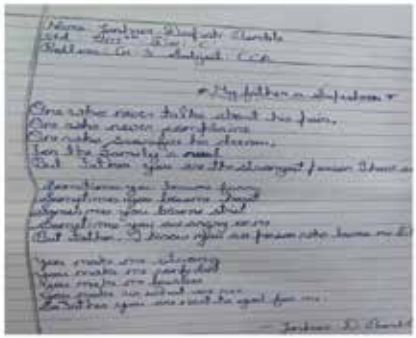
specific day of every week. Efforts were made to bring stability and coherence to it to keep the children interested. This helped in developing the skills of the children, increasing their confidence and strengthening their ability to think broadly.

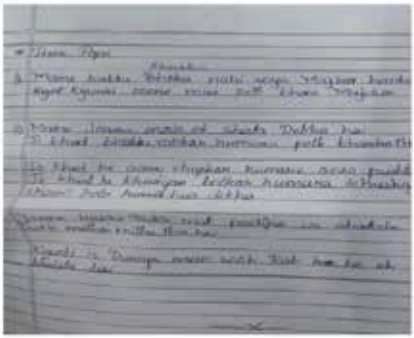
- **Co-Curricular Activities :**

  I was given CCA subject for class VIII in the year 2023-24, in which, apart from the regular school curriculum, activities like debate, dance, writing etc. were conducted to boost the morale and all-round development of the students; in which some wrote self-composed poems, while some wrote ghazals. One student wrote a new song by mixing new and old songs; someone wrote a story, while some danced. When the student comes in front of the class and presents the activities, then he and the other students are also impressed.









Impact Analysis and Conclusion

This list is insufficient to meet the emerging needs of 21st century learners and teachers; but the examples given highlight the process of learning. The responsibility of parents is also important in this process. The future of education is bright; it is playing an important role in providing new opportunities for all-round development to learners.

About Higher Education Forum (HEF)

Higher Education Forum (HEF) was promoted as an advocacy group of individuals concerned with issues and challenges in landscape of higher education in India. Individuals include representatives from all stakeholders of higher education including academicians and corporate. Sole objective of the forum is to help creation of a world class higher education system in India. This encompasses creation of appropriate structure, strategies, policies, processes and development of institutions. HEF came into existence more than a decade ago. With membership base of around 4,000, it is the largest advocacy group in the country in the space of higher education. HEF also publishes a half-yearly journal captioned "Indian Journal of Higher Education".

About SIES School of Learning and Leadership Development (SIESSLLD)

SIESSLLD is the one of the new entries in the family of South Indian Education Society (SIES) educational ventures having been launched in November 2022. It is primarily an internal competency-building institute that aims at equipping the teaching as well as non-teaching staff of all SIES institutions to get ready with the required skill sets of tomorrow. The objective is to build a world class institute that would cater to the developmental needs of internal human resources (teaching as well as non-teaching). The school also supplements the efforts of SIES institutes in equipping the students with special and emerging competencies. This is the second book being supported by SIESSLLD as a part of its intellectual capital creation initiative after the first book titled "Engaging Students: Challenges and Sharing of Experiences" received positive response.

Brief Profile

Dr. A.K. Sengupta

Dr A K Sen Gupta is a known teacher, researcher, and thinker in the parlance of higher education in India. A Ph.D. in Commerce. He is the Founder & Convener of the Higher Education Forum (HEF), the largest community in the space of higher education in India with more than 3,500 members. He is also the Co-Founder and Chief Trustee of My Retired Life Foundation (MRLF), a new-generation social enterprise dedicated to senior citizens. It has more than 350 senior citizens as members.

Dr Sen Gupta is the Founding Director of SIES School of Learning and Leadership Development (SIESSLLD), the latest initiative of SIES group of institutions. He was the Director of SIES College of Management Studies (SIESCOMS) for more than a decade. He is also the Vice Chairman of Bharatiya Vidya Bhavan's Navi Mumbai Kendra.

Some of his past assignments include Professor & Director of Bharatiya Vidya Bhavan's S P Jain Institute of Management & Research (SPJIMR), Mumbai, one of top business schools in the country, World Bank Consultant and instrumental in setting up National Banking College (NBC) as the apex banking training & research institute for Sub-Saharan English speaking Africa in Ghana, Africa and faculty at National Institute of Bank Management (NIBM), Pune, India. He started his career as a banker with Punjab National Bank and worked there for more than a decade in various managerial capacities.

Dr Sen Gupta is an avid researcher & writer with 8 books to his credit and several research articles in national and international publications.