# PERSPECTIVES ON HIGH-IMPACT PRACTICES FOR AN EXCITING EDUCATIONAL EXPERIENCE

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**ABSTRACT**
The collective future of humanity depends on focusing on the meaningful pursuit of new knowledge created from higher-order thinking skills learned from high-impact teaching strategies (HITS) adapted by the best teachers. Engaging the learners in the learning process through innovative teaching-learning methodologies, reinforcing the core concepts via active learning, and adapting tools, techniques, and ideas to comprehend domain-specific knowledge makes the classes more interesting and productive, and makes a paradigm shift in the teaching-learning process. This paper emphasizes the importance of implementing alternate HITS in higher education across multiple disciplines while conducting interactive sessions to have a substantially higher effect on student results. It will boil down to a direct interaction of the learner with the subject to a large extent to improve upon the student's performance.
**Keywords:** Teaching-learning Interactions, High-Impact Teaching Strategies, Excellence in Education, Teaching art, Topic Understanding

## Introductory Input

Engaging the learners on the learning curve and reinforcing the core concepts/principles/ideas/applications in various disciplines would enable them to grasp the topics. Learning and developing a set of instructional practices and a ladder of processes using advanced technology-driven teaching, dynamic academic edge, and vigorous assessment systems to pursue different career goals require nurturing and channeling talent as the first step under expert guidance and mentorship. The framework for 21st-century learning skills involves 4 Cs, critical thinker (solving problems), communicator (understanding and communicating ideas), collaborator (working with others), and creator (producing high-quality work). The real challenges ahead to shape a better future for humankind involve preparing individuals who are academically accomplished, professionally dedicated, emotionally balanced, morally upright, socially responsible, and ecologically sensitive. Transformative higher education involves experiencing a deep, structural shift in the basic premises of thought, feelings, and actions in human resources with intellectual potential (Author, 2017, 2016, 2015, 2014, 2014, 2013, 2013). We have to recognize the switch in the learning styles from formalistic lecturing style (pedagogy) to learner-centered flexible style (heutagogy) (Halupa, 2015, Patel, 2018). Learner maturity and autonomy are considered in a learning-based model over instructor control and course structuring in an instruction-based model. The mismanagement of important learning elements in classroom practices and the failure to monitor deliverables impact the entire knowledge transfer chain. The use of active learning techniques, exposure to diverse ideas, and high-impact practices inspire the learners and help in unique value creation in higher education ecosystem, fostering student achievement and well-being. This paper reviews best practices in higher education system with illustrative examples and explains the tools, techniques, and ideas to make classes more interesting and productive. These active learning examples demonstrate learner knowledge construction, relevance of a topic in daily life, a balance between theory and practice, and a paradigm shift from a passive to an active education system.

Teaching strategies like explicit teaching, goal setting, collaborative learning, questioning spirit, constructive feedback, meta-cognitive strategies, and internships are some high-impact practices to enhance learner engagement and are useful in subject realization in higher education institutions. Other important interactive teaching strategies include intellectual debate, peer tutoring, brainstorming, classroom discussion, seminars/symposia/tutorials/assignments, laboratory sessions, concept mapping/worked examples, role play, games, puzzle technique, case study discussion, impersonation, mnemonic technique, workshop/panel discussion/academic debate, demonstration, real-world applications, and innovative introductions/conclusions as they make the learning even more exciting (Baepler et al., 2016; McLaughlin, 1996; Fink, 2016; Knight, 2012; Orlich et al., 2010; Raba, 2017, Bomia, et al., 1997; Killen & O' Toole, 2023). We describe the active learning techniques below with illustrative examples to develop a learner-centric culture that helps break the monotony of the session. The examples of a few activities can be replicated and conducted to have an interactive educational experience, taking teaching innovation to the next level and making a strong academic representation of a topic. These special teaching techniques and tones provide a markedly different learning experience than the conventional methods in a journey beyond analyzing in the revised Bloom's taxonomy (Anderson & Krathwohl, 2001). Interestingly, exciting new educational experiences with creative and useful perspectives empower the faculty in their journey toward excellence in higher education.

  

**1. Brainstorming Technique**

It is a creative thinking technique for generating new ideas and solutions (Al-Samarraie & Hurmuzan, 2018; Hender et al., 2001; Rickards, 1999; Ritter & Mostert, 2018; Paulus & Kenworthy, 2019). It encourages new ways of thinking in problem-solving individually or collectively in response to a prompt. Individual or group brainstorming in the classroom can contribute and develop many ideas. After introducing the various types of binary relationships (one-to-one, one-to-many, many-to-one, and many-to-many) in a computer science class, the facilitator can test the learners' conceptual understanding by asking them to spell out a few real-time relationship sets. A car company selling a car product to a customer, a teacher taking a class for students, learners submitting assignments to the faculty, and students joining different courses are some of the relationships the students may identify. One can list on the board and discuss the correct responses on the merits of electric heating by forming two groups of learners. The consolidated list of points could include the absence of flue gases, cleanliness, ease of temperature control, automatic protection against overheating, high-efficiency utilization, and low cost. The facilitator can then explain the advantages of electric heating using the list generated by brainstorming.

**2. Case Study Discussion**

It is an in-depth study of exploring and analyzing a particular person, group, institution, or event over a period in a real-world context (Dart & Clarke, 1991; Welty, 1989; Gilbert & Dabbagh, 2005; Wu, 2016; Parker, 2001). It is an empirical inquiry using a rigorous research design and single or joint application of research methods to collect and analyze data. Case study analysis is an active, problem-based, learner-centered, faculty-facilitated strategy that helps develop critical thinking skills. Real or constructed problem-based case studies are useful in introducing a concept/theory, resolving conflicts, analyzing problems, evaluating proposals, understanding the gravity of an issue, and developing curiosity. In explaining the everyday applications of Ohm's law, learners can be divided into 3 groups, and ask each group to select a wire of suitable size that can withstand the ratings of a domestic geyser, an air conditioner, and a refrigerator. This activity makes the learners appreciate the relevance of the law in daily life and its significance in designing any electrical circuit. A global warming case study can be used to introduce beginners to scientific reasoning and data analysis. The chemistry of life case study can help understand health conditions like diabetes and the importance of diet, nutrition, and exercise. A case study to implement the 12 green chemistry principles as a part of the corporate social responsibility initiative of a multinational company can reveal the challenges in communicating the technicalities of the green principles like atom economy or design for energy efficiency to consumers. The case study could involve the design and development of a cancer drug from initial research to its use in humans. These sample case studies in different disciplines help learners to understand topics in real-world situations.

**3. Demonstration Method**

It is a practical exhibition and explanation of how a product/process/system works (Behnke, 1975; Giridharan & Ramasamy, 2016; Sever, 2013; Umara, 2022). Learning by observation provides an opportunity for learners to understand the topics most naturally. A demonstration would be well-suited for explaining the working principle of a battery, and it can be made interactive by asking relevant questions, ensuring learner participation. The active functional components of a lead acid battery can be demonstrated by taking a working lead acid battery from an automobile workshop in the classroom. The learner group or the facilitator can open and identify the different components of the battery system and write their names on the board. It is better to explain the function of each part of the system to reinforce learning. The demonstration can be made more interactive by asking relevant designing/logical questions on the topic at the right time holding the particular component in hand. We could encourage the learners to draw a schematic diagram of the battery and write the details of major components in the form of a table. At the end of the session, the participants should be able to identify the different parts of a battery system and explain their functions. Similarly, different materials such as chalk/glass pieces, and plastic/copper wires taken to the classroom can be used to demonstrate the two types of fractures viz. brittle and ductile types. The group of students can be asked to break the materials and write their observations on the board. The teacher can explain the ductile fracture in plastic/copper wire as the one that involves extreme plastic deformation while the brittle fracture occurs in chalk/glass by cleavage due to the tensile stress acting normal to the crystallographic planes with weak bonding. Hands-on activities using the necessary materials allow the participants to learn by doing in a more interactive way, and direct practical experience helps learners understand concepts or practice skills.

**4. Game-based Activities**

Games can be effective teaching tools because of more learner involvement, improved problem-solving, development of critical thinking, and enhanced team spirit (Pivec, 2009; Tham & Tham, 2014; Holmes & Gee, 2016; Hartt, et al., 2020; Cadiz, et al., 2023). Digital/board/word/card/video/hybrid game-based (individual/team) learning is altering education as it makes learning more engaging and interactive. It is designed to balance content area learning with gameplay and is an immersive activity promoting a state of flow. Learners can explore scientific

  

phenomena through interactive simulations like virtual chemistry experiments on titrations, weather-spreading patterns, flash-fire in explosive-reaction scenarios, challenge-response games on digital systems, or 3D models of the human body systems. A word game can introduce learners to commonly used building materials like cement, wood, brick, steel, sand, paint, and glass to help recall their properties and uses. The faculty can display a few words using a laptop that contains the name of one building material hidden in it (comprehensibility, wondrous, bicker, stalemate, polyandrous, flippant, glossary). The learners are tasked to identify the material and give the meaning of the word displayed. A snake and ladder game can be played using a board and a die to revise a topic. We have to associate each square with a question on a topic such as catalysis or network security. The entire class can be divided into two groups. Each group will have to answer the question associated with the square which is reached after moving the die. It can be passed on to the other group, if not answered. The facilitator can discuss the questions unanswered or skipped in the end.

**5. Group Discussion**

This is a structured group conversation to exchange ideas/opinions on a specific topical topic or a problem (Garside, 1996; Johnson & Mighten, 2005; Rahmat, 2017; Tsang, 2011). A moderator facilitates a panel discussion on an issue/current event. This learner-centric approach promotes a deeper understanding of a topic and increases long-term retention. Group discussion is an effective teaching technique as it helps develop critical thinking, improve focus and communication, increase retention, and share ideas/experiences/perspectives/opinions. It is a cooperative problem-solving activity that seeks consensus on the solution to a problem and enhances the ability to articulate and defend a position thoughtfully. It could be factual/opinion-based/case studies-based/abstract with clearly defined objectives, and a question outline. The group members should have basic knowledge about the topic to be discussed to become effective as a teaching methodology. The group discussions can help learners learn from each other, improve critical thinking, be more involved, and feel more confident.

**6. Mnemonic Technique**

This teaching strategy helps learners remember information by using keywords/acronyms/phrases/visual or auditory clues to connect new information to existing knowledge (Farrokh, et al., 2021; Jurowski, et al., 2015; Scruggs, et al., 2010). The acronym VIBGYOR represents the colors of the rainbow in order violet, indigo, blue, yellow, orange, red, and ABR in chemistry classes represents the fact that the acid turns blue litmus red. The use of songs, stories, or rhymes that relate to the information can be fun and easy to learn and help students retrieve information using this memory technique. My very educated mother just served us nine pizzas representing the nine planets in order Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, and Pluto. The initial letters of the sentence “faculty training in electronics communication engineering and technology” could represent the names of six basic concepts of total quality management (TQM), i.e. focus on the customer, treating suppliers as customers, effective involvement and use of the entire workforce, continuous improvement, establishing performance measures, and top management commitment. Learners can easily memorize the above sentence, recall the initial letters of the six basic concepts of TQM, and explain the listed concepts. Similarly, RAMP is a mnemonic device for recognizing hazards, assessing the risks, minimizing the risks, and preparing for emergencies in the management of chemical safety in academic laboratories.

**7. Academic Analogies**

This requires the learner to analyze a thing and transfer that analysis to another thing to understand a concept (Glynn, et al., 2012; Taber, 2013; Holyoak & Richland, 2013; Gray & Holyoak, 2021; Clement, 1998). The target analogy is used to teach the difference between accuracy and precision. Measurement accuracy is the closeness to the actual value while precision is the reproducibility of each measurement. In the target analogy, accuracy is measured by the average position of the arrows closer to the bull’s eye and precision is measured by closely spaced arrows though far from the bull’s eye. The closer the arrow is in the bull’s eye, the more accurate the measurement is, and if the arrows are closely spaced though they are away from the bull’s eye, the shooting is considered precise. Analog concepts help learners understand new target concepts by comparing them to known things. They are useful in explaining complex ecosystems/photosynthesis that is hard to visualize. The atomic system is analogous to the solar system in many ways; the central body (nucleus/sun), orbiting bodies (electrons/planets), mutual force, orbits, and distance are common to both systems.

**8. Puzzle/Jigsaw Techniques**

This methodology uses a puzzle analogy in a cooperative learning strategy for subfields of science (Bagheri, et al., 2018; Hussin, et al., 2019; Aggarwal, et al., 2023; Egiluz, 2019). After forming the students’ groups, assign smaller pieces (puzzle pieces) of the topic, and the students of one group can explain their piece using examples, analogies, or details to the other group. At the end of the given time, students in one group can exchange their solutions with the other group, followed by a discussion with a complete understanding of the topic. Three groups

  

of students can describe the characteristic features of three types of rocks and compare them for similarities and differences. Similarly, two groups of students can share their knowledge with others, wild animals' habitats, or predators to complete a common task of tabulating and discussing their role in ecosystems. Mind map puzzles can be used to learn the classification of polymers. This exercise consists of identifying each type of polymer based on the keywords/phrases/characteristic features provided on the board. Alternatively, group the types of polymers, provided in the form of stickers, by pasting them under the correct headings. Here, six criteria for the classification of polymers are listed in the puzzle, and important points specific to each class can be written on the board.

**9. Match the Columns**

The matching type test provides a way for learners to connect a word/phrase/sentence in one column (premises) to a corresponding item in the second column (responses) in several sub-discipline categories (Iriyani & Silitonga, 2013; Setiawan, 2023; Pagliaro, 2011; Sulla, 2023). We can display the table and ask the learners to match the terms in column I with the appropriate descriptions in column II. Column I-Silicon, Silicone, Silica, Silicates; Column II-a chemical compound of formula $SiO_2$, minerals containing silicon and oxygen in tetrahedral $SiO_4^{4-}$ units, a polymer with repeating units of siloxane $(-O-R-R_2Si-O-SiR_2-)_n$ where R = organic group, a chemical element with symbol Si and atomic number 14. Similarly, different types of stains (coffee, lipstick, ink, rust, grease/oil, perspiration) and methods of removal (ammonia, hydrocarbons, ethylene dichloride, citric acid, sodium hypochlorite, oxalic acid) can be listed in two columns, and ask the randomly selected learners to match the correct entry in the other column. This is a very efficient approach to assessment, covers more content in one question, allow testing of higher-order thinking skills, and provides an excellent objective measurement. The constructive role of subject experts in sharing knowledge about the topics to spark the learner's interest enhances each learner's experience and brings in the much-desired level in academic discussions and debates plays a pivotal role in promoting quality in higher education spaces like universities/institutions.

**10. Innovative Introductions/Conclusions**

The innovative introduction provides a general understanding of the overall topic, the relevance of the topic, and the specific purpose (Afdal & Spernes, 2018; Creedon, 2004; Afdal & Spernes, 2018; Sumathi, 2022; Sivarajah, et al., 2019). Water is a fundamental substance and an integral part of life. Faculty can display different apparent types of water such as raw water, turbid water, potable water, fresh water, salt water, hard water, soft water, distilled water, tap water, mineral water, alkaline water, infused water, and so on. The session on real kinds of water can be introduced by mentioning many different water types commonly found including the solid, liquid, and gaseous forms. Then select six learners to stand in other places and they can be named according to the isotopes of hydrogen and oxygen-protium ($^1H$), deuterium ($^2H$), tritium($^3H$), $^{16}O$, $^{17}O$, and$^{18}O$. Then we can ask other learners in the class to count the total number of isotope kinds of water using different permutations and combinations of the three isotopes of hydrogen and oxygen by taking the water formula as $A_2B$. The teacher can discuss the properties of regular water, heavy water, and super-heavy water. This activity results in the engagement of students, fostering active participation in the teaching-learning interactions. The session on fire classes can be concluded by recalling the six classes of fires and their source materials. Class A-Ordinary combustibles (wood, paper, cloth), B- Flammable liquids (oils, paints, gasoline), C- Electrical equipment (wire, fuse box, phone chargers), D-Combustible metals (magnesium, sodium, lithium) and K-Combustible cooking (vegetable oils, fats, grease). We can ask five learners to represent five classes of fires. One of the learners says one source of any class of fire and the other learners have to identify whether the stated source belongs to the class of fire they represent. This exercise can continue till all the sources and classes discussed during the session have been covered. The creative ways of introducing/concluding a topic to make the students understand also make them enjoy learning and find this intense experience interesting.

**11. Knowledge Test Quizzes**

A quiz is a time-tested technique to revise the main concepts related to any topic and/or test learners' knowledge interestingly and engagingly (Shafiq & Siddiquah, 2011; Romero, et al., 2021; Cook & Babon, 2017; Rothe et al., 2021). Effective questioning is a powerful tool that engages students and stimulates interest and curiosity in learning. It opens up opportunities for learners to discuss, argue, express opinions, and present alternative points of view. We get immediate feedback on student understanding, support formative assessment, and capture feedback on the effectiveness of teaching strategies. The questions can be prepared by the teacher on PPT slides which can be projected in the class using a projector system. At the end of a session, a convergent/divergent, factual/rapid-fire quiz can be planned to make the revision more effective and beneficial to every learner in the class. We can conduct innovative quizzes by forming two groups of students. One group member can ask a question on the 'chemical bonding' topic to the other group and the students in the other group shall answer the questions. The correct question and answer shall get one mark and the wrong questions/answers shall lose one mark. If one group fails to answer any question, then the other group would get the opportunity to answer and get bonus points. The groups can switch their roles after the first round. The winning group will get the chance to

  

distribute chocolates. Sample questions: i) what is the difference between primary and secondary bonds? What is meant by London Force? iii) What are the consequences of hydrogen bonding? Name the different types of secondary bonds. A quiz can be conducted on various topics using multiple choice questions (MCQs) or a rapid-fire picture quiz that can be displayed using a PPT. Conducting a clue-based quiz/lucky-draw quiz/cyclic quiz to conclude a session or a discussion followed by a picture quiz on the properties of liquid crystals/supercritical fluids would make an efficient teaching experience.

**12. Role-play/Simulation Strategies**

It is a powerful creative instructional strategy and experiential learning where learners (individual/group) take on assigned roles and act out those roles through a scripted play that enhances communication skills and develops insights (Erturk, 2015; Alabsi, 2016; Rashid & Qaisar, 2017; Stevens, 2015). Role-play allows learners to explore realistic situations by interacting with other people in a managed way to develop a participative learning experience. Students can role-play interview scenarios (interviewer/interviewee) restaurant situations (waiters/guests), and company management (administrator/worker). Students can act out the life cycle of a plant or animal and discuss what they learned. Learners can enact predator-prey relationships or dramatize their real reactions to certain problematic situations. It is better to follow up by brainstorming for solutions to the problem. The facilitator can present a problem that can be approached from differing perspectives and the group members discuss the problem by simulating the perspective of the assigned role. Symbolic role-play can be used to teach chemical reactions that are invisible and rapid where the students act as atoms/molecules holding a placard. They can hold hands indicating bond-making, move their bodies to represent the course of a chemical reaction involving rearrangement, and detach the hands suggesting the breaking of the bond. The reaction between the dioxygen molecule containing the oxygen-oxygen double bond and the carbon on heating to give carbon dioxide can be understood by role-play.

**13. Seminar Techniques**

A brief presentation by a learner on a specific topic, discussion, and question-answer session is a student-centric practice-oriented activity that helps improve reading, writing, and talking skills (Rave & Botero, 2008; Liu, et al., 2024; Gomathi, et al., 2014; Waring, 2000). Presenters can use the 'chalk and talk' method or PPT presentation technique. In student seminars, the teacher should monitor discussion, keep it within limits, and evaluate/grade based on different criteria. This method helps develop higher cognitive abilities, the ability to respond, develop a keen sense of observation, and the ability to seek clarification in the cooperative environment of the participants. It should be an integral part of student training where the exchange of ideas/facts, stimulation of thinking, and learning of specific techniques in a particular topic takes place. This high-impact practice must be cultivated, refined, and perfected in an academic setting. Important steps to ensure a confident and effective delivery include speaking practice, eye contact, images/videos, interesting points, voice modulation, slide design, and interactive presentation. In this experiential learning technique, the students will understand and remember the key concepts/principles, technical terms, relationships, and applications.

**14. Problem-based Learning (PBL) Method**

The real-world problems are used to promote the learning of concepts/principles (Peterson, 2010; Hung, et al., 2008; Kwan, 2009; Schwartz, 2013; Duch, et al., 2001). The students are assigned a problem. The PBL process is based on several steps including problem scenarios, identifying the key facts, brainstorming missing information, self-directed learning, assimilating the new knowledge, applying the information, and analyzing the results. It helps in students' motivation to understand concepts, incorporate objectives, connect them to previous knowledge, and defend decisions with logical reasoning. Student-centric activities like project/research work and case studies are typical PBL problems where they identify what we know and learn and apply to solve the assigned real-life problem through a collaborative approach and critical reasoning. All-terrain wheel-chair design challenges can be taken up by a group of students to create ways to make such a product. This approach promotes critical thinking skills, problem-solving skills, interpersonal communication skills, and teamwork spirit. A PBL framework requires examining the real-world problem from every perspective and exploring solutions from a variety of angles.

**15. Multi-media Presentations**

Multimedia presentations used in education settings include texts, images, audio, videos, and animations that are often more engaging than traditional presentations (Bochina, et al., 2014; Artal-Sevil, et al., 2018; Syafii, et al., 2019; Rusli, et al., 2014). Anecdotes, examples, statistics, personal experiences, interactive quizzes, virtual experimentations, and computer simulations make it easier for the audience to understand the dynamic content. Proper content development on various scientific topics using graphics, sound, transitions, documents, and video requires skill, effort, time, and energy to be more effective and user-friendly. This interactive presentation can hold attention, stimulate discussion, and create clarity in the subject matter to enhance learning and development.

  

It can lead to better retention via the usage of multiple senses to experience information. The key points can be highlighted using sound effects, creative visualizations, or animations increasing learning effectiveness. Multimedia presentations can simplify complex functions of the different organ systems (skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, reproductive, and integumentary) in the human body and help visual learners to understand the content better. It would help understand abstract concepts difficult for learners to comprehend and visualize.

**16. Experimentation and Modeling Practice**

This instructional strategy emphasizes the importance of learning from mistakes and taking corrective actions during experimentation/modeling (Schauble, et al., 1991; Montoya, 2017; Besson, et al., 2010; Huang, et al., 2019). They help learners develop problem-solving, time management, and teamwork skills and engage them in the learning process. It is essential to share their ideas and goal setting, collect the items required, engage with actual experimentation, and reflect on the overall process. This technique involves a cycle of four elements concrete experience, reflective observation, abstract conceptualization, and active experimentation. It is better to focus on a single concept around the topic discussed in the class in this inquiry-based learning exercise. Here, the students explore and investigate the topics actively and understand the challenges involved in putting the concerned theory into practice. Asking relevant questions and encouraging research to construct their understanding of a topic promotes critical thinking and fosters curiosity in learners.

**17. Blended Learning Methods**

Finally, match tuning of two or more methodologies fosters a remarkable learning journey in the higher education landscape (Khalil, et al., 2018; Pereira, et al., 2007; Kaur, M. (2013; Cleveland-Innes & Wilton, 2018). A blend of demonstration and discussion, using a set of questions and a demonstration, analogy followed by a set of convergent questions, a word game followed by a set of questions, a few questions based on an analogy, role play based on the analogy, problem/project-based case studies, discussion followed by picture quiz, insightful infographics followed by academic debate, and crossword puzzle designed to revise the main concepts-all are useful in topic understanding in the learning and development (L&D) sector. These innovative teaching strategies involving blended learning methods are suitable for effective teaching of certain scientific topics to support student growth. The advantages of blended learning include i) allowing experimentation with learning methods ii) using interactive media to enhance learning iii) online modules/electronic resources supplement lectures iv) active participation of students, and v) unaffected by time or geography. It is essential to promote academic content development in intensifying the impact of academic innovation involving innovative strategies to integrate traditional teaching practices with modern high-impact methods for holistic student welfare and growth.

**18. Microteaching Technique**

It involves recording a short teaching segment on a single topic/concept and then analyzing the video using a structured protocol (Göçer, A. 2016; Higgins & Nicholl, 2003; Mahmud, et al., 2013; Ralph, 2014; Otsupius, 2014; Mergler, et al., 2010). It helps teachers identify areas of growth, experiment with new strategies, prepare systematic lesson plans, develop self-confidence in class management, eliminate subject errors, and improve overall teaching practice. The microteaching cycle can help students to present short lessons in the classroom. The process of microteaching involves the following steps; planning, lesson selection, preparing teaching materials, feedback, revision and practice, and repeating the process to gain mastery. Microteaching can be practiced to build stronger teaching skills to improve classroom teaching performance. It helps in the development of new skills in learners and emerging teacher trainees to gain confidence and enables them to master high-impact teaching practices under controlled conditions. High-impact educational practices discussed above are highlighted in **Figure 1**. [ Figure 1 Near Here]

**20. Concluding Remarks**

The art of awakening the natural curiosity of young minds by providing the conditions in which they can learn in the form of stories/quizzes/ innovation activities fosters excellence. Thinking and analyzing abilities developed from the teaching-learning process flow in young minds which connects daily life with career goals stretching the limits of one's imagination. We have to implement active learning techniques in classrooms that are more effective in embedding concepts into their long-term memory and create capabilities of analyzing problems by linking learning across disciplines, sharing ideas and solutions, working together to reach a common goal, and new specific approaches to innovation and invention as a part of long-term higher education reforms using the nuts and bolts of teaching practice, advancements in pedagogy, educational psychology, and cognitive research outcomes. Technology-enhanced learning innovations help capture the attention of learners, and learner involvement in the teaching-learning process, ensure deeper student learning, keep the spark of motivation ignited, achieve a paradigm shift in the teaching-learning process, and provide a global outlook. Those who step outside their comfort teaching zone and explore new ideas often achieve the most important milestones in their career.

  

Innovative teaching learning assets empower faculty in their journey toward excellence and enhance the quality of higher education.

The most powerful tool to change the world is higher education where the learners are actively encouraged to venture beyond their safe space to reach greater heights. High-impact teaching-learning interactions are a major factor in transforming the nature of higher education and shaping the new generation via a continuous learning process involving high-tech student-centered strategies and improvement in learning outcomes that will enhance the quality of higher education. These modern teaching methods involve changes in educational approach making learning more interesting than traditional methods. Using the 5E framework of engagement, exploration, explanation, elaboration, and evaluation helps implement several HITS. Despite the challenges of today's teaching style, one can remain capable of being productive, relevant, impactful, and fruitful by adapting HITS in academic settings and allowing the younger generation to learn from past experiences and knowledge. A multipronged approach including content development and implementation committee to develop comprehensive strategies in inspiring teaching-learning excellence for the sector is suggested to enhance the quality of the higher education. These instructional strategies, when applied effectively can help students gain a deeper understanding of the topics and encourage critical thinking. The perspectives presented above provide opportunities for personal practice, a unique approach, teaching philosophy, and culturally responsive teaching to develop high-impact teaching culture.

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