

Implementation Strategies of Pedagogy in Making Effective E-Learning Practices

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Abstract—Teaching and learning is a complex process which requires careful planning, assessing of individuals and the situation, and selection and demonstration of appropriate instructional strategies. To bring up quality in the learning the teacher should be more skilful in using these strategies. Most of the pedagogical strategies applied to the traditional learning are applicable to e-learning with very little differences. Those strategies are like motivation (ARCS Model), structured content to keep up the student's confidence, moving from abstract to concrete, etc., connecting prior knowledge to the new knowledge with help of reflective journals, blogs, etc., making learning meaningful by connecting the content to the real life situations, fostering reflective practice by increasing the visual interest by adding photos, videos, audio clips, graphics, animations, including emotions, usage of thinking tools like concept mapping, graphic organizers, etc., catering the individual differences by mixing up the mastery and developmental tasks, which definitely helps enhancing e-learning. But as in any case, there are few drawbacks in implementing all these strategies in practice. But beyond which as teacher if anyone starts implementing will get to know the flaws and loose ends as well as the possible solutions.

Introduction

Teaching and learning is a complex process which requires careful planning, assessing of individuals and the situation, and selection and demonstration of appropriate instructional strategies. Teachers play a crucial role here in the process of learning. What and how the teachers do, has paramount importance to bring up the quality in learning. Effective teaching is about what students learn. The pedagogical dimensions are not a single formula that teachers need take into account without thinking. It is important to understand the interconnectedness of these various dimensions that would assist teachers to bring quality teaching into their classroom settings. Thus, teachers have to be skillful in using the pedagogical strategies. Most of the pedagogical strategies applied to the traditional learning are applicable to e-learning also. However they are one and the same with a very little difference for the e-learning environment because of the heavy usage of the different technologies from the traditional learning environment.

Few of the pedagogical dimensions discussed in the National Curriculum Framework (NCF) to enhance the quality of learning practices, are:

- Creating a Positive Learning Environment
- Connecting Prior Learning to New Learning
- Making Learning Meaningful
- Fostering Reflective Practice
- Catering to Individual Difference

For the enhancement of the quality of e-learning practices the strategies to be implemented for above dimensions are discussed below.

Strategies for creating a positive learning environment

A positive learning environment improves the quality of students learning and achievement and enhances positive behavior. The strategies for creating a positive learning environment are as follows:

Laying ground rules: Teachers need to establish ground rules of behavior as early as possible and keep them consistent to avoid classroom management issues. It should be based on mutual agreements, discussions, reflection of student's opinion and negotiation. By involving students in rulemaking teachers will achieve full acceptance of rules such as careful listening, giving up from interrupting others, punctuality and respect for fellow students.

Motivation: Some common strategies that stimulate student's motivation and ensure students' success by assigning tasks that are neither too easy nor too difficult include, like, helping the students find personal meaning and value in the material, creating an atmosphere that is open and positive, helping the students feel that they are valued members of a learning community, etc. ARCS is an acronym that identifies four basic elements of motivation, originally published in 1987 by psychologist John Keller:

Attention This is essential. If a teacher can't gain and keep the learners' attention, he has no hope of motivating them, much less teaching them anything. With e-Learning, the teacher must employ tricks like animation, emotional stimuli, and storytelling to maintain learner attention.

Relevance There is also little hope of success if the learners don't know why it's important for them to learn the information contained in the e-Learning courses. As with traditional face-to-face learning, it's best to make it clear up, why it's important to know this information.

Confidence If learners do not feel they're capable of achieving the learning objectives, their motivation levels will decrease. To help with learner confidence, always indicate up front how long it will take them to complete the session.

Satisfaction Learners feel a greater sense of motivation when they anticipate some reward for their efforts. This could be a simple certificate or verbal recognition from a superior, or might include steps along a path to a raise or promotion.

Set high but realistic expectation for the students: This means that the standards set by the teachers are high enough to motivate students to do their best but at the same time not so high to de-motivate and frustrated the students from achieving their tasks.

Help students set, achievable goals for them: Unrealistic goals can frustrate and disappoint students. Teachers should focus on their continued improvement; the aim should not just be achieving a higher grade. Teachers should also help the students to evaluate critique and analyze their work and learn through their strengths and weaknesses.

Express your expectation: Help your students to figure out what is expected of them. Reassure students that they can do well in your course, and tell them exactly what they must do to succeed.

Strategies in structuring content

A well-structured e-Learning piece is more motivating because it addresses the "C" in the ARCS model: confidence. The audience will feel more confident about completing the learning session if they can visualize the overall structure of the piece. Learner confidence is also related to the length of the sessions we create. Research shows that on average, your learners will only be able to pay close attention to your content for about nine to ten minutes at a time. There are many different kinds of structures a teacher can use to build the e-Learning courseware, like:

- Move from general to specific,
- Move from abstract concepts to concrete examples, and
- Have an introduction, body and conclusion.
- A random assortment of facts can be very dull, but interest levels increase rapidly once the instructor put them into a logical, coherent structure.

Strategies in connecting prior knowledge to new learning

Connecting prior knowledge to new knowledge creates a platform to accommodate new knowledge, skills and attitudes and provides opportunities to build a broad base of knowledge by providing access to a wide variety of materials.

Graphic Organizers or Mind Maps: instructional tools used to illustrate prior knowledge.

Questioning Technique: Questioning is the key element in each of the building block of constructivism. Categories of questions are guiding, anticipated, clarifying and integrating.

Reflective Journals or Learning Logs: Journals can be used to assess the process of learning and student growth. They can be open-ended or the teacher can provide guiding, reflective questions for the students to respond to. These often provide insights on how the students are synthesizing their learning.

Background knowledge probe: This is a short, simple questionnaire used at the start of a new unit or a lesson. Teachers need to consider what students may already know about a new concept, subject, or topic.

Minute paper: In this technique teacher asks students to submit comments related to given questions.

Annotated drawings: In this students are asked to draw their ideas for a concept or a question, the drawing provides an insight into the thought processes of the students. Through the use of the drawings, teachers could discuss students' ideas with the teachers and each other.

Blogs: Here, students choose their own blog to record their learning on a specific topic. A group of learners could choose to share a blog and read, write, challenge, debate, validate and build shared knowledge as a group.

Strategies in making learning meaningful

Making learning meaningful promotes higher order thinking, problem solving skills, student's engagement and relates what student is learning to real world problems and their lives.

Present new concepts in real-life (outside the classroom) situations and experiences that are familiar to the student:

- Give examples in student exercises to include real, problem-solving situations that students can recognise as being important to their current or future lives.
- Give opportunities for students to gather, analyze their own data and guide in discovery of the important concepts.
- Provide opportunities for students to gather, analyze and present their own data for enrichment and extension.
- Provide opportunities for students to apply concepts and information in useful contexts, projecting the student into imagined futures (e.g., possible careers) and unfamiliar locations (e.g., workplaces).

- Encourage and expect students to participate regularly in interactive groups where sharing, communicating, and responding to the important concepts and decision-making occur.

Strategies in fostering reflective practice

Reflection strengthens and encourages learning and allows learners to recognize their achievements or strengths and areas that need improvement. Reflection makes it possible for the learners to actively engage in authentic experiences and discover on their own, what real learning is. Students develop a range of skills through reflections such as interpreting, analyzing, evaluating, inferring, explaining and self-monitoring and become active players in constructing knowledge.

Increase visual interest:

Perhaps the best way to enhance learner motivation is to make sure the courseware you develop looks appealing to the eye. This can be as simple as a nice HTML treatment based on the principles of good graphic design or as elaborate as a fully scripted video with professional actors and high production value. The most common ways of adding visual interest to an e-Learning program includes:

Photography The use of photographs is one of the most common ways that e-Learning designers add visual interest to their programs. In order to have impact, it must directly represent one or more key elements of the content. The quality photograph that actually portrays one of the concepts to teach can be very effective in enhancing learner motivation.

Video If done correctly, a short video clip greatly enhances an e-Learning production. The lesson here is to make sure the visuals support the message of the content. Video production is expensive, difficult, and time-consuming.

Graphics A nice visual display of quantitative information can be very effective at increasing the visual interest of the content. It can be as simple as a two-dimensional Excel chart; indeed, the best rule to follow with graphics is, the simpler the better.

Animations Perhaps the best way to increase visual interest while enhancing learner motivation and retention is through the use of simple animations.

Incorporate emotion Some neurologists suggest that emotion plays an important role in memory.

Use of thinking tools: In order to foster reflective practice it is important to identify ways to support thinking among the students. Students could develop their thinking through the use of thinking tools such as mind maps, concept maps and graphic organizers. Using thinking tools allows students to reflect on the relationship between concepts/ideas.

Use of learning logs, blogs: Learning logs and blogs can help students to continuously reflect on their learning. Learning log is a personal record of students own learning which focuses on

the student's experiences, thoughts, feelings and reflections. It helps the students to record, plan, develop, think, reflect and give evidence of their own learning.

Use of problem based/project based learning: When students are given opportunities to explore real-world problems and challenges, in a project, it gives them a specific purpose and hence becomes unique. Their work is based on research. The work is time bound and needs to be completed within the stipulated time. When it is done in this manner students develop thinking skills and reflect on their work and adjusts them as they go along.

Using SWOT analysis to support different ways of thinking and learning: The SWOT analysis provides a basis for decision-making and problem solving. Students may therefore find the analysis helpful in tackling problems and issues they come across.

Developing self and peer assessment skills: Self and peer assessment involve students thinking about their own learning using a set of standards or criteria to apply to their task and making judgments about the extent to which they have met these criteria or standards. In such a case, the students need to understand the set of criteria or standards used and make judgments. The process therefore involves learning, understanding and reflecting on their learning.

Strategies in catering for individual differences

Catering to individual differences refers to varying and adapting instructional approaches (including, content, process, product and the learning environment) in relation to individual and diverse student needs. In order to cater for such individual differences, differentiated teaching and learning approach could be used. It provides students with multiple opportunities and options to take in information and process them. It maximizes each student's growth and individual success by meeting each student where s/ he is and assisting in the learning process.

Moving from easy to hard: For effective understanding it is crucial that teachers plan learning from simple tasks and move on to more complex tasks.

Using Bloom's Taxonomy: Three areas of Bloom's taxonomy need to be looked into:

Cognitive: mental skills (Knowledge)

Affective: growth in feelings or emotional areas (Attitude)

Psychomotor: manual or physical skills (Skills)

Teachers need to consider how to use the various levels in designing tasks.

Mix of Mastery and Developmental Tasks: A mix of developmental and mastery tasks ensures that weak students as well as more able students are catered to. Mastery tasks refer to tasks that all learners can master in a short period of time regardless of their prior learning. Mastery tasks help to

build the self-esteem, confidence, and motivation of weak students. Developmental tasks refer to tasks that develop the knowledge, skills and values required for academic success as well as the world of work. These tasks develop the skills required for progression to the next educational level. They also create deep learning that is real and understanding.

Conclusion

The strategies are the most useful for the teachers to improvise the e-learning practices. Teachers could use these strategies and reflect on their current teaching practices to bring appropriate positive change. This is simply a try out to pull together some of the current best teaching practices that are supported by different researches. Teachers need to familiarize themselves to the forms of thinking, planning, delivering and reflecting these strategies. There may be possibility that some of things mentioned here are things that they have come across before or are already doing in their classroom for effective learning.

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