Instructional Models For Enhancing The Performance Of Students And Workforce During Educational Training

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Abstract: In this paper three main models are disuses in detail and also explain about its implementation in class room management, during lesson planning how instructor can implement these models in the class, by using them how any company can train their workforce for enhancing their skills and performance. Learning theories which are able to explain a specific topic with respect to its subject and context are called as methodologies. Methods can be defined as a combination of a teacher's organized schemes which make learning easy and quick; it includes procedures based on approaches. Techniques are the directions to follow the process in order to ensure learning. Teaching models are responsible to define the methods of teaching and their strategies, which are consequently based on the teaching approaches. Various teaching models have been proposed by many academicians and physiologists, who help the teachers to acquire proper plans to enhance the learning capabilities of the learners and at the same time, allow them to design their course contents and syllabus more efficiently. Form the brief discuss research conclude that these three models are very effective for successful training and instructional design and for enhancing the performance of students and workers in fields and industries.

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1. Introduction

It is possible to acquire the desired outcomes effectively by carrying out the defined procedures described in a specific teaching model. There are numerous teaching models present in the literature. Some of these are newly proposed, while others are the typical ones already present. There are some new ideas being presented in the latest proposed models and some of them modify or improve the conventional ideas. But the most important thing is to serve the good cause of learning by innovating new thoughts and implying novel teaching models to improve the learning process. They should fulfill the needs and requirements of today's' students, while analyzing and identifying the problems and provide the solutions, accordingly.

Learning theories which are able to explain a specific topic with respect to its subject and context are called as methodologies. Methods can be defined as a combination of a teacher's organized schemes which make learning easy and quick; it includes procedures based on approaches. Techniques are the directions to follow the process in order to ensure learning. Teaching models are responsible to define the methods of teaching and their strategies, which are consequently based on the teaching approaches (Kamaruddin, 1993).

A range of teaching skills are presented in a teaching model to improve the learning process in a classroom. Nowadays, various teaching models are being innovated to support teaching. Teaching models are developed, basically, to educate and train the

teachers to adapt diverse strategies and techniques to enhance and ensure a prospective learning atmosphere. Various teaching models have been proposed by many academicians and physiologists, who help the teachers to acquire proper plans to enhance the learning capabilities of the learners and at the same time allow them to design their course contents and syllabus more efficiently.

Strategic Instruction Model (SIM) For Educational Training

The Strategic Instruction Model (SIM) approach has been formed and intended to facilitate the learners who possess fundamental word identification abilities. In some cases, some students face problems to cope up with the class lectures and could not find it easy to understand, what has been taught. Technically speaking, First of all they need to "learn how to learn". SIM helps such student to get along with the classroom routines and also allow the teachers to make sure, if the students are able to follow the lecture contents and can carry through the standardized syllabus literature. Consequently, this helps the students for the future education also, when they go to higher levels of education.

It can be simply extracted that SIM aims to encourage efficient techniques of, learning and teaching, of critical content in schools. It enables the teaches to decide about the significance of the literature and their priorities, accordingly, It also allow them to analyze the common problems of the students in the process of

learning and what tactics can be used to overcome them, what approach is more suitable to support the learning in class. SIM empowers the teachers of school level and up until post-secondary levels, including colleges and even some workplaces.

Several SIM Assumptions

The usefulness of the Strategic Instruction Model can be evaluated based on these characteristics:

- a) It can assist a majority of youngsters and also older low-achieving students to learn effectively and efficiently, by themselves in the typical learning.
- b) A teacher who had earned SIM training is responsible to educate low-achieving young students, as well create those policies that will help them to learn by their own.
- c) The content of the lectures must be designed as such that serve to promote "strategic behavior" and

to convey the lectures in such a manner which is convenient for the students to understand and at the same time easy to remember.

d) All strategies and approaches should be designed and developed while taking major feedback from the students themselves. They should be the one to decide that what tactics are going to work for them better, and they should choose what help do they need along with these strategies.

In conclusion, the Strategic Instruction Model (SIM) is a process of learners' or students' learning plans and teachers' instructional procedures. SIM is being used by generally teachers to support them work with their struggling students.

A quicker Look at SIM based Strategies

Below in table 1.1 is a listing of the topics included in the strategies based on SIM:

Reading	Word Identification, Self-Questioning, Visual Imagery, Paraphrasing Strategy.			
Studying & Remembering Information	Studying & Remembering Information FIRST-Letter Mnemonic, Paired Associates Learning, LINCS Vocabulary.			
Writing	Sentence Writing (Fundamentals), Sentence Writing, (Proficiency), Paragraph Writing, Theme Writing (Fundamentals).			
Improving Assignment & Test Performance	Assignment Completion, Tutoring, Test-Taking.			
Efficiently Interacting with Others	A Classroom Participation Strategy			
Cooperative Thinking	THINK (Problem Solving), LEARN (Learning Critical Information), and BUILD (Decision Making.			
Community Building	Following Instructions Together, Organizing Together, Taking Notes Together, Talking Together.			
Strategies for Math	Self-Advocacy Strategy, Possible Selves, Strategic Math Series.			
Teacher Teamwork	SMARTER.			

2. ADDIE Model For Educational Training

The ADDIE model is the standard practice usually used by instructional and training development. ADDIE model constructed on the five phases and they are listed below:

- 1) Analysis.
- 2) Design.
- 3) Development.
- 4) Implementation.
- 5) Evaluation.

ADDIE model is very flexible guide for constructing very active and effective training and Instructional designing. ADDIE is the most commonly used design model for training sessions.

ADDIE is the approach of receiving feedback while instructional materials are being created. ADDIE is very effective model for instructional designing and also to save time and money. Instructional theories execute an important part in the design of instructional materials.. In the ADDIE model instructional designing

method, all phases have an outcome that involve into the later stages.

Analysis Phase

In the analysis phase of this model, problem should be simplified and well-defined. In this phase of ADDIE the developer should know very well about the audience or learners needs, objectives and content required before instructional design. In This Initial phase also analyze performance and achievements of Learner and training purpose and its expected outcomes.

Some of the relevant questions are listed below:

- Who is the audience?
- What strategy you can use for them?
- What do the learning audiences already
- know?
 - What they want to learn?
 - What are the delivery choices?
- What is the timeline for project completion and milestones?

Design Phase

In this Phase of ADDIE model we deals with learning goals, and design the instructional materials which can help us in the development of our delivery instruments, exercises and practices, developing content of our teaching material and lesson planning and media selection for the delivery to the audience.

This phase of ADDIE model should be logical and specific. In this design phase developer ask question like:

- Design objectives should be very specific and testable.
- Developer design outline will provide the tasks, strategies and sequencing of the project.
- Developer should indicate the assessment practices and feedback required.
- Instructional developer should identify the required technology.

Development Phase

The development phase is where the developers form and gather the content assets that were generated in the previous phase of ADDIE Model. This development phase almost depends upon design phase. It consists of several stages such as specifying the plane of action and learning for project, Assign roles and responsibilities, Prepare documentation because organization and planning is very important for systematic process. In this phase the developer should identify the available media and its performance.

Implementation Phase

The Implementation phase is where the developed course is actually place into action and monitors its implementations. The implementation phase of ADDIE deals instructional designers with exclusive opportunities to develop a course. After previous phases the work or planning we have done in the design and development phase now in this implementation phase we should to apply on our audience or learners for further outcomes. If we work or planned efficiently on the previous three phases then our implementation will be very smooth and effective.

Evaluation Phase

This phase is involved an ongoing process or activity in all phases after every stage and review and analyzes the feedback and evaluates results from learners. In the first phase of analysis the evaluation can determine that is there have problem and its exciting solution, and in design phase the objective can evaluate the type of project. In development phase the tester evaluate the desired requirements. And developer can evaluate his/her work from the feedback of these listed questions:

- a) Did the instruction work and achieve required result?
- b) Did the learner active the objectives of project?

c) How can Project can improve and upgraded more?

3. The ASSURE Model For Educational Training

To Improve and enhance the learning and training process in today's classrooms it is necessary to know How and on which stage we can use widespread collection of instructional strategies and Effective media and method. Heinich, R. Molenda, M. Russell, D. J &Smaldino E. S., (2002) identified that practice or usage of media and technologies efficiently a systematic plan for their use is necessary. They also recommend using the ASSURE model as a conductor or Reference for designing training and lesson plan, ASSURE classified in to six main phases in an instructional planning procedure.

We can define Assure Model as

- a) A useful instrument intended for designing and conveying instruction that integrates technology and media into the teaching practice.
- b) An organized method to designing and writing lesson and conducting Training sessions.
- c) A strategy used to assist teachers in instructional designing.
- d) An idea used to support teachers to identify by student learning evaluation.

Analyze learners

First phase of ASSURE model it is the explanation and whole detail of the class. In this stage the developer should know all relevant information and data as the number of students in the lesson and training, their CGPA and grade, gender(male or female) and age group, infrequencies, and cultural.

In this stage the developer should also know about the type of information which the developer is designing the learner also have some basic knowledge about it or not and also know before lesson planning that the learner have competencies for the lesson and how much the learner know about this lesson and also know about learner interest before designing this is the main factor in Analyzing stage.

The lesson developer should also know about the behavior of learner and his capability of understanding because some learners need more explanation during the lesson and some can understand very quickly so before designing the developer also know about the learning style of the audience and learner.

State Objectives

This is a second stage of ASSURE model and the statement of objectives label what the learner determination to perform as an outcome of training. Developer should to realize and plane to as objectives for lesson plane or training. Developer should Emphasis on the learner or audience not on the Instructor. Objectives are descriptions of the learning outcomes and are written using the **ABCD** group showing in Fig

1.4.2 and table 1.4.2.

Audience: Identifies the students and learners interest and knowledge before Panning objectives

Behavior: Skill needs to be established as learner enactment, an observable, assessable performance, or a practical proficiency.

Condition: comprise apparatus and equipment's, tools, learning aids the learner can or cannot practice, and

different environmental settings in which the learner takes to achieve.

Degree: Skill necessary to be learned or the principle for satisfactory performance its contain period limit, series of correctness, percentage of accurate answers required, and/or qualitative ethics and some questions are listed below in table 1.4.2.

Table 1.4.2: ABCD Group

Audience	Behavior	Condition	Degree
• Who is the Learner?	• What do	• What conditions or	 In what way well
Identifies the learner's interest	developers want	conditions are the learners to	do you need them to
and knowledge before Panning	them to perform?	prove the ability being	prove their mastery?
objectives.		educate?	

Following inquiries to evaluate objectives:

Does the objective agree you to do the following with your lecture?

- 1. Find what the prospects are for the students or learner.
- 2. Find the needed easier for the learning atmosphere.
 - 3. Evaluate learning.
- 4. Define requirements for suitable media or materials.
- a) In what way would you categorize your objective? Is the learning conclusion mainly:
 - b) Cognitive?
 - c) Affective?
 - d) Relational?
 - e) Intrapersonal

Select, modify and design Methods, Media, & Materials

In this stage of ASSUR the Instructor or developer will form a connection among the listeners and the goals and objective. Here developer must to choose technique which he wants to implement like; developer will arrange specific lecture, or particular training or group work. What media he will apply or use for lesson like: photographs, audiovisual aid, film, or computer power point, or developer using an external sources to deliver materials, changing or modifying any resource for delivering the lesson or training session.

Selection Principles

- 1) Media must be carefully chosen on the base of learner need.
 - 2) Must study the whole learning condition.
 - 3) Must follow learning objectives.
 - 4) Must be suitable for the teaching plan.
 - 5) Should be reliable with the learners 'abilities.
 - 6) Must be selected objectively.
- 7) Should be selected in order to superlative chance the learning outcomes.
- 8) Not at all single medium is the total explanation.

9) Does it match the curriculum?

- 10) Is it correct and recent?
- 11) Does it cover strong and concise language?
- 12) Is it of worthy technical feature?
- 13) Is there proof of its efficiency?
- 14) Is a handler guide or additional records comprised?

Utilize Methods, Media, & Materials

In this stage of utilizing method and media developer all planning and selection will implement in this stage and developer will manage or plane by using which type of resources media, material and which method he will use for implementation of lesson and training for learners and also meet with objectives of lesson. For applying materials properly in the lesson there are some elements to generating effective student-centered instruct

- a) Arrange the material- Make assured you have all you want and that it all working.
- b) Get ready the learners- Provide the students an outline, explain in what way they can take this info and practice it and in what way they will be assessed up front
- c) Arrange for learning experience- Coaching is just high theatre. Coaching and learning should be a practice not an ordeal.

Evaluate and Revise

In this stage developer should explain how he will improve and explore this in future and also measure the result or outcome from his lesson or they fulfill his lesson objectives or not, and also explain about the media and material which he use in his lesson plan and effectiveness of that media which he implement in his lesson or training session. The evaluation process figure is shown below in Fig 1.4.5.



Fig 1.4.5: Evaluation Process.

Assess student performance

Developer should explore this fact that his lesson plane is how much effective for students and student performance meet with his objectives or not.

Assess media apparatuses

In what way will developer control the media efficiency?

Assess instructor performance

In what way will developer define his own performance as lecturer/organizer was active?

Conclusion and Discussion

In this paper three main models are disuses in detail and also explain about its implementation in class room management, during lesson planning how instructor can implement these models in the class, by using them how any company can train their workforce for enhancing their skills and performance. SIM helps such student and workers to get along with the classroom and work field routines and also allow the teachers or trainer to make sure, if the students are able to follow the lecture contents and can carry through the standardized syllabus literature. Consequently, this helps the students or workers for the future education also, when they go to higher levels of education and for further advance courses. ADDIE model is very flexible guide for constructing very active and effective training and Instructional designing. ADDIE is the most commonly used design model for training sessions. To Improve and enhance the learning and training process in today's classrooms it is necessary to know How and on which stage we can use widespread collection of instructional strategies and Effective media and method. Heimlich, R. Molenda, M. Russell, D. J & Smaldino E. S., (2002) identified that practice or usage of media and technologies efficiently a systematic plan for their use is necessary. Form the brief discuss research conclude that these three models are very effective for successful training and instructional design and for enhancing the performance of students and workers in fields and industries.

References

- 1. M (2003) In search of the elusive ADDIE model, *Performance Improvement*, 42(5), 34-36.
- 2. Newby, T. J., Stepich, D. A., Lehman, J. D., & Russell, J. D. (2000). Educational Technology for Teaching and Learning (2nd ed.) Upper Saddle River, NJ: Merrill/Prentice-Hall.
- 3. Andrews, Dee H. and Goodson, Ludwika A. 1980. "A Comparative Analysis of Models of Instructional Design," *Journal of Instructional Development* 3:4, 2-16.
- 4. Rossett, Allison. 1987. *Training Needs Assessment*. Englewood Cliffs, NJ: Educational Technology Publications.
- 5. Branson, Robert K. 1978. "The Inter service Procedures for Instructional Systems Development, "Educational Technology, March, 11-14.
- 6. Sarah Graboski. (2003). Teaching and Media: A Systematic Approach— The Gerlach and Elymodel. Retrieved Feb 2, 2004, from the personal website of Sarah Graboski. Website: http://www.arches.uga.edu/~sarahlee/edit6180/gerl ach ely.doc
- 7. Briggs, Leslie J. 1970. *Handbook of Procedures for the Design of Instruction*. Pittsburgh: American Institutes for Research.
- 8. Grafinger, Deborah J. 1988. *Basics of Instructional Systems Development*. INFO-LINE Issue 8803. Alexandria, VA: American Society for Training and Development.
- 9. Gustafson, Kent L. 1994. Instructional design models. In Husen, T. & Postlethwaite, T.N. (ed's). *The International Encyclopedia of Education*, 2nd ed. Oxford: UK, Pergamon.
- 10. Gustafson, Kent L. and Branch, Robert M. 2002. What is Instructional Design? In Reiser, Robert A. and Dempsey, John V. (ed's) *Trends and Issues in Instructional Design and*
- 11. Technology. Columbus: OH, Merrill Prentice Hall.
- Molenda, Michael, Pershing, James A., and Reigeluth, Charles M. 1996.Designing Instructional Systems. In Robert L. Craig (Ed.), The ASTD Training and Development Handbook 4thed. (pp. 266-293). New York: McGraw-Hill.

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