

Self – Instructional Materials (SIMs) : Design and Development

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Abstract

Self Instructional Materials (SIMs) are the specially designed and developed instructional materials to meet the needs, interests and problems of distance learners. In these materials, the distance teacher performs, through media and technology, the roles and functions of a classroom teacher who does them mostly through oral medium. The SIMs enables the learners to learn according to their own pace of learning, interest, ability and convenience with minimum assistance from the distance teacher/instructor/institution.

The SIMs are essential for distance education because they address many problems that may arise in the process of isolate learning of individual distance learners.

Designing and developing SIMs require proper understanding of the key features of SIMs, pre-requisites of course developers (writers) and designers involved and the actual process of designing SIMs.

KEY FEATURES OF SIMs

SIMs are characterized by certain features.

- They focus more on learning than on teaching or instruction.
- These are based on the needs of individual learners and not on the interests of teachers or upon learning institutions.
- SIMs are, therefore, called self learning materials (SLMs) these days.

KEY CHARACTERISTICS OF SIMs are :

- The SIMs are self-explanatory.
- They are self-contained.
- They are self directed.
- They are self motivating.
- They are self Learning.
- They are self evaluation.

Pre-Requisites for Course Writers/Designers

Teachers involved in developing learning materials for distance learners are expected to possess specialized knowledge, skills and competency so that they may do justice for fulfilling the special features of SIMs. The main pre-requisites of the course writers preparing self-learning material for distance learners are as follows :

Familiarity with the System : The Course writers should be fully familiar with the instructional system of the distance education institution concerned, the profile of the students of the system and the media approach followed.

Familiarity with Target Group :- In the distance education system, the students come from different backgrounds- educational qualifications, experience, socio-economic status. They come from different linguistic abilities, potential for learning, study habits, previous knowledge's, rural-urban divide and so on. The course writers involved in developing learning materials should be well aware about the heterogeneity of the group and their needs so that the learning materials can be pitched at the right mental level of the students.

Familiarity with Syllabus : To develop meaningful and effective learning materials, the course writers should have thorough knowledge of the syllabus and the scope of the content to be covered in a particular course to help the students achieve objectives.

Familiarity with the Theories of Learning: Distance learners are not classroom based learners. They are independent learners studying at their homes or workplace. The course writers need to use a variety of teaching strategies to enable the students to choose the learning strategies suited to their needs. Adequate knowledge of theories of learning and communication on part of the course writers will help them creatively design SIMs that suit the individual students. It is very essential that course writers should have a thorough knowledge of theories of teaching and learning.

Knowledge of Effective Communication :Thorough knowledge of effective communication is also a pre-requisites for those who are involved in developing SIMs for the distance learners. Clarity of the contents, explanation, language, presentation etc. will ensure effective communication and meaningful learning by students, Communication becomes effective if it takes place in the language fully understood by the receiver, meeting his/her needs and requirements.

Process of Designing SIMs Designing SIMs is like preparing a blue print of SIMs, which together form a design of a course/programme of distance education institution. In the course design main steps or stages are as under

- Assessment of needs of target group.
- Defining objectives.
- Identification and Organization of Contents
- Analysis of resources and constraints.
- Selection of appropriate methods, media and activities.
- Writing of lessons/Units.

- Evaluation

Writing the Unit

Various formats or styles of presenting SIMs depend on various ways of teaching and learning so in order to be a successful course writer, he should know various ways of presenting learning activities.

In distance education, a unit describes a unified theme of knowledge. Different topics are covered in each unit and a unit itself has three main parts- the beginning of the unit, the main body and the ending of the unit. The Course writer should know the details of each part of unit.

1. **Beginning of the unit** – This part of the unit includes three access devices. They are :
 - (a) **Unit Structure** - Every unit begins with the unit structure or the contents list. It helps the student understand what constitute the Unit. With clearly differentiated and logically arranged learning activities, the unit structure makes the text more learner-oriented.
 - (b) **Unit Introduction** – The unit is introduced with its main purpose. In this introduction, the students will clearly know what they will be studying in the Unit. Like an effective classroom teacher, the introductory section of a Unit provides necessary guidance to the student to facilitate his learning.

Three Components of Introduction of a Unit

Structural Component	Thematic Component	Guidance Component
(Linking the content of the unit with what has already been discussed or what has already been studied earlier. Linking with previous knowledge.)	(Presenting and highlighting in a very friendly and personalized style an overview of what is being dealt in the Unit)	(Guidance about time, activities, equipment, books etc needed for the unit and instruction)

- (c) **Objectives** : Defining objectives in terms of learning outcomes is useful for both the course writer and the students. Well defined objectives, in terms of learning outcomes, help in planning, evaluating and revising any learning activity until the designed outcomes are achieved. There can be three domains of objectives: Knowledge, psychomotor and affective.
2. **Main Body of the Unit** : This part of the unit includes the presentation of learning activities/content to be learnt by the learner. Content presented would be appealing for achieving the objectives. Six broad features of the main body of the Unit are.

- (a) **Logical Arrangement of Learning Points** - The learning steps are logically arranged so that the learner proceeds from one learning step to another and there should not be any abrupt gap or break between two steps. In other words, there should be a smooth transition from one learning point to another.
 - (b) **Ordering of Content** : The learning activities are arranged along the principles of teaching and learning. The principles of effective teaching proceed from the known to the unknown, from the simple to the complex, from the concrete to the abstract, from particular to general, from actual to representative, and so on, are followed in writing a unit. This ordering will provide a logical flow and will create continuity of the desired focus.
 - (c) **Personalized Style** : The course writer should be sympathetic and generous in discussing the content. The student should feel as if he is talking to the invisible distance teacher. Content discussion should be in conversational style and we should address the student directly in a friendly, normal tone. Here we should try to link the content with the student, life experience and should think of using more than one means of communication.
 - (d) **Language** : The quality of language is decisive factor in assuring the quality of SIMs. The language used should be warm, friendly and grammatically correct. Personal pronouns such as “you”, “I” and “We” should be used frequently.
 - (e) **Illustrations** : The insertion of illustrations, diagrams, charts, examples, etc, is an important feature of SIMs. Illustrations create interest in the students, stimulate their imagination, increase their comprehension and help them retain the knowledge. Illustration linked with real life experience will make the unit more lively and interesting.
 - (f) **Assessment** : Assessment help in monitoring whether the student is moving towards the set objectives or not. Therefore each step should be followed by an assessment item. Assessment also helps the students learn better and provides them feedback about their progress.
3. **Ending of the Unit** : This is the last part of unit in which the summary of the matter discussed in the main body is discussed. Summary helps learners recall the gist of the discussion and reinforce their learning. This part contains besides summary, glossary, suggested readings, answer to self check exercise/check your progress questions and references.
- (a) **Summary** : Summary of the unit can be presented in a variety of ways/forms. It can be in paragraphs, points, charts, free diagrams etc.
 - (b) **Glossary** : The crucial, key, new and technical words are better explained to the students to enhance their comprehensive. The words with multiple meanings need to be defined with proper explanation.
 - (c) **References and Suggested Readings** : A list of reference and suggested readings is presented to help those students who want to know more about the context of the particular unit or topic.

- (d) **Answer to Self-check Questions** : The answers to the self-check questions, given in the text at the end of the sections are provided at the end of the unit. These answers provide feedback to the students. The answers should be based on what has been discussed in the Unit.

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