INSTRUCTIONAL DESIGN FOR DEVELOPMENT OF e-CONTENT PACKAGE

Educational Technology has great potential for improving the teaching-learning process. Educational technology is the development, application and evaluation of systems, techniques and also aids in the field of human learning. One of the important contributions of educational technology is individualized instruction, which enables us to make use of self-instructional programmes.

Teacher-centered and group-centered approaches are inadequate since they hardly make any provision for individual differences of the learners. The premise is that, strictly speaking, no two students in the class are alike and that there are many permutations and combinations of individual differences.

NEED FOR INDIVIDUALIZED INSTRUCTION

We have three categories of learners in our classrooms, viz., Brilliant/Gifted, Average, Below average/ Slow learners. Frankly speaking, the teachers can satisfy the first two categories of the learners in the class rooms. We must give individual attention to the slow learners and transform them into average learners. Individualized instruction is not only the best option for slow learners but it can also be used to the other two categories of learners.

Individualized instruction means, learners are learning at their own pace. The learner can proceed with his learning on the basis of his own mental abilities. The learner is not forced to move with the other learners of the class. Such an approach creates confidence in him.

There are many methods in individualized instruction, viz., Assignment, Learner Controlled Instruction, Programmed Instruction, Personalized System of Instruction, Computer Assisted Instruction, etc. The recent method of individualized instruction in the field of education is 'e-Learning'.

e-Learning

e-Learning is the online delivery of info communication, education and training, which defined to increase learners' knowledge and skill they can be more productive. e-Learning has types of learning technologies viz., web-based interactive distance learning, internet-based CD-ROM etc. The advantages of e-Learning are demand, availability, self-pacing, interactiv confidence, etc.

e-Content

e-Content means web-based instr developed for individuals' auto learning on any required by the learners. The benefits of e-Con learners are including flexible schedule and instru convenient locations -homes, schools and colle informs learners about their progress and accompli An important outcome of e-Learning is e-C e-Learning is a process and e- content is a product private institutions have come forward to pl e-content materials for a limited number of subje the higher education level, the University Commission, New Delhi has allocated funds to tho are willing to develop 'e-Content' on any subject colleges have already started 'e-Content develo cell'. At the school level, it is in the infancy According to Information Technology Poli Directorate of School Education, Government o Nadu has planned to introduce web-based instru the schools from 2010-2011 onwards.

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TABLE 1
IFFERENCE BETWEEN e-LEARNING AND e-CONTENT

e-Learning	e-Content
Objectives are general and not specified in behavioural	Objectives are specified in behavioural terms
Various ranges of technologies can be used for delivering the information	Any one of the technologies can be used to deliver instruction at a time
The duration of programme can not be fixed	The duration of programme can be fixed
Immediate feedback can not be collected	Immediate feedback can be collected
There will be no control over the situation	It is carried on under controlled situation
Pattern of interaction can not be studied objectively	Pattern of interaction can be studied objectively

CONTENT PACKAGE

e-Content package can be used as teacher in the ssroom situation. While we are developing an e-ntent package, we must know and link it with ADDIE del. There are more than 100 different instructional ign models, but almost all are based on the generic DDIE model". The ADDIE model is a systematic ructional design model, which was redefined by Dick Carey and others in 1996. The five phases of ADDIE del has five steps. Each step has an outcome that feeds subsequent step as follows:

- Analysis Phase
- Design Phase
- Development Phase
- Implementation Phase
- Evaluation Phase

VELOPMENT OF ONTENT PACKAGE

The following steps are to be involved in developing -Content package on the basis of ADDIE model.

NALYSIS PHASE

In the analysis phase the following steps are to be owed:

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1. Selection of system/stage

In school education, we have different education systems viz. Tamil Nadu State Board (TNSB), Central Board of Secondary Education (CBSE) and Indian School Certificate (ISC). We can decide on any one of the systems.

In higher education, we have different disciplines. We can select any one of the disciplines to develop an e-Content programme with the help of faculties in different disciplines.

2. Selection of target group

We have to select a target group: the school college university learners. General information of the learners can be collected viz., Name, Sex, Group studying, Name of the institution, Locality of the institution, Kind of the institution, Study habit, Computer courses undergone, Internet facility, and Browsing habit.

3. Selection of the unit

The development of e-Content can be applied to all the subjects. Selection of the unit will be decided after thorough discussion with the subject experts and faculties / teachers of the concerned subjects on the basis of the following points:

(i) Whether the lecture method is sufficient to deliver the instruction to the students.

(ii) Whether the media option is to be used to deliver the instruction.

(iii) Whether animations or graphics are to be utilized in the instruction.

4. Decision on duration of the programme

After consulting with the subject experts and faculties teachers of the concerned subjects, duration of the e-Content programme will be finalized. Allotment of duration / sessions will be fixed on the basis of the curricula of the subjects.

5. Developing the instructional objectives of the programme

The instructional objectives can be decided on the basis of the behavioral changes to be expected from the learners after going through the e-Content programme developed.

6. Classification of Students

A pre-requisite test consisting of basic units of the subject, can be conducted for classifying three categories of learners, viz., Brilliant, Average and Slow learners.

II. DESIGN PHASE

1. Consultation with the subject experts and faculties / teachers

Script for e-Content can be planned in consultation with the subject experts and faculties / teachers of the concerned subjects in which the following things are discussed:

(i) What are the aspects to be covered?

(ii) Where are audio and video clippings to be added in the programme?

2. Consultation with the media experts and software programmers

e-Script for e-Content is planned in consultation with the media experts and software programmers to decide where graphics and animation to be added in the instruction and how audio and video clippings are to be added in the e-script.

III. DEVELOPMENT PHASE

1. Preparation of the script

Contents of the script for the programme are prepared on the basis of discussion with the subject experts and faculties / teachers of the concerned subjects. The contents are to be organized logically as well as psychologically and an ideal balance is to be struck on the basis of relevant literature, text books, work-books, manuals and other reference material.

2. Preparation of e-script

After preparation of the content script, it is to be converted into e-Script on the consultation with software programmers and experts. e-Script is considered in the following a

(i) Audio and video clippings

(ii) Linkages between one content to another co

(iii) Graphics and Animation

(iv) Exercises of the programme to be done students

(v) Explanations to the concepts

3. Editing the e-Script

After the first draft, the e-script is to be e the following three levels:

(i) Technical accuracy editing is to be done for technical accuracy of the subject in consulta subject experts

(ii) Programme technique editing is to be done for of the illustrations used in the script

(iii) Composition editing is to be done for co grammatical errors, checking spelling, punctua sequence of information etc.

4. Details of the e-Content package

After editing the e-script, a manual for the e- package is to be prepared to help the students und the procedures for using e-Content packages manual, an introduction, instructions to the stud instructional objectives, the steps to be followed, to take pre and post-test are to be mentioned.

IV. IMPLEMENTATION PHASE

Delivery of e-Content treatment

The students are to be well versed in the for e-Content package. Treatment of the e- package is to be started. The e-Content p programme is to be provided through LAN or a website.

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