



Information and Communication Technology

General Component



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2.1 Applies instructional principles in the development of material

Instruction Design

Developing Process of quality teaching material (Instructional Material)

- Design
- Implementation
- Evaluation
- Maintenance

Instructional Design

What is Instructional Design?

Instructional design is the systematic process by which **Instructional Materials(IM)** are designed, developed, and delivered.

Instructional Design

- **Instructional Design** is the creation of instructional materials. Though, this field goes beyond simply creating teaching materials, it carefully considers how students learn and what materials and methods will most effectively help individuals achieve their academic goals. The principles of instructional design consider how educational tools should be designed, created and delivered to any learning group, from grade school students to adult employees across all industry sectors.

Importance of the Instructional design

- **Instructional Design** is cost effective, given that it ensures students learn efficiently by creating high quality **learning** materials that take into account the strengths and weaknesses of students. These materials are also focused and customized to address the specific needs of educators.

Basic Principals

- Content should Aligns with curriculum and standards
- Materials should be durable, easily stored, transported and are universally accessible
- Materials should appropriate for the subject matter
- Materials should appropriate for the learner's capacity or levels of learning
- Should have motivational strategies (few "Big Ideas;" explicit instruction; guidance and support; active participation of students)
- It should be eye captivating and catches the attention of the students
- should not be expensive

Evaluates educational software

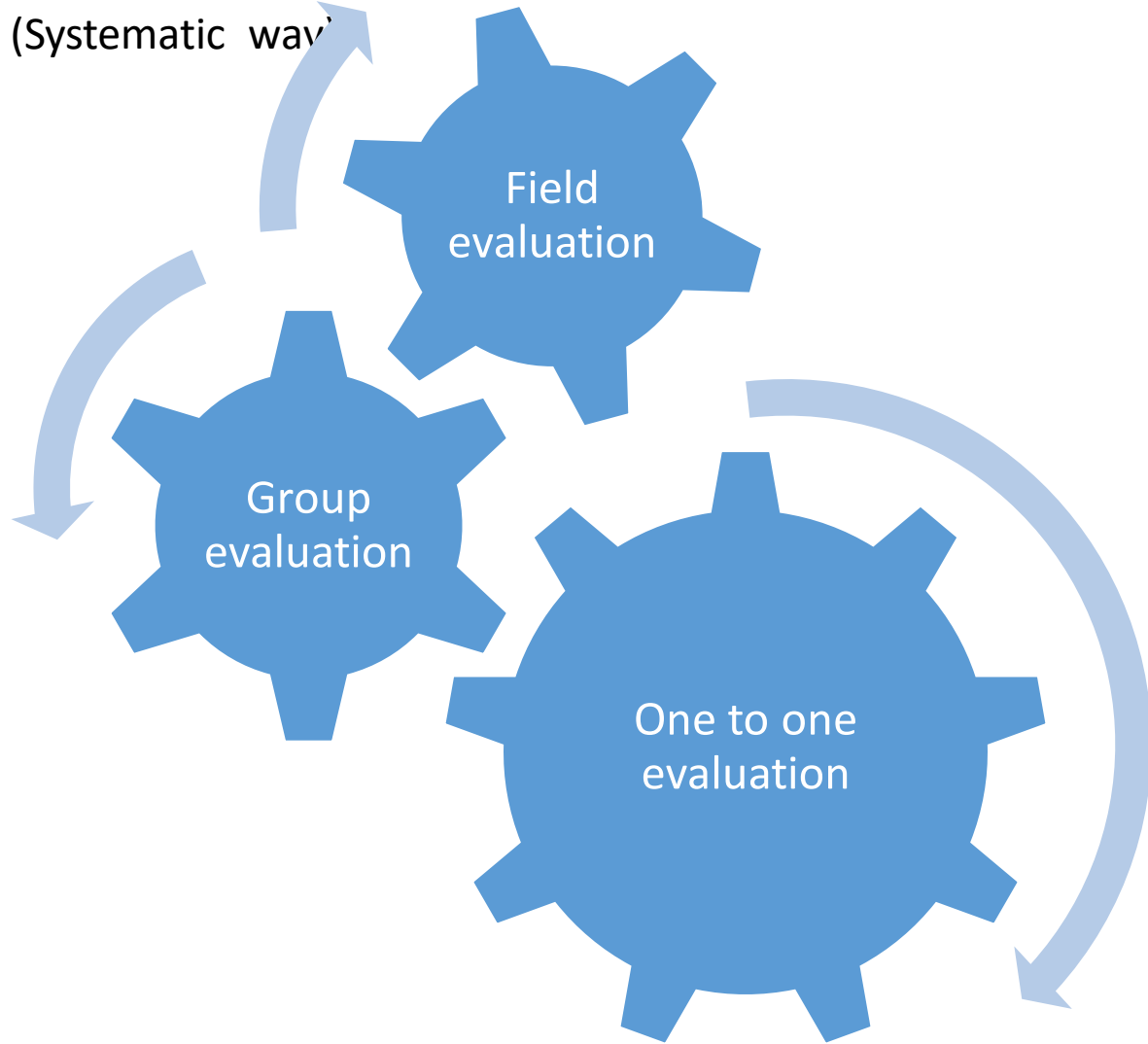
Why ,

- ✓ To select quality and productive software
- ✓ Make decisions about what software to purchase
- ✓ Making productive teaching learning culture

How ? (Indirect way)

- talking with other educators
- tryout with students
- tryout without students
- written ratings/descriptions from evaluations or reviews
- pictures of sample screens from evaluations or reviews
- school system lists of recommended software
- documentation or manual included with software
- software catalogs/advertisements

How ? (Systematic way)



One to one testing

One learner at a time reviews and give comments upon it.

The purpose

✓ Identify gross problems in the instruction

(typographical errors, unclear sentences, poor or missing directions, etc.)

Small group evaluation

- ✓ Group of 8-20 learners study the instructional materials independently and tested to collect the required evaluation data

The purpose

- ✓ To check the efficacy of the revisions based on one-to-one evaluation
- ✓ To ascertain how well the instruction works with more varied learners
- ✓ To see how well the instruction material run without the teacher

Field evaluation

- ✓ Test the instructional material with real, natural environment and get comments on it.
- Final stage of IM development.
- Release a beta version.

The purpose

To verify that the system works in the user-like environment.

(verifying business processes, interfaces, connectivity, co-residency with other applications, and performance on the user-like hardware)

IM evaluation criteria

- ✓ Content correctness
 - ✓ Validity
 - ✓ Relevancy
 - ✓ Simplicity
 - ✓ Soundness
 - ✓ Usability
 - ✓ Technical feasibility.
- etc....