Science KOER workshop
Content Analysis of Textbook

How do we look at the textbook?

- What are the topics that are covered?
- What are the skills that are being built?
- How is it different from last year Class 9?
- How does it build from Class 8 textbook?
- How have other textbooks dealt with the same topic?
- Can we identify levels of content and skills?
- What strategies can we use?
- What resources can be used?

What are the approaches?

- Concept mapping
- Experimentation and recording
- Project based approaches
- Discussion and inquiry
- ICT tools for reinforcement and learning

For a given topic

- What are the skills?
- What are the concepts to be built?
- What prior learning is assumed?
- Mapping different approaches to the skills and competencies
- Approaches to assessment

Concepts, Skills and Facts

- Nature of light
  - Form of energy
  - Different Sources
  - Can travel without a medium
  - Light can be transmitted and absorbed
  - Eye is how we sense light and colour
  - Absorption and mixing of colours
- Transmission of Light
  - Models to describe this transmission
  - Two models – wave and particle theory
  - Experiments and instruments

Accessing Resources – What and How?

What kind of resources?

- What do I need to teach
- What do I need to know
- How do I teach it.

Accessing Resources – What and How?

Evaluation parameters

- What are the concepts to be covered and how do the specific ICT resources fit in
- Areas of learning reinforced
- Extensions of learning it provides
- Suitability to a given classroom context (age appropriateness, content level)