

Day 2

Effective teaching and learning

Day 2 Training objectives

- To be aware of the characteristics of effective teaching and learning
- To know the pedagogical approach to be taken as identified in the subject programmes
- To participate in an active learning activity
- To understand what active learning is
- To incorporate active learning principles into teaching activities
- To know that learning should be objective led, not activity driven

Day 2 Training objectives

- To know what an effective learning environment should be like
- To explore possibilities for display as a learning tool
- To understand how to create and develop an interactive learning environment

Day 2 Overview

- Session 1
Characteristics of effective teaching and learning
- Session 2
Active learning 1
- Session 3
Active learning 2
- Session 4
Learning environment

Day 2 Session 1 – Characteristics of effective teaching and learning: session overview

- Discussing ideas for characteristics
- Matching characteristics to classroom images
- Thinking of examples of characteristics in own classroom

Day 2 Session 1 – What are the characteristics of effective teaching and learning?

Discussion in pairs

List five characteristics of effective teaching and learning

Share ideas in small groups

Day 2 Session 1 – Some characteristics of effective teaching and learning

In pairs, match these pictures to possible characteristics listed on the handout



A



B



C



D

Day 2 Session 1 – Some characteristics of effective teaching and learning

In pairs, match these pictures to possible characteristics listed on the handout



E



F



G



H

Day 2 Session 1 – 1 Active learning

Learning from own experiences:

- Allows learners to experiment, construct meaning and develop understanding
- Relates new knowledge to existing knowledge
- Making mistakes makes us check and refine our understanding
- Results in deeper learning
- Changes attitudes



Picture F

Day 2 Session 1 – 2 Collaborative learning

Structured group work:

- Improves interpersonal and communication skills
- Improves acquisition of information and higher-level thinking skills
- Promotes positive interdependence – ‘we succeed together’
- Can break down barriers between learners



Picture B

Day 2 Session 1 – 3 Differentiation

Meeting the individual learning needs of each learner:

- Increases progression of understanding and skills
- Improves confidence and motivation
- Stimulates creativity by helping learners to understand ideas better
- Benefits all learners
- Can raise expectations for all learners



Picture H

Day 2 Session 1 – 4 Cross-curricular links

Creating links between subjects:

- Adds breadth and balance to the curriculum
- Allows deeper learning
- Provides a broader range of skills
- Can help with progression of understanding and skills
- Can help to put learning into a more meaningful context
- Can make learning more motivating



Picture C

Day 2 Session 1 – 5 Responding to learners' needs

Checking learning and giving feedback to inform learning:

- Improves motivation and self-esteem
- Gives direction to teaching
- Provides opportunities for learners to improve their work
- Helps learners to understand how to learn more effectively



Picture A

Day 2 Session 1 – 6 Learning conversations

Learners talking about a task:

- Gives learners more ownership
- Encourages transfer of knowledge and skills between learners
- Encourages deeper understanding
- Provides opportunities for learners to reflect on their progress and decide what to do next
- Challenges and motivates learner



Picture D

Day 2 Session 1 – 7 Using e-learning and new technology

Using technology:

- Offers exciting tools for active learning
- Can be motivating
- Can be used to research, communicate, collaborate and create
- Can give learners more ownership of a task by allowing them to search for information and find their own tools
- Allows opportunities for learning outside the classroom



Picture G

Day 2 Session 1 – 8 Modelling

An expert giving an example whilst explaining their accompanying thought processes:

- Exposes learners to subject content and expert thinking simultaneously
- Breaks a task into steps, allowing learners to become increasingly independent
- Stimulates reflection on the processes



Picture E

Day 2 Session 1

In pairs

- How do these characteristics compare with the 'Pedagogic approach' section of the subject programme?

Whole group discussion

- How is the approach similar/different to what occurs in your schools now?
- What are the issues in implementing these approaches?
- How can we address these?

End of Session 1

Day 2 Sessions 2 and 3 – Active learning: training objectives

- To participate in an active learning activity
- To understand what active learning is
- To incorporate active learning principles into their own teaching activities
- To know that learning should be objective led, not activity driven

Day 2 Session 2 – An active learner

Group discussion

What does an active learner look like?

Label a picture of a person with key qualities and characteristics

Share with the whole group

Day 2 Session 2 – An active teacher

What does an active teacher look like?



Day 2 Session 2 – An active teacher: Active learning principles 1

To enable progress:

- Repeat learning objectives
- Present *different* activities
- Practise **skills**
- Build on prior learning

Day 2 Session 2 – An active teacher: Active learning principles 2

To support learning:

- Promote curiosity
- Ask questions
- Experiment
- Suggest
- Invent
- Teach to learning styles



Day 2 Session 2 – An active teacher: Active learning principles 3

Make sure resources are:

- Organised
- Accessible
- Shared
- Familiar
- Made
- Used regularly
- Built up over time
- Good quality

Day 2 Session 2 – What is active learning?

Different teaching strategies = an environment for learners to develop knowledge, skills and understanding

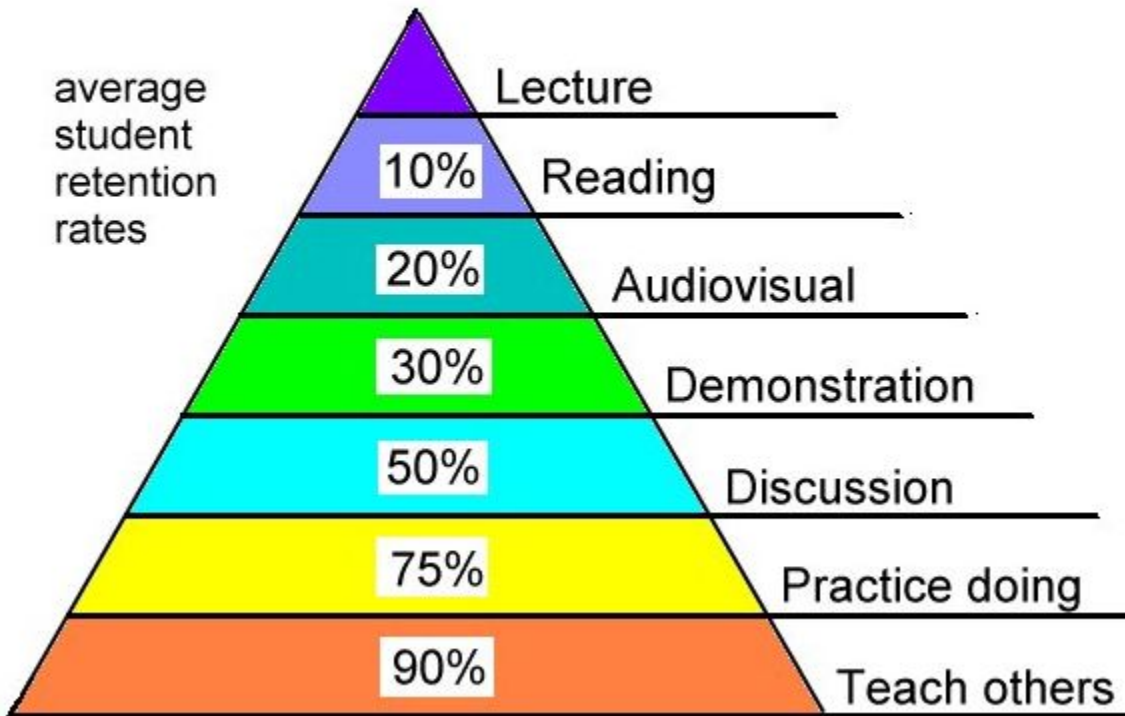
I listen **but** I forget!

I see **and** I believe

I do **then** I understand!

Day 2 Session 2 – Using your senses to learn

Learning Pyramid



| Ears | Eyes | Voice | Touch | |
|------|------|-------|-------|---------------------|
| X | | | | Receive information |
| | X | | | |
| X | X | | | |
| X | X | X | | |
| X | X | X | X | |
| X | X | X | X | Apply learning |

Day 2 Session 2

Active learning is ...

- Learning by doing
- Having FUN learning!



End of Session 2

Day 2 Session 3 – Training objectives

- To incorporate active learning principles into their own teaching activities
- To know that learning should be objective led, not activity driven

Day 2 Session 3 – Using active learning in your own teaching

Individuals

Think of a successful activity you have taught recently

Small groups

Share your activities. Record aspects of active learning

Whole group

Share some good examples of active learning

What makes it a successful learning experience?

Day 2 Session 3 –

1. Why do we ask questions?

Possible reasons

- To identify gaps in learning
- To direct learner's thinking
- To assess
- To prompt further questions
- To revise a topic
- To excite interest or curiosity
- To challenge
- To model questioning and thinking
- To help clarify understanding
- To evaluate

Day 2 Session 3 –

2. What makes a good question?

Open questions are more likely to improve learning. They encourage talking and thinking

e.g. Which metals are magnetic?

Closed questions generate “yes”/“no” answers. They can be useful but are not good at encouraging talking and thinking

e.g. Is copper magnetic?

Day 2 Session 3 –

2. What makes a good question?

General open questions

- How can we ...?
- How did you ...?
- What would happen if ...?
- Tell me about ...?
- What do you think about ...?

Complete the questions to make questions you might ask in your classroom

Day 2 Session 3 –

2. What makes a good question?

Invert the question

Instead of asking a question that requires factual recall, invert it

e.g.

Is copper a metal?

... becomes ...

Why is copper a metal?



Day 2 Session 3 –

2. What makes a good question?

X and Y

Ask learners why X is an example of Y, e.g.

Why is an apple an example of a fruit?

Why is a fox an example of a mammal?

This sort of questioning requires more than factual recall – it asks for an explanation of learners' reasoning

Day 2 Session 3 –

3. Who asks the questions?

Learners asking questions

Create opportunities for learners to ask questions:

- ask the teacher
- ask each other
- a ‘question box’ for written questions provides a different way for learners to be able to ask questions

Day 2 Session 3 –

4. How do you involve all learners in asking and answering questions?

Consider asking questions such as:

What do others think about _____'s idea?

'Bounce' the question around the classroom ...

How could you develop _____'s answer to include more detail?

Then ask the learner who gave the original idea ...

How can you combine all you have heard into a single answer?

Day 2 Session 3 –

5. How do you encourage learners to ask and answer questions?

Incorrect answers

Use incorrect answers as a discussion point

This creates a classroom atmosphere in which it is okay to give an incorrect answer, and also encourages a ‘have a go’ attitude!



That's not quite right ...
let's talk about it ...

Day 2 Session 3 –

5. How do you encourage learners to ask and answer questions?

Wait-time

Allow learners time to think:

Allow a minimum of 5 seconds

- Teacher speaks and then waits before taking learners' responses
- When learner's response ends, teacher waits before responding

This gives learners time to give a better answer or for another learner to respond

Day 2 Session 3 –

6. How can you make your questioning effective?

- Plan questions in advance – this can make them more challenging
- Focus on a few carefully constructed open-ended questions
- Ask one question at a time
- Allow thinking time
- Vary question strategies
- Ensure all learners have the opportunity to respond

Day 2 Session 3 – Engaging starters for learners

- Video clips
- Photographs
- Film clips
- Objects
- Cartoons
- Pieces of music
- Questions
- Games
- Puzzles

End of Session 3

Day 2 Session 4 – Learning environments: objectives

- To know what an effective learning environment should be like
- To explore possibilities for display as a learning tool
- To understand how to create and develop an interactive learning environment

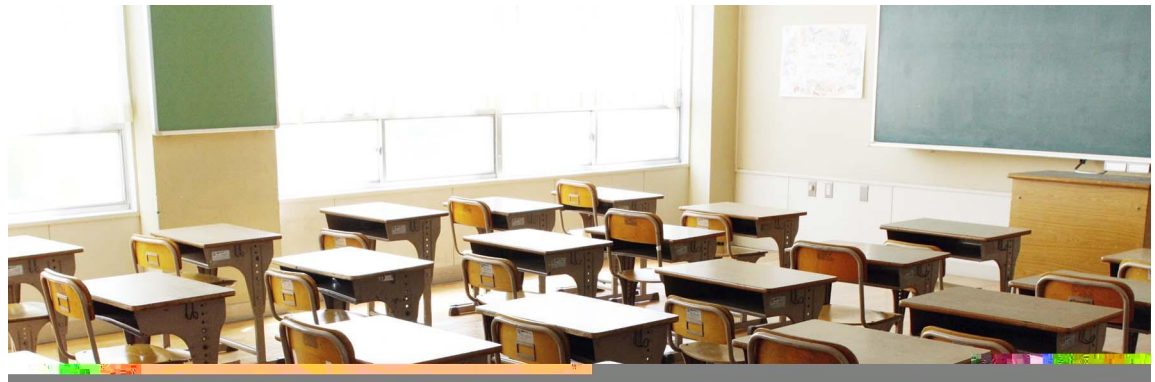
Day 2 Session 4 – Your classroom plan

Pairs

- How does your classroom enhance opportunities for learning?
- Does your classroom need to be different for you to be able to deliver the updated Kazakhstan curriculum?
- How would it be organised? What needs to be included?

Day 2 Session 4 – Classroom 1

What do you like or dislike about this classroom?



Would this classroom work well for the updated curriculum?



Day 2 Session 4 – Classroom 2

What do you like or dislike about this classroom?

Would this classroom work well for the updated curriculum?



Day 2 Session 4 – Classroom 3

What do you like or dislike about this classroom?

Would this classroom work well for the updated curriculum?



Day 2 Session 4 – Classroom 4

What do you like or dislike about this classroom?

Would this classroom work well for the updated curriculum?



Day 2 Plenary

- Review of Day 2
- Preview of Day 3: Key approaches in the updated curriculum
 - Criteria-based assessment model
 - Cross-curricular themes
 - Managing active learners
 - Effective questioning