MCAST
MALTA COLLEGE of ARTS, SCIENCE & TECHNOLOGY

ECVET Meeting

MCAST Learning Outcomes Approach & Assessment

Education and Culture DG
Lifelong Learning Programme

ECVET Malta

ecvet
European Credit system for Vocational Education & Training

Where are we coming from ?

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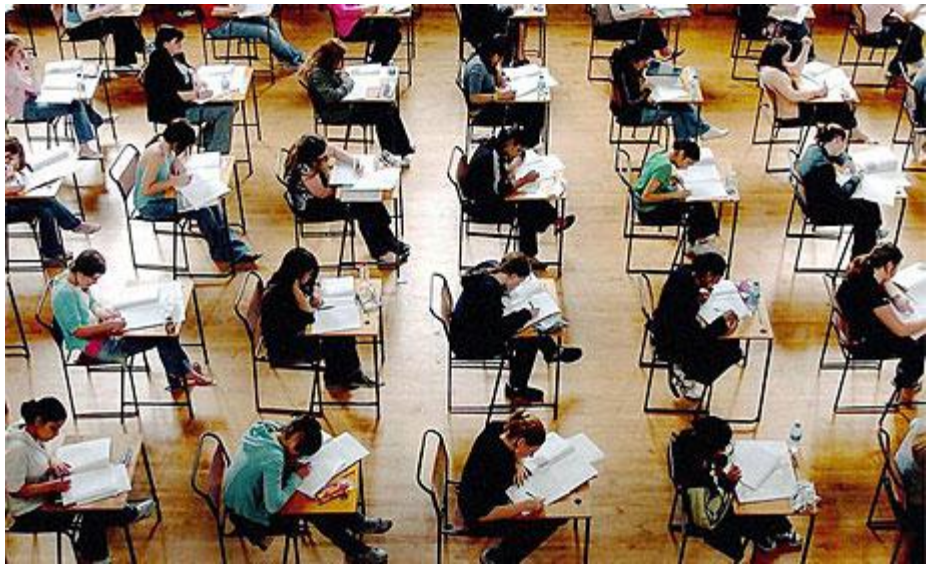
- Traditional Syllabi
  - Classical Time Constrained examinations
  - Certification depends on a % mark



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Where are we now ?

- The learning outcomes and units of learning outcomes
  - A Range of assessment methods are used
  - Certification depends on all learning outcomes being achieved

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Assessment as an Important Step

- It is the ‘evidence’ that the learner has acquired knowledge, skills and competencies.

- Shows that the learner has achieved the learning outcomes.

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Method Development

- Partners are still working independently on this point but will be discussing and sharing best practices and concerns during the project workings.

- MCAST has put a lot of emphasis on assessment in the recent project workshop involving MCAST academic staff.

- Learning Outcomes are broken down into grading criteria to make sure that they are assessable.

Typical Approaches at MCAST

- Assessment as an integral part of the learning cycle.
- Assessment is no longer a specific event, separate from the teaching process.
- A formative approach to assessment is adopted.
- Assessment tasks use a range of methods however not excluding time constrained assessments.

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Development Process

1. Established the need to move in that direction
   I. Inadequacy of traditional assessments in current learning outcomes approach
   II. Pressure from industry to minimise the skills gap
2. Build knowledge and capacity
   I. Acquired a lot of experience from particular awarding bodies (BTEC , C&G)
   II. Training staff and management
   III. Start implementing a culture change

Development Process cont.

3. Gradually start implementing the change
   I. Formative Assessment generally established
   II. Curricula being re written
   III. Audit and feedback mechanism set up

Module Outcome	Pass Criteria To achieve a pass grade the evidence must show that the learner is able to : 		
LO 1 Design a complex sequential logic circuit specified by state tables and graphs	1.1 Analyze a Moore and Mealy state machine to derive the state table	1.2 Derive the state equations for a given state table	1.3 Use different encodings to implement a state machine
LO 2 Model and simulate combinational logic circuits using VHDL tools	2.1 Convert given combinational logic functions to VHDL code	2.2 Write a test bench to verify the operation of a combinational logic function	2.3 Simulate combinational logic circuits using VHDL
LO 3 Design state machines using ASM charts	3.1 Convert given sequential systems into their ASM equivalent	3.2 Convert an ASM chart into a state machine	2.4 Implement an ASM chart into its hardware equivalent
LO 4 implement sequential systems using VHDL tools and programmable logic devices	4.1 Model two sequential system using state machines or ASM charts	4.2 write a testbench to verify correct operation of some of the aspects of the model	Implement the models on a programmable logic device