# T3.A1 Foundations session handouts

## Learning Activity 1 – Motivation

Purpose: To identify the way the four motivational categories work in teaching context and to create an inventory of motivational strategies.

**Instructions**

In groups of 4 – breakout rooms

* Discuss with your group your strategies and elaborate;
* Select the two most interesting/creative motivational strategies per ARCS category;
* Write 8 strategies (in total 2 per ARCS category) that you use in your course (or you have experienced) in the chat of your breakout room

Follow-up: discussion of the most interesting findings

## Learning Activity 2 – Constructive Alignment

Purpose: To start designing a course based on the Constructive Alignment principle

Instructions:

* Work in pairs to give each other peer feedback.
* Divide the time between both of your courses.
* Check the following pages to guide you.
* Follow up: in the follow-up assignment you will work further on your first course design.

Part A: Peer Feedback on Learning Objectives – use the checklist

Part B: Determine one Learning Activity for your Learning Objective – handout below for inspiration.

Part C: Determine a relevant and aligned formative and summative Assessment Method – handout below for inspiration.

## Learning Activity 3 – Not-so Constructive Alignment Table

Purpose: To combine all the elements of a constructively aligned course together and critically evaluate a constructive alignment table.

Look at the table below and consider:

* What is the student supposed to learn from this course? To what extent is that measurable?
* To what extent does the assessment capture these achievements adequately?
* In what way do the learning activities help the student to achieve the learning objectives?
* What should be done to get this course more aligned?

## Part A: Feedback form for Learning Objectives

Use this form to give each other feedback on your learning objectives.

|  |
| --- |
| Is the learning objective well-formulated? (yes/no why?) |
|  |
| Which principles (time specific, action verb, context, etc) have been included |
|  |
| How would you improve it? |
|  |
| Is the level of thinking appropriate (Bloom)? |
|  |
| Are there ambiguous elements (words such as various, clear, different, etc)? If so how would you rephrase them so that they are specific? |
|  |

**TIP:** Make sure that you **take notes** of the feedback that you receive, because this will help you to move on further for a basic aligned course design.

## Part B: Learning Activities to Engage your students

Learning activities:

1. What is the learning activity?
2. To what extent does this enable students to practice towards the skill?
3. What are the conditions of this activity? Individually, in pairs, in groups?
4. What should they do?
5. What should be the deliverable and the follow-up (formative assessment)?

|  |  |  |
| --- | --- | --- |
|  | **ACTIONABLE VERBS** | **ACTIVITIES** |
| REMEMBER | Duplicate, List, Repeat, Reproduce, Identify, Label, Locate, Name, Recognise, Recall | * Discuss with a partner, your definition of... * Come up with an analogy * Flashcards * Memory activities * Reading material * Watching presentations and videos |
| **UNDERSTAND** | Discuss, Explain, Give examples, Illustrate, Define, Paraphrase, Rephrase, Restate, Summarise, Categorise, Compare, Contrast, Order, Organise | * Create a chart of similarities and differences. * Retell the story in your words. * Illustrate what you think the main idea was. * Write a summary report of an event. * Think-pair-share * One-minute paper |
| **APPLY** | Apply, Administer, Develop, Employ, Perform, Use, Implement, Make use of, Categorise, Link**,** Assemble, Calculate, Compile, Correlate, Construct, Evaluate, Experiment, Illustrate, Interview, Simulate, Solve | * Research different methods used today. * Problem-solving tasks * Role-play * Calculations * Lab experiments * Think-pair-share with a partner about what will happen next. |
| **ANALYSE** | Analyse, Appraise, Estimate, Examine, Inspect, Categorise, Discriminate, Organise, Point out, Reason, Compare, Contrast, Correlate, Link, Model, Rank, Relate, Reorganise, Choose, Identify Model, Select, Simplify | * Construct a graph to illustrate selected information. * Report/ Survey * Write a report about how this ties to what we’re learning. * Discuss with a partner how this connects to you. * Group investigation |
| **EVALUATE** | Consider, Deduct, Reason, Value, Appraise, Assess, Award, Evaluate, Grade, Mark, Rate, Reason, Score, Solve a problem, Advise, Choose, Conclude, Decide, Determine, Judge, Prioritise | * Prepare a case to present your view about... * Debate * Write about your feelings in relation to... * Pros and cons list * Review paper |
| **CREATE** | Compose, Create, Design, Develop, Discover, Experiment, Invent, Plan, Adapt, Change, Innovate, Suggest, Theorise, Construct, Illustrate, Draw, Visualise, Model, Solve, Program | * Brainstorm * Decision making tasks * Tie your learnings to another course you have taken and present. * Prepare a flow chart to show * Develop and describe new solutions or plans * Research projects |

## Part C: Determine a relevant and aligned formative and summative Assessment Method

**Assessment method**

1. What is the assessment of this LO?
2. To what extent is the observable behaviour measurable?
3. To what extent does this capture the LO at the same cognitive level?
4. What are the students expected to do?
5. Are you able to collect enough evidence through this assessment?

You can use the following table for inspiration – note that this is not the same format as Bloom’s taxonomy.

|  |  |
| --- | --- |
| **Learning Outcomes** | **Assessment Types** |
| **Thinking critically and making judgements**  reflecting, evaluating, assessing, judging | * Essay, report * Journal, newspaper article for a foreign newspaper * Letter of advice, book review (or article) for a particular journal * Comment on an article's theoretical perspective |
| **Solving problems and developing plans**  Identifying problems, analysing data,  reviewing, designing experiments,  planning, applying information | * Problem scenario, group Work * Work-based problem, analysis of a case * Draft a research bid to a realistic brief * Paper |
| **Performing procedures and demonstrating techniques**  Computation, using equipment, following laboratory procedures, following protocols, carrying out instructions | * Demonstration, video * Poster, lab report * Illustrated manual on using the equipment, for a particular audience * Observation of real or simulated professional practice * Role play |
| **Demonstrating knowledge and understanding**  Recalling, describing, reporting, recounting, recognising, identifying, elating & interrelating | * Open-ended questions, essay questions, short answer questions, closed-ended question * Essay * report |
| **Designing, creating, performing**  Imagining, visualising, designing, producing, creating, innovating, performing | * Portfolio * Presentation * Projects * Performance |
| **Accessing and managing information**  Researching, investigating, interpreting, organising information, reviewing and paraphrasing information, collecting data | * Annotated bibliography * Project Dissertation * Applied task * Applied problem |
| **Communicating**  One and two-way communication; communication within a group, verbal, written and non-verbal  communication. Arguing, describing, advocating, interviewing, negotiating, presenting | * Written presentation (essay, report, reflective paper etc.) * Oral presentation, discussion/debate/role play * Group work, observation of real or simulated professional practice * Presentation to camera |
| **Managing and developing oneself**  Working co-operatively, working independently, learning independently, being self-directed, managing time, managing tasks, organising | * Journal * Portfolio * Learning contract * Group work |

Learning outcomes + assessment types (Nightingale et al., 1997)

## Learning Activity 3: Constructive (not so) Alignment table

Consider:

* What is the student supposed to learn from this course? To what extent is that measurable?
* To what extent does the assessment capture these achievements adequately?
* In what way do the learning activities help the student to achieve the learning objectives?
* What should be done to get this course more aligned? (use the CA table to note down the improvements)

|  |  |
| --- | --- |
| **Learning Objective** | **Cognitive level** |
| Build a prototype of a well and its surface facilities using the materials and design provided. | Apply |

|  |  |  |
| --- | --- | --- |
| **Teaching and Learning activities** | **Formative assessment and feedback** | **Summative assessment** |
| * Reading on the technological development of surface facilities. * PowerPoint lecture: How to design a well * Pre-recorded video lecture (2 hours): Surface facilities for wells | * Mobile quiz (Kahoot!): How to design a well and its surface facilities. * Q&A during lecture (20%). Based on how well the questions are answered. | Group presentation on one of the topics about wells (30%)  Multiple choice exams:   * Final exam (50%) |