

Federation for Self-financing Tertiary Education (FSTE)

Intensive Teacher Training Programme Module 2: The Theories and Practice of Course Design

Brief Notes and Suggested Reading

This brief note intends to give participants the blueprints of the contents covered in the module. Suggested readings are listed to facilitate participants in accessing the sources and to obtain more detail information.

1. What is a curriculum?

Curriculum is the menu of formal education. According to Tyler, a curriculum has 4 essential components:

- a. What educational purposes should the domain of education seek to attain? (objectives or learning outcomes)
- b. How can learning experiences be selected which are likely to be useful in attaining these objectives? (contents of the curriculum)
- c. How can learning experiences be organized for effective instruction? (the pedagogy)
- d. How can the effectiveness of learning experiences be evaluated? (the assessment)

Tyler, R.W. (1949) Basic principles of curriculum and instruction. Chicago: The University of Chicago Press.

http://en.wikipedia.org/wiki/Ralph_W._Tyler

2. What is a learning outcome (LO)?

A **LO** is what you expect students to learn after a defined period of time.

In order to prescribe student learning effectively, a learning outcome should have at least the following three components.

- a. What the student will do that demonstrates learning (the action and/or process)
- b. The context within which the student will demonstrate learning (the context)
- c. How well s/he have to demonstrate his/her learning (the standard)

<http://www.bologna.msmt.cz/files/learning-outcomes.pdf>

http://www.brookes.ac.uk/services/ocsd/2_learnch/writing_learning_outcomes.html

<http://www.wisha.org/CE/Writing%20Learning%20Outcomes%20and%20Assessment%20of.pdf>

Examples of LOs

- The student will be able to design and draft a company report (a) using information provided in case study materials (b) such that the final report is suitable for discussion at Board level (c).
- The student will be able to prepare a 10 minute presentation (a) on topic x (b) suitable for a student seminar (c). The seminar should enable fellow students to tackle the questions relevant to the topic on the final exam.
- The student will be able to design a product (a) from a brief using the materials listed in the brief (b) and appropriate to xxx market (c). The product should be innovative in that it should be different from anything currently on the market.
- The student will be able to organise a patient education programme (a) that will teach topic x to y number of people (b) over z time using the stated resources (c).

Action words

http://www.comfsm.fm/~dleeling/assessment/slo_bloom.html

3. What is an outcome based curriculum?

Outcome-based Curriculum will have the following general characteristics:

- Creation of a [curriculum framework](#) that outlines specific, measurable outcomes. The standards included in the frameworks are usually chosen through the area's normal political process.
- A commitment not only to provide an opportunity of education, but to require learning outcomes for advancement. Promotion to the next grade, a diploma, or other reward is granted upon achievement of the standards, while extra classes,

repeating the year, or other consequences entail upon those who do not meet the standards.

- [Standards-based assessments](#) that determines whether students have achieved the stated standard. Assessments may take *any* form, so long as the assessments actually measure whether the student knows the required information or can perform the required task.
- A commitment that all students of all groups will ultimately reach the same minimum standards. Schools may not "give up" on unsuccessful students.
http://en.wikipedia.org/wiki/Outcome-based_education

4. What are the general procedures in developing the outcome based curriculum for a course or programme?

Assume that you are given an assignment by your supervisor to develop a course for a programme at sub-degree level (e.g. a course on “Warehousing” for a sub-degree programme on “Logistic Management”). The following are some questions to help you in the development process.

a. Identify and define the position of the course

| Key question(s) to be asked | Key persons to be consulted/process |
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| What is the aim of the Programme? (e.g. the Programme aims at providing participants with the necessary knowledge and skills: ✧ to be appointed as trainee foreman of a logistic company; and ✧ to be accepted for a top up degree in logistic management) | ➤ Your supervisor ➤ The programme director (if not your supervisor) |
| What is the aim of the course? (e.g. the course aims at providing participants with: ✧ Concepts on the different functions of warehousing. ✧ The function(s) of warehousing in logistic management. ✧ The limitations and constraints of | ➤ Your supervisor ➤ The programme director (if not your supervisor) ➤ Related persons of the trade, in particular those in the management positions ➤ Related teaching staff of logistic management |

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| warehousing. | |
| <p>What is the position of the course within the programme? (e.g.</p> <ul style="list-style-type: none"> ✧ The duration of the Programme and the duration of the course; ✧ What are the other courses within the Programme? ✧ What are the courses before and after your course? And most important, ✧ Is the course indispensable for the programme? etc) | <ul style="list-style-type: none"> ➤ Your supervisor ➤ The programme director (if not your supervisor) ➤ Related persons of the trade, in particular those in the management positions ➤ Related teaching staff of logistic management |

b. Identify the Learning Outcomes

| Key question(s) to be asked | Key persons to be consulted/process |
|---|--|
| <p>Who are your key stakeholders? (e.g.</p> <ul style="list-style-type: none"> ✧ Who support(s) the offering of the Programme? ✧ Who will accept the graduates of the Programme? ✧ Who will be the participants of the Programme? ✧ Who will be partners in offering the Programme? etc) | <ul style="list-style-type: none"> ➤ Your goodself ➤ Your supervisor ➤ The programme director (if not your supervisor) ➤ In identifying the key stakeholders, don't miss student groups, both those have completed and will enroll in the course |
| <p>What opinions, in particular concrete expectations on the course, I need to gather from stakeholders? (e.g.</p> <ul style="list-style-type: none"> ✧ What are the key skill sets to be developed? ✧ What are the most important facts and concepts participants have to know? ✧ What are the modes of learning expected by different stakeholders? etc) | <ul style="list-style-type: none"> ➤ Your goodself ➤ Your supervisor ➤ The programme director (if not your supervisor) |
| <p>How can I gather such opinions and expectations? (e.g.</p> <ul style="list-style-type: none"> ✧ Should I have both quantitative and qualitative data? ✧ What are the limitations and constraints | <p>Process:</p> <ul style="list-style-type: none"> ➤ Arrange data collection according to limitations and constraints. Spend reasonable time on this process |

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| you are facing in this process? etc) | <ul style="list-style-type: none"> ➤ Carefully craft the discussion guides so that your target persons can understand your expectations quickly and clearly ➤ You must have some opinions from key persons, even very informal reality checks. |
| How can I make the opinions and expectations into useful information for course development? | <ul style="list-style-type: none"> ➤ Conduct interviews and/or focus group discussion with the key stakeholders identified ➤ Summarize their views and expectations of similar natures into categories. A rule of thumb is that it should be around 4-8 meaningful categories |
| How can the views and expectations be represented meaningfully? | <ul style="list-style-type: none"> ➤ Represent the categories by learning outcomes. There is no hard and fast rule for one-one matching ➤ Remember the LOs should have three components: the action, the context and the standard ➤ Some components, e.g. the context, can be put in the leading phase so as to improve the readability of LOs ➤ Ask a few colleagues not involved in the development to read your LOs to see whether they can understand |

c. Select the context and contents of the course

| Key question(s) to be asked | Key persons to be consulted/process |
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| <p>What are the likes and dislikes of your target students?</p> <p>(In a particular course, you need to choose the 'context' as the platform of learning. In warehousing, the context can be warehouse</p> | <ul style="list-style-type: none"> ➤ From the data collection process suggested above, you probably have some ideas about the answer ➤ There are generic knowledge |

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| <p>for apparel products, for food and food products, for electronic products etc. Context close to students' experiences can help to motivate student learning)</p> | <p>and concepts, or even skills on warehousing. However, such generic components have to be explained and demonstrated through concrete examples. In extreme case, more than one contexts can be suggested for a course where different classes can use different contexts as platforms of learning</p> |
| <p>Will the contents chosen match with the LOs?</p> | <ul style="list-style-type: none"> ➤ List all the contents that will match with the LOs of the course based on your professional knowledge ➤ Use a two-dimensional table to check whether there is any LOs that miss out; or too much contents targeting at same LO |
| <p>Can I have sufficient resources, including learning materials, lesson time and suitable facilities to deliver all the contents?</p> | <ul style="list-style-type: none"> ➤ Taking into consideration all the limitations and constraints on course delivery, carefully consider whether there is/are overlapping of contents with similar nature and/or contents that could be omitted without affecting the aims and LOs of the course |

d. Construct the concept map of the course

| Key question(s) to be asked | Key persons to be consulted/process |
|---|---|
| <p>How can I organize the contents of the course to facilitate student learning? (you need to have professional knowledge not just on the contents of the course, but also on how such contents can be taught effectively to your students, i.e. the pedagogical content knowledge)</p> | <ul style="list-style-type: none"> ➤ Organize the contents into learning units (or learning tasks) which can be easily understood by lay persons ➤ Sequencing the learning units to identify whether there are sequential requirements of certain units |

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| | <ul style="list-style-type: none"> ➤ Organize the learning units in a chart to show the sequential and parallel relationships among the units |
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e. Compiling the course document

| Key question(s) to be asked | Key persons to be consulted/process |
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| How can I compile the course document and improve the readability of the document? | <ul style="list-style-type: none"> ➤ You should assume that the readers are not experts of the contents ➤ Use graphics and tables to help the readers understand the concepts and relations ➤ Don't let two or more similar details appear in two different places of the document ➤ Ask your colleagues or your good friends not involved in the development process to read the document to see whether they can understand |
| How can I ensure the course document meets the Quality Assurance (QA) requirements? (QA requirements can be internal and or external. Such requirements are generally stated either as principles, guidelines or indicators.) | <ul style="list-style-type: none"> ➤ Make sure that you understand the underpinning rationale behind the requirements, whether it is guidelines, principles or indicators ➤ Check you documents against the requirements ➤ It is much easier to adjust and amend some technical issues. However, if there is/are mismatch in the underpinning rationale, there is almost no choice but to start the whole process again |