

A1.3 Implementation by Design
 A1.4 Assessment Methods

Summary of A1.1 and A1.2

In a cognitive constructionist model, the student first says (1) what is known, and then (2) why or how this knowledge is connected to other points socially and culturally, then (3) some new connections are explored, and some old connections may be weakened or broken, to make a new network, followed by (4) checking this new understanding in real-life practice to see how well it fits – in other words, learn.

This model is a cycle, so after (4), the student can enter (1) and say what is now the current knowledge, and so on ... , for e-learning, continuing education, and lifelong learning.

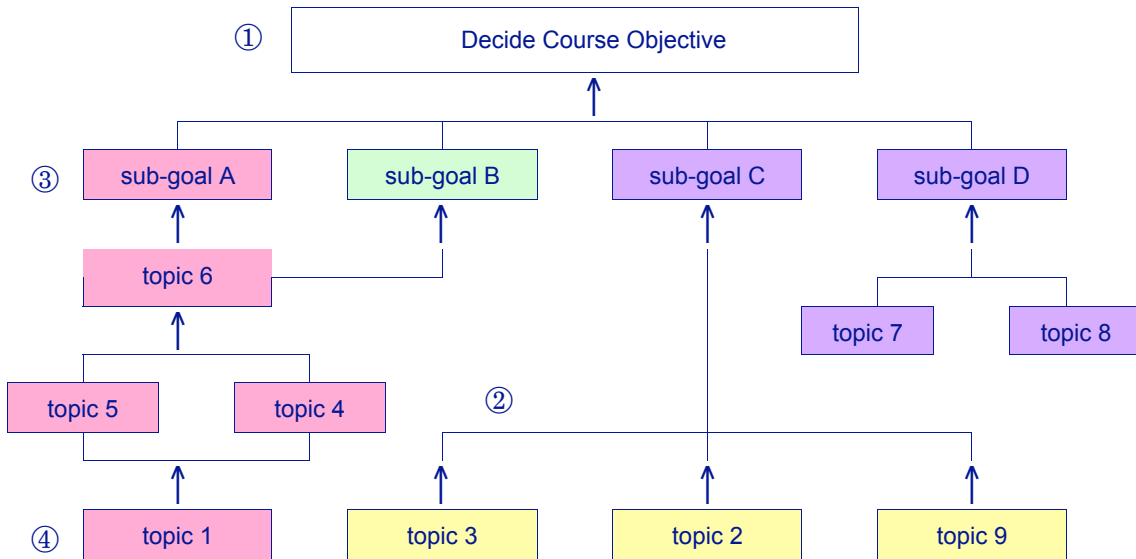
in Theory	in Practice
Stage 1	You can now see we have shared some old knowledge and understanding, and
Stage 2	applied these to understand theoretically e-learning and choice of media.
Stage 3	Here we will analyze e-learning and identify its parts to discover its structure and organization. We must look at Needs Analysis, then discover and decide criteria for what we want to do, and then re-structure our understanding to make a new design for our e-learning project.
Stage 4	Finally (in this short course), we should judge this new design in practice, according to our decided criteria.

What is the structure of e-learning ?

The design process can be divided into nine steps to be done in the following order ; -

- ① Decide purpose, the final objective
- ② Decide entry level
- ③ Decide sub-goals
- ④ Draw topics and links to each other
- ⑤ Group similar topics together into lessons
- ⑥ Put lessons into order
- ⑦ Try out, get feedback, and then revise
- ⑧ Add-in flexibility, and support services
- ⑨ Write detailed lesson-plans

The Structure of Design for e-Learning



① Decide on your course main objective.

② **Needs Analysis**
 Who are the likely students ?
 What prior knowledge and skills do they bring ? How many hours or lessons are available ? Students change even within a few weeks – some learn faster than others, some develop different motivations and discover new interests and new preferred ways of studying – so Needs Analysis must be revised continuously.

③ Decide your course sub-goals, use different sizes of boxes to indicate their relative importance.

④ Write your various topics, and add links between related topics.

⑤ Group related topics into lessons, keeping in mind the media, the learning activities, workload and how much time is available. For example use different colours to group them - Lesson 1 Lesson 2 Lesson 3 Lesson 4 and so on. Revise content, difficulty and complexity if necessary.

⑥ Put lessons into sequential order, keeping in mind any pre-required content.



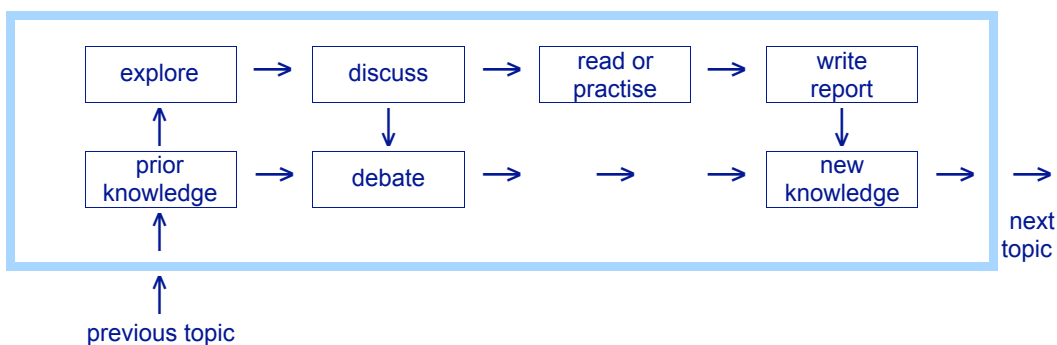
Delving into complexity and always returning to the baseline is better. Hypertext here is useful.

⑦ Try out each lesson, for example

Lesson 1 = topic 1 > topic 4 > topic 5 >
topic 6 > sub-goal A

Get feedback, and then revise.

In each topic, allow choice of routes to learn the target new knowledge ;



⑧ Collate books and other resources for each lesson, and further reading.

Check library services.

Arrange study skills counselling..

Arrange technical and other media support. For example, if you choose powerpoint media, viewers may want notes or print-out support. If you choose discussion, speakers may want to pre-read the full paper or all your lecture notes plus other related texts beforehand as support.

After students enroll, your Needs Analysis (under continuous review) may discover unexpected findings such as weak language skills, which may require a slower pace than you had originally planned or extra preparatory lessons as support.

⑨ Write detailed lesson plans, and use the most suitable multimedia.

Design learning activities and tasks in detail, keeping in mind that feedback from the teacher should always be immediate. Good feedback might be your response together with your invitation to other students by name to elicit their contributions.

A higher frequency of interaction can lead to reflective self-evaluation and initiate learning activity.

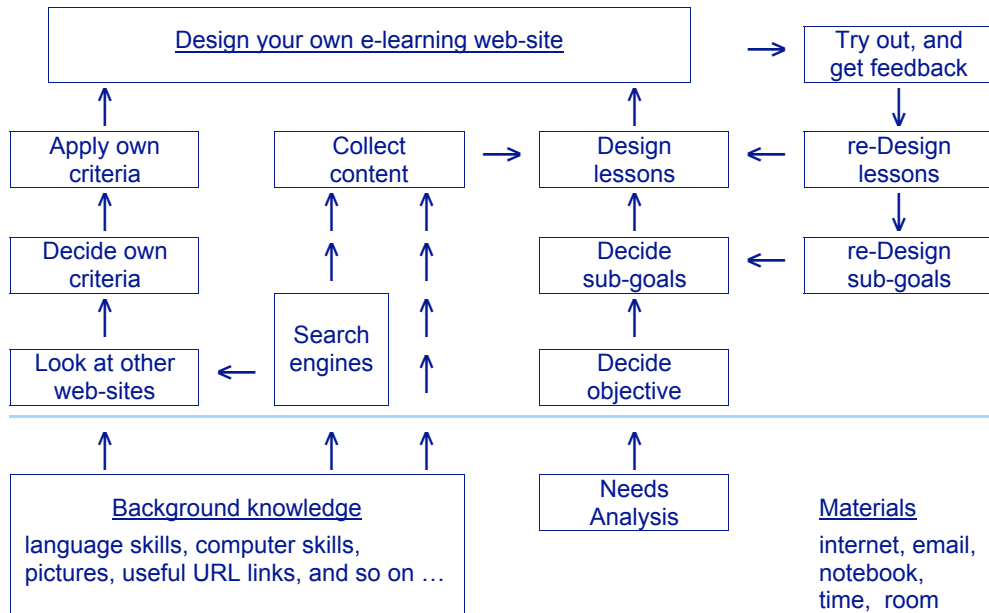
In each lesson, say what you will do, then do it, then say you have done it.

Use a personal conversational style in all your interactions with students.

Add-in flexibility – includes doing Needs Analysis continuously, and adapt content as necessary.

Revise your sub-goals if necessary.

In a group, design your own e-learning web-site, as follows ;



Assessment

The best way to assess learning is to give a test before the course and then give the same test again after the course. If those who took the course show more learning than another group who did not take the course, then you can assume your course was effective for helping your students to learn.

In this Course AI on e-Learning, there was no test before the course.

Therefore assessment is not easy. Any feedback from you would be welcome and useful.

This course will be revised with your kind advice.

Please write feedback to me about which points you think were too difficult, too easy, too fast, interesting, not interesting, and so on. Which points do you think should be cut, added, or changed – and why. Also add any other comments you wish. Thank you.

You may use Japanese, if you wish -