

# The Effective Courseware Production: A Lesson Learned

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## **Abstract**

*Five Steps of a courseware production for eLearning were described. They were (1) role of expert team (2) role of technology team (3) the process of courseware productions (4) feedback from audience and (5) quality improvement and efficiency concerned.*

## **1. Introduction**

The quality of eLearning depends on how learners learn from constructed course content integrated with suitable multimedia and self managed. The quality of courseware, then, comes from the idea of how much it makes learning interactive and active. The content must be presented in such a way that learners can absorb it easily. The media format (synchronous or asynchronous), the type of media chosen, i.e. video, audio, photos, animation, drawings, clip art, etc, are well integrated with content activities such as provoking question, case study, survey, analogies, quiz, test, real world example, chat, sample documents, exercise, supporting documents, FAQ, references and help guides.

The College of Internet Distance Education (CIDE) is in the process of experiencing the effective courseware production and eLearning management. Since the definition of eLearning varies from just VDO combined with lecture to completely online, the College then chose the blended environment type with face-to-face or tutorial session provided for those who need them.

The first course chosen to be the first learning experience is Operations Research, one of 36 courses of M Sc. in Management.

## **2. Purpose**

This paper aims to describe how the courseware in eLearning is produced and recommendations for betterness.

## **3. Methodology**

Five steps were drafted in order to ensure the effective production of good quality of courseware:

- Step 1 Content expert's role to produce a courseware
- Step 2 Technology Team's role to cooperate with content expert
- Step 3 Process of courseware production
- Step 4 Feedback from audience
- Step 5 Quality improvement and efficiency concerned.

### **Step 1 Content expert's role**

The content expert must be able to apply pedagogy to the content; that is he/she must know how to present the sub content sequently with suitable media. He/she must know each type of media suitable for each content. This is done by a group of expert and technology discussed over Course Syllabus and Lesson Plan.

The Course Syllabus comprised of Course objectives, Sub-content (15 lessons), measurement and evaluation. The example of course syllabus is

### Course Syllabus

1. Course Title
2. Numbers of Credit
3. Course Objectives (should include the end product of learning both cognitive and affective)
4. Details of 15 lessons with activities such as assignment, exercise, chat, teleconference, survey, quiz, test, email etc.
5. Measurement of elearning achievement (how much % for each measurement i.e. quiz for 5% each, exercise for 10% each, post test for 15% each)
6. Evaluation of elearning achievement (the criterion for grading i.e. A = 86% or above)
7. Required Text

### Lesson Plan

1. Course Title
2. Numbers of Credit
3. Total numbers of lessons
4. Lesson Objectives
5. Learning activities (identify multimedia suitable and assessment techniques)

Objectives	Content	Sub-content	elearning activity with multimedia	Assessment technique
	1.	1.1 1.2		

## Step 2 Technology Team's role

This team must be able to communicate with expert team and help create Course Syllabus and Lesson Plan. The team must understand the needs of expert and make it as much concrete as possible.

## Step 3 Process of courseware production

Each lesson is a trial and error for both teams. Cooperation with sympathy is needed. Due to time and budget allowance, each lesson should take minimum time and expenses.

The courseware production starts with

- (1) the expert completed the lecture note and handouts for students
- (2) the expert completed all lesson plans
- (3) the expert and technology team designed together how to present content with multimedia
- (4) the expert and technology team reviewed the courseware together

## Step 4 Feedback from audience

2 groups of audience are needed, one is instructors and the other is students. Both groups should take time to study each lesson and give comments with respect to

- (1) How much do they learn from this lesson?
- (2) Is content integrated with suitable media?
- (3) Is each sub-content well presented for self learning?
- (4) Do they enjoy the activities, i.e. questions, test, quiz, case study?
- (5) How much time do they spend in order to achieve the learning for each lesson?
- (6) Are they satisfied with this eLearning?

The comment from both groups should be taken in order to improve each lesson.

## Step 5 Quality improvement and efficiency concerned

The feedback and comments from both groups lead to some changes of content progressively presented with media. The efficiency concern with budget and time allowance versus quality of courseware. Feedback from both groups also lead to reduce some unnecessary expenses and time spent. The second lesson should prove this statement. After all 15 lessons were produced, the summary of time and money spent are recorded.

Lesson	Time spent (day)	Money spent (Baht)
1	35	400,000
2	30	370,000
3	20	350,000
4-15	20 each	300,000 each

## 4. Conclusions

The experience learned from a courseware production for eLearning is worth recorded. After the first lesson out of 15 lessons of one course was done, the plan for the other 14 lessons were drafted and presented to people involved for more systematic, effective, efficient and quality production. With that target in mind, content team and technology team learned their role better in order to reduce time and expense. The content expert from lesson 1 can help content expert from lesson 2 and so on ... This applied to the technology team of course 1 to course 2, 3 ... The lessons learned from this experience is valuable if eLearning is the future of education.

## References

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