

# Visible Models Of Course Organization

*By Stephen Yelon & Christopher Reznich*

From a disorganized course trainees learn only isolated skills and ideas without gaining the total meaning of the course. They do not see the relationships among ideas and are not able to recall or apply combinations of skills and ideas. From a trainee's point of view, understanding a disorganized course is like trying to piece together a jigsaw puzzle without the puzzle's picture. To be able to understand a course as a whole and to recall and use integrated course ideas, trainees need a picture of the course; they need a visible model of the course's organization.

## **A Visible Model Of Course Organization**

A visible model of the organization of a course is an image that reveals how a course's components fit together to make a unified whole. The image may take many forms: a schematic diagram, a drawing, a flow diagram, or a table. Figure 1 shows a schematic diagram of a hypothetical health course. In the visible model we can see that the course teaches trainees to create and implement fitness plans. We can also see the two major parts of the course:

1. A total fitness plan consisting of separate parts for proper nutrition, flexibility, strength and cardiovascular conditioning,
2. Implementation plans consisting of early and later sections—integration, equipment selection and activity scheduling, and then record keeping, rescheduling, and maintaining motivation.

## **Using A Visible Model Of Course Organization**

A visible course model provides a multipurpose tool for course designers. First, designers can use the

model to clarify their thinking. In the process of deriving a model, designers can view, analyze, evaluate and refine their course's structure. When first thinking about the health course, designers had not considered the relationships among the types of health plans: proper nutrition, flexibility, strength and cardiovascular conditioning. After drawing a sketch of the model, the designers realized that they needed to specify the relationships of the four types of health plans. Following some analysis and discussion, the designers decided upon the relationships seen in the final diagram.

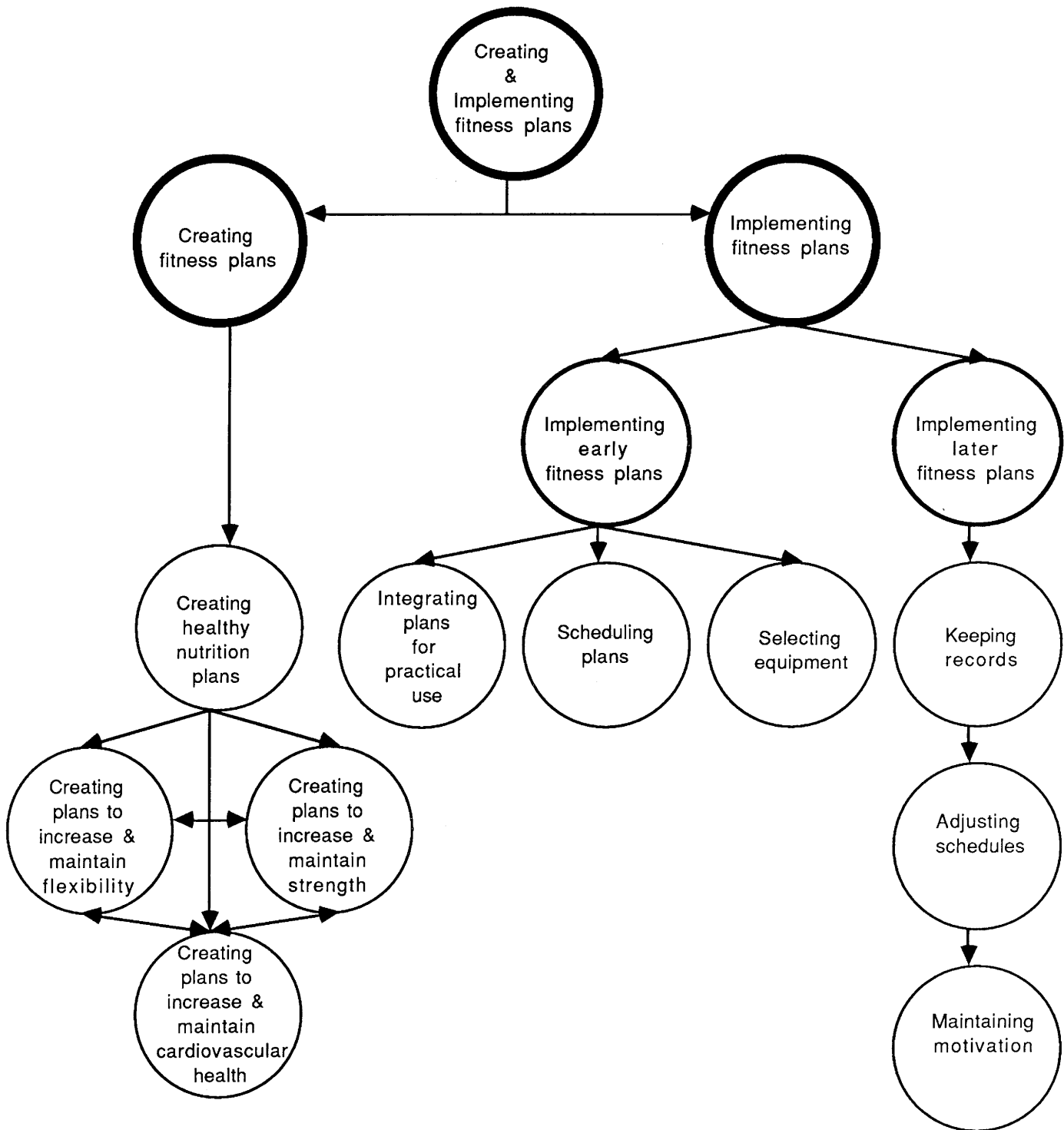
Second, designers can use the model to plan units and lessons. For example, the top circle in the health course model represents the course goal, while each of the circles below represent unit goals. For each unit goal designers specified objectives, tests, contents, and methods of instruction.

Third, designers can use the model to communicate course requirements. Because each circle represents a goal, designers used the drawing to tell other course designers and interested students what participants would learn to do in the health course.

Fourth, designers can use the model as an aid in presenting a course overview and in reviewing unit and course content. At the beginning of the health course, the instructor showed the students how the course divides into two major segments and how each of those portions is subdivided into segments that would be taught as units. At the end of each unit the instructor returned to the diagram to show students what they had accomplished in the course and where they were going.

Students can also use the model to aid in learning. Students in the health course referred to the model when they needed to see how any one unit fitted into

Figure 1. A Visible Model For The Organization Of A Health Course



the whole course. As a consequence, they were less anxious and confused as the course progressed.

In addition, students can use the model as an application tool. For example, to write a rough outline of a fitness plan, students used the topic headings in the model. They judged the completeness of their final health plans by checking the contents against each segment of the course model. The students also learned to create their own models for this and other courses.

## Developing A Visible Model Of Course Organization

Follow six steps to produce a visible model of course organization.

### 1. Make a rough draft of the major components of a course.

Begin developing your course by formulating the three basic elements of course organization: the whole, the parts, and the relationships. Ask three questions about your course:

- What is the whole course about?
- What are the parts of the course?
- What are the relations among the parts of the course and between the parts of the course and the whole idea of the course?

For example, if we were organizing the course on health, we might reason that the whole course should be about fitness, that the parts should be nutrition, strength, flexibility, and cardiovascular conditioning, and that each of these parts are necessary and important components of fitness.

### 2. Decide upon and state the goal that captures what the whole course is about.

How would you describe the central meaning and purpose of your course in one sentence? We express the central meaning of the course as a goal. In the course goal we state generally what a graduate will do when applying the course content in the job context. For the health course we might state that graduates would create and implement their own fitness plans.

### 3. Describe the parts of the course.

We use the term "unit" for a part of a course; unit titles are written as subgoals. Each title contains a verb and an object describing a subsidiary real world performance. The subgoals depend in part on the definition of the course goal. For example, parts may be skills for a skill-oriented course, categories in a conceptually oriented course, or principles in a theoretically oriented course (Reigeluth and Stein, 1983).

There are many ways to divide a particular goal. A skill could be divided into its steps, variations in procedure, or levels of performance. For example, if the goal were "To prepare and edit business documents using any word processing program on a Macintosh computer," the parts could be divided into:

- a. the major parts of the task:
  - preparing business documents
  - editing business documents
- b. the type of document:
  - preparing and editing letters
  - preparing and editing reports
  - preparing and editing memos
- c. the type of program:
  - preparing and editing using MacWrite
  - preparing and editing using Microsoft Word
  - preparing and editing using Microsoft Works
  - preparing and editing using WordPerfect or
- d. the levels of performance:
  - basic preparation and editing
  - intermediate preparation and editing
  - advanced preparation and editing

To decide on a set of units, ask: What are the major elements of the course goal? What are the parts of the whole course performance? What constitutes the whole major idea? For example, we might state that there are two obvious components of our fitness goal:

- creating fitness plans
- implementing fitness plans

The subgoals for creating fitness plans might be creating separate plans for:

- healthy nutrition,
- increasing or maintaining strength,
- flexibility, and
- cardiovascular conditioning.

The subgoals for implementing fitness plans might be:

- integrating components of fitness for practical use,
- selecting equipment,
- scheduling events,
- recording progress, and
- maintaining motivation.

When you have the parts in mind, ask: Is this a complete set of units? Does it include all the performance and the content needed to achieve the course goal?

Figure 2. An Outline As A Visible Model For A Health Course

## Creating And Implementing Fitness Plans

- I. Creating fitness plans
  - A. The base of your fitness plan: creating a healthy nutrition plan
  - B. Three interrelated aspects of your fitness plan
    - 1. Increasing and maintaining strength
    - 2. Increasing and maintaining flexibility
    - 3. Increasing and maintaining cardiovascular conditioning
  
- II. Implementing fitness plans
  - A. Early implementation
    - 1. Integrating separate fitness plans for practical use
    - 2. Scheduling events
    - 3. Selecting equipment
  - B. Later implementation
    - 1. Recording progress
    - 2. Adjusting schedules
    - 3. Maintaining motivation

#### 4. Explain the organization of the course.

When a course is organized, there are clear connections among its unit subgoals and between its subgoals and the course goal. To determine your course's organization, ask: What are the relationships among the unit subgoals? What are the relationships of the unit subgoals to the goal? Are the unit goals equal and parallel contributors to the whole? Do some unit subgoals encompass others? Do some unit subgoals depend on others? Are they mutually influential? Are they related by time?

For example, the two major subgoals creating and implementing fitness plans are of equal importance and scope but are sequenced in order of use. The nutrition, strength, flexibility, and cardiovascular conditioning subgoals are related in a more complex fashion. Proper nutrition is required to maintain strength, flexibility, and cardiovascular conditioning, while strength, flexibility, and conditioning influence each other. For instance, it takes some strength and flexibility to do cardiovascular conditioning, but it takes flexibility to do the exercises for strength and aerobic conditioning safely. The subgoals for

implementing fitness plans are related by time. Early in implementation workers will integrate components of their separate fitness plans for practical use, then schedule events and select equipment. As the plans are followed, participants will record their progress, adjust schedules on the basis of progress and other factors, and continuously maintain motivation.

#### 5. Draw a picture of the course components and organization.

A model of a course's organization is a representation of the course goal, the unit subgoals, and their interrelationships. One common visible course model is a written outline in which the title of the outline is the course goal, the major headings are the unit subgoals, and the placement of entries reveal the relationships (See Figure 2). To reveal some of the more complex relationships, you must carefully craft an outline. Compare the outline in Figure 2 with the diagram in Figure 1 and consider how well each communicates the relationships between the parts of the course and the course as a whole.

## 6. Use and test the visible model.

When you are satisfied with its structure and content, use the visible model and revise it based on an analysis of the results. Check to see if the model helps you to structure your thinking, to organize your planning, to communicate your requirements, and to train your students. Note how students used the model in their learning. Ask about training effects:

- Can students explain the total meaning of the course?
- Can they explain how all the ideas and skills fit together?
- Are they able to recall and apply combinations of ideas and skills?
- Do they apply what they have learned as a total approach?

## Conclusion

For the time invested in creating a visible model of a course's organization, there seem to be substantial possible returns:

- Designers clarify their thinking about the structure of a course.
- Designers plan units and lessons that are consistent with the structure.
- Designers efficiently communicate course requirements.
- Instructors effectively present overviews and reviews.
- Students perceive the total structure of the course.
- Students perceive the course as organized.
- Students understand the relationships among course requirements.
- Students understand where specific content of the course belongs as the learning progresses.
- Students build a systematic and integrated notion of the course content.
- Students apply the ideas and skills of the course in an integrated fashion.

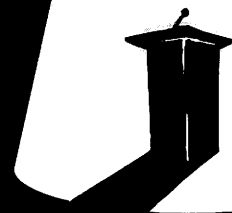
Make the investment of building a visible model of your course's organization and reap the benefits. ■

## References

Reigeluth, C.M., & Stein, F.S. (1983). The Elaboration Theory of Instruction. In C.M. Reigeluth (Ed.) *Instructional Design Theories and Models: An Overview of Their Current Status*. Hillsdale, NJ: Lawrence Erlbaum Associates.

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