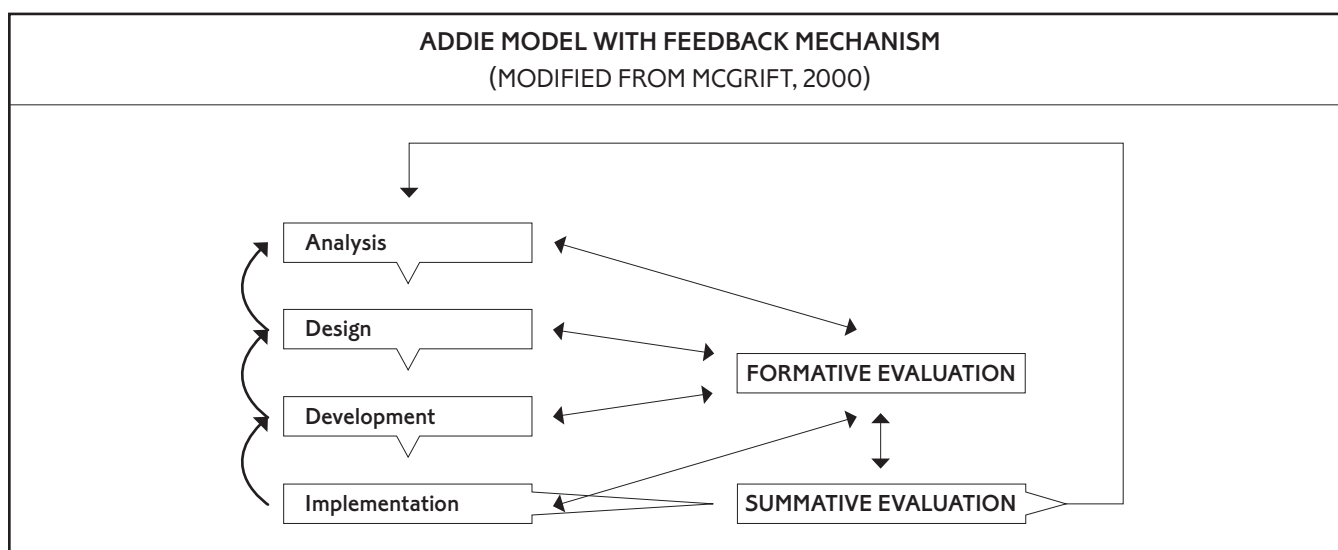


USING THE ADDIE MODEL FOR EFFECTIVE PEDAGOGICAL INTERVENTIONS

Marleigh GREANEY, conseillère en mesure et évaluation
Joanne ELLIS, aide pédagogique - Vanier College

Learners usually don't notice good instructional design when it is present, but complain when it is lacking.

(Anglada, 2005)



EXAMPLES OF INTERVENTIONS TO STIMULATE REFLECTION

- *English now: an online tutorial* [<http://www.vaniercollege.qc.ca/languageschool/Potatoes/home.htm>]
- *Mathematics & science peer tutoring program* [<http://sun4a.vaniercollege.qc.ca/mathsci/>]

INDIVIDUAL REFLECTION

1. What pedagogical project might you like to implement or what project have you already implemented?
2. In your opinion, what factor would you consider most important for ensuring the effectiveness and success of this project? If you were to do one thing to ensure that your project was successful, what would it be?
3. What main obstacle/challenge do you foresee in the realization of this project?

| STAGE | DEFINITION | SAMPLE QUESTION |
|--------------|---|---|
| Analyzing | The process of defining WHAT is to be learned and by WHOM - defining the needs of learners; identifying possible constraints; setting goals for the project; determining the scope of the project. | What are the needs of the learners? |
| Designing | The process of specifying HOW material is to be learned - identifying specific learning goals; defining the exact content of the project; determining the structure of activities and how assessment will be conducted. | What does the project look like on paper? Would creating a storyboard help you see how the learning activities match up with the learning objectives of the project? |
| Developing | Creating the learning materials and the learning environment. | Will you create the graphics / video / audio materials for your project or will you have them done by someone else? |
| Implementing | Delivering the learning materials to a group of students. | How will you train learners to use your product or complete the activities? |
| Evaluating | Measuring the effectiveness and efficiency of the instruction. | When will you start collecting feedback from students? |

Once they had pieced together the table, groups then create a visual representation of the model. They were provided with arrows which they used to show relationships between the various stages. As they worked through this activity, participants recognized the importance of the feedback mechanism in the model. Groups then shared their representations with each other and an interesting discussion ensued.

QUESTIONS TO CONSIDER AT EACH STAGE WHEN USING THE ADDIE MODEL

1. ANALYZING – The process of defining WHAT is to be learned and by WHOM

1. Who are the learners? What are their ages, cultural backgrounds, past experiences, interests, educational goals, etc.?
2. What are the needs of the learners?
3. What are the skills, knowledge, attitudes and/or behaviours that need to be learned?
4. What are the current instructional strategies being employed? What needs to be improved upon, added, clarified, etc.?
5. What are the instructional goals of the project?
6. What are the delivery options? What will the learning environment be like? Will it be face-to-face or online or blended? If online, what might be the differences between web-based and classroom-based learning?

7. What constraints might limit the scope of your project (e.g. timeframe, human resources, financial support, technical skills, technical resources, technical support, etc.)?

2. DESIGNING – The process of specifying HOW it is to be learned

1. What types of media do you want to use (e.g. graphics/video/audio)? Will you create these materials yourself or will you have them done by someone else?
2. What resources do you have at your disposal to complete the project?
3. What type of activities will you create: individual, interactive, collaborative, etc.?
4. What pedagogical approach will you use in designing your project (e.g. behaviourist, constructivist, etc.)?
5. How will you sequence the various activities of your project? Will you set up the project as one task or several tasks staggered over time? Will you divide the learning activities into units, lessons, modules, etc.? Will the content progress from simple to complex?
6. What cognitive skills are required of the students to meet the learning goals of the project? How will you determine which methods/media/environment will best allow students to develop these cognitive skills?
7. What skills do you expect the learners to have acquired after completing each activity? What method will you use to determine whether students have acquired the desired competencies?
8. What does the project look like on paper? Would creating a concept map help you see how the learning activities match up with the learning objectives of the project?
9. In the case of an online project, what type of user-interface do you want? What will be the “look and feel” of the site?
10. How will learners determine whether or not they understand the material? What mechanism will you design to provide feedback to learners?
11. How will you ensure that your project’s activities appeal to students with different interests and learning styles? Will you use a variety of delivery options or types of media?
12. What exactly is the “content” of the project?

3. DEVELOPING – The process of developing the learning materials

1. Are you on schedule with respect to the creation of materials?
2. Are the team members working together in an effective manner?
3. Is each member fulfilling his/her responsibilities in terms of the production of materials?
4. Do the newly produced materials function as expected?

4. IMPLEMENTING – The process of delivering the project to “real” students

1. What information might you want to record as you observe students engaging with the learning materials for the first time?

2. When you first introduce the materials to instructors, do they appear interested? Enthusiastic? Resistant? Critical?
 3. During the training session for instructors, do instructors catch on quickly or do they encounter unforeseen problems?
 4. How will you react to “bugs” (i.e. when you present activities to students and they do not go as planned)?
 5. Do you have a “back up” in case of technical or other problems?
 6. Will you start with a small-scale or large-scale implementation?
 7. When you first introduce the materials to a group of students, do they require constant guidance or can they work independently?
5. **EVALUATING** – The process of determining the effectiveness and efficiency of the instruction. Formative evaluation takes place at each stage of the project, while summative evaluation occurs upon full implementation of the project. Note that formative evaluation takes place at each stage of the project, while summative evaluation occurs upon full implementation of the project.
1. What factors/criteria will you use to determine the effectiveness of the project (e.g. development of higher-order problem-solving skills, increased motivation, improved learning, etc.)?
 2. How and when will you collect data relating to the overall effectiveness of the project?
 3. How will you analyze the feedback collected from students?
 4. How will you decide whether or not you need to revise any aspects of the project before full implementation?
 5. How will you measure the content validity and reliability of the project?
 6. How will you assess whether the instructions are clear?
 7. How will you assess the reaction of learners to the instructional materials?
 8. To whom will you submit a report outlining the results of the evaluation?

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