# Curriculum Development Using the *Backward Design Method**

 (*Wiggins and McTighe, 1998)

## "Curriculum Architects":  What shapes our work?

What are the "design codes" for "Curriculum Architects"?   Life skills; content standards; student interests; developmental levels; some or all of the above?

## What is the purpose of a curriculum?

The curriculum topic (e.g., Concrete Garden Stepping Stones), materials (concrete, marbles, tiles, rocks, shells, mason's trowel, 5-gallon bucket for mixing, 5-gallon bucket with bottom removed, water, cooking oil), and appropriate instructional methods (hands-on, inquiry-based experiential learning; demonstration) are used to bring about learning to meet a given standard, interest, or skill.

## What is the Backward Design Method?

1. Backward design starts with the desired results.  What is it that we want our audience to learn?  What concepts need to be developed?  Are they based on content standards?  Life Skills?  Determine these first.

   Given that there are usually more concepts available than can be addressed in a curriculum, one must prioritize desired results.  Determine: a) What's worth being familiar with; b) What's important to know or do; and c) What should be considered "enduring" understandings, things that are important for the audience to retain after they've forgotten many of the details?

   How do I determine what's most important to include?  Suggested filters:

   a. Determine the "big ideas" that are essential for understanding.  Do not "clutter" a curriculum with facts and ideas that are not going to having enduring value.

   b. What will allow for authentic learning experiences that involve learners the opportunity to "do" the subject rather than be told or demonstrated the subject?

   c. Concepts, processes, and/or skills that learners often have difficulty understanding or mastering are important ones to consider.   Teach for understanding such that the learners can gain an understanding or master a skill.

d. Decide what ideas, topics, or processes are most interesting to your audience and will most likely engage the learners. (Is what you choose interesting to your specific audience, or to you?)

2. How will we know if our audience has learned the content, Life Skill, or skill that is our desired result? Determine the acceptable evidence (based on the desired results) that will help the educator determine whether or not acceptable levels of learning have taken place.

   How do I assess whether or not learning has occurred? Understanding does not appear magically at the end of an activity, program, or project; rather, it develops over time as a result of ongoing exploration, reflection, and further questioning by the learner. With that in mind, assessment should not be an isolated event (e.g., test or survey) at the end of a program, project, or activity. The assessment of understanding should be a collection of evidence that is gathered over time. In 4-H, an "Assessment Continuum" might look like the following:

   ***Informal Checks for Understanding*** (e.g., questions, observations, informal dialogues) used to provide evidence of learning during the Exploration Phase of the Learning Cycle.

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   ***Academic Prompts*** (open-ended questions that challenge the learners to think critically about the concept being explored; not a recitation of facts) can help assess learners as a component of the Exploration and Concept Development Phases of the Learning Cycle.

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   ***Performance Tasks and/or Projects*** (e.g., authentic tasks that require the transfer of knowledge and skills to an independent situation) can provide evidence as part of the Concept Application Phase of the Learning Cycle.

3. Plan the learning experiences and instruction.

   With clearly identified results and assessment tools identified, "Curriculum Architects" can now proceed to planning their instructional activities. Key questions to consider include:

   ❑ What background knowledge, skills, and/or abilities will the learners need to perform the activities and achieve the desired learning

objectives?  (Note:  These may be age-related; they may concern literacy levels; physical abilities may be a consideration; etc.)

- ❑ What is the best instructional method?  Will advance teaching or coaching be necessary for the learners or the facilitators?
- ❑ What materials and resources will be needed?  How can these be best obtained?

- ❑ Does the design of the activities flow well and is it effective in achieving the desired results?

## <u>Why is "backward" a desirable approach</u>?

Many educators design activities and teach they way they were taught.  They often design activities using what they know from previous experience, which usually includes traditional approaches (e.g., lectures or demonstrations) to well-established activities, rather than beginning at the "design codes" that need to drive our work.  Furthermore, results from activities, projects, and programs are typically assessed only once:  A "snapshot of knowledge" test at the end of the activity, project, or program.  The Backward Design looks at what the learners need first and targets assessment and instructional strategies around those needs.

**Backward Design Stages:**

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│  Identify Desired Results │
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│  Determine Acceptable    │
│  Evidence                │
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│  Plan Learning           │
│  Experiences and         │
│  Instruction             │
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