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## THE IMPORTANCE OF FORMATIVE EVALUATION AND WHAT IS INVOLVED IN DOING IT

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## A DESIGN APPROACH TOWARDS HELPING PEOPLE TO LEARN EFFECTIVELY AND EFFICIENTLY

CRITICAL TO ENSURING SUSTAINED MOTIVATION

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# EVALUATION Sometimes nega

- Sometimes negative connotations because of questionable uses in the schooling practice, particularly when resulting labels stuck on people representing their assumed 'value'.
  - Here: "To examine and judge carefully; appraise."
  - What? Not people but a product and the practice of its use.
  - Aim: Find out if it works for all intended users and if it can still be improved.
  - □ If it can be improved, then how?

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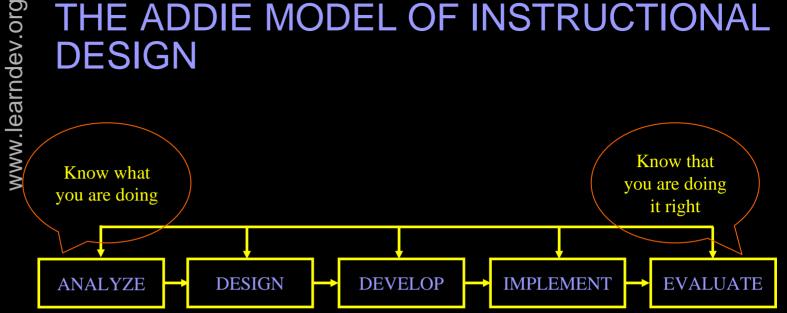
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### MAKING THINGS WITH A PURPOSE

How do you do it?

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THE ADDIE MODEL OF INSTRUCTIONAL DESIGN



### See for instance:

- http://ed.isu.edu/addie/index.html
- http://itsinfo.tamu.edu/workshops/handouts/pdf\_handouts/addie.pdf
- http://raleighway.com/addie/

### ANALYZE

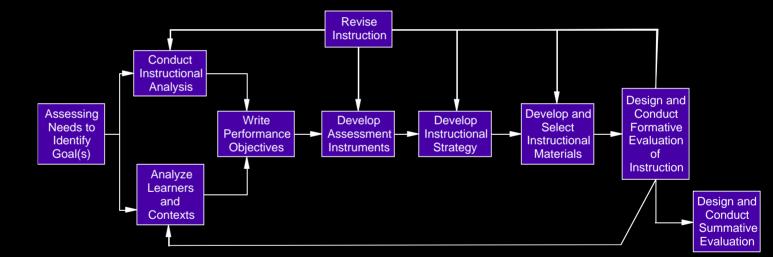
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- Ask such questions as:
  - □ Who is learning?
    - What will be learned? (Formulate it as specifically as you can in concrete terms.)
      - Three domains: psycho-motor; cognitive (from labeling to conceptual development, reasoning, problem solving, creativity); attitude.
      - Mind that skills often build on each other, that there are hierarchies of skills and interconnections.
    - In what circumstances will the learning take place?
    - How will it be known that the learning has occurred?
    - □ What constrains the learning?
    - □ What helps the learning along?

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### THE DICK & CAREY MODEL OF INSTRUCTIONAL DESIGN



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### FORMATIVE AND SUMMATIVE EVALUATION

Summative: Determine overall effectiveness (after the product has been completed)

Formative: Checking on the detail and finding out what can be changed to make things work better for the user. This is typically done while the product and its intended procedures for use develop.

### STAGES OF FORMATIVE EVALUATION

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- Goal specification (measurable goals of what must have been achieved at different stages of the learning process)
- Preparation (evaluation instruments and protocols; evaluation settings [one-on-one, small group, large group])
- Data collection
- Data analysis
- Revision of product and procedures of use
  - Recycling (retest product and continue to improve until unlikely that further efforts are worth their while – then move to summative evaluation and disseminate product)

