Course Design Institute

Teaching is a basic human practice whose excellence depends upon the exercise of certain intellectual, moral and spiritual virtues…Teaching is closer to an art than it is to techne, and though it certainly involves mysterious transaction, it is nevertheless a public activity that is improvable through practice and criticism…calling for constant application of practical wisdom.
-Mark Schwehn; The Spirit of Teaching

UNION UNIVERSITY
CENTER *for* FACULTY DEVELOPMENT

Together Toward Excellence

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Learning that Lasts

(Course Name)

(Course Goal: "What do I want my students to remember in five years?")

(Learning Objective)	(Learning Objective)	(Learning Objective)	(Learning Objective)
Formative Assessments (Activities, Assignments)	Formative Assessments (Activities, Assignments)	Formative Assessments (Activities, Assignments)	Formative Assessments (Activities, Assignments)
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Summative Assessment

Learning That Lasts
Developing a Course Goal

Course Description

What do I want my student to know at the end of the course? What do I want my students to be able to do at the end of this course? What is the impact I want this course to have on my students, 4 – 5 years later? What are you teaching your students to love?

My Course Goal

Characteristics of Well-written Goals

- The goal is written as a single statement or one essential question.
- The goal is cohesive.
- The goal is broad.
- The goal considers what student know, can, and/or will be in two – three years.
- The goal is appropriate for all student in the class.
- The goal addresses the whole student, not just the cognitive domain.

Writing Course Goals:

1. They should be broad statements of what you want your students to know or care about by the end of the course, not necessarily content related.

2. They should be student-centered, not teaching-centered: "students will understand…"students will learn how to… rather than "this course will teach… "or "in this course, I plan to..."

3. They can use "fuzzy" general verbs like "understand," "appreciate," "value," "perceive," and "grasp," which are not appropriate for learning objectives.

4. They need not use observable and measureable verb, which must be used for learning objectives.

   What do you want your students to be able to do?

   Who do you want them to become?

   What do you most care about?

   What do you not want to lose in this course?

   What will drive you to teach it every day?

Examples of Course Goals:

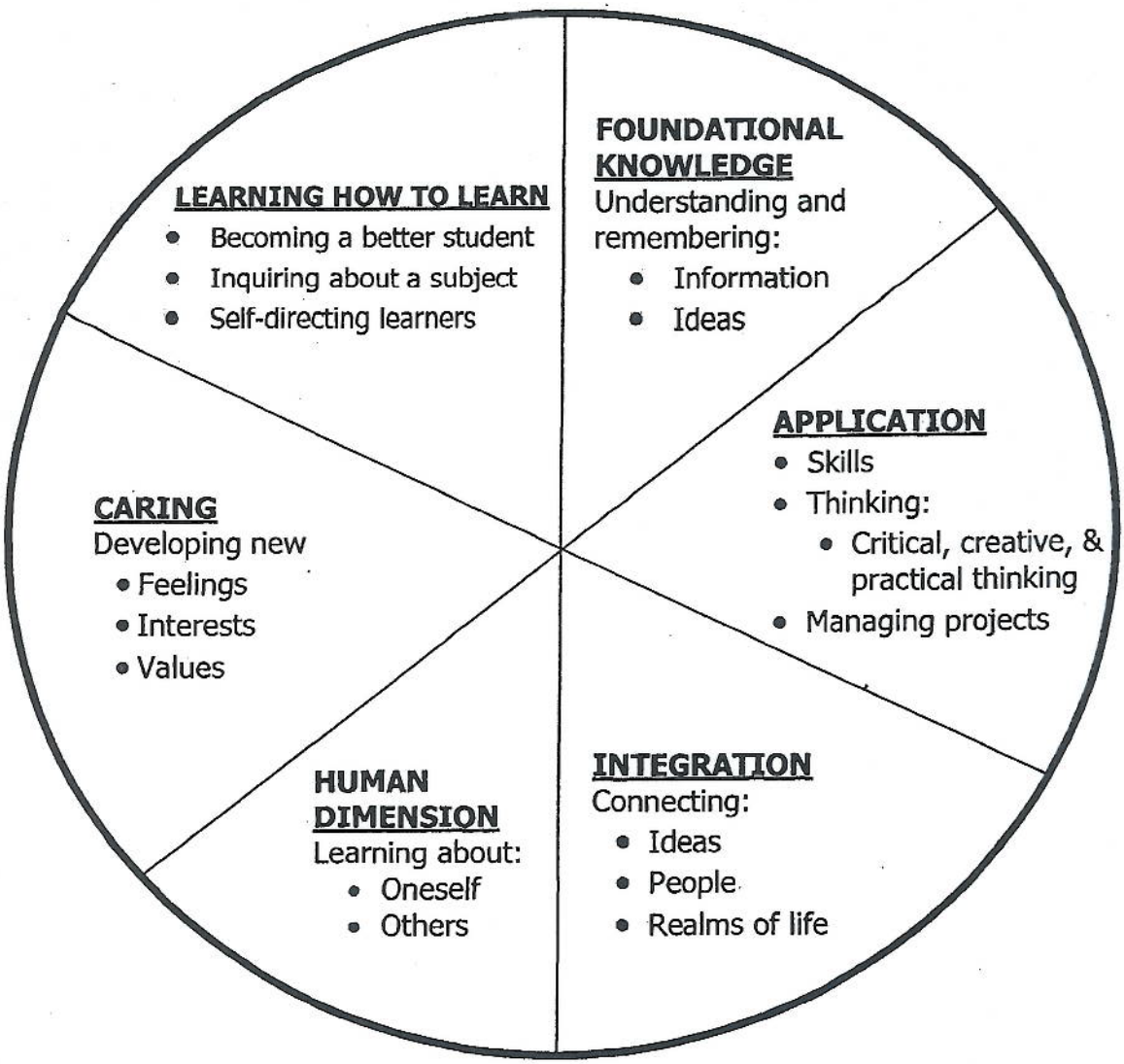
1. Goal: First I want you to have a broad understanding of the history of the United States. By the time you finish both courses, you should be far more aware of your nation, its origins, values, and development, and your place in that collection of values and experiences. Second, I want you to be more aware of historical context in every aspect of life, past and present. I hope you learn to ask historical questions about things which before seemed timeless. I hope you realize more fully how *everything* about people is historical.

2. Goal: Students will become comfortable, confident, and excited about teaching mathematics in elementary grades.
   Goal restated as an essential question: What does an effective elementary mathematics teacher understand and create in a mathematics classroom?

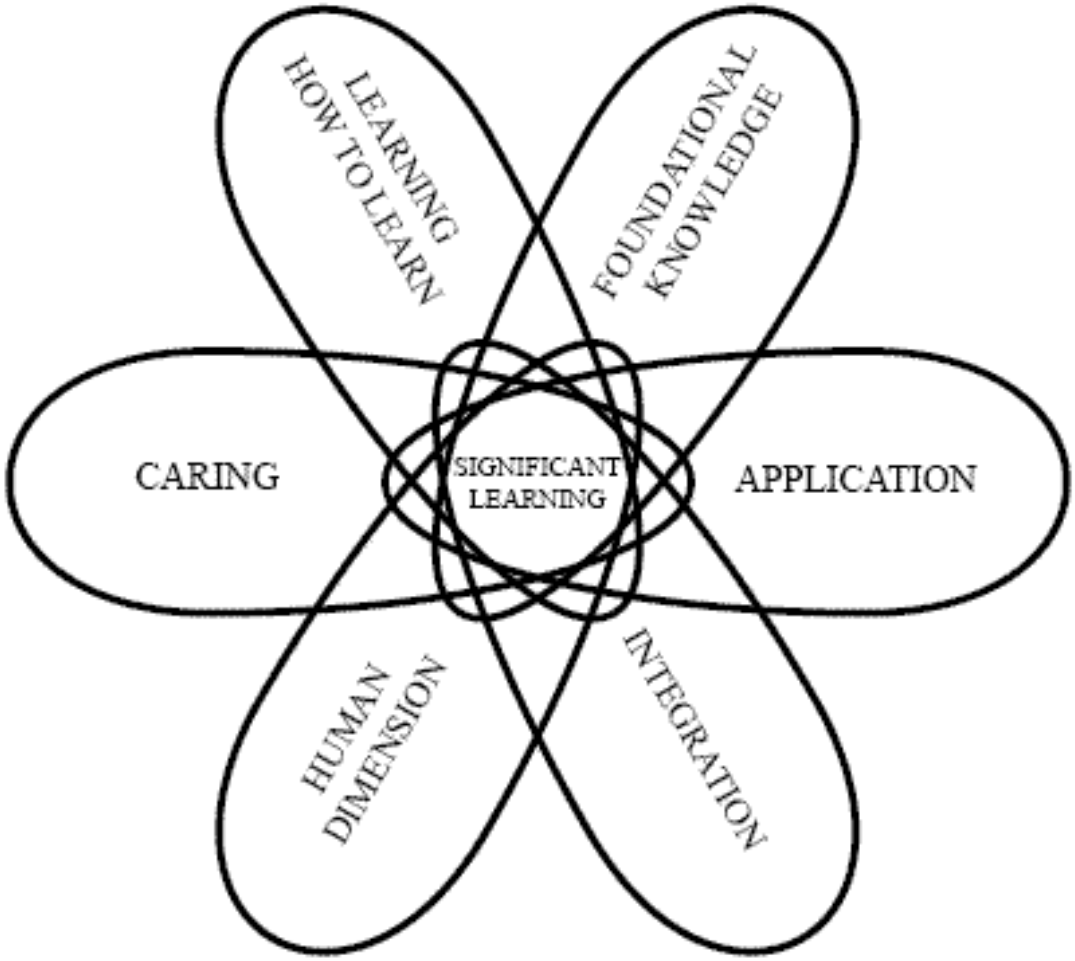
3. Goal: This course is designed to present the student with a survey of the major developments in the history of mathematics. Special emphasis will be given to the following areas: number theory, geometry, algebra, trigonometry, and calculus.

Figure 1

A TAXONOMY OF SIGNIFICANT LEARNING



One important feature of this particular taxonomy is that each kind of learning is ***interactive***, as illustrated in Figure 2 (next page). This means that each kind of learning can stimulate other kinds of learning. This has major implications for the selection of learning goals for your course. It may seem intimidating to include all six kinds of significant learning. But the more you can realistically include, the more the goals will support each other—and the more valuable will be your students' learning.


LEARNING HOW TO LEARN
FOUNDATIONAL KNOWLEDGE
CARING
SIGNIFICANT LEARNING
APPLICATION
HUMAN DIMENSION
INTEGRATION

Revised Blooms Taxonomy – Verbs, Materials/situations that require this level of thinking, Potential activities and products

	REMEMBERING	UNDERSTANDING	APPLYING	ANALYSING	EVALUATING	CREATING
VERBS	Tell, List, Describe, Relate, Locate, Write, Find, State, Name, Identify, Label, Recall, Define, Recognise, Match, Reproduce, Memorise, Draw, Select, Write, Recite	Explain, Interpret, Outline, Discuss, Distinguish, Predict, Restate, Translate, Compare, Describe, Relate, Generalise, Summarise, Put into your own words, Paraphrase, Convert, Demonstrate, Visualise, Find out more information about	Solve, Show, Use, Illustrate, Construct Complete, Examine Classify, Choose Interpret, Make Put together, Change, Apply, Produce, Translate, Calculate, Manipulate, Modify, put into practice	Analyse, Distinguish, Examine, Compare Contrast, Investigate Categorise, Identify Explain, Separate Advertise, Take apart Differentiate, Subdivide, deduce,	Judge, Select, Choose, Decide, Justify, Debate, Verify, Argue, Recommend, Assess, Discuss, Rate, Prioritise, Determine, Critique, Evaluate, Criticise, Weigh, Value, estimate, defend	Create, Invent, Compose, Predict Plan, Construct Design, Imagine Propose, Devise Formulate, Combine, Hypothesize, Originate, Add to, Forecast,
MATERAILS SITUATIONS	Events, people, newspapers, magazine articles, definitions, videos, dramas, textbooks, films, television programs, recordings, media presentations	Speech, stories, drama, cartoons, diagrams, graphs, summaries, outlines, analogies, posters, bulletin boards.	Diagrams, sculptures, illustrations, dramatisations, forecasts, problems, puzzles, organisations, classifications, rules, systems, routines.	Surveys, questionnaires, arguments, models, displays, demonstrations, diagrams, systems, conclusions, reports, graphed information	Recommendations, self-evaluations, group discussions, debates, court trials, standards, editorials, values.	Experiments, games, songs, reports, poems, speculations, creations, art, inventions, drama, rules.
POTENTIAL ACTIVITIES & PRODUCTS	Make a list of the main events . Make a timeline of events. Make a facts chart. Write a list of any pieces of information you can remember. List all the …in the story. Make a chart showing.. Make an acrostic. Recite a poem	Cut out or draw pictures to show a particular event. Illustrate what you think the main idea was. Make a cartoon strip showing the sequence of events. Retell the story in your own words. Paint a picture of some aspect you like. Write a summary report of an event. Prepare a flow chart to illustrate the sequence of events. Make a colouring book.	Construct a model to demonstrate how it will work. Make a diorama to illustrate an important event. Make a scrapbook about the areas of study. Make a papier-mache map to include relevant information about an event. Take a collection of photographs to demonstrate a particular point. Make up a puzzle game showing the ideas from an area of study. Make a clay model of an item in the area. Design a market strategy for your product. Dress a doll in costume. Paint a mural. Write a textbook outline.	Design a questionnaire to gather information. Write a commercial to sell a new product. Conduct an investigation to produce information to support a point of view. Construct a graph to illustrate selected information. Make a jigsaw puzzle. Make a family tree showing relationships. Put on a play about t he study area. Write a biography of the study person. Prepare a report. Arrange a party and record as a procedure. Review apiece of art including form, colour and texture	Prepare a list of criteria to judge a ……..show? Remember to indicate priorities and ratings. Conduct a debate about a special issue. Make a booklet about 5 rules you see as important to convince others. Form a panel to discuss views. Write a letter to .... advising on changes needed at … Write a half yearly report. Present your point of view.	Invent a machine to do a specific task. Design a building to house your study. Create a new product, give it a name and then devise a marketing strategy. Write about your feeling sin relation to … Design a record, book or magazine cover. Sell an idea. Devise a way to … Compose a rhythm or put new words to an old song.

teachers.net/lessons/posts/355.html www.teachers.ash.org.au/researchskills/dalton.htm Dalton.J & Smith.D [(1986) Extending Children's Special abilities – Strategies for Primary Classrooms
www.lgc.peachnet.edu/academic/educatn/Blooms/critical_thinking.htm

From http://www.nwlink.com/~donclark/hrd/bloom.html

Bloom's Taxonomy: Affective Domain

Affective[2]

This domain includes the manner in which we deal with things emotionally, such as feelings, values, appreciation, enthusiasms, motivations, and attitudes.

Descriptors of the Major Categories in the Affective Domain:	Illustrative Verbs:
Receiving phenomena: Awareness, willingness to hear, selected attention.	Examples: Listen to others with respect. Listen for and remember the name of newly introduced people. Keywords: asks, chooses, describes, follows, gives, holds, identifies, locates, names, points to, selects, sits, erects, replies, uses.
Responding to phenomena: Active participation on the part of the learners. Attends and reacts to a particular phenomenon. Learning outcomes may emphasize compliance in responding, willingness to respond, or satisfaction in responding (motivation).	Examples: Participates in class discussions. Gives a presentation. Questions new ideals, concepts, models, etc. in order to fully understand them. Know the safety rules and practices them. Keywords: answers, assists, aids, complies, conforms, discusses, greets, helps, labels, performs, practices, presents, reads, recites, reports, selects, tells, writes.
Valuing: The worth or value a person attaches to a particular object, phenomenon, or behavior. This ranges from simple acceptance to the more complex state of commitment. Valuing is based on the internalization of a set of specified values, while clues to these values are expressed in the learner's overt behavior and are often identifiable.	Examples: Demonstrates belief in the democratic process. Is sensitive towards individual and cultural differences (value diversity). Shows the ability to solve problems. Proposes a plan to social improvement and follows through with commitment. Informs management on matters that one feels strongly about. Keywords: completes, demonstrates, differentiates, explains, follows, forms, initiates, invites, joins, justifies, proposes, reads, reports, selects, shares, studies, works.
Organization: Organizes values into priorities by contrasting different values, resolving conflicts between them, and creating an unique value system. The emphasis is on comparing, relating, and synthesizing values.	Examples: Recognizes the need for balance between freedom and responsible behavior. Accepts responsibility for one's behavior. Explains the role of systematic planning in solving problems. Accepts professional ethical standards. Creates a life plan in harmony with abilities, interests, and beliefs. Prioritizes time effectively to meet the needs of the organization, family, and self. Keywords: adheres, alters, arranges, combines, compares, completes, defends, explains, formulates, generalizes, identifies, integrates, modifies, orders, organizes, prepares, relates, synthesizes.
Internalizing values (characterization): Has a value system that controls their behavior. The behavior is pervasive, consistent, predictable, and most importantly, characteristic of the learner. Instructional objectives are concerned with the student's general patterns of adjustment (personal, social, emotional).	Examples: Shows self-reliance when working independently. Cooperates in group activities (displays teamwork). Uses an objective approach in problem solving. Displays a professional commitment to ethical practice on a daily basis. Revises judgments and changes behavior in light of new evidence. Values people for what they are, not how they look. Keywords: acts, discriminates, displays, influences, listens, modifies, performs, practices, proposes, qualifies, questions, revises, serves, solves, verifies.

Writing Learning Objectives:

1. Just like course goals, they should be learning-centered, not teaching-centered: "students will be able to … rather than "students will be exposed to…"

2. They should use specific active verbs that identify clear, measurable, observable objectives;

3. They should avoid verbs such as "understand," "appreciate," and "value," which are fine for course goals but are not observable or measureable.

   Check out the verbs in different Bloom's categories
   Verbs for Learning Objectives

4. People learn most effectively when they are trying to answer their own questions. Ask your students: What questions do you want to answer? (Bain; What the Best College Teachers Do)

Examples of Learning Objectives:

Learning objectives (for a lesson on Gregorian chant): define the musical characteristics of Gregorian chant (in terms of texture, melody, rhythm, text setting, and structure) and aurally identify these characteristics in specific examples of chant -identify liturgical contexts and textual sources for Gregorian chants.
Learning Objectives:

1. Students will represent numbers, number relationships, and number systems verbally, symbolically and graphically.
2. Students will model operations and explain how they relate to one another.
3. Students will apply number and operation sense to represent and solve problems and justify reasonable estimates.

The following are learning **goals** for the course: Students will …

- demonstrate knowledge of the history of the discipline by placing topics and key concepts within their appropriate historical period and by identifying both the civilizations and the individual mathematicians who made significant contributions to the discipline.
- solve representative problems and state famous problems from the major periods in the history of the discipline.
- connect historical perspectives and the progression of ideas to the content taught in high school and college mathematics courses.
- understand that mathematics in a human endeavor that involves both successes and failures.
- value the lens of history to deepen their understanding of mathematical ideas.
- learn to read historical sources and to discriminate among various types of sources.

Fink's Significant Learning Framework

Knowledge and Goals	Learning Activities (quizzes, exams, in- and out-of-class activities)
Foundational Knowledge Understanding and remembering information and ideas	
Application Skills; thinking (critical, creative, practical); managing projects	
Integration Connecting ideas, people, realms of life	
Human Dimension Learning about oneself and others	
Caring Developing new feelings, interests, values	
Learning How to Learn Becoming a better student; inquiring about a subject; self-directed learning	

General notes about Fink:

Bloom's Taxonomy Planning Framework

Levels of Thinking	Learning Activities (quizzes, exams, in- and out-of-class activities)
Remembering Recalling information	
Understanding Explaining ideas of concepts	
Applying Using information in another familiar situation	
Analyzing Breaking information into parts to explore understandings and relationships	
Evaluating Justifying a decision or course of action	
Creating Generating new ideas, products,	

Learning Objectives	Level of Thinking in Bloom's/Fink's Taxonomy	How will the objective be assessed? (Is the assessment formative or summative?)

Formative and Summative Assessments

Formative (Low Stakes) Assessing what students know DURING their learning.

Purpose: to give students feedback during the learning process to improve their learning

- Concept maps
- Ticket out the door
- Research papers submitted in parts
- Minute Paper
-
-
-
-
-

Summative (High Stakes) Assessing what students know AFTER they have learned.

Purpose: to evaluate student learning at the end of an instructional unit

- Midterm exam
- Final exam
- Paper
- Recital
- Art project

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Summative Assessment

A Self-Directed Guide to Designing Courses for Significant Learning

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Author of:
Creating Significant Learning Experiences:
An Integrated Approach to Designing College Courses

(San Francisco: Jossey-Bass, 2003)

https://www.deefinkandassociates.com/GuidetoCourseDesignAug05.pdf