

*Worldwide Instructional
Design (WIDS)*

Instructional Guide
for

*Aultman College of Nursing & Health
Sciences (ACNHS)*

November 1, 2010

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Curriculum and Assessment Inter-Relationships

Formative and Summative Assessments (www.wids.org)

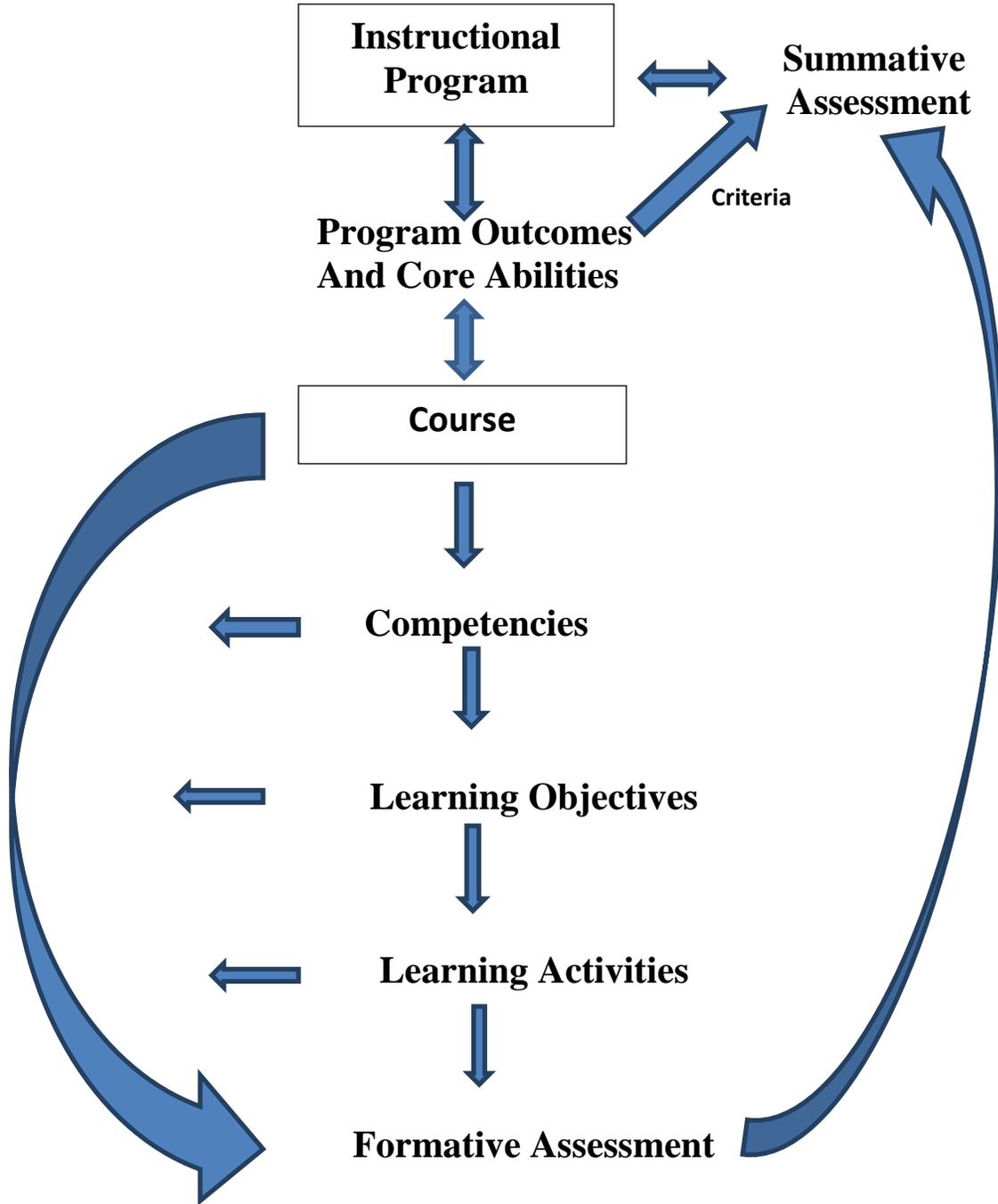
A balanced assessment system combines summative and formative assessments; the integration of both assessments within a program is an integral part of information gathering. Dependence on one type of assessment more than the other and student achievement becomes unclear.

Summative Assessment is used as a gauge to evaluate what students do and do not know at any given time within their overall course of study. Because they are spread out and occur *after* instruction every few weeks, months, or once a year, summative assessments are tools to help evaluate *the effectiveness of programs, school improvement goals, alignment of curriculum, or student placement in specific programs*. Summative assessments happen too far down the learning path to provide information at the classroom level and to make instructional adjustments and interventions *during* the learning process. It takes formative assessment to accomplish this.

Formative Assessment is part of the instructional process. When incorporated into classroom practice, it provides the information needed *to adjust teaching and learning while they are happening*. In this sense, formative assessment informs both teachers and students about student understanding at a point when timely adjustments can be made. These adjustments help to ensure students achieve targeted standards-based learning goals within a set time frame. Although formative assessment strategies appear in a variety of formats, there are distinct ways to distinguish them from summative assessments. One distinction is to think of formative assessment as "practice." We do not hold students accountable in "grade book fashion" for skills and concepts they have just been introduced to or are learning. We must allow for practice. Formative assessment helps teachers determine next steps during the learning process as the instruction approaches the summative assessment of student learning.

The diagram on the next page is representative of this inter-related assessment practice. Each course within a program will evaluate students while they are learning through competencies, learning objectives, and learning activities which will measure a student's formative assessment. Each course in a program is carefully selected to build on the knowledge of the prior coursework. Monthly ATI testing, program outcomes, external standards, core abilities are all part of the summative assessment process – the process of evaluating the effectiveness of the course alignment, program effectiveness, etc. to form a *sum* of the overall learning strategy effectiveness.

(i.e. Formative assessments can be used to make changes in classroom techniques, summative assessment can be used for making changes in course sequencing).



WIDS Overview

The Worldwide Instructional Design System (WIDS) is a software tool that provides a way to organize and plan your curricula to ensure that you and your students arrive entirely prepared for an active learning experience. The WIDS software allows you to develop learner-centered classes that focus on performance-based teaching and learning. It is a centralized curriculum development tool adopted by ACNHS that:

- Provides a consistent framework for developing curriculum and training in any discipline or delivery mode.
- Links curriculum to external and/or college-wide standards.
- Creates syllabi, performance assessments, learning plans, teaching plans, program designs, and DACUM charts and surveys.
- Builds learning outcome matrices.
- Uses a proven instructional design model.

A complete curriculum for a course is to be documented in the Worldwide Instructional Design System (WIDS) and include the following components:

1. Core abilities (college-wide expectations of graduates)
2. Program outcomes
3. Competencies linked to core abilities and program outcomes
4. Learning objectives
5. Performance standards (conditions and criteria)
6. Learning plans
7. Performance assessment tasks
8. Syllabus

A complete WIDS course file incorporates all the elements that are required in the curriculum. Once the course is created in WIDS, it is then a very simple process to update and maintain the content.

NOTE: WIDS is considered *shareware software* since ACNHS pays a license fee.

Contact Sherri Cole @34381, scole@aultman.com for guidance and assistance.

Program Summary Glossary

Terminology	Definition	Example
Syllabus	A written agreement between instructors and learners that includes course competencies, class expectations, evaluation process, grading plan, required texts and supplies and other pertinent class information.	
Competencies	A major skill or ability stated in measurable and observable terms telling what the learner will be able to do as a result of the learning experience.	<ul style="list-style-type: none"> ▪ Solve quadratic equation ▪ Prepare a career development plan ▪ Present a speech to inform
Performance Standards: Criteria and Conditions	<p>Observable, measurable criteria and conditions of their performance assessment.</p> <p><i>Criteria:</i> Established specifications by which performance of a target competency is evaluated.</p> <p><i>Conditions:</i> The situation in which a performance will be assessed.</p>	<p><i>Criteria:</i></p> <ul style="list-style-type: none"> ▪ With a minimum of 80% accuracy; within one hour; using correct spelling; according to manufacturer's specifications <p><i>Conditions:</i></p> <ul style="list-style-type: none"> ▪ In a test; without resources; in a small group
Related Assessment Task	What the learner must do to demonstrate achievement of one or more competencies.	<ul style="list-style-type: none"> ▪ Submit a resume ▪ Complete Unit exam ▪ Present an oral report
Course Outline	List of the topics addressed in a course.	
Grading Policy	Includes a grading scale as well as a plan that tells the learner how he/she will achieve a course grade.	
Learning Objectives	Supporting skill, knowledge or attitude that leads to the mastery of a competency.	<ul style="list-style-type: none"> ▪ Name the essential components of a resume ▪ List the characteristics of desirable firewood
Support Materials	Worksheets, exercises, information sheets and anything else that helps the learner.	
Learning Activities	A statement describing an appropriate activity designed to help learner's master specific learning objectives.	<ul style="list-style-type: none"> ▪ Read Chapter 1 in test ▪ Complete Worksheet 2 ▪ Participate in class discussion ▪ Find 3 URLs related to...
Performance Assessment Activities	This statement matches the criteria without stating at what percentage or according to instructor guidelines.	<ul style="list-style-type: none"> ▪ Complete quiz ▪ Complete paper ▪ Complete Performance Assessment Task 1

ACNHS Core abilities (college-wide expectations of graduates)

Core Abilities are life skills that are addressed throughout the entire college experience and which are not course specific. In order to meet the expectations of the workplace, ACNHS graduates will possess the following core abilities:

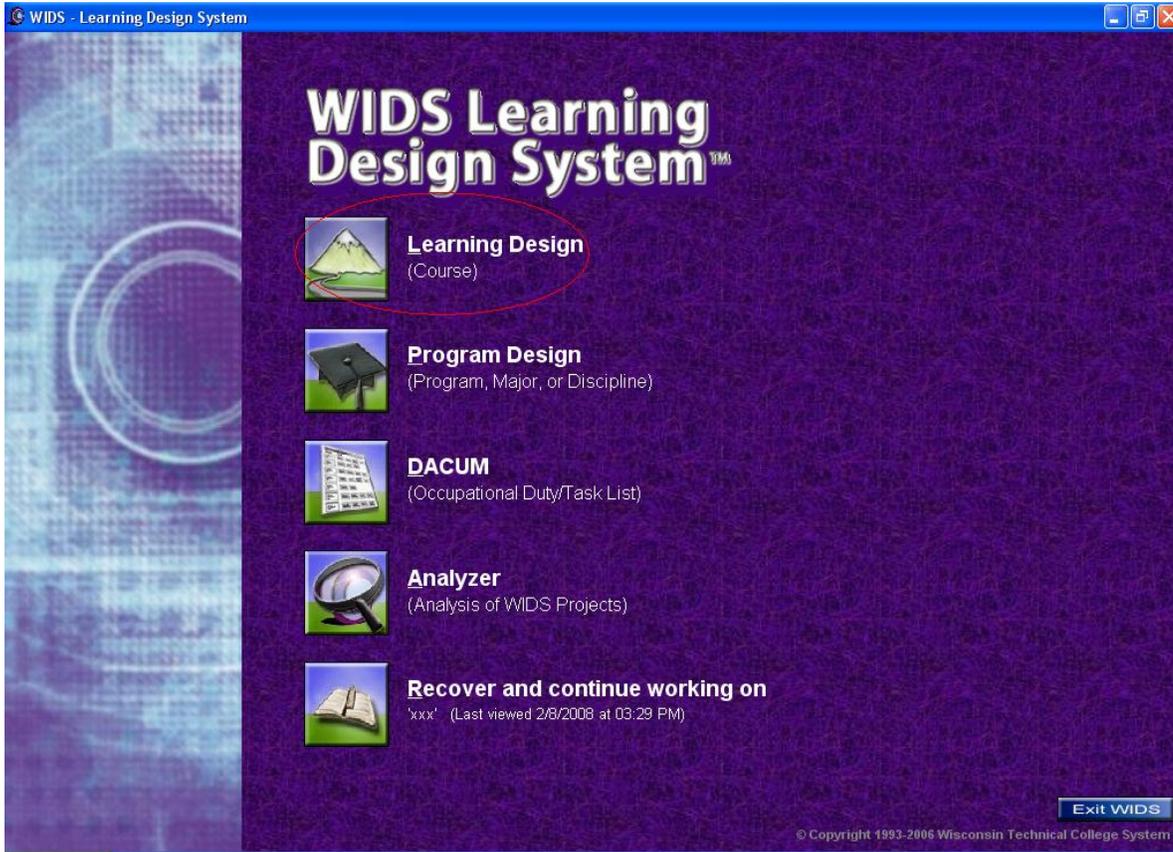
Core Ability	Definition	Indicators
Think Critically and Solve Problems	The ability to think creatively and reflectively; actively search for answers and meaning; evaluate ideas and information in a purposeful, organized manner; and develop beliefs that lead to action.	The learner will: <ul style="list-style-type: none"> Integrate experience, reason, and information to make meaningful conclusions, judgments, and/or products Integrate mathematic and scientific-based knowledge and understanding of its impact on the evolving healthcare environment
Demonstrate Information Literacy	The ability to identify, locate, and utilize information to engage in lifelong learning. To develop an aptitude for the use of technology and an understanding of its impact on the evolving healthcare environment.	The learner will: <ul style="list-style-type: none"> Retrieve, evaluate, synthesize, and apply information across a range of contexts, cultures, and areas of knowledge Apply appropriate technology and resources as part of a team approach Question validity of information and evaluate it using fact-based scientific inquiry
Model Ethical and Civic Responsibility	The ability to recognize an obligation to self and others for his or her decisions/actions, evaluate potential consequences of decisions/actions, and make both personal and professional choices based on these.	The learner will: <ul style="list-style-type: none"> Accept responsibility for learning now and in the future Exhibit professional, personal, and academic honesty Act cooperatively and work effectively in a diverse environment by respecting the rights, views, and work of others Consider context and implication of ethics in all actions
Communicate Effectively	The ability to exchange information by writing, speaking, and listening in order to precisely convey thoughts, ideas, and opinions in a variety of contexts.	The learner will: <ul style="list-style-type: none"> Communicate effectively, appropriately, and professionally in verbal, nonverbal, and written forms Use appropriate technology that supports or facilitates communication Provide and accept constructive feedback Demonstrate fluency in the scientific-based language of healthcare settings

The skills of thinking critically and solving problems, demonstrating information literacy, model ethical and civic responsibilities, and communicating effectively remain integral to students' overall success. Discrete courses in these areas as well as on-going application within the major program courses continue to play a major role in the educational experience for ACNHS students.

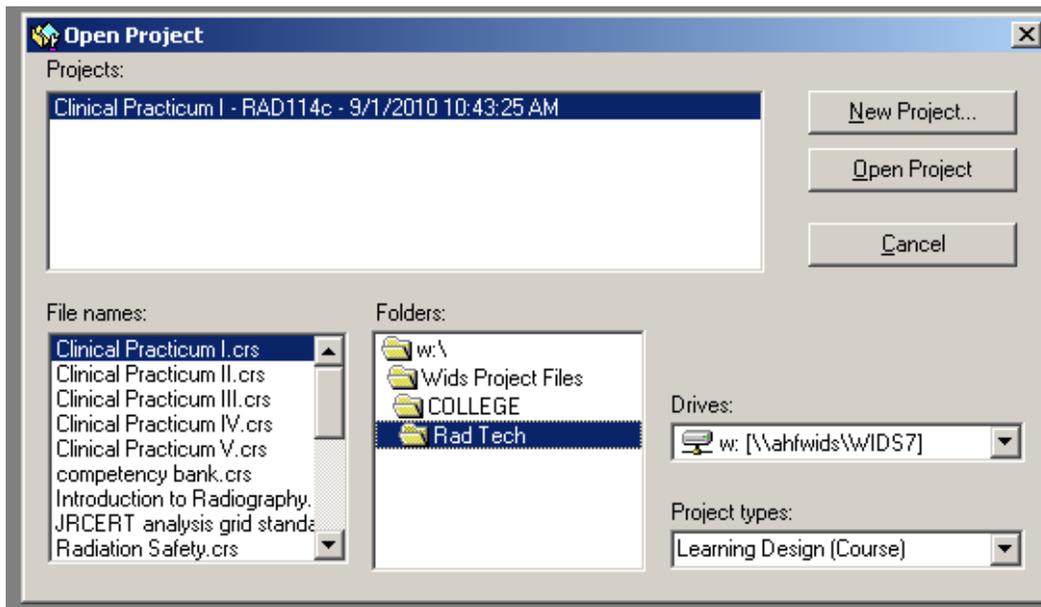
NOTE: These have been set for the college, and cannot be altered within your course unless the core abilities change through evaluation and review by the proper governance committee.

WIDS Software Step by Step Illustrated Instructions

The main page of the WIDS software gives you entrance into its 4 main programs:

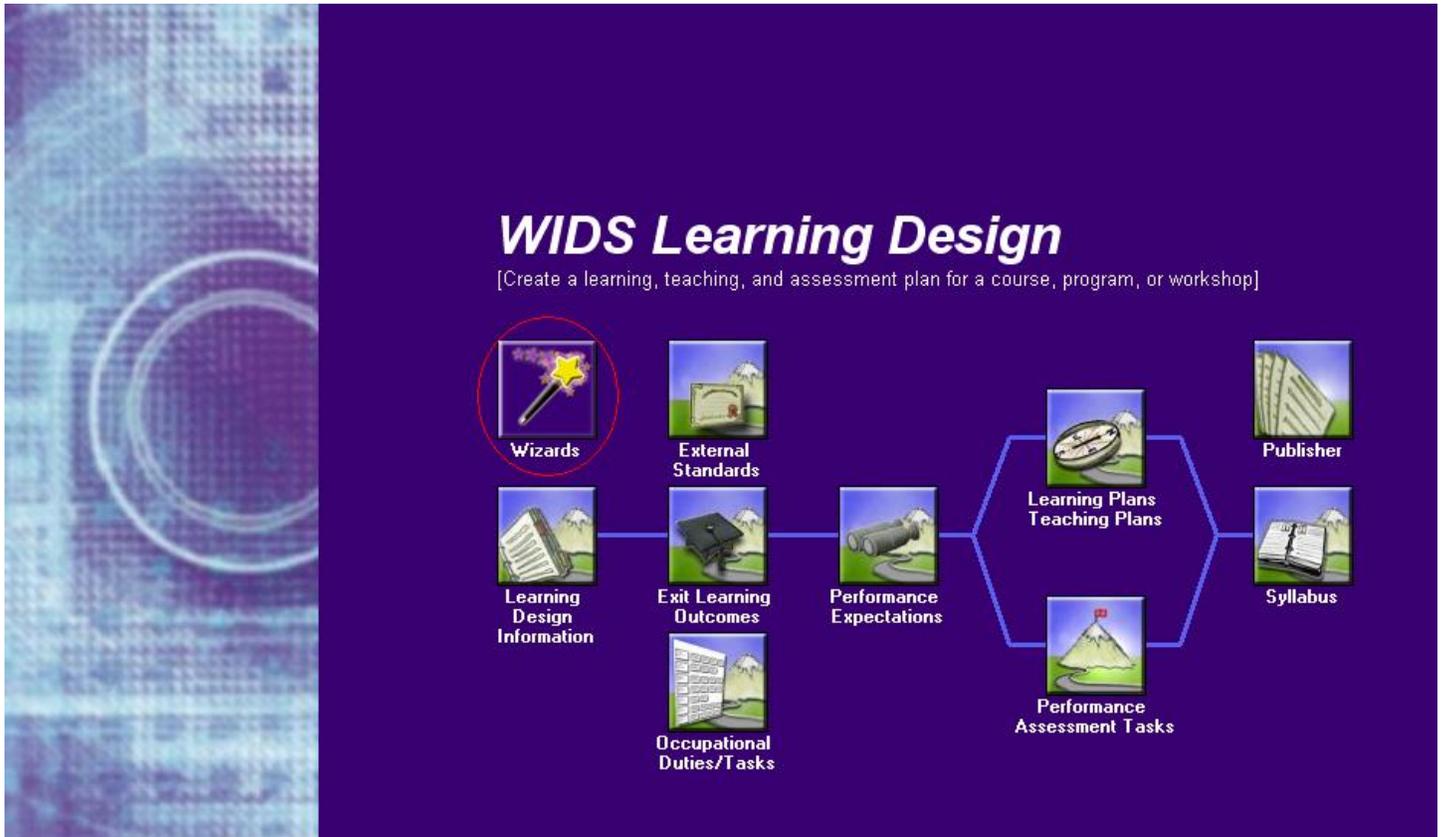


Once you click on the Learning Design, you will be asked to open a project or start a new project. Click on W: drive, Wids Project Files, College, and then your discipline. Choose your course from the list of courses under your area of instruction.



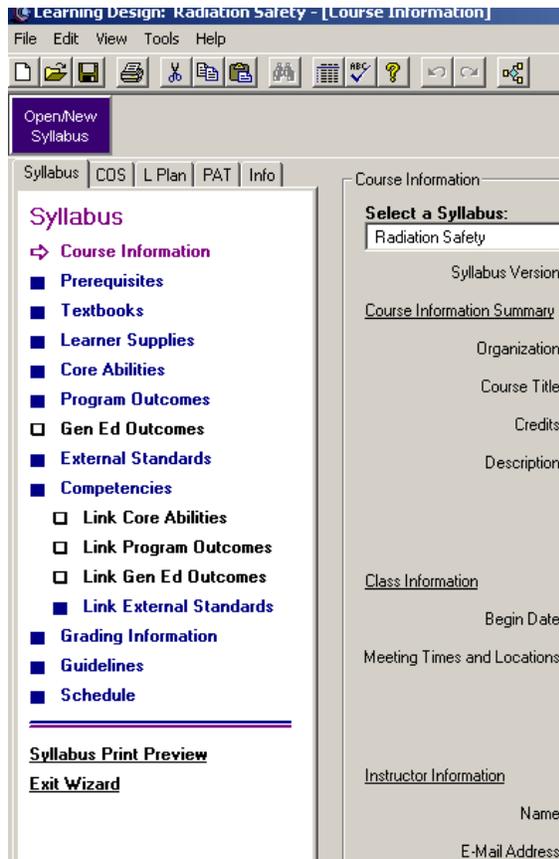
Note: Adapted from www.wids.org, 2010

You will be directed to the main page for course construction:



Clicking on the Wizards button will take you to the inside of the course design area.

There are four major parts to completing a course in WIDS, listed in the tabs on the left hand side of the page:



Note: There are five tabs available; at any time within the first four tabs, you can click on the last tab labeled “INFO” and receive information on that tab or its contents.

<i>Tabs</i>	<i>Description</i>
<i>Syllabus</i>	The syllabus establishes a contract for learning.
<i>Course Outcome Summary (COS)</i>	The course outcome summary contains the competencies, criteria, and conditions that a student would expect to accomplish successfully when finished with the course.
<i>Learning Plan (LPlan)</i>	The learning plan is used to help learners navigate through the materials.
<i>Performance Assessment Tasks (PAT)</i>	A performance assessment task is the actual assignment that learners must do to demonstrate achievement of one or more competencies.
<i>Information (Info)</i>	This tab can be clicked to receive information on the area that you are working on.

The first four tabs will be used extensively as you design your course.

We will talk about each section and requirements further within this manual.

Performance-Based - It's about Learning!

➤ Let's look at a comparison of norm-based instruction and performance-based instruction:

Component	Norm-Based Instruction	Performance-Based Instruction
<u>WHO</u>	<ul style="list-style-type: none"> • Teacher (Design often centers on what the teacher will do – i.e., input) 	<ul style="list-style-type: none"> • Learners (Design centers on what and how learners will learn—i.e., outcome)
<u>WHAT</u> <i>What will students learn?</i>	<ul style="list-style-type: none"> • Based on textbooks, course outlines, faculty interest/expertise • Results from teacher • Emphasizes facts, information • Rarely shares intended outcomes with learners up front • Centers around chapters, units • Focuses on covering the material 	<ul style="list-style-type: none"> • Based on task analysis and needs assessment • Emphasizes application of knowledge, skills, and attitudes • States measurable, observable, instructional targets • Shares intended outcomes with learners up front • Focuses on what learners can do upon successful completion of learning experience
<u>WHEN</u> <i>How will you know when students have learned?</i>	<ul style="list-style-type: none"> • Relies heavily on paper/pencil testing • Focuses evaluation on retention of information and facts • Often what will be evaluated is ambiguous • Features norm-based grading (grading on a “curve” or relative to peer achievement) • Allows for averaging of grades so that unsatisfactory performance in one area can be offset by a high rating in another • Often based on “seat time” (learners progress when they have logged “enough” time) 	<ul style="list-style-type: none"> • Relies on performance (demonstration) of the application of skills, knowledge, and attitudes • Focuses sharply on stated core abilities, competencies, and learning objectives • Measures achievement according to performance standards (pre-stated criteria and conditions)-criterion referenced • Demands the satisfactory performance of each competency and core ability • Allows learners to progress only when competencies are mastered • Holds learners and teachers accountable for achievement of intended outcomes
<u>HOW</u> <i>How will learners develop skills, knowledge and attitudes?</i>	<ul style="list-style-type: none"> • Relies primarily on teacher to deliver instruction • Places learners in a passive role • Often offers little variety in learning style • Provides few benchmarks and little periodic feedback • Lacks clear connections between learning activities and intended outcomes 	<ul style="list-style-type: none"> • Features learner-centered activities • Places learners in an active role • Offers varied learning activities for varied learning styles • Provides benchmarks and periodic feedback with opportunities for learners to improve performance • Clearly ties learning activities to intended outcomes

Note: Adapted from www.wids.org, 2010

Program Outcomes

Program Outcomes are the specific and general knowledge, skill, attitude and abilities demonstrated by the program graduate. The program outcomes incorporate technical skills and ACNHS core ability statements. Program graduates are expected to have mastered the outcomes by the time they finish all the coursework in their program. All programs should have completed matrices showing where and how the outcomes are taught and assessed throughout the program and through summative assessments.

Program Outcomes are also known as **Exit Learning Outcomes or Learning Outcomes** – these are the foundation of what the graduate should master throughout the program in order to be success in the chosen field. The Program Divisional Head has developed the program outcomes to align with the various accrediting bodies in each discipline. *Within the course, the program outcomes/exit learning outcomes cannot be altered/changed unless the program outcomes are changed through evaluation and review by the proper governance committee.*

Program outcomes are:

- ▶ Measurable, observable, and field-specific skills – major outcomes
 - ▶ Number 5-7 per program (*guideline not rule*)
- ▶ Originate from:
 - ▶ Current DACUMs
 - ▶ Accrediting Agencies
 - ▶ National (or other) Skill Standards
 - ▶ Advisory Committees
- ▶ Threaded through courses
- ▶ Performance verified with summative assessment of skill performance

Program Outcomes Checklist

<i>Criteria</i>	<i>Ratings</i>	
1. Begins with an action verb.	yes	no
2. Describe for learners the broad occupational or field-specific skills, attitudes, and abilities they must master in order to successfully complete a program, major, or discipline thread.	yes	no
3. Describes outcomes that are addressed throughout the program and across courses.	yes	no
4. Pertain to all of the learning experiences (e.g. courses, laboratories, clinicals, independent research, capstone projects, and internships/externships) that make up a program, major, or discipline thread	yes	no
5. Encourages learners to integrate related Competencies and perform at higher, more complex levels.	yes	no

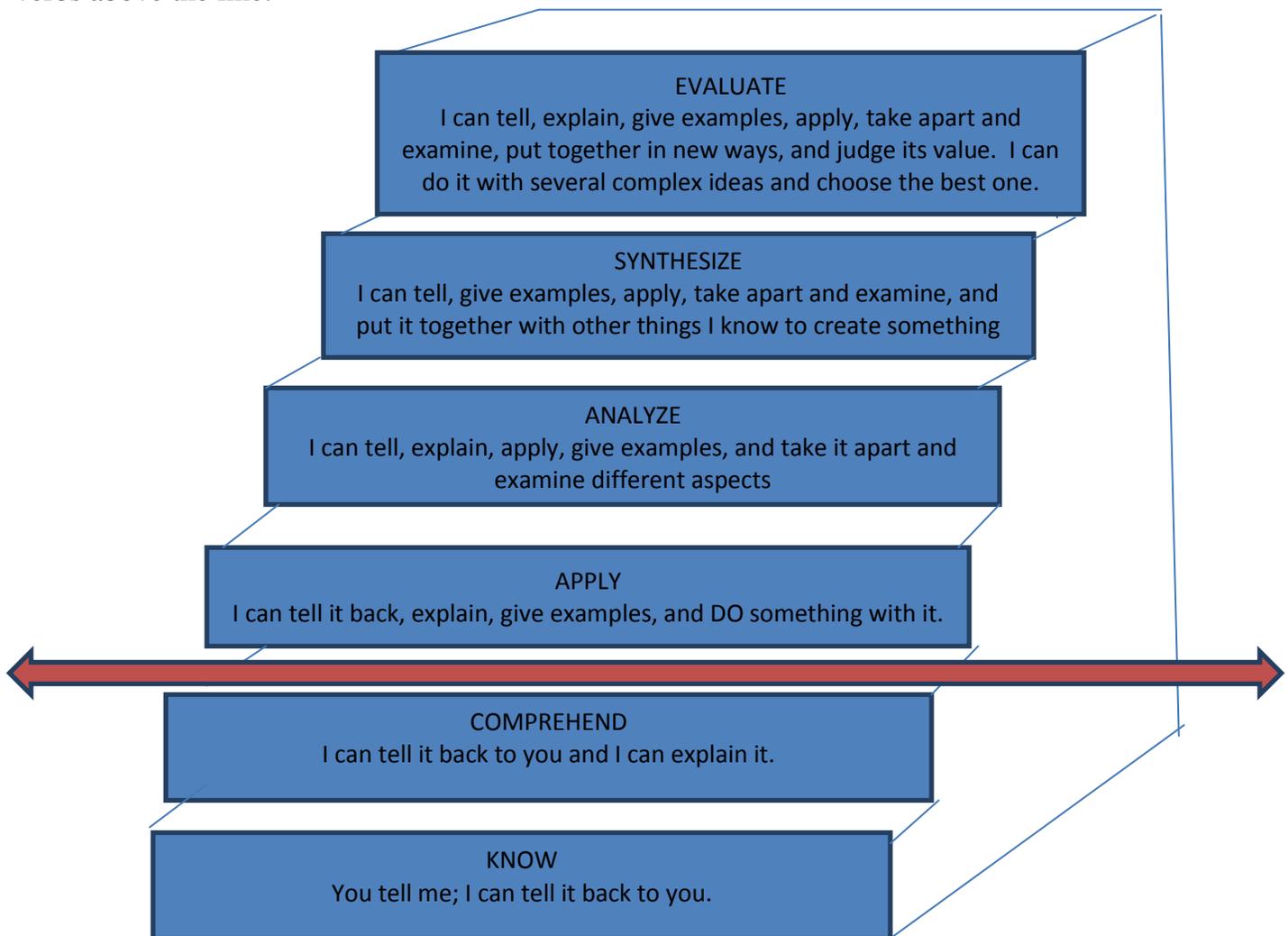
Comments:

Competencies

- *Competencies (linked to core abilities and program outcomes)*

Using Bloom's Cognitive Domain for Writing Competencies and Learning Objectives

Learning starts on the bottom step. Each step up requires a higher level of thinking. How high should your learners go? Tell them with precise verbs. Then measure their performance accordingly. Competencies are about DOING not about KNOWING. Be sure to start all competencies with action verbs above the line.



NO COMPETENCIES BELOW THE RED LINE!

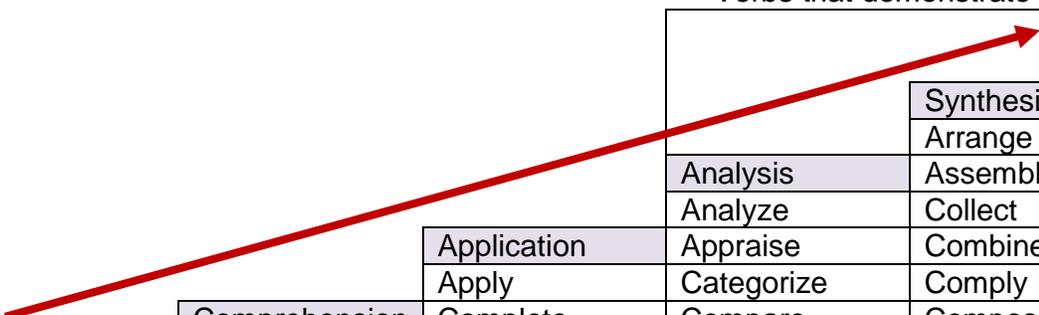
(These levels are fine for **LEARNING OBJECTIVES**, though)

Bloom's Taxonomy of Measurable Verbs

Benjamin Bloom created a taxonomy of measurable verbs to help us describe and classify observable knowledge, skills, attitudes, behaviors and abilities. The theory is based upon the idea that there are levels of observable actions that indicate something is happening in the brain (cognitive activity.) By creating learning objectives using measurable verbs, you indicate explicitly what the student must do in order to demonstrate learning.

(The verbs in the listed categories are not a complete list; included are many of the most common verbs per category)

Verbs that demonstrate **Critical Thinking**



					Evaluation
					Appraise
				Synthesis	Argue
				Arrange	Assess
		Analysis	Assemble	Choose	
		Analyze	Collect	Compare	
		Application	Appraise	Combine	Conclude
		Apply	Categorize	Comply	Estimate
	Comprehension	Complete	Compare	Compose	Evaluate
	Compare	Construct	Contrast	Construct	Interpret
Knowledge	Describe	Demonstrate	Debate	Create	Judge
List	Discuss	Dramatize	Diagram	Design	Justify
Name	Explain	Employ	Differentiate	Devise	Measure
Recall	Express	Illustrate	Distinguish	Formulate	Rate
Record	Identify	Interpret	Examine	Manage	Revise
Relate	Recognize	Operate	Experiment	Organize	Score
Repeat	Restate	Practice	Inspect	Plan	Select
State	Tell	Schedule	Inventory	Prepare	Support
Tell	Translate	Sketch	Question	Propose	Value
Underline		Use	Test	Setup	

Course Competencies – Course Competencies represent the framework of instruction. The competencies are the basic outcomes that a student should be able to do at the completion of the course.

For example, in a *Medical Ethics* course, **a competency might be:**

- **Perform within ethical boundaries**

This is a broad category that encompasses many parts -the **learning objectives**, such as:

- **Differentiate between legal, ethical, and moral issues affecting healthcare**
 - **Compare personal, professional and organizational ethics**
 - **Identify reportable illegal and/or unsafe activities**
 - **Etc.....**
- The **competency** is the big picture, and the **learning objectives** are the pieces of the topic that the student needs to be able to achieve the competency.
- If you think of the textbook that you use with your course, the Chapter identification would be representative of the overall competency, and the bulleted learning outcomes are the learning objectives to achieve the overall competency.....

Competencies

- Describe the performance of a major skill
- Begin with an action verb that matches the means of performance assessment
- Tells learners what they will be able to do as a result of a given learning experience
- Describe the intended outcome, not the learning process
- Specify a single performance/not a combination
- Describe the learner's performance, not the instructor's
- Are measurable and observable

Examples:

1. Solve quadratic equations.
2. Create a career development plan.
3. Use spreadsheet software.
4. Prepare papers for probate court.
5. Present a speech to inform.
6. Write a proposal.
7. Assess the impact of social stratification.
8. Formulate therapeutic goals.
9. Develop a stress management plan.

Non-examples:

1. Understand the rules of logic. (not measurable)
2. Define pedicure. (small piece, not a major skill)
3. Perform office functions. (too broad).
4. Select hand tools and use them to punch, drill, and shape sheet metal. (more than one skill in a statement)
5. Demonstrate knowledge of the bending machine. (not measurable; the action verb “demonstrate” doesn’t fix the verb “know”)

Competencies

- ✓ *What do learners need to know or be able to do?*
- ✓ *Drivers for the course; all other decisions are based on competencies*
- ✓ *Measurable (results)*

Competencies

Checklist

<i>Criteria</i>	<i>Ratings</i>	
1. Tells learner what major skills, knowledge, and attributes they will learn.	yes	no
2. Begin with action verbs.	yes	no
3. Are measurable and observable.	yes	no
4. Require learning at the application level or above.	yes	no
5. Number 3-10 per credit hour (total course credit hours).	yes	no

Comments:

Learning objectives

– Learning objectives identify the skills, knowledge, attitudes, the learner will need in order to achieve the competency. *~~ If the competency is a big picture of a topic, what are the pieces that need to be addressed for the learners to understand/perform/achieve the competency?*

For example, if the competency (overall picture) is:

- **Perform venipuncture**

The learning objectives are the pieces of the overall picture that will enable the student to perform venipuncture:

- **Differentiate between blood collecting equipment and supplies.**
- **Identify personal protective equipment.**
- **Utilize safety procedures.**
- **Compare and contrast accepted venipuncture techniques.**
- **Evaluate positioning techniques.**
- **Identify the critical steps in the process of venipuncture.**
- **Etc....**

Learning Objectives can be thought of as the Content that you will be teaching to enable the students to achieve the competency.... (What goes in the soup, to make it vegetable soup? A LOT of vegetables.....without them, you only have a base!!)

Learning Objectives

Checklist

<i>Criteria</i>	<i>Ratings</i>
1. Reflect what learners must do to achieve a specific competency.	yes no
2. Begin with an action verb.	yes no
3. Are measurable and observable.	yes no
4. Number 2-10 per competency.	yes no

Comments:

Performance standards (conditions and criteria)

Performance standards --are explicitly stated and made public in advance of assessing the performance

- **Learners should never wonder what is expected**
- **Learners are assessed against a pre-set standard, not against others**
- *Performance standards are made up of two components: the condition and the criteria.*
- *When the framework of the course has been developed (competencies) and the content (learning objectives) established that will enable students to achieve the competency; the instructor must assess the mastery of the competency through performance standards. How else will the instructor know if the students are learning the desired outcomes?*
- *Performance standards close the loop: you have laid out the competencies, informed the students of the content needed to master the competency, and now you must assess their level of understanding and/or performance of the competency.*

Performance Standards

Checklist

<i>Criteria</i>	<i>Ratings</i>	
1. Describe performance for a specific competency.	yes	no
2. Criteria provide specifications for the performance described by the competency.	yes	no
3. Describe conditions under which performance will be measured.	yes	no
4. Conditions include one of the following; product or process to be evaluated, format, resources given, resources denied, environment, information given or deadlines.	yes	no
5. Do the criteria provide enough information to answer these questions: What is required? Is this good enough? Is this right?	yes	no

Comments:

Performance Standards – Conditions

Opposite each of the general categories of performance conditions are some examples which might be included. In order to **define conditions, you may choose one, all or any combination of the following conditions:**

CATEGORIES OF CONDITIONS	EXAMPLES OF CONDITIONS
1. What <i>equipment, supplies</i> or <i>materials</i> will be provided for the learner? <u>Category: “Givens”</u>	<ul style="list-style-type: none"> • Using any available equipment in the electronics laboratory. • Given a set of blueprints. • Provided access to all reference and materials to the _____.
2. To what <i>materials</i> will the learner be <i>denied</i> access? <u>Category: Resources Denied</u>	<ul style="list-style-type: none"> • Without references. • Using only the materials provided. • Having available only the equipment which has been set up.
3. In what type of <i>environment</i> must the performance be demonstrated? <u>Category: Environment</u>	<ul style="list-style-type: none"> • In the school setting. • In a simulated laboratory situation. • While in the hospital or nursing home. • With a customer auto.
4. What <i>information</i> may be provided for learner to direct the action in a certain direction? <u>Category: Direction</u>	<ul style="list-style-type: none"> • Given a written situation involving a family with ethnic eating patterns. • Provided two lists, one of terms and another of definitions. • Provide a case study.
5. In what <i>format</i> must the performance be demonstrated? <u>Category: Format</u>	<ul style="list-style-type: none"> • Through performance of (skill). • In a written assignment. • Through oral discussion. • Through contribution to a specific class activity. • In an oral report. • In an essay exam or an objective test. • In production of a specific product.
6. By what <i>time</i> must the learner complete the performance? <u>Category: Deadlines</u>	<ul style="list-style-type: none"> • By the end of the semester. • Given no more than 2 hours. • Prior to the third week of class.

Performance Standards – Criteria

Questions that offer clues about each of the categories of criteria are listed in the table below. Opposite the categories are some examples. In order to **define performance criteria** for a given competency, **you may choose one, all or any combination of the following categories of criteria.**

CATEGORIES OF CRITERIA	EXAMPLES OF CRITERIA
<p>1. What are the <i>characteristics, elements</i> or <i>qualities</i> of a satisfactory performance?</p> <p>Category: Characteristics/Elements of a Satisfactory Performance</p>	<ul style="list-style-type: none"> • Exhibits correct grammar, usage, spelling and punctuation • Illustrates how an employment contract impacts a supervisor-employee relationship • Explains the terms of a given employment contract using lay language (no jargon) • Shows how a given employment contract applies to a variety of work situations • Gives logical rationale for interpretation
<p>2. How <i>accurate</i>: within what <i>tolerance limit</i>?</p> <p>Category: Accuracy/Tolerance</p>	<ul style="list-style-type: none"> • Within +/-0.1 degree as compared with the instructor's reading • Within +/- 0.001 inch tolerance as measured by a micrometer
<p>3. How <i>fast</i>? With what <i>speed</i>?</p> <p>Category: Speed</p>	<ul style="list-style-type: none"> • Completed within five minutes • Ready for return to customer within 24 hours of drop-off
<p>4. What <i>percent</i> or <i>number</i> must be achieved?</p> <p>Category: Number</p>	<ul style="list-style-type: none"> • Two out of the three items must meet criteria for the "finished product" • All information necessary for dental history is recorded • At rate of five per hour • With 80% correct responses
<p>5. According to what specific <i>reference</i> of <i>standards</i>?</p> <p>Category: Standards</p>	<ul style="list-style-type: none"> • According to the manufacturer's specifications • Using the evaluation guide which outlines specific criteria for table setting • According to criteria outlines in the performance checklist • According to office procedures
<p>6. How many <i>errors</i> are <i>permissible</i>?</p> <p>Category: Permissible Errors</p>	<ul style="list-style-type: none"> • With no more than two errors • With no more than _____ total items not meeting "standards" • Missing no more than one reading/recording within a two-hour period
<p>7. What <i>degree</i> of <i>excellence</i> is required?</p> <p>Category: Degree of Excellence</p>	<ul style="list-style-type: none"> • So that the shine will reflect a piece of paper • Such that the seam will not split when the two pieces of materials are jerked sharply • So that when the weld is submitted to a stress machine it will withstand 100 pounds of pressure • With no hair visible in the operating field • All criteria must be achieved at the good or excellent level