

Things I Learned
at the
SACS Summer Institute
(or what I did on summer vacation)

Kathleen Fenton, PhD
Assoc. Dean, Outcomes & Quality Enhancement,
Collin County Community College District
kfenton@ccccd.edu

Bloom's Classification of Cognitive Skills

Category	Definition	Related Measurable Behaviors
Knowledge	Recalling or remembering something without necessarily understanding, using, or changing it.	define, describe, identify, label, list, match, memorize, point to, recall, select, state
Comprehension	Understanding something that has been communicated without necessarily relating it to anything else.	alter, account for, annotate, calculate, change, convert, group, explain, generalize, give examples, infer, interpret, paraphrase, predict, review, summarize, translate
Application	Using a general concept to solve problems in a particular situation; using learned material in new and concrete situations.	apply, adopt, collect, construct, demonstrate, discover, illustrate, interview, make use of, manipulate, related, show, solve, use
Analysis	Breaking something down into its parts; may focus on identification of parts or analysis of relationships between parts; or recognition of organizational principles.	analyze, compare, contrast, diagram, differentiate, dissect, distinguish, identify, illustrate, infer, outline, point out, select, separate, sort, subdivide
Synthesis	Creating something new by putting parts of different ideas together to make a whole.	blend, build, change, combine, compile, compose, conceive, create, design, formulate, generate, hypothesize, plan, predict, produce, reorder, revise, tell, write
Evaluation	Judging the value of material and methods as they might be applied in a particular situation; judging with the use of define criteria.	accept, appraise, assess, arbitrate, award, choose, conclude, criticize, defend, evaluate, grade, judge, prioritize, recommend, referee, reject, select, support

(from Ball State University)

Associate Degree Nursing

1. Graduates will practice within the ethical, legal, and regulatory frameworks of nursing.
2. Graduates will utilize the nursing process while incorporating Gordon's functional health patterns as a basis for clinical decision-making in providing client, family, and community care.
3. Graduates will develop, implement, and evaluate individualized plans of care focusing on services and activities that promote independence, maintain or restoring health, or support a peaceful death.
4. Graduates will establish and maintain effective/therapeutic communication with clients, families, significant others, and members of the health care team.
5. Graduates will integrate caring behaviors in managing care.
6. Graduates will use teaching/learning processes to facilitate the clients in informed decision-making to achieve positive outcomes and support the client's functional patterns.
7. Graduates will manage care that demonstrates respect for diverse clients.
8. Graduates will establish priorities and organize nursing care in a timely, efficient, and cost effective manner.

Carpentry

1. Graduates using critical thinking will be able to understand the characteristics of concrete and demonstrate how it relates to residential and commercial construction.
2. Graduates will be able to safely use various machinery and hand tools that relate to the construction industry.
3. Graduates using critical thinking will be able to apply various techniques for interior and exterior finishes in residential and commercial properties.
4. Graduates using critical thinking will be able to comprehend and fabricate the complicated structures in roof framing in residential construction.
5. Graduates using critical thinking will be able to plan, layout, and construct walls and the various details therein in the construction of residential properties.
6. Graduates using critical thinking will be able to plan, layout, and construct various subfloors.
7. Graduates will be able to calculate and estimate materials needed for various residential and commercial projects.
8. Graduates will be able to analyze blueprints, comprehend the information, and apply that to the construction industry.

Clinical Laboratory Technology

1. Graduates will work safely utilizing all standard precaution protocols.
2. Graduates will participate in continuing professional development.
3. Graduates will practice medical ethics.
4. Graduates will carry out an established quality control program.
5. Graduates will prevent and detect technical errors in testing.
6. Graduates will maintain laboratory equipment and materials.
7. Graduates will perform laboratory test accurately.

Welding

1. Graduates will be able to pass Kentucky certification test Gas Metal Arc Welding
2. Graduates will be able to pass Kentucky certification test for Shielded Metal Arc Welding
3. Graduates will be able to work in teams and independently to complete live work projects
4. Graduates will use GTAW equipment to perform welds and use critical thinking and weld gauges to determine if welds meet criteria for acceptance by AWS D1.1 code or other set standards
5. Graduates will use GMAW equipment to perform welds and use critical thinking and weld gauges to determine if welds meet criteria for acceptance by AWS D1.1 code or other set standards
6. Graduates will use SMAW equipment to perform welds and use critical thinking and weld gauges to determine if welds meet criteria for acceptance by AWS D1.1 code or other set standards
7. Graduates will be able to analyze blueprints, comprehend the information, and apply that knowledge to cut parts with oxy-fuel torch.

Radiology Technology

1. Students will display effective communication skills in the clinical setting with patients and hospital personnel.
2. Students will pass all mandatory, elective, and patient care clinical competencies.
3. Students will demonstrate effective critical thinking skills by passing all critical thinking assignments.
4. Students will demonstrate the professional attitudes, behaviors, and ethical standards of a healthcare professional.
5. Students will receive the necessary learning experience needed to pass the ARRT registry examination.

Respiratory Care Technology

1. Graduates will demonstrate an understanding and appreciation for administrative managerial techniques and procedures in a hospital respiratory care department.
2. Graduates will demonstrate effective written and oral communication skills in their roles as advanced-level respiratory therapists.
3. Graduates will demonstrate professional behavior consistent with employer expectations as advanced-level respiratory therapists.
4. Graduates will demonstrate technical proficiency in all skills necessary to fulfill their roles as advanced-level respiratory therapists.
5. Graduates will demonstrate the ability to comprehend, apply, and evaluate clinical information relevant to their roles as advanced-level respiratory therapists.
6. Graduates will practice within the ethical, legal, and regulatory frameworks of Respiratory Care.

Surgical Care Technology

1. Graduates will properly use medical terminology
2. Graduates will work cooperatively and collaboratively in team settings
3. Graduates will perform the duties of a surgical technologist in a clinical setting
4. Graduates will demonstrate the fundamental principles of the clinical use of drugs
5. Graduates will demonstrate knowledge of basic ST principles, concepts, and techniques
6. Graduates will know the history of surgery and the roles and responsibilities of a Surgical Technologist

Practical Nursing

1. Design a plan describing steps for attaining personal and professional goals.
2. Apply the nursing process as a basis for decision making in providing client care.
3. Identify legal and ethical responsibilities of the practical nurse when giving nursing care.
4. Demonstrate the use of effective therapeutic communication techniques in all clinical portions of the program.
5. Exhibit safe and caring behaviors when providing nursing care.
6. Demonstrate the competent organization and management of care for assigned clients.

Aviation Maintenance Technology

1. Demonstrate skills in electrical troubleshooting using schematics, wiring diagrams, and troubleshooting charts
2. Apply basic principles of powerplant maintenance
3. Demonstrate the primary skills needed to service landing gear and hydraulic systems on aircraft
4. Demonstrate the procedures used to determine the weight & balance of an aircraft
5. Demonstrate a method of bending sheet metal to form a replacement part for an aircraft
6. Apply basic principles of airframe maintenance

Business Administration

1. Explain the economic system and how it affects individuals
2. Make use of basic financial accounting concepts for decision making, planning and control
3. Explain the role of marketing and consumer focus in organizations

Curriculum Mapping

Learning Objective	Course #1	Course #2	Course #3	Course #4	Course #5	Course #6	Course #7
A		<i>I</i>	<i>U</i>				
B	<i>I</i>						
C	<i>I</i>			<i>E</i>			<i>E</i>
D					<i>I</i>	<i>U</i>	
E			<i>I</i>	<i>U</i>			<i>E</i>

Legend:

I = Introduced U = Used/Practiced A = Applied & Assessed

Alignment of Curriculum Activities & Assessment

General Education Outcome	Assignment or Activity Designed to Address this Outcome	Evidence of Student Achievement
Analyze arguments according to stated criteria	?	?
Assume & defend a position on a given topic	?	?
Use systematic processes, including the collection & analysis of evidence, to form and support conclusions	?	?

**Program Student Learning Outcomes Assessment Rubric
Paralegal Studies (A.A.; C.T.S.)**

Program Manager:			Assessment Semester: Spring 2008		
Program Learning Outcome	Excellent (E)	Acceptable (A)	Unacceptable (U)	Not Enough Information	Rating
1. The student functions professionally in an office/court environment.	At the conclusion of the legal practicum, the student receives a favorable written evaluation from the cooperating legal supervisor.	At the conclusion of the legal practicum, the student receives a satisfactory written evaluation from the cooperating legal supervisor.	At the conclusion of the legal practicum, the student receives an unsatisfactory written evaluation from the cooperating legal supervisor.	Information not available to rate.	
2. The student demonstrates the requisite written skills to communicate effectively in the legal community.	The legal correspondences written by the student utilize an acceptable format. The content of the correspondences is essentially ready for submission to a client or other legal recipient.	The legal correspondences written by the student utilize an acceptable format. The content of the correspondences include basic requisites but some improvements are needed before submission to a client or other legal recipient.	The legal correspondences written by the student do not utilize an acceptable format. The content of the correspondences require major changes before submission to a client or other legal recipient.	Information not available to rate.	
3. The student effectively drafts various legal pleadings and transaction documents.	The legal pleadings and transaction documents prepared by the student utilize an acceptable format. The pleadings and transactions documents are essentially ready for submission to the Court or the client.	The legal pleadings and transaction documents prepared by the student utilize an acceptable format. The pleadings and transaction documents meet basic requirements but some improvements are needed before submission to the Court or the client.	The legal pleadings and transaction documents do not utilize an acceptable format. The pleading and documents, prepared by the student, require major changes before submission to the Court or the client.	Information not available to rate.	
4. The student	Student is able to access	Student is able to access	Student is unable to	Information	

Program Student Learning Outcomes Assessment Rubric
Monster Studies (AAS., CTS)

Program Manager: Professor Godzilla			Assessment Semester: Spring 2008		
Program Learning Outcome	Excellent (E)	Acceptable (A)	Unacceptable (U)	Not Enough Information	Rating
1. Students recognize Japanese fishing ships as a source of food and discriminate between these and nuclear submarine.	The students choose Japanese fishing boats as a source of food at a rate of 95% or better when faced with the choice between those and nuclear submarines. When a student chooses incorrectly he corrects the mistake quickly, by dropping submarine BEFORE attempting to eat it.	Students choose Japanese fishing boats when faced with a choice between those and a nuclear submarine at a rate of 90%. Students may try to eat incorrect choices before dropping the inedible ships.	Students eat any vessel in the water.	Information not available to rate.	
2. Students demonstrate hand to hand fighting skills in one on one battle with a similarly sized monster.	The students choose the method of attack that best matches the weakness of the opponent (Supersonic scream for the sensitive bird creature, fire breath for the flammable). Wrestling moves include holding opponent above the students head while spinning. Monsters with tails or wings adjust their fighting styles to make use of their particular attributes.	The students choose a method of attack based on the weakness of the opponent for at least 85% of battles. Wrestling moves may not include the spinning move, but stomping is consistent and effective. Monsters may not make use of special wing or tail moves.	Fights are disorganized and ineffective, with inappropriate techniques chosen regularly (Fire breath for inflammable opponents).	Information not available to rate.	

Advantages and Disadvantages of Various Assessment Methods

Source: Morningside College, *Assessment Handbook* Advantages and Disadvantages of Various Assessment Methods
 (<http://www.morningside.edu/academics/research/assessment/documents/advantagesdisadvantages.pdf>, March 2006)

1. Standardized Exams (Commercial)	
<p>Advantages</p> <ul style="list-style-type: none"> • Convenient • Can be adopted and implemented quickly • Reduces or eliminates faculty time demands in instrument development and grading • Are scored objectively • Provide for external validity • Provide reference group measures • Can make longitudinal comparisons • Can test large numbers of students 	<p>Disadvantages</p> <ul style="list-style-type: none"> • Measures relatively superficial knowledge or learning • Unlikely to match the specific goals and objectives of a program/institution • Norm-referenced data may be less useful than criterion-referenced • May be cost prohibitive to administer as a pre- and post-test • More summative than formative (may be difficult to isolate what changes are needed) • Norm data may be user norms rather than true national sample • May be difficult to receive results in a timely manner
<p>Recommendations</p> <ul style="list-style-type: none"> • Must be selected carefully based on faculty review and determination of match between test content and curriculum content • Request technical manual and information on reliability and validity from publisher. • Check with other users 	
2. Locally Developed Exams	
<p>Advantages</p> <ul style="list-style-type: none"> • Can be tailored to match program and institutional objectives • Specific criteria for performance can be established in relation to the curriculum • Can be used to develop locally meaningful norms • Can obtain results more quickly • Cheaper than commercial exams • Easier to use in a pre- and post-test approach • May be embedded in specific course 	<p>Disadvantages</p> <ul style="list-style-type: none"> • Complex and time consuming to develop psychometrically valid exams • More costly in time and effort • Requires considerable leadership and coordination • May hinder curriculum change if it means that exam would have to be revised • Vulnerable to student theft and distribution • Results not cannot be generalized beyond the program or institution
<p>Recommendations</p> <ul style="list-style-type: none"> • Development requires strong cooperation by program faculty • Use on-campus experts to assist with test construction and validation 	
3. Performance Measures	
<p>Advantages</p> <ul style="list-style-type: none"> • Essays • Oral presentations • Oral exams • Exhibitions • Demonstrations • Performances 	<p>Disadvantages</p> <ul style="list-style-type: none"> • Products • Research papers • Poster presentations • Capstone experiences • Practical exams • Supervised internships & practicums
<p>Advantages</p> <ul style="list-style-type: none"> • Can be used to assess from multiple perspectives 	<p>Disadvantages</p> <ul style="list-style-type: none"> • Usually the mostly costly approach

<ul style="list-style-type: none"> • Using a student-centered design can promote student motivation • Can be used to assess transfer of skills and integration of content • Engages student in active learning • Encourages time on academics outside of class • Can provide a dimension of depth not available in classroom • Can promote student creativity • Can be scored holistically or analytically • May allow probes by faculty to gain clearer picture of student understanding or thorough processes • Can provide closing of feedback loop between students and faculty • Can place faculty more in a mentor role than as judge • Can be summative or formative • Can provide an avenue for student self-assessment and reflection • Can be embedded within courses • Can adapt current assignments • Usually the most valid way of assessing skill development 	<ul style="list-style-type: none"> • Time consuming and labor intensive to design and execute for faculty and students • Must be carefully designed if used to document obtainment of student learning outcomes • Ratings can be more subjective • Requires careful training of raters • Inter-rater reliability must be addressed • Production costs may be prohibitive for some students and hamper reliability • Sample of behavior or performance may not be typical, especially if observers are present
<p>Recommendations</p> <ul style="list-style-type: none"> • Can be intimidating to students • Develop specific, measurable criteria for observing and appraising • When possible, use criterion-referenced rating approach instead of simple checklists • Develop rubrics for greater consistency between raters • Must clearly articulate expectations to students prior to initiation and provide models or performance criteria 	
<p>4. Surveys & Questionnaires (students, alumni, employers, public)</p>	
<p>Advantages</p> <ul style="list-style-type: none"> • Easy to administer • Can cover a variety of topics in a brief amount of time • Helps to establish relationship with stakeholders • Easier to communicate results to stakeholders • Can be used to gather information from individuals who would be difficult to include in other assessment methods • Demonstrates concern about gathering feedback/information 	<p>Disadvantages</p> <ul style="list-style-type: none"> • Information on student learning (perception and opinion) considered to be indirect data • Good surveys and questionnaires are difficult to develop • Voluntary participation may result in biased results • Forced-response choices may not allow individuals to respond as they wish • Low response rate
<p>Recommendations</p> <ul style="list-style-type: none"> • Pilot all instruments 	
<p>5. Portfolios</p> <p><i>Types of Portfolios</i></p> <ul style="list-style-type: none"> • Learning Portfolios • Assessment Portfolios • Marketing Portfolios • Job Portfolios • Showcase Portfolios 	
<ul style="list-style-type: none"> • Performance Portfolios • Personal Portfolios • Proficiency/Competency Portfolios • Process Portfolios • Developmental Portfolios • Hybrid Portfolios 	

PROGRAMMATIC ASSESSMENT
Assessment Plan and Report Checklist (Based on HLC/NCA Matrix 2002)

1. Learning Outcomes

Level 1

- Learning outcomes identified.

Level 2

- Learning outcomes identified.
- They describe student behaviors.
- They are program, not class or course, outcomes.
- They are clear.

Level 3

- Comprehensive learning outcomes identified.
- Outcomes are appropriate in number.
- They describe student behaviors.
- They are program, not class or course, outcomes.
- They are clear.
- They are measurable.
- They support the institution's educational goals
- They span multiple learning domains.
- Course outcomes correlate with program goals.

2. Assessment Measures

Level 1

- Measures identified.

Level 2

- Measures were identified.
- Measures relate to the learning outcomes.
- They include direct measures of student learning.

Level 3

- Measures identified.
- They relate to the learning outcomes.
- They emphasize direct measures of student learning.
- They are multiple.
- They emphasize direct learning.
- They focus on real-world tasks.
- They stress higher order learning.
- They are integrated in the curriculum.
- They allow performance to be gauged over time.

3. Expectations

Level 1

- Some expectations identified.
- Expectations may be vague or lacking specificity.

Level 2

- Performance expectations/standards established.
- They are specific.
- They describe desired outcomes for all measures.

Level 3

- Performance expectations/standards established.
- They are specific.
- They describe desired outcomes for all measures.
- They describe indirect and direct measures.
- They can be tracked over time.
- Expectations are re-evaluated regularly.

4. Results

Level 1

- Data collected for at least some outcomes.

Level 2

- Data collected for all outcomes.
- Data analyzed in a routine and systematic manner.
- Data compared over time.
- Program implications for results are discussed and engage faculty/program choices.

Level 3

- Data collected for all outcomes.
- Data analyzed in a routine and systematic manner.
- Data compared over time.
- Program implications for results are discussed and engage faculty/program choices.
- Results reported annually and in self-studies and program reviews.
- Changes made based on previous results are analyzed, assessed, and documented.

5. Feedback Loop

Level 1

- Data is not interpreted or used.
- Assessment is largely the responsibility of the department chair.

Level 2

- Data are being collected, interpreted, and used by faculty to improve student learning.
- Data are being shared with other appropriate constituents.
- Data are considered in departmental planning and budgeting processes.

Level 3

- Data are routinely collected, interpreted, and used by faculty to improve student learning.
- Data are being shared with other appropriate constituents.
- Data are an integral part of departmental planning and budgeting process.
- The improvement of student learning is central to the department.
- Assessment is a part of the culture of the department.

Assessing the Major

Bob Smallwood, Univ of Alabama

Additional Internet Resources

Assessment Guidebooks:

1. **University of Virginia's *Assessment Guide***
<http://www.web.virginia.edu/iaas/assessment/Assessment%20guide.pdf>
2. **Bridgewater State College's *Assessment Guidebook for Departments***
<http://www.bridgew.edu/AssessmentGuidebook/>
3. **University of Wisconsin's *Assessment Manual***
<http://www.provost.wisc.edu/assessment/manual/>
4. **University of Connecticut's *Assessment Primer***
<http://assessment.uconn.edu/primer.htm>
5. **California State University-Fresno's *Guide to Student Outcomes Assessment***
http://www.csufresno.edu/irap/assessment/assessment_guide/implementing_program.shtml

Mission Statements

1. **San Diego State University's *Best Practices Mission Statements***
http://dus.sdsu.edu/assessment/mission_statements.pdf

Writing Learning Objectives

1. **Park University's *Writing Learning Objectives***
<http://www.park.edu/cetl/quicktips/writinglearningobj.html>

Curriculum Mapping

1. **Bridgewater State College's *Establishing Learning Outcomes***
<http://www.bridgew.edu/AssessmentGuidebook/chapter4.cfm>

Assessment Methods

1. **American Psychological Association's *Evaluating Assessment Strategies***
http://apa.org/ed/eval_strategies.html

Assessing the Assessment Plan

1. **Educause's *Assessing Transformation***
<http://net.educause.edu/ir/library/pdf/EDU0251.pdf>