Crafton Hills College
Basic Skills SLO Retreat
November 16-17 2007
Learning Assessment Development Toolkit

Goals of the Retreat:
1. Develop completely mapped-out Learning Improvement Cycles for developmental (aka, basic skills, pre-collegiate, nontransferable) courses in math, English, and reading, including the following:
   □ clearly articulated student learning outcomes;
   □ specific assessment instruments to be used;
   □ fully elaborated rubrics for each assessment instrument;
   □ specific date(s) the assessments will be given;
   □ specific date(s) faculty will meet to discuss what areas of improvement the assessments suggest need attention, as well as what changes might facilitate that improvement.
2. Align outcomes to be assessed with curricular modules.

What is this all about?
   • An ongoing process aimed at understanding and improving student learning.
   • Faculty making learning expectations explicit and public.
   • Faculty setting appropriate standards for learning quality.
   • Systematically gathering, analyzing and interpreting evidence to determine how well student performance matches agreed upon faculty expectations & standards.
   • Using results to document, explain and improve teaching & learning performance.

Tom Angelo AAHE Bulletin, November 1995

Roles of Assessment
        "We assess to assist, assess to advance, assess to adjust":
                                                                    -   Ruth Stiehl,
                                                        The Assessment Primer:
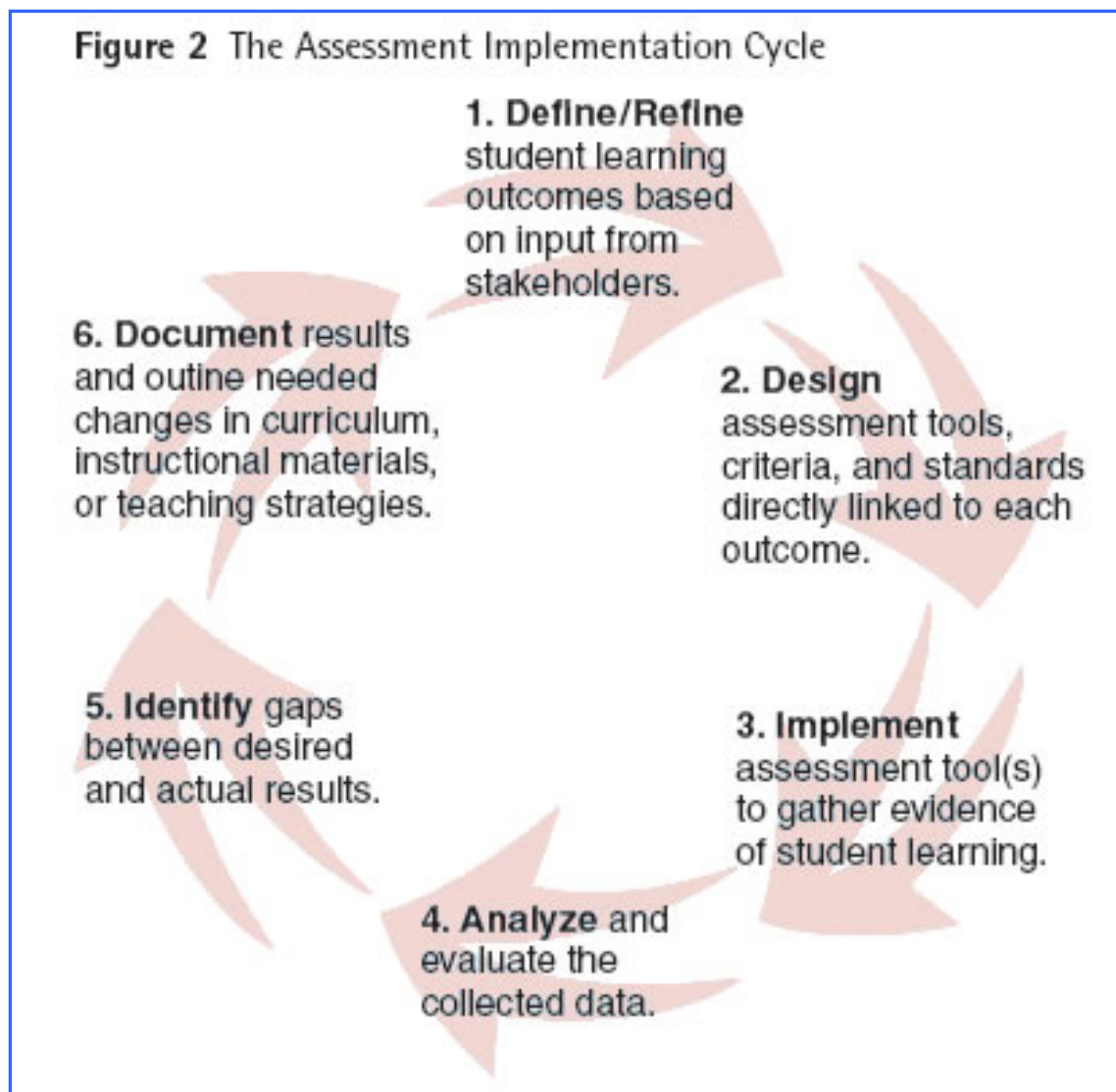   *Creating a Flow of Learning Evidence (2007)*

        – **Assist:** provide formative feedback to guide student performance
        – **Advance:** summative assessment of student readiness for what's next
        – **Adjust:** continuous improvement of curriculum, pedagogy.

Formulating Assessment Strategies

Classroom assessment is the purest form of assessment-for-improvement, because information gleaned can be immediately used to improve teaching and learning …the further away from the individual classroom you get, the harder it becomes to turn assessment data into useable information" (Miller, 1997).

"Post secondary assessment done right must be rooted in the course and in the classroom, in the individual the cells, to speak metaphorically, where the metabolism of learning actually takes place" (Wright, 1999).

> **Figure 2** The Assessment Implementation Cycle
>
> **1. Define/Refine** student learning outcomes based on input from stakeholders.
>
> **2. Design** assessment tools, criteria, and standards directly linked to each outcome.
>
> **3. Implement** assessment tool(s) to gather evidence of student learning.
>
> **4. Analyze** and evaluate the collected data.
>
> **5. Identify** gaps between desired and actual results.
>
> **6. Document** results and outine needed changes in curriculum, instructional materials, or teaching strategies.

Framing questions for Session 1: Developing Learning Outcomes

In teams with your colleagues, develop outcome statements for the course, module, unit or other instructional activity where significant student learning occurs.

Getting started: Faculty have reported that the hardest aspect of writing SLOs is simply getting something on paper. That time is now.

1. REALIZE –you have been doing this all along, operating from intuitive and professional experience; the task is to communicate and articulate your goals, outcomes, and criteria.

2. As experts in this discipline and course, begin by thinking about the 5-7 most important things a student should leave your class being able to DO. 5-7 may not seem like enough, you may have 20-50 objectives for a course - but these represent the 5-7 things you will assess - most people would not want to assess and make public 20-50 different objectives.

3. Spend time brainstorming, and then write down words that express knowledge, skills, or values that integrate the most important aspects of your class.

4. If it is helpful, think about these most important skills and knowledge in the context of where students will go next, and how they will use the essential skills, understandings and values they gained from your course.

BRAINSTORM: In the boxes below briefly list words or descriptions of attitudes, skills, or knowledge that you would like your students to know or do as a result of this course or student services program.

Attitudes or values developed as a result of this course	
Skills or performance ability as a result of this course	
Knowledge and concepts they will have as a result of this course	

"What do students need to be able to do OUT THERE that we're responsible for IN HERE?"   *-Ruth Stiehl, The Outcomes Primer.*

Draft Learning Outcomes for: _____

At the conclusion of this module, unit, level or course, students will be able to:

Session 2: Identifying Assessment Activities and Creating Rubrics:

- What is Assessment?
    - An ongoing process aimed at understanding & improving student learning.
    - Involves clearly defined criteria & high standards for learning quality.
    - Gathering, analyzing and interpreting **_evidence_** of student learning.
    - Using this evidence to document and improve student learning.

- What do we mean by evidence?
    - **_Visible indicators_** that tells us whether learning has occurred.
    - Quality data that allows us to address the criteria/outcomes
    - Allows us to determine what's working and what's not working.
    - Goal: create a "culture of evidence" for decision-making, curriculum improvement

- What do we mean by "quality data?"
    - Valid – accurately represents what it is trying to measure.
    - Reliable – repeated assessment yields the same data (reproducible)
    - Authentic – assessment simulates real-life circumstances
    - Relevant – data answers important questions, not generated because it is easy to measure.
    - Effective- data contributes to improving learning/teaching.

- What are rubrics?
    - A tool used to evaluate student performance based on specific defined criteria.
    - Reflects the major traits or characteristics that are expected in student work.
    - Assignment/activity specific.
    - Given to student when assignment is announced.
    - Assigns points or values for meeting performance criteria.

- What should be included in a Rubric?
    - Major traits or characteristics expected in student work. (Primary Trait Analysis)
    - A range of values that reflect student performance – can include descriptions or examples of what each value represents.
    - Clear criteria for each trait and value – e.g. what warrants a "4" vs. a "3".
    - Easy for students to understand.

- Rubrics are useful because . . .
    - They focus instruction on the most important outcomes.
    - They provide formative feedback to students
    - They communicate explicit expectations
    - They connect assessment to activity, increasing validity.
    - They articulate how scoring/grading is determined.
    - They provide more consistent/reliable grading.

Choosing the Right Assessment Tools

Assessment Tool	Pros	Cons
Multiple Choice Exam	✓ easy to grade ✓ objective	✓ reduces assessment to multiple choice answers
Licensing Exams	✓ easy to score and compare	✓ no authentic testing, may outdate
Standardized Cognitive Tests	✓ comparable between students	
Checklists	✓ very useful for skills or performances ✓ students know exactly what is missing	✓ can minimize large picture and interrelatedness ✓ evaluation feedback is basically a yes/no - present/absent - without detail
Essay	✓ displays analytical and synthetic thinking well	✓ time consuming to grade, can be subjective
Case Study	✓ displays analytical and synthetic thinking well connects other knowledge to topic	✓ creating the case is time consuming, dependent on student knowledge form multiple areas
Problem Solving	✓ displays analytical and synthetic thinking well authentic if real world situations are used	✓ difficult to grade due to multiple methods and potential multiple solutions
Oral Speech	✓ easily graded with rubric allows other students to see and learn what each student learned ✓ connects general education goals with discipline-specific courses	✓ difficult for ESL students stressful for students takes course time ✓ must fairly grade course content beyond delivery
Debate	✓ provides immediate feedback to the student ✓ reveals thinking and ability to respond based on background knowledge and critical thinking ability	✓ requires good rubric more than one evaluator is helpful difficult for ESL students stressful for students takes course time
Product Creation & Special Reports	✓ students can display skills. knowledge, and abilities in a way that is suited to them	✓ must have clearly defined criteria and evaluative measures "the look" can not over-ride the content

Assessment Tool	Pros	Cons
Flowchart or Diagram	✓ displays original synthetic thinking on the part of the student ✓ perhaps the best way to display overall high level thinking and articulation abilities	✓ more difficult to grade, requiring a checklist or rubric for a variety of different answers ✓ difficult for some students to do on the spot
Portfolios	✓ provides the students with a clear record of their work and growth ✓ best evidence of growth and change over time ✓ students can display skills. knowledge, and abilities in a way that is suited to them promotes self-assessment	✓ time consuming to grade different content in portfolio makes evaluating difficult and may require training bulky to manage depending on size
Exit Surveys	✓ provides good summative data easy to manage data if Likert-scaled responses are used	✓ Likert scales limit feedback, open-ended responses are bulky to manage,
Performance	✓ provides best display of skills and abilities ✓ provides excellent opportunity for peer review ✓ students can display skills. knowledge, and abilities in a way that is suited to them	✓ stressful for students may take course time some students may take the evaluation very hard - evaluative statements must be carefully framed
Capstone project or course	✓ best method to measure growth overtime with regards to a course or program - cumulative	✓ focus and breadth of assessment are important ✓ understanding all the variables to produce assessment results is also important ✓ may result in additional course requirements ✓ requires coordination and agreement on standards
Team Project	✓ connects general education goals with discipline-specific courses	✓ must fairly grade individuals as well as team ✓ grading is slightly more complicated ✓ student interaction may be a challenge
Reflective self-assessment essay	✓ provides invaluable ability to evaluate affective growth in students	✓ must use evidence to support conclusions, not just self-opinionated assessment
Satisfaction and Perception Surveys	✓ provides good indirect data data can be compared longitudinally ✓ can be used to determine outcomes over a long period of time	✓ respondents may be influenced by factors other than those being considered ✓ validity and reliability most be closely watched

In ***What You Measure Is What You Get*** by **John H. Hummel and William G. Huitt** of Valdosta State University http://chiron.valdosta.edu/whuitt/papers/wymiwyg.html explain that:

"Typically, students' achievement and critical thinking skills are assessed using a forced-choice format. Unfortunately, most items used in these assessments address levels of knowing and thinking not typically associated with critical thinking. Many researchers (e.g., Carter, 1984; Gage and Berliner, 1992; Woolfolk, 1993) agree that the objective test items used at all levels of education overwhelmingly tap the lower (i.e., knowledge and comprehension) levels of the Bloom et al. (1956) taxonomy. Other researchers who developed alternative taxonomies have drawn a similar conclusion (e.g., Stiggins, Rubel & Quellmalz, 1988).

These problems are crucial in that the types of assessments used in education affects how students learn and how teachers teach (Fredericksen, 1984). This conclusion is so central to teaching and assessment practices at all levels of education that in our preservice and inservice teacher education classes we use the acronym WYMIWYG to emphasize its importance. WYMIWYG specifies a concept we believe ought to be a guiding principle for all educators: What You Measure Is What You Get. If educators develop assessments aimed at higher-levels thinking skills, (a) they will be more likely to teach content at those levels, and (b) students, according to Redfield and Rousseau (1982), will master-and-perform at those levels. Students not only need to know an enormous amount of facts, concepts, and principles, they also must be able to effectively think about this knowledge in a variety of increasingly complex ways."

Bers, T. (n.d.) *Assessment at the Program Level.* California Assessment Website at
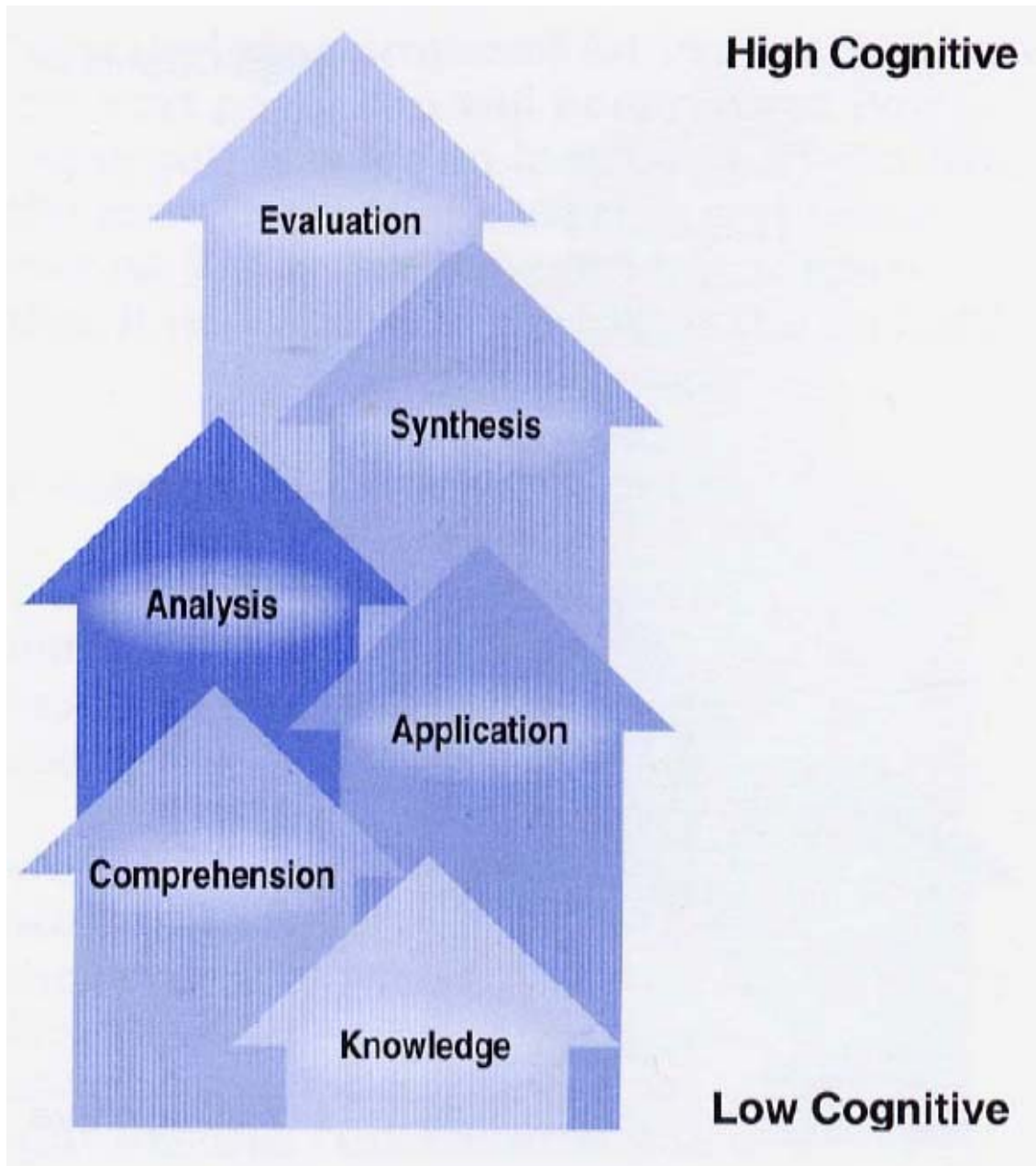   http://cai.cc.ca.us/workshops/Prog Level Assessment by Bers.doc

Creel, D.W. (n.d.). Northern Virgina Community College General Education Assessment
        http://www.nv.cc.va.us/assessment/VAG Gen Ed/VAG Gen Ed.PPT

Educational Testing Services at http://www.ets.org/ for standardized testing.

Erwin, T.D. (2000). The NPEC sourcebook on assessment, volume 1: Definitions and
        Assessment methods for critical thinking, problem-solving, and writing. Download
        document from http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2000195

Moskal, B.M. & Blake, B.B. (2000). Developing a departmental Assessment plan: Issues and
        concerns. In *The department chair 11(1).* Bolton, MA: Anker Publishing. Also available
        online at http://www.acenet.edu/resources/chairs/docs/Moskal_and_Bath.pdf

Southern Missouri State University. *Busy Chairpersons Guide for Departmental Assessment
        Reporting* at the SMSU website http://www2.semo.edu/provost/assmt/1

High Cognitive

Evaluation

Synthesis

Analysis

Application

Comprehension

Knowledge

Low Cognitive

9

Rubrics:

On the pages that follow, you will find a variety of sample rubrics from a variety of disciplines. These are provided to illustrate that rubrics can take many different forms, and that you as instructors have the flexibility to design rubrics to suit your specific assessment requirements.

Developmental English Essay Rubric

	1 **Needs Work**	2 **Adequate**	3 **Good**	4 **Excellent**
Assignment Fulfillment	Essay is off-topic and/or fails to fulfill the directives (i.e., minimum number of quotes, etc.). . .	Essay is on-topic but fails to fulfill some of the directives (i.e., minimum number of quotes, etc.).	Essay is on-topic and fulfills most of the directives (i.e., minimum number of quotes, etc.).	Essay is on-topic and fulfills all directives (i.e., minimum number of quotes, etc.).
Thesis	Thesis is missing, unfocused or vague.	Thesis is clear and engages the topic appropriately, but is not original.	Thesis is clear, engages the topic appropriately, and is somewhat original.	Thesis is clear, insightful, and original.
Organization/ Coherence/ Focus	No clearly defined or apparent organization. Paragraphs lack focus and cohesion.	Sequence of ideas is functional but may have abrupt or illogical shifts.	Sequence of ideas is effective but may lack smooth transitions.	Sequence of ideas and transitions between paragraphs are effective.
Development & Support	Body paragraphs contain summaries or generalizations that lack relevant supporting evidence and analysis.	Body paragraphs offer a functional level of evidence and analysis which at times may be too general.	Body paragraphs offer solid, convincing, and somewhat original analysis of relevant evidence.	Body paragraphs offer richly developed, insightful, original, and convincing analysis of relevant evidence.
Grammar & Usage	Frequent errors in grammar, usage and spelling.	Some errors in grammar, usage and spelling. Sentences may by simplistic, choppy or awkward.	Occasional errors in grammar, usage and spelling. Demonstrate syntactical maturity through varied sentence structure.	Few if any grammatical or proofreading errors. Demonstrate syntactical maturity through varied sentence structure.
Basic Research & Documentation Skills	Neglects relevant sources and/ or improperly cites sources according to MLA format.	Inconsistently integrates relevant sources and quotes to substantiate claims, and demonstrates an inconsistent use of MLA format.	Integrates relevant sources and quotes to substantiate claims, using MLA format with occasional lapses in usage.	Smoothly integrates relevant sources and quotes to substantiate claims, consistently using MLA format.
Overall Holistic Score				

	Analytic Rubric for Grading Oral Presentations					
	Not Acceptable	Below Expectation	Satisfactory	Above Satisfactory	Exemplary	Score
Organization	No apparent organization. Evidence is not used to support assertions (0-1)	Poorly organized. Evidence is not enough to clearly support assertions. (2-3)	The presentation has a focus and provides some evidence which supports conclusions. (4-5)	Presentation is well-organized and evidence largely supports its conclusion. (6-7)	The presentation is carefully organized and provides convincing evidence to support conclusions. (8)	
Content	The content is inaccurate or overly general. Listeners are unlikely to learn anything or may be misled. (0-1)	The content is often inaccurate or generalized. Listeners learned little from the presentation. (2-3)	The content is generally accurate, but incomplete. Listeners may learn some isolated facts, but they are unlikely to gain new insights about the topic. (4-6)	The content is mostly accurate and complete. Audience is hearing facts and may gain some insights. (7-8)	The content is accurate and complete. Listeners are likely to gain new insight about the topic. (9)	
Style	The speaker appears anxious and uncomfortable, and reads notes, rather than speaks. Listeners are largely ignored. (0-1)	The speaker is uneasy. Eye contact is only occasional. (2-3)	The speaker is generally relaxed and comfortable, but too often relies on notes. Listeners are sometimes ignored or misunderstood. (4-5)	Speaker is mostly confident and familiar with notes. Eye contact is good (6-7)	The speaker is relaxed and comfortable speaks without undue reliance on notes, and interacts effectively with listeners. (8)	
Total Score						

Critical Thinking Assessment Grid	0-1 point F-D (00-69%)	2 points C (70-79%)	3 points B (80-89%)	4 points A (90-100%)
1: **analysis/ assessment of deductive arguments**	Incorrect applications. Reveals a poor understanding of basic logical concepts, deductive forms or methods for evaluating validity and soundness.	Demonstrates a fair understanding of deductive forms and assessment methods, and is able to apply them, though with some errors.	Demonstrates a good understanding of deductive forms and assessment methods, and is able to apply them with only a few errors.	Demonstrates thorough grasp of various deductive forms and assessment methods (e.g., use of symbols, Venn diagrams, truth functions, etc.) and applies them correctly.
2: **analysis/assessment of inductive arguments**	Incorrect applications. Reveals a poor understanding of basic logical concepts, inductive forms or methods for evaluating strength and cogency.	Demonstrates a fair understanding of inductive forms and assessment methods, and is able to apply them, though with some errors.	Demonstrates a good understanding of inductive forms and assessment methods, and is able to apply them with only a few errors.	Demonstrates a thorough grasp of various inductive forms and assessment methods (e.g., basic statistical methods, Mill's methods, fallacies, etc.) and applies them correctly.
3: **analysis/assessment of explanatory theories**	Reveals a poor understanding of the criteria of adequacy for empirical theories and is unable to use these concepts to assess a theoretical claim. May also have multiple errors of application or interpretation.	Demonstrates a fair grasp of the concept of *testability* and is able to use it and at least some of the other criteria. May have some errors of application or interpretation.	Demonstrates a good grasp of the concept of *testability*, and the other criteria of adequacy for empirical theories, and correctly uses most of the criteria. Few or minor errors.	Demonstrates a thorough grasp of the concept of *testability*, and the other criteria of adequacy for empirical theories, and successfully deploys the criteria. No major errors.
4: **construction of a novel argument**	The student fails to construct an argument with a clear logical structure. The conclusion is uninteresting or poorly supported. Has problematic premises or commits an obvious fallacy. Unable to represent argument form.	The student can construct a novel but unchallenging argument, having a fairly clear logical form. May have problematic premises. Avoids obvious fallacies. May contain some errors in the construction or formal representation.	The student can construct a somewhat challenging and interesting argument that is well-formed, valid or strong, has few problematic premises, and avoids major fallacies. Few or no errors in the construction or formal representation.	The student constructs a challenging and interesting argument that is well-formed, valid or strong, with no obviously problematic premises, and no fallacies. No significant errors in the construction or formal representation.

Golf Bunker Shot Rubric (#3)
Draft 2/5/07

	SLO- Be able to successfully hit balls from greenside bunkers using proper stance, ball position and swing technique.			

	Poor	**Average**	**Good**	**Excellent**
Success of shot (balls struck from greenside bunker in an attempt to hit the green)	Student is able to hit balls out of the bunker 10% of the time or less	Student is able to hit balls out of the bunker 25% of the time	Student is able to hit balls out of the bunker the majority of the time and on the green occasionally	Student is able to hit balls out of the bunker at least 70% of the time and on the green the majority of the time
Proper stance (open, weight forward, good golf posture)	Stance is incorrect and contributes to lack of success	Some components of the stance are correct but student is rarely successful	Most components of the stance are correct and student is occasionally successful	All components of the stance are present and the student is often successful
Ball position (ball center to back in stance, proper distance from golfer)	Ball is almost always incorrectly placed in stance and contributes to lack of success	Ball is primarily either positioned the incorrect distance from the golfer or too far forward in stance, contributing to relative lack of success	Ball is usually positioned correctly in stance, some success is evident	Ball is almost always positioned correctly in stance and student demonstrates success
Swing technique ("down the target line swing", open club face, smooth and rhythmic, eyes behind the ball)	Swing technique is incorrect in at least three of four key characteristics, leading to lack of success	Two of four characteristics of proper swing technique are present; success is effected by improper technique	Three of four characteristics of proper swing technique are present, leading to a majority of successful shots and occasional accuracy	Three to four characteristics of proper swing technique are present, success and accuracy result

Rubric for a Research Project   **Student Name(s)**_____

	Thesis/Problem/Question	Information Seeking/Selecting and Evaluating	Analysis	Synthesis	Documentation	Product/Process
4	Student(s) posed a thoughtful, creative question that engaged them in challenging or provocative research. The question breaks new ground or contributes to knowledge in a focused, specific area.	Student(s) gathered information from a variety of quality electronic and print sources, including appropriate licensed databases. Sources are relevant, balanced and include critical readings relating to the thesis or problem. Primary sources were included (if appropriate).	Student(s) carefully analyzed the information collected and drew appropriate and inventive conclusions supported by evidence. Voice of the student writer is evident.	Student(s) developed appropriate structure for communicating product, incorporating variety of quality sources. Information is logically and creatively organized with smooth transitions.	Student(s) documented all sources, including visuals, sounds, and animations. Sources are properly cited, both in-text/in-product and on Works-Cited/Works-Consulted pages/slides. Documentation is error-free.	Student(s) effectively and creatively used appropriate communication tools to convey their conclusions and demonstrated thorough, effective research techniques. Product displays creativity and originality.
3	Student(s) posed a focused question involving them in challenging research.	Student(s) gathered information from a variety of relevant sources--print and electronic	Student (s) product shows good effort was made in analyzing the evidence collected	Student(s) logically organized the product and made good connections among ideas	Student(s) documented sources with some care, Sources are cited, both in-text/in-product and on Works-Cited/Works-Consulted pages/slides. Few errors noted.	Student(s) effectively communicated the results of research to the audience.
2	Student(s) constructed a question that lends itself to readily available answers	Student(s) gathered information from a limited range of sources and displayed minimal effort in selecting quality resources	Student(s) conclusions could be supported by stronger evidence. Level of analysis could have been deeper.	Student(s) could have put greater effort into organizing the product	Student(s) need to use greater care in documenting sources. Documentation was poorly constructed or absent.	Student(s) need to work on communicating more effectively
1	Student(s) relied on teacher-generated questions or developed a question requiring little creative thought.	Student(s) gathered information that lacked relevance, quality, depth and balance.	Student(s) conclusions simply involved restating information. Conclusions were not supported by evidence.	Student(s) work is not logically or effectively structured.	Student(s) clearly plagiarized materials.	Student(s) showed little evidence of thoughtful research. Product does not effectively communicate research findings.