Course 2: Teaching & Facilitating - Level II
Teaching & Facilitating Learning - Level I

Skill Standard D: Provide student instruction

Key Activities:
D1. Prepare and/or gather current instructional materials and equipment.
D2: Provide individual and group instruction
D3: Initiate, develop, and implement student assessments
D4. Modify instructional material and methods based on student and industry assessments and feedback.

Skill Standard B: Develop outcomes, assessments and curricula

B2: Create, evaluate and modify curriculum
B3: Create, evaluate and modify assessments
B4: Integrate curriculum with other faculty in the department and in other instructional areas/institutions

Editor's Note: The focus of the previous Level 1 course and this subsequent Level II is on Standard D2: Provide individual and group instruction. Refer to other courses such as The Adult Learner, Assessment for Learning, Learning Styles, Planning for Instruction and Manage Learning Environments in this guide for more in-depth development of those related aspects of providing learner-centered instruction for adults at the community college.

COURSE DESCRIPTION:

Teaching and Facilitating Learning – Level II guides instructors through the process of moving from a teacher-centered classroom to a student-centered learning environment and prepares instructor-learners to assist students to become a productive part of a learning community. Instructor-learners will further examine and fine tune multiple modes of instruction beyond those in Level I including class discussion, case studies, role plays and student self-assessment. Using the universal cycle of learning with the four essential elements of Preparation, Presentation, Practice, and Performance, instructor-learners will develop model lessons and instructional models as well as developing model facilitation practices for establishing learning communities within the classroom. This course is particularly helpful to experienced instructor-learners who wish to hone and apply their facilitation and instructional delivery skills and deepen their understanding of how students learn. Focus is on preparing instructor-learners to be facilitators as well as dynamic presenters and on increasing the quality of instruction and self-assessing their own effectiveness.

LEARNING OUTCOMES: The instructor-learner will:

- Design, evaluate, and revise instructional materials in support of learner-centered activities such as self-assessment, self-directed learning, and other life-long learning skills.
- Self-assess their own application and effectiveness of all four steps in the learning cycle and provide and receive peer feedback on the delivery of learner-centered instruction.
- Implement a variety of creative and original instructional strategies that provide students regular opportunities to actively engage with course content to achieve course objectives.
• Model facilitation teaching skills to develop, support and sustain a learning community within your institution.

OUTCOMES ASSESSMENTS:
• Document and apply deliberate criteria, including college, local, state, industry, and federal policies and guidelines, and knowledge of learning styles and instructional strategies to select, design, and/or customize the most appropriate instructional materials and methods for desired curriculum outcomes.
• Develop and apply appropriate criteria for self-assessment of a teaching activity and for peer assessment and feedback on a teaching activity.
• With supervisory and/or peer feedback and review, conduct a learner-centered lesson or series of lessons incorporating a variety of instructional modes that effectively accommodate diverse adult learners.
• Facilitate a student learning community while demonstrating mastery of the subject matter, competency in the field, and the ability to impart that knowledge and model technical proficiency.
• Demonstrate instructional delivery of complex learning subject matter using media.

PERFORMANCE INDICATORS:
• Students are effectively oriented to the learning task, including outcomes, assessments, syllabus, and prior and related skills and abilities.
• Learning is facilitated with clear and effective and well-planned presentations, demonstrations and active learner involvement.
• Learning activities and lessons are focused and directed toward program and student outcomes and competencies and industry standards.
• Lesson plans are well organized to provide regular opportunities for students to actively practice, perform, and received feedback on all required skills.
• Instruction promotes the application, transfer, and retention of learning.
• Group and individual instruction accurately and effectively model and teach industry standards and workplace requirements.
• Student questions and discussions are effectively acknowledged, guided and integrated into the learning process in a positive way.
• Instructor-learners provide mentoring and modeling for newer instructors.
• Students are actively engaged in their learning community and meet or exceed established program criteria and current workplace expectations and industry standards.

KNOWLEDGE AND SKILLS: The instructor-learner will have an opportunity to:
• Create an effective learner-centered learning environment and communicate to learners their role and responsibilities in a learner-centered environment.
• Communicate to learners how they can develop self-directed learning strategies and self-assessment skills.
• Review a set of instructional materials in a variety of media for specified program/curriculum, identifying multiple college, industry, and other resources, and identify rationale, resources, and suggestions for revision and development of replacements.
• Consistently demonstrate the role of the instructor as that of leader, facilitator, and role model.
• Model a deepening understanding of the learning process and of student-centered learning.
• Present complex concepts and information in well-organized speech.
• Engage students with the learning through a variety of instructional techniques including case studies and role plays.
• Consistently develop, implement and demonstrate effective and creative lesson planning.
• Demonstrate a mastery understanding of the learner and the learning process.
• Assess strategies and own instructional effectiveness to teach diverse learners and cultural pluralism (multiculturalism) in the classroom.
• Identify and/or customize instructional materials that appeal to each learning style and to the diverse needs of learners.
• Demonstrate commitment to excellence, lead by example and motivate others to extend their capabilities.
• Investigate new learning techniques and formulate/adapt learning strategies.
• Assess and apply effective learning strategies to deal with diverse learners and cultural pluralism (multiculturalism) in the classroom.
• Self-assess facilitation skills.

SUGGESTED Learning Activities: The facilitating-instructor may use the following activities/assignments with instructor-learners and/or instructor-learners may be able to use such activities with their own students:

• Complete a pre and post presentation survey of adult learner characteristics, principles of adult learning, and essential skills of an adult educator.
• Create a Professional Development Plan indicating further educational goals in a self-determined weak area of the essential skills for adult educators.
• Develop a Lesson Plan for your training situation incorporating adult learner characteristics, principles of adult learning, essential skills of an adult educator, one of the strategies presented, and learning styles theory.
• Upgrade and publish a personal philosophy of teaching and learning.
• Develop assessment criteria for effective lessons and delivery of instruction and use these criteria for assessing lesson plans and instructional activities conducted in the class.
• Identify and demonstrate a wide variety of teaching skills and strategies, including developing scenarios and case studies, presenting an interactive lecture or demonstration, holding a discussion lesson, having students work in small groups, and conducting a complex but effective lecture or presentation.
• Video tape teaching/facilitation sessions and use these for personal reflection, diagnosis for improvement and for modeling for other instructors.
• Present the same lesson and learning outcome utilizing at least three distinct instructional strategies and assess the effectiveness (pros and cons) of each approach for learners.
• Design and deliver presentations and demonstrations and ask for student feedback on their effectiveness.
• Practice facilitating learning in a laboratory environment.
• Individual students and small groups conduct mini-lessons in class and have peer review sessions, citing specific criteria about what makes an effective lesson and ways to improve the lessons.
• Write and have your classes write a series of scenarios relevant to your subject matter that can be published, used by other classes, and used by colleagues to develop critical thinking and problem solving skills.
• Design an inquiry-based lesson for students in your class to explore/research course material.
• Develop an online newsletter of teaching tips, model lessons and resources.
• Self-assess facilitation skills with attached assessments.
<table>
<thead>
<tr>
<th>Essential Content</th>
<th>Discussion Topics and Key Points</th>
</tr>
</thead>
</table>
| Basic learning premises for facilitating learning    | - Student empowerment, ownership, discovery, intellectual courage, honesty, critical thinking, and self-assessment  
- See Learning Premises for Facilitating Learning list by Jim Pollard, attached.  
- See Checklist for Establishing a Good Learning Environment.  
- See Guidelines for Facilitators attached.                                                                                                                                                                                                       |
| Facilitating students to think critically             | - Thinking should be part of the curriculum, all curricula  
- Moving away from opinions to student research  
- Students write, evaluate assessments, assess their own learning  
- Lots of “What if…” kinds of questions  
- See Facilitating Students to Reason and Think Critically attached.                                                                                                                                                                                   |
| Learning principles and (Adapted from Carl Rogers, *Freedom to Learn*, Charles E. Merrill Publishing Company, Columbus Ohio, 1969.) | - Significant learning takes place when the subject matter is perceived self-assessment by the student as having relevance for his/her own purposes.  
- Learning which involves a change in the perception of oneself is threatening and tends to be resisted. Learning can proceed best when external threats are at a minimum.  
- Self-initiated learning which involves the whole person of the learner - feelings as well as intellect - is the most lasting and pervasive.  
- Independence, creativity, and self-reliance are all facilitated when self-criticism and self-evaluation are basic and evaluation by others is of secondary importance. |
| Learning as creative act                               | - Active thinking, reflection, making connections, developing understanding  
- See Learning is a Creative Act attached.                                                                                                                                                                                                             |
| Student-centered learning                             | - Much significant learning is acquired through doing.  
- Learning is facilitated when the student participates responsibly in the learning process.  
- Consistent emphasis on outcomes  
- Adapting instructional methods based on student learning  
- Active student participation and leadership in the classroom  
- Consistent student assessments and feedback as a natural, habitual flow of the learning process  
- See Checklist for Writing Learning Outcomes, attached.  
- See Student Learning Outcomes and Assessments and Outcomes Template in Section #18: Resources of this guide.                                                                                                                           |
| Environments for effective adult learning             | - Physical attributes of effective environments  
- Spatial arrangements and social arrangements for learning  
- Flexibility, authority in determining spatial arrangements  
- Setting the climate for effective teaching and learning  
- See Creating Environments for Effective Adult Learning in Additional Resources list.                                                                                                                                                                     |
| Learning communities                                  | - Interdisciplinary and coordinated studies  
- Linked courses for greater coherence, thematically developed  
- See Washington Center website for lists of learning communities in the states’ colleges: www.evergreen.edu/user/washctr/ilcwash.shtm  
- What is effective teaching for the experienced instructor?  
- Demonstrates a level of teaching skill from previous experience.  
- Uses experience to assess student learning and modify instruction as needed for diverse learners.  
- Facilitates student learning - not just direct instruction.  
- Maintains flexibility in instructional delivery and teaching approaches.                                                                                                                                                                             |
<table>
<thead>
<tr>
<th>Essential Content</th>
<th>Discussion Topics and Key Points</th>
</tr>
</thead>
</table>
| **What is effective teaching for the experienced instructor? (cont.)** | - Focuses on student learning rather than content.  
- Designs effective assignments and ties them to effective assessments of student learning |
| **Processing information** | - **Analytical approach:** step-by-step processing, logical inductive processes, objective  
- **Global approach:** right brain/left brain, field sensitive, deductive or intuitive processes, subjective  
- **Adult memory and storage:** short term working memory (chunking) and long-term learning (imagery, encoding verbal, retrieving via free or cued recall, etc.) |
| **Designing assignments** | - Opportunities for students to practice the skills  
- Involve students in formulating the assignment  
- Explain how work will be assessed  
- Defined the scope and time required to complete the assignment with reasonable effort  
- See *What’s an Effective Assignment?* attached. |
| **Lessons incorporating the Universal Learning Cycle** | - The Preparation phase of the learning cycle is four part: preparing the teacher to teach, preparing students to learn, preparing the learning environment and preparing materials.  
- The Presentation stage is the introduction of new material, often overindulged. Teachers learn how students both receive and process information and why it is important to reduce Presentation time and lengthen the more active learning phases of Practice and Performance.  
- Facilitators will learn how to use both Practice and Performance to solidify learning for long-term memory, and create successful learning experiences.  
- In addition to facilitating learning, the Performance element of the learning cycle provides teachers the opportunity to observe and evaluate learning. |
| **The Constructivist classroom** | - Students construct meaning from their learning activities.  
- Social constructivism views of knowledge and learning - Vygotsky: the world is complex, culturally negotiated, and values socially constructed.  
- Knowledge and understanding are constructed through social talk and problem solving and shared tasks. (Driver et all 1994, p. 7)  
- 5 principles (See *Constructivism* attached.) |
| **Conduct of the experienced instructor** | - Knows when and how to be responsive and helpful to students.  
- Demonstrates professionalism at all times:  
- Actively seeks out student input and questions.  
- Persistently and naturally assesses student learning and his/her own instructional effectiveness. |
| **How the brain learns** | - Experienced teachers help students understand how they learn and how their brain works  
- Building dendrites and making synapses i.e. making connections, remembering =learning  
- See *Incorrect and Counterproductive Assumptions About Learning*, attached.  
- Refer to Rita Smilkstein’s articles —*Transferring Complex Knowledge and How the Brain Learns: Research, Theory and Mathematics Classroom Application* in the Resources (Section #18) of this guide. |
**LEARNING ACTIVITIES:** These are activities that the facilitating instructor can use in this course or that instructor-learners can use in their own classes.

- Facilitate a learning community comprised of students in your program, and/or in related and unrelated programs.
- Review Rita Smilkstein’s *Incorrect and Counterproductive Assumptions* article (attached) and debate and present lessons that refute these assumptions.
- Demonstrate a lesson in which the instructor incorporates learning theory directly into the lesson so that students develop a better understanding of how they learn.
- Design and present a lesson that demonstrates best practices of the Universal Learning Cycle.
- Instructor-learners apply the Checklist for Establishing a Good Learning Environment and Guidelines for Facilitators as self-assessments and/or as a classroom assessment that students use.
- Class designs course assignments and each group assess the potential effectiveness.

**SUPPORT MATERIALS:** The following materials can be found at the end of this course module:

- Learning Premises for the Facilitating Learning
- Checklist for Establishing a Good Learning Environment
- Guidelines for Facilitators
- Facilitating Students to Reason and Think Critically
- Learning is a Creative Act
- Checklist for Writing Learning Outcomes
- What’s an Effective Assignment?
- Constructivism
- Incorrect and Counterproductive Assumptions About Learning

**ADDITIONAL READINGS AND RESOURCES:**

- Learning Premises, Facilitating Students to Reason and Think Critically and Tactical and Structural Recommendations for College Course Design as cited in A Learning Facilitators Workbook by Jim Pollard, Spokane Falls Community College.


<table>
<thead>
<tr>
<th>Essential Content</th>
<th>INSTRUCTIONAL STRATEGIES II Discussion Topics and Key Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional strategies and the strengths and limitations of each</td>
<td>Lecture (with or without visuals)</td>
</tr>
<tr>
<td></td>
<td>Discussion</td>
</tr>
<tr>
<td></td>
<td>Demonstration</td>
</tr>
<tr>
<td></td>
<td>Cooperative learning and Small Group work</td>
</tr>
<tr>
<td></td>
<td>Hands-on learning (laboratory)</td>
</tr>
<tr>
<td></td>
<td>Role play</td>
</tr>
<tr>
<td></td>
<td>Case Studies and Scenarios</td>
</tr>
<tr>
<td></td>
<td>Individual conferencing</td>
</tr>
<tr>
<td></td>
<td>Inquiry-based learning</td>
</tr>
<tr>
<td></td>
<td>Computer-based instruction</td>
</tr>
<tr>
<td></td>
<td>Video tele-training</td>
</tr>
<tr>
<td></td>
<td>Learning community</td>
</tr>
<tr>
<td>Essential Content</td>
<td>INSTRUCTIONAL STRATEGIES II (CONT.)</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Instructional strategies and the strengths and limitations of each</td>
<td>• For a fuller examination of the first four strategies listed above, see Course #1, <strong>Teaching and Facilitating Learning – Level I</strong> in this guide.</td>
</tr>
<tr>
<td>(cont.)</td>
<td></td>
</tr>
<tr>
<td>Variety of methods</td>
<td>• Lecture, simulations, games, exits notes, case studies, cooperative learning, structured controversy, presentations, clustering, projects, discussion, role-plays, etc.</td>
</tr>
<tr>
<td>Class discussion</td>
<td>• The secret is getting the learners to take responsibility for the discussion by strategically facilitating rather than telling or asking the questions i.e. teacher as catalyst, listener.</td>
</tr>
<tr>
<td></td>
<td>• Secret to asking questions: avoid questions with one-word responses; ask those questions for which there is no one right answer</td>
</tr>
<tr>
<td></td>
<td>• See <em>The Details of Discussion and Yackity-Yack: Thoughts on Classroom Dialogue</em> attached.</td>
</tr>
<tr>
<td>Techniques for asking questions:</td>
<td>• Distribute attention evenly among males and females</td>
</tr>
<tr>
<td></td>
<td>• Allow time for students to think and respond (3-5 seconds of WAIT time)</td>
</tr>
<tr>
<td></td>
<td>• Address question to the class</td>
</tr>
<tr>
<td></td>
<td>• Responding to student’s questions:</td>
</tr>
<tr>
<td></td>
<td>• Actively listen</td>
</tr>
<tr>
<td></td>
<td>• Admit not knowing if that is the case</td>
</tr>
<tr>
<td></td>
<td>• Answer concisely and clearly</td>
</tr>
<tr>
<td></td>
<td>• Paraphrase the question</td>
</tr>
<tr>
<td></td>
<td>• Accept all questions</td>
</tr>
<tr>
<td></td>
<td>• Inappropriate questions: “I don’t think that your question is relevant to what we are doing today.”</td>
</tr>
<tr>
<td></td>
<td>• Praise questioner: “I hadn’t thought of it that way. Good question.”</td>
</tr>
<tr>
<td>Facilitation as teaching</td>
<td>• Facilitating a laboratory environment and or learning community</td>
</tr>
<tr>
<td></td>
<td>• Assisting individual students working on different learning activities simultaneously</td>
</tr>
<tr>
<td></td>
<td>• Group learning activities but student-focused</td>
</tr>
<tr>
<td>Interactive Lectures, presentations, demonstrations</td>
<td>• Lecturing, presentations and demonstrations whereby students play a dominant role, give their examples, come up to the board, suggest and organize learning activities, teams, etc.</td>
</tr>
<tr>
<td></td>
<td>• Lectures organized to reinforce previous learning and incorporate new knowledge and skills</td>
</tr>
<tr>
<td>Case studies or case analyses</td>
<td>• Can be a dominant teaching strategy</td>
</tr>
<tr>
<td></td>
<td>• Allow students to develop their own relevant scenarios and analyses</td>
</tr>
<tr>
<td></td>
<td>• See <em>Case Analysis Worksheet</em> and <em>Case Study Rubric</em> attached.</td>
</tr>
<tr>
<td>Role-playing</td>
<td>• Start with specific behavioral objectives</td>
</tr>
<tr>
<td></td>
<td>• Make use of a positive model</td>
</tr>
<tr>
<td></td>
<td>• Use coaching skills for success.</td>
</tr>
<tr>
<td></td>
<td>• Manage feedback to learners.</td>
</tr>
<tr>
<td></td>
<td>• Protect participants’ self-esteem.</td>
</tr>
<tr>
<td></td>
<td>• Broaden the experience with alternative positive behaviors.</td>
</tr>
<tr>
<td></td>
<td>• Prepare yourself to fulfill role of the instructor.</td>
</tr>
<tr>
<td></td>
<td>• Customize role-plays to reflect realistic job settings.</td>
</tr>
<tr>
<td></td>
<td>• Focus attention on the process.</td>
</tr>
<tr>
<td></td>
<td>• Everyone gets roles</td>
</tr>
<tr>
<td></td>
<td>• Give specific pointers to all observers.</td>
</tr>
<tr>
<td>Essential Content</td>
<td>Discussion Topics and Key Points</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Role-playing (cont.)              | • Let learners write their own role-plays.  
• Always follow a role-play with an analysis.  
• See *How to Turn Reluctant Trainees into Role-Players and 9 Ways to Make Role-Playing Pay Off in Training* in *Adult Learning in Your Classroom*…listed in Additional Resources section of this course outline.                                                                                                           |
| Computer-based instruction        | • See *Computer-based Instruction and Video Tele-training* attached.  
• See also *Course # 12, Learning and Adapting New Technologies* for more in-depth resources and approaches to technology in the classroom.                                                                                                                                                     |
| Project-based learning            | • Learning centered around a major project or activity that requires many skills and approaches  
• Learners usually work collaboratively and “present” their project to the class or to a program advisory committee  
• Typically, the project requires many skills learned in the program  
• Often used as capstone assessment  
• See *Thoughts About Project-Based Learning and Questions to Consider in Project-Based Learning* attached.                                                                                                               |
| Work-based learning               | • Students engage in real work required in industry  
• Includes activities such as on the job training, apprenticeships, site-based learning, students preparing work for hire for real customers, etc.  
• Learning occurs in “real” work situations such as job shadowing, internships, and cooperative learning situations often built into a program  
• See *Benefits of Work-Related Learning* attached.                                                                                                                                                                                                 |
| Self-assessment for students and instructors | • See *Self-Evaluation Prompts for Students* attached.  
• See *Promoting Self-Reflexivity Through Classroom Assessment* attached.  
• See *Instructor/Facilitation Assessment* attached.  
• See *Self-Assessment Checklist of Questions for the Teacher* attached.                                                                                                                                                                                                 |
| Students self-evaluation:         | • Learning strategy that helps students make meaning, find relevance, and build coherence in their learning  
• Active engagement with the learning  
• Helpful for special populations and minority students  
• Helpful strategy for older adults who need to integrate the learning with their opinions and experience  
• Helps instructors listen to what students have to say  
• Helps students, instructors to be more reflective about the learning process  
• Developmental change  
• Sample Prompts: Imagine you had more time to [complete this project, write this essay or report, etc.]  What would you do differently and why?  
• What did you expect to learn in this course?  What did you actually learn?  What do you need to learn in the next subject?  
• See *Student Self-Evaluation Fostering Reflective Learning* attached.                                                                                                   |
LEARNING ACTIVITIES:
- Identify the pros and cons of different teaching strategies.
- Students keep an observation journal when on work-based learning or cooperative learning projects.
- Adapt a learning strategy to diverse learners.
- Plan and implement a project that actively promotes student involvement.
- Lead a discussion and respond to student questions and ideas.
- Design a lesson using easel charts, graphics, whiteboard and/or presentation software like PowerPoint, etc. which the class evaluates.
- Write case studies and/or role-playing scenarios
- Complete self-assessment tools and design a plan for improvement.

SUPPORT MATERIAL: These materials are attached at the end of this course module:
- The Details of Discussion
- Yackity-Yack: Thoughts on Classroom Dialogue
- Case Analysis Worksheet
- Case Study Rubric
- Computer-based Instruction and Video Tele-training
- Thoughts About Project-Based Learning
- Questions to Consider in Project-Based Learning
- Benefits of Work-Related Learning
- Self-Evaluation Prompts for Students
- Promoting Self-Reflexivity Through Classroom Assessment
- Instructor/Facilitation Assessment
- Self-Assessment Checklist of Questions for the Teacher
- 11 Steps to Delivering Terrific Presentations
- Voice & Body Language, by Michael Buschmohle, Issaquah, WA.

ADDITIONAL READINGS AND RESOURCES:
- Malcolm Knowles: Apostle of Andragogy from nlul.nl.edu/ace/recources.html
  The text was reprinted on the website with permission from article by Robert Carlson in Vitae Scholasticae, vol. 8, No. 1, Spring 1989.
- Conducting Group Discussion With Adult Basic Learners, Techniques, Lifelong Learning, Vol. 9, No. 5, February 1986.
<table>
<thead>
<tr>
<th>Essential Content</th>
<th>INSTRUCTIONAL DELIVERY OR PRESENTATIONS</th>
</tr>
</thead>
</table>
| Presentation      | • When is the presentation method most useful for learners?  
|                   | • Monitoring to check for understanding  
|                   | • See 11 Steps to Great Presentations attached.  
| Using flip charts effectively | • Diagrams and color  
|                   | • White space, underlining, font size, etc.  
|                   | • Planning ahead of a lecture, presentation  
|                   | • See presentation ideas in the Resources, Section 18 of this guide.  
| Giving effective presentations | • Prepare, Plan, Present  
|                   | • Be audience-centered, not just topic-centered  
|                   | • See Voice and Body Language for Making Presentations attached.  
| The body language of listening | • LOOK into eyes as you listen.  
|                   | • LIFT your eyebrows and smile.  
|                   | • LEAN your upper body toward the speaker.  
|                   | • NOD your head when you agree.  
|                   | • TAKE NOTES to remember.  

**LEARNING ACTIVITIES:**

- Instructor-learners present complex ideas, information and/or concepts on a specific topic in a well-organized lecture, presentation, demonstration and or small group work.
- Instructor-learners design a similar lesson using easel charts, graphics, whiteboard and/or presentation software like PowerPoint, etc.
- Instructor-learners access several of the following websites to research and present on an educational teaching/facilitating learning topic for the class.

**ADDITIONAL RESOURCES:** (not alphabetized)


**STUDENT SELF-EVALUATION**


• Cross, Angelo. *Classroom Assessment Techniques*. Ann Arbor: School of Education, University of Michigan.


**CASE STUDY RESOURCE LIST**


• Shulman, Judith J.; Colbert, Joel A. (1988) *The Intern Teacher Casebook*. California: Far West Laboratory for Educational Research and Development


**WEBSITES:**

http://www.uky.edu/Education/TEP/usacert.html 50 states’ certification requirements

http://www.wam.umd.edu/~mhall/teaching.html Teaching with Electronic Technology


http://www.teachingandlearning.org ETS supports advancing teaching through coherent approach to licensing and certifying of teachers

http://www.ntlf.com National Teaching and Learning Forum

http://www. evergreen.edu/user/washctr/index.asp Site for The Washington Center for Undergraduate Education—contains a listing of all Learning Communities in the state colleges, models for learning communities, discussion forums, etc.
http://www.ccla.lib.fl.us
Biography Resource Center contains reference sources and full-text periodical articles on individuals from ancient times to the present. APA, MLA Articles, MLA Reference

http://www.ccla.lib.fl.us
EBSCO Academic Search Elite is an interdisciplinary periodical database which provides access to approximately 3000 periodicals. Over 1100 titles are available in full-text format; over 1700 titles are peer-reviewed. APA, MLA

http://www.ccla.lib.fl.us
EBSCO Business Source Premier provides bibliographic and full-text access to over 2000 business periodicals. APA, MLA

http://www.ccla.lib.fl.us
The complete text of the online version of Encyclopedia Britannica is available. This database also provides Internet Links for many of the articles. APA, MLA

http://ericir.syr.edu
ERIC is a U.S. Government supported database, which provides access to thousand of educational journals and reports. Entries in the database include bibliographic information as well as abstracts. In most cases, the complete text of the article or the report will need to be requested through the Inter-Library Loan system.

http://www.ccla.lib.fl.us
FirstSearch is a collection of over 50 databases. The following databases contain full-text information APA, MLA Articles, MLA Reference:
- Business & Industry (business articles)
- Business Dateline (business articles)
- Contemporary Women’s Issues (international coverage)
- Disclosure (company financial information)
- FactSearch (statistical abstracts)
- New York Times (newspaper articles)
- SIRS Researcher (general reference database)
- WilsonSelect (interdisciplinary periodical articles)
- World Almanac (directory and statistical information)
- World Book Encyclopedia (brief encyclopedia articles)

http://www.ccla.lib.fl.us
Literature Resource Center provides comprehensive biographical and critical information about authors from ancient times to the present through access to reference sources and full-text periodical articles, as well as Internet sites. MLA Articles, MLA Reference

http://www.ccla.lib.fl.us
Proquest Career and Technology provides bibliographic and full-text access to periodical articles relevant to AS degree programs. APA, MLA
GLOSSARY:

Constructivism
Student or learner generated pedagogy; educational philosophy centered around learners constructing the context of their learning, students generating central issues and course content

Facilitation
Helping students help themselves learn, being more of a guide on the side rather than a presenter of learning, facilitating students inquiries, discussions, etc.

Learning Community
A variety of approaches that link or cluster classes around an interdisciplinary theme; fosters collaborative teaching and learning and a greater intellectual interaction

Project-based Learning
Learning activities centered around a major project or multi-faceted assignment that gives students opportunities to incorporate a wide variety of skills—writing, speaking, research, cooperative learning, etc.

Work-based Learning
Learning activities involving “real” work, often at a workplace, includes job shadowing, internships, co-op, on-the-job training, etc.
Learning Premises for Facilitating Learning
Reprinted with permission from *A Learning Facilitator’s Workbook* by Jim Pollard, Spokane Falls Community College

- Empowerment
- Ownership
- Discovery
- Transference
- Relevancy
- Clarity
- Continuous Improvement
- Intellectual Courage
- Intellectual Humility
- Intellectual Honesty
- Durable self-image
- Long Term Memory
- Learning Centered
- Learning Style
- Critical Thinking
- Purpose
- Learning Objectives
- Self-assessment

Checklist for Establishing a Good Learning Environment
Reprinted by permission of the BCIT Learning Resources Unit, Burnaby, BC V5G 3H2

In the first few classes of your course, use the following checklist to ensure you are on the right track. *To establish a good learning environment, I need to:*

**REINFORCE RELATIONSHIPS**
1. Greet students personally whenever possible; use their names.
2. Interview as many as possible and find out more about them.
3. Encourage informal study groups (or buddy system).
4. Be sure students set ground rules when working in groups.

**KEEP CLASSES INTERESTING AND ENGAGING**
1. Be energetic and enthusiastic. Vary the pace.
2. Post the agenda and learning outcomes for each class and refer to them as I teach.
3. Start each day with a question or scenario requiring student input.
4. Give students useful handouts to guide their note-taking.
5. Vary presentation techniques by using exercises, audio-visual displays, group work, discussions, and brief written tests.

**KEEP TRACK OF LEARNING**
1. Give pretests and post-tests on the day’s topics.
2. Allow for sufficient time to deal with student questions.
3. Use various techniques to check understanding throughout the class. Give instant feedback wherever possible.
4. Give a test early in the term. Grade it for the next class, and use the results to guide instruction and student learning.
5. Gather student feedback about course content and delivery before mid-term, and use the results to improve instruction and learning.

**AVOID DIFFICULTIES WITH STUDENTS**
1. Be well prepared for all classes.
2. Involve the students in their learning.
3. Be respectful of the students and their ideas.
4. Give up some control—it’s not necessary or possible to be perfect.

**Guidelines for Facilitators**

Adapted from John B. Bennet, Director of Academic Affairs, American Council On Education; Friedman & Yarbourgh, *Training from Start to Finish*, Institute for Academic Leadership Development

The facilitator plays an especially important role in the classroom or workshop. He or she is the one who does much to set the tone within the small group and, thereby, to help it establish an identity as a group, rather than simply as a collection of individuals. These guidelines are simply some suggestions about ways in which this process of group-sharing can be enhanced.

The goal is to get maximum involvement of participants in each group. Below are a list of some guidelines for serving in the role as group facilitator:

1. At the beginning the group usually needs an ice breaker, so the facilitator should have each person introduce himself or herself.
2. As the facilitator, you must be prepared to use good judgment at any number of points in the small group discussion. Do not hesitate to begin the discussion.
3. Judgment must be employed in keeping the direction fairly focused and yet also honoring the issues which different individuals wish to pursue.
4. The discussion should be related to the topic at hand, and clear diversions or extraneous issues should be postponed.
5. The facilitator should enable the discussion to occur, not dominate it. Hesitate from illustrating or recounting personal experiences, doing so only when the person’s report might spark contributions from others.
6. A good facilitator will quickly establish an open climate, reinforcing contributions and helping people to listen to each other.
7. Avoid making judgment or taking prominent sides on emotional issues.
8. Take “control” of the group if everyone begins to talk all at once or side conversations occur.
9. Keep the discussion moving on target at a fast pace.
10. Try to get as many individuals involved as possible and as relaxed as possible.
11. Draw out those who may be shy and have ideas to share to benefit the entire group.
12. Summarize as appropriate at regular intervals.
Facilitating Students to Reason and Think Critically
Reprinted with permission from A Learning Facilitator’s Workbook by Jim Pollard, Spokane Falls Community College

As a learning facilitator I engage learners in activities that are based on the following premises:
First: I firmly believe that thinking should be taught in every course, to the end that learners of history would be thinking historically, learners of biology would be able to think biologically. The same would be true of all subjects.

Second: The elements of reasoning are basic to the way in which the mind works, when it works well. When you find someone who is good at what they do, you will find someone who has learned to apply the elements of reasoning to their field. Good saddle makers understands the logic of saddle making because they have applied the elements of reasoning to the art of saddle making. The same is true of good plumbers, designers, police officers, photographers and so on. As natural as this process may seem, I know that the purposeful recognition of the thinking process, that is to say the elements of reasoning, will improve thinking.

Third: Every individual can learn to think more effectively.

Fourth: I have come to believe that the study of thinking is really the study of learning. It is learning that is basic to the human process. Thinking is a means to learning. Improving your thinking is actually improving your ability to learn. For this to make sense you need to see learning as being more than memorizing. Learning is figuring out, discovering, problem solving and making sense of things, all of which is summed up in the notion of discovering the logic of things.

I regularly emphasize critical thinking in all of the following ways:
1. I see myself, not as a teacher but a facilitator of learning.
Example: When asked questions I first decide rather the question is a information question, a opinion question or a thinking question. If the question is information question I suggest where the learner might find the answer. If the question is a matter of opinion, I encourage the learner to seek varying points of view and move away from opinions. If the question is a thinking question, I ask either a element of reasoning question or encourage the learners to apply some standard to their thinking.

- I do not evaluate. I encourage the learner to self-assess. I ask questions or suggest options.
- I assist in focusing the discussion.
- When asked for direction, I try always to give three options.
- I do not take ownership over a learner’s activity, project or learning. I support what the learner is doing.
- I encourage, motivate and support.

I attempt to create a learning environment that could be described as productive confusion. If the learner is working his/her way out of the confusion, I feel I am doing my job.

2. I do not engage in any activity that doesn’t directly impact learning.
Example: I do not write tests. I assist learners in writing test questions.
I do not correct tests. I allow learners to correct tests so they can learn from their mistakes. I do not “grade” learners or learning. I assist learners in assessing their own learning and assigning their own grades. I must “teach” criteria.

3. I recognize the importance of relevance.
Example: Learners make choices about what they want to learn. Learners make choices about how they want to learn it.

4. I recognize the importance of self-assessment
Example: I assist learners in the application of criteria (intellectual standards).

5. I recognize the essential role of the elements of reasoning in the learning process.
Example: I facilitate class discussion in which every communication by learner or facilitator is recognized as being a part of one of the elements of reasoning. Note: I like, I don’t like, I agree, I disagree, in my opinion, right, wrong, good, bad, wonderful, or it sucks are not on the list of reasoning elements or intellectual standards.

6. I share my thinking with learners.
Example: To share thinking, one must move past the “how” to do something, and get into the why. One way of doing this is to let learners ask elements of reasoning questions of the learning facilitator. “When you decided to do that, what assumptions did you make? What implications did you consider at that time?”

An important part of this process is to share your poor thinking as well as your good thinking. Show that you have flaws in your thinking. Demonstrate that you, like everyone else, makes mistakes in thinking and show how you learned from your mistakes.

7. I use phrases such as: “What would happen if…”? “Have you considered…”?

8. I ask questions which assist the learners in reviewing and assessing their use of the elements of reasoning.
Example: From what point of view is that position? What do you think the implications would be if that happened? What conclusion would people from different points of view come to?

9. I ask questions which focus the learner on their use of the intellectual standards.
Example: How could that be more clear? How could that be more precise? From what point of view is that significant?
Learning is a Creative Act
Adapted from Peter Ewell, 1998

1. Learning is an essentially creative act. The learner creates his or her learning actively and uniquely.

2. Learning is about making meaning for each individual learner by establishing and reworking patterns, relationships, and connections.

3. Every student learns all the time, both with us and despite us.

4. Direct experience decisively shapes individual understanding.

5. Learning occurs best in the context of a compelling “presenting problem.”


7. Learning occurs best in a cultural context that provides both enjoyable interaction and substantial personal support.

Checklist for Writing Learning Outcomes*
Reprinted by permission by BCIT Learning Resources Unit, Burnaby, BC V5G 3H2 Phone: 604-432-8406

Use the following checklist to help you as you write learning outcomes.

When writing learning outcomes, I need to:
1. Focus on outcomes, not processes
2. Start each outcome with an action verb
3. Use only one action verb per learning outcome
4. Avoid vague verbs such as know and understand
5. Check that the verbs used reflect the level of learning required
6. Ensure that outcomes are observable and measurable
7. Write the outcomes in terms of what the learner does, not what the instructor does
8. Check that the outcomes reflect knowledge, skills, or attitudes required in the workplace
9. Include outcomes that are woven into the entire course (such as work effectively in teams)
10. Check that there are the appropriate number of outcomes (no more than three per major topic)
11. List the sub-outcomes for each outcome
12. Check that the outcomes fit within program and course goals

* For more on outcomes, see Student Learning Outcomes and Assessments and Outcomes Template in Section #18: Websites and Resources in this guide.
What’s an Effective Assignment?

This list was compiled in a workshop entitled *Designing and Evaluating Standards-Based Classroom Assessments and Curricula in Professional-Technical Programs* facilitated by Robin Jeffers from Bellevue Community College at the Higher Education Assessment Conference May 2, 2001, in Spokane, Washington.

- Demonstrates what students have learned, i.e. application of the learning
- Offers challenges and stretches students to excel
- Engages students to be active learners
- Has evaluative criteria that should be known to students
- Is progressive and developmental in developing student proficiency
- Has a reasonable scope as to time and effort required
- Accommodates different learning styles
- Is creative, allowing for student growth and potential
- Is adaptable to allow for student creativity
- Is consistent with instructional purpose
- Is collaborative with other students and the instructor
- Has a feedback loop
- Encourages reflection
- Encourages students to use new tools and ideas
- Promotes a sense of accomplishment
- Fits into the curriculum and reinforces previous learning
- Has a stated purpose and context
- Has structure or a framework
- Offers options for learners
- Provides resources and models
- Includes guidelines to do the assignment
- Will include different audiences and evaluators in addition to the instructor
- Clarifies presentation expectations
- Contains timelines
- Synthesizes learning

Robin offered that effective assignments:
- Articulate the conceptual framework of the field and what it means to work in that profession.
- Are metacognitive so that instructors and learners can stand outside and see the conceptual framework.
- Allow for advanced students to design their own task to demonstrate the conceptual framework.

"An effective assignment is like a bathing suit: long enough to cover the subject but short enough to be interesting."…Norma Goldstein (comment from her 8th grade science teacher)
Constructivism

Many of the ideas included here are from In Search of Understanding: The Case for Constructivist Classrooms, a 1993 publication of the Association for Supervision and Curriculum Development, Alexandria, VA. The authors are Jacqueline Grennon Brooks and Martin G. Brooks.

In many areas, we are now questioning what it means to learn, what it means to be educated, and what it means to teach. A number of educators are beginning to ask how much time should be spent having learners acquire knowledge developed by others, and how much should be spent having them construct knowledge which has meaning to them, and which they can use to know their world better. Although the two are not mutually exclusive, and may even be of equal importance, traditional views of education have historically favored the former over the latter. Why is this?

What would happen if at least some of the curriculum were driven by student thinking, i.e., by learner-generated questions and solutions? How can we design education and training programs to help learners organize and understand their individual worlds? How can we help them name, frame, and discuss their own problems?

How often do we encourage alternative interpretations or explanations of phenomena/topics studied in our classrooms? How much of school success is based on true understanding and application, and how much on “getting through the material?”

From a constructivist perspective, it is important to look at the big picture, i.e., at systems. From a traditional perspective, we have looked at pieces. We all know individuals who can manipulate numbers well, but cannot describe how a number system works; who have memorized the periodic table, but have no idea why it is organized as it is; who can describe how government officials are elected, but cannot explain why a budget impasse occurs, etc.

How can we construct new understandings about what we think we know? How can we who are responsible for helping others learn, help reconstruct or restructure the learning experiences occurring in our institutions? A constructivist perspective reflects five overarching principles regarding pedagogy:

1. Problems are posed that have relevance to learners.
2. Learning is structured around “big ideas” or themes.
3. Students’ points of view are sought and valued.
4. Curriculum is adapted to address students’ suppositions.
5. Student learning is assessed in the context of teaching.

Incorrect, Counterproductive Assumptions About Learning

Reprinted by permission by Dr. Rita Smilkstein, Professor of English, Emeritus, North Seattle Community College

1. The mind is a container into which knowledge is to be put. Once the knowledge is put into the mind of a receptive learner, the learner will be able to understand and apply it.
2. Real teaching is done when teachers impart knowledge to students. The better the teacher pre-analyzes and pre-synthesizes the material, the more logically the teacher organizes the material, the more clearly the teacher communicates, the more entertaining
the presentation, the more successful will be the imparting of knowledge to the students.

3. If the teacher does all the above and the students still cannot understand or apply the material, then the students do not have the ability to think at high levels. Either their cognitive development is inadequate (i.e., they do not have the intelligence or talent to be college students) or they lack basic communication, computation, study, and/or thinking skills. If the last assumption is held, the further assumption is that once having acquired the missing skills, the students will be able to understand and apply the material imparted to them.

4. Once a student achieves mastery in one subject or skill, that student is able to perform at a high level in another subject or skill. If a student cannot, then the student lacks the capacity for the second subject, e.g., the student is right brained and can do math well but can’t write well.

5. The proper sequence for teaching is that the teacher should first give an overview in a lecture and then, in subsequent lectures, give definitions, background, technical terms, explanations, examples, demonstrations, etc. As a result of these activities, the students should be able to prove on a test that they understand and are able to apply the material.

6. Learning is pleasant for students only when the teacher or the materials or learning aids are entertaining and exciting. Otherwise, the natural frustration and/or difficulty—or even boredom—of learning will militate against students learning, except for students with exceptional aptitude, motivation, or perseverance.

The Details of Discussion
This article is reprinted by permission from Magna Publications and The Teaching Professor from February 1997. Subscription and submission information at dharvil@magnapubs.com.

Of all instructional methods and approaches, discussion is often the most disappointing and frustrating for teachers. When it doesn’t work, its failure seems as obvious as does the failure in efforts to fix it. Students won’t talk, and despite gallant efforts to engage them, they still don’t contribute or offer such meager morsels there is little on which to intellectually feed.

Yet, most of us prize discussion, have tasted its power on those all-too-few occasions when it has worked, and aspire to use it more regularly and effectively. One of our problems may be an ongoing underestimation of the details and dynamics associated with successful discussion. Our love of the content, its obvious intellectual intrigue, and life in an academic culture founded upon scholarly exchange seduce us into thinking intellectual exchange will happen in class easily — almost automatically. Consequently, we prepare less than we should.

The fact is, discussion is anything but easy or automatic — for students or teachers. It is a complex instructional method that rests on sophisticated use of numerous techniques. Rice University Professor of English Dennis Huston, a nationally-recognized discussion teacher, addresses some of those skills in outlining how he manages discussion in classes of 60 to 100 students:

PREPARATION

“I first go over the material assigned, trying to identify the ideas and passages that seem most important, both for me and these students’ (p. 111), explains Huston, who reports he
tends to see themes, problems and issues in groups) or clusters. He then spends considerable time thinking about and preparing opening questions for each area, asking himself such questions as (p.111):

- “Do I want to open with a shocking question, designed to surprise the students into really imaginative thinking? Or should I choose instead a much more predictable beginning. How is this work like?
- “What in this work did you find confusing, important, or notable?”
- “Should I perhaps open the discussion in a low-key way by simply asking what issues the students want to talk about, what questions they want answered?”
- “Should I focus on a particular moment in the text or use it as a way of discussing crucial themes or problems?”
- “Should I begin with a context-specific question that has important subtextual ramifications?”

He also thinks about which students he might call upon based on their relevant past experiences, completion of related writing assignments, or their recent silence in class.

LISTENING
Huston believes the cornerstone of effective discussion is “the ability to listen to students’ answers [and] to hear what the students are really saying, not what the teacher expects them to say” (p. 109). He also understands and acknowledges that teachers often frame questions with a definite answer in mind which makes it easy to impose that answer on student comments and/or to dismiss a student answer in search of one more closely aligned with what teachers want to hear. While this may be acceptable in a test, in discussion settings, Huston explains, “It does not take students long to realize that what they are being asked to do is not to discuss, not to think their own ideas, but to read the teacher’s mind” (p. 109).

IMPROVISATION
Another essential discussion skill is the ability to improvise, which allows teachers to use discussion to build on the ideas as they come from students” (p.109). What makes this hard for many who lecture well is that the method places little importance on organization. In Huston’s case, discussions move between, across and around clusters of issues he has identified for discussion.

Though discussions may need to be summarized and/or organized with separate ideas related, that should not take place as they are occurring. At that point, the sense of exploration and discovery serve as the appropriate forces that drive the discussion from point to point. “While the discussion teacher can be less concerned than the lecturer with organization, s/he must be more focused on the process, constantly monitoring the ebb and flow of ideas. For Huston it’s an ongoing subtext of questions:

- Who’s prepared?
- Is the material interesting most of them?
- Do they understand the reading?
- Who wants to participate?
- Who’s carrying the discussion?
- Should I call on one of my best students to give the class a lift? Or can a quieter person shine on this issue?
• Am I attending to all parts of the room
• Should I try the topic from a different angle?

It’s a constant balancing act between the content being discussed and the processes being used to discuss it. Is discussion worth all the effort? Huston’s answer regarding this challenging teaching method is a compelling confirmation.

“Teaching an effective discussion class is for me,” Huston explains, “a deeply human and humanizing activity, a process built both on community and on communication, in which all of us work together — questioning, listening, examining, qualifying, challenging, explaining, and elaborating — to build something more imaginative, more interesting, more satisfying, and ultimately more enduring than any of us could build alone.” (p. 112).


“Yackity-Yack”- Thoughts on Classroom Dialogue
This article is reprinted by permission from Magna Publications and The Teaching Professor from December, 1966. Subscription and submission information at dharvili@magnapubs.com.

In class, I face a common dilemma: motivating my students to start talking. Short of advocating the use of blinding lights, rubber hoses and tough, leading questions, I offer here some techniques used to increase opportunities for classroom dialog.

Be patient. The shelf life of a Twinkie is half as long as the time some students need to formulate responses. I had to learn not to be afraid of silence; I ask a question and take a deep breath. Sometimes, I allow students a few minutes to respond to a question in writing before we begin discussion.

Turn students into individuals. I try to call each student by name and encourage them to learn each other’s name by inviting them to say hello to each other, to work with different group members, to respond to each other in class, and to design and decorate name tags that they set on the desks.

Be directive. In that silent moment after the first people who always speak have spoken, I call on someone. I’ve discovered that most students are thinking, but many are shy, though they will given the license to speak, do so. They simply need to have the first words coaxed before they speak freely and often. Promote good habits. On written assignments or in conversation, I remind students that what they say in class is good, and that they should speak more often.

Engage students. I try to respond to student comments without being judgmental. If the response is inadequate, I ask another question to re-engage them in the topic from a different perspective. I’ve discovered that most students don’t mind being challenged, especially after they understand that they’re not in the classroom “to know,” but “to learn.” Since students often think they should have the same answer, I try to stimulate dialog that could lead to
conclusions. Though I find it best to ask questions with simple answers, students often respond more readily and imaginatively to questions that are open enough to elicit diverse responses.

**Disrupt the class.** Change the seating or environment, which will create a general hubbub and increase the class’ energy level. I ask students to take a seat they haven’t tried, move those in back to the front and others from left to right. I’ve also formed circles, taken them outside and created an amphitheater setting. Sometimes, I teach from a different part of the room or move about as I talk, engaging different students from different angles.

**Divide the speaking equally.** When everyone speaks, they continue to speak. For example when we’re looking closely at a text. I’ll ask each student to read a few sentences. I’ve even required everyone to respond to a question or assignment. asked the class to come prepared with a quotation and/or queried each student about what happened over the weekend. Occasionally, the discovery is both simple and profound: I once needed to get words out of their mouths.

**Don’t teach.** (I thought this would be popular.) Encourage students to educate themselves and their peers by providing opportunities for:
- student-led discussions
- student presentations that culminate in Q&A sessions
- group work

This approach has increased participation in my classes:

**Applaud.** I encourage students to applaud each other’s work, and I thank them for their papers, quizzes, tests, answers and attendance. After a particularly grueling week, we pat each other on the back. Communication in my classes always comes most readily when the students and I feel like we’re a community focused on common goals.

Finally, I try to be diplomatic and genuine. Students want to talk, but they don’t want to be criticized or patronized.

- Keep the energy level high
- Create an atmosphere that unburdens students from “knowing” answers
- Get every voice to ring out

Such approaches have helped me to create classes where, after some truly vocal sessions, I find myself muttering happily. “I’ve got to mind another use for those rubber hoses.”
Case Analysis Worksheet
Presented at Assessment Conference, May 2001 in Spokane. Submitted by Judy Noel, Spokane Falls Community College

Instructions: During this workshop, we will practice using a case study like you might in your classroom. Begin by reading the case. Individually, you will complete parts 1-4. Then as a group we will finish part 5.

1. What is this case about?

2. Get the facts. List the facts that you see embedded in the case

   1. ____________________________________
   2. ____________________________________
   3. ____________________________________
   4. ____________________________________
   5. ____________________________________

3. State the problem, issue or question that needs to be resolved.

   ____________________________________
   ____________________________________

4. List several ways that the problem might be resolved.

   a) ____________________________________
   b) ____________________________________
   c) ____________________________________

5. Write down the best way to solve the problem and why you would solve it that way.

   ____________________________________
   ____________________________________
   ____________________________________
   ____________________________________
   ____________________________________

Case Study Rubric
Presented at Assessment Conference, May 2001 in Spokane. Submitted by Judy Noel, Spokane Falls Community College

Evaluation of effective use of a case study within a discipline

<table>
<thead>
<tr>
<th></th>
<th>Beginning</th>
<th>Developing</th>
<th>Accomplished</th>
<th>Exemplary</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Collaboration</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Listens to discussion but doesn’t contribute. Ignores alternative points of view</td>
<td>Rare participation, struggles with alternate views, but willing to consider</td>
<td>Occasional strong contribution to regular participation, open to new views</td>
<td>Consistent. Participates in discussion. Reflects awareness of others’ views and opinions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Understanding the Problem</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Able to describe elements but confused about resulting issues</td>
<td>Listens to conflictual elements with rare insight into principle</td>
<td>Recognizes general principles that may apply in this situation</td>
<td>Identifies the salient principles that are involved or have been violated to create the problem.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Critical Thinking</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Decision Making</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Impulsive decisions not based on rationale</td>
<td>Decisions deferred to superior or made without applying principle</td>
<td>Makes decisions with regular applications of principles and some process errors</td>
<td>Consistently makes an informed, ethical choice.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The template for this rubric can be found at: http://olp.swlauriersb.qc.ca/webquest/rubric_example.htm
Computer - Based Instruction and Video Tele-Training
Submitted by the U.S. Naval TRIDENT Training Center, Bangor, WA

1. Electronic classroom
   (a) Large screen video display in front of class (smart board)
   (b) Instructional manuals on computer
      (i) Interactive
      (ii) Computer animation
      (iii) Allows part rotation for visual perspective
      (iv) Interactive programs within
   (c) Individual workstations for instructor and students
      (i) Each can work independently
      (ii) Save to student floppy disk
      (iii) Instructor’s notes appear on big screen

2. Interactive courseware
   (a) A process in which the student interacts with the computer either directly or indirectly
      (i) Direct – student interface via mouse, keyboard, etc.
      (ii) Indirect – simulator/trainer, near real environment
   (b) Realism – place students in simulated situations requiring;
      (i) Decision making
      (ii) Trouble-shooting
      (iii) Problem solving operational proficiency
      (iv) Maintenance skills
   (c) Safe environment
      (i) Little or no consequence to student for incorrect actions
   (d) Cost effective

3. Video Tele-training
   (a) To train personnel who are geographically remote from training resources
   (b) Primary instructor at control site
      (i) One or more remote sites with facilitator
      (ii) Linked through telephone lines
      (iii) Could be done via satellite
   (c) Originating classroom and remote classrooms do not differ significantly
   (d) Primary instructor teaches lesson
      (i) Same personal instructor traits – VEGA, questions, etc.
      (ii) Instructor uses clip-on microphone
      (iii) Camera coverage controls instructor movement

4. Facilitator coordinate, interface and assist students at the remote site as needed

5. Equipment
   (a) Cameras project instructor to remote sites and students from remote site to instructor
   (b) Large screen monitors in front of classes
   (c) Microphone for each student or pair of students
   (d) Facsimile machine
   (e) Telephone for private conversations (testing, labs)
Thoughts about Project-Based Learning
Prepared by Cal Crow, Ph.D., Center for Learning Connections, Highline Community College

PROJECT-BASED LEARNING CAN TAKE MANY FORMS. AMONG THEM:
1. Small group or class projects emanating from the curriculum.
2. Small group or class projects emanating from a community or industry need. These can be combined into some type of service learning.
3. Individual student projects. These are often capstone experiences required for graduation.
4. An entire quarter or semester class activity.
5. A school within a school.
6. As a component of a student’s career pathway or major.

EXAMPLES OF PROJECT-BASED LEARNING:
- Drawings (including cartoons)
- Models
- Graphs
- Narratives
- Research projects
- Charts
- Performances
- Art work
- Products
- Displays

Questions to Consider in Project-Based Learning

1. What do I want students to know and be able to do as a result of this project? How will they be different when the project is completed? What complex thinking skill(s) will be enhanced? What attitudes and/or behaviors will be affected?

2. Will this project produce the desired results? Is it interesting, rigorous and connected to the curriculum? Will students believe the project is worth doing?

3. What information will students need in order to carry out this project? Where are they most likely to find it, e.g., in publications, from other people, on the Internet? How can I facilitate their getting this information? How much information will I provide, and how much will I expect students to find on their own? What information will students bring to the project from their own experiences? What are the most effective ways for identifying and disseminating this information?

4. What different roles will be required for this project, e.g., leader, facilitator, organizer, presenter, creator/composer, investigator, etc. Will all students perform all roles? How will students be assigned different roles?

5. What tasks will be required to complete the project? Will they need to be completed in any particular order? How much time can be allowed for each task? What kind of timeline would be helpful?

6. What SCANS skills can be acquired through the completion of this project? How many state and district learning standards can be acquired/demonstrated through the completion of this project?
7. What kind of experiences can be generated to ensure that students operate at the highest levels of the cognitive, affective and psychomotor domains?

8. How will the project be presented/displayed/celebrated?

9. How will the project be evaluated? How will grading be determined? How will students be able to demonstrate their particular contribution to the project?

10. What opportunities will students have to respond to—
   - What did I learn?
   - Why is this important to know?
   - How will I be able to use this knowledge/skill when I leave school?

Benefits of Work-Related Learning
Prepared by Cal Crow, Ph.D., Center for Learning Connections, Highline Community College

FOR THE INSTITUTION
Work-Related Learning
- can improve recruitment and retention.
- helps improve student motivation.
- can help generate community/business support.
- enables students to receive more balanced educational experiences.
- helps turn out graduates who are appreciative of their educational experiences, and may return the favor.
- helps students and faculty broaden their knowledge base and world views.
- promotes academic excellence.
- helps students and faculty integrate academic and career development.
- encourages faculty involvement in the community.
- helps keep faculty and curriculum up to date.
- can give students access to state-of-the-art equipment.
- can lead to faculty becoming consultants.

FOR STUDENTS
Work-related learning helps students
- apply theory to practice.
- increase their sense of responsibility, judgment and self-confidence.
- see more clearly how education and work are related.
- discover who they are, what they can do, and how they can apply their talents.
- become self-motivated.
- test interests and abilities in connection with real jobs.
- develop marketable skills/experiences related to their career objectives.
- develop contacts that increase their chances for employment.
- understand how the workplace operates.
- learn how to interact with diverse groups in the workplace.
- acquire attitudes, values and interpersonal skills necessary for future success in the workplace.
- develop a work history and resume.
- hone their planning, problem solving and decision-making skills.
- learn time management skills.
- develop earning power and fiscal responsibility.
- mature socially.
Self-Evaluation Prompts For Students
Reprinted with permission from A Learning Facilitator’s Workbook by Jim Pollard, Spokane Falls Community College. Original article by Rich Haswell, Department of English, Washington State University, Pullman, WA 99164-5020 rhaswell@wsu.edu (March 1996)

1. What did you learn? How well did you learn it? What now—what do you see as the next steps in your learning? (Basic self-evaluation questions)

2. Suggested questions: Did I do more or less than was expected by the instructor? By me? What do I now understand best about this subject? Least well? What are my strongest and weakest points as a student? What did I do to improve the weak points? What will I do next? What do I need to learn next about this subject? What was most satisfying about the class? Most frustrating? Has the course irritated you? Stimulated you? Touched you personally? Has it made you uncomfortable about yourself, about society, about the future, about learning? Are you the same person who began the class ten weeks ago? What’s different? What did you expect to learn? What did you actually learn—more or less? Why? (Don McLeod at Fairhaven College, Western Washington University)

3. Post-write: What problems did you face during the writing of the essay? What solutions did you find for those problems? What alternative plans for this essay did you consider—why did you reject them? If you had the time, what would you do if you were to continue working on this essay? (Michael S. Allen and Barbara Sherr, ERIC Doc. Ed 303 809)

4. Look back upon your experiences in this course, and reflect on your discoveries about yourself as a learner. Please be as specific and concrete as possible about what stood out for you. Through these experiences, what have you learned about yourself as a learner? (William S. Moore)

5. Focus on the relationship between this semester’s learning and your over-all degree program. What progress did you make in relation to the goals in your major? Did your learning lead you to modify your degree goals? What implications for your future learning are indicated by your experiences this semester? (Antioch University, Seattle)

6. Has your view of mathematics changed since the beginning of the quarter? Has your view of your ability to do math changed as a result of your work? What about this class helped you to learn? Is there anything that you would do differently if you could turn back the clock and begin the quarter again?

7. How has your knowledge grown? What will you remember in a year? Five years? What is the theory, guiding principle, or philosophy that shapes your education? How does your education help you answer ethical and moral questions? What “useful” skills have you learned? Is there a “most important thing” you’ve learned? What do you hope to be doing 10-15 years from now? In what ways will this course help you get there? (Marie Eaton, Fairhaven College)

8. Give attention to yourself as a writer in general and to writing in geography in particular. Discuss how you think your writing and thinking skills are related and how they may have developed or changed over the course of the quarter. Use your own writing as evidence for the arguments you want to make; discuss the meaning and value of each piece of writing selected, and the relation of the pieces to one another. (Kim Johnson-Bogart, directions for composing an essay to accompany a required portfolio of writings for a linked writing/geography course, University of Washington.)
Promoting Self-Reflexivity Through Classroom Assessment


1. Background Knowledge Probes
   a. “Are you familiar with ______?” Yes/No
   b. If yes, list as many of the categories, points, ideas, and define each.

2. Directed Paraphrasing
   Ask students to paraphrase a reading or a lecture in their own words and within a specific page-length limit.

3. Documented Problem-Set Solutions
   Ask students to document the steps they took in solving a problem (writing a paper); i.e. write out the process.

4. Concept Maps
   Ask students to illustrate associations from a lecture, chapter,..

5. Student Goals Ranking
   At the beginning of a unit or course, ask students to list their goals and rank them.

6. Focused Autobiographical Sketches of Students as Learners
   Examples: “Write a 2-3 page autobiographical sketch relating and discussing as experience in which you learned something significant in the process.”

7. Punctuated Lecture
   Stop lecture at selected points and ask students to reflect on where their thoughts were, then jot down feedback to teacher in the form of “insights.”

8. Student-Teacher Email Messages
   Use e-mail to elicit feedback on progress of class, progress of student learning, etc.

9. Chain Notes
   Teacher passes out notecards; pass around envelope with a question written on it, students respond on card and put in envelope
   Ex: “What do you fear as a writer?”

10. One Minute Point
    Ask students to summarize the most important item they learned that day and the two questions that are still in their minds as they leave the class.

11. Muddiest Point
    Ask students to describe the “muddiest” point from the previous lesson.

12. Post-Writes
    Ask students to reflect on the paper they are submitting and write their feelings about them.

13. Personal Inventory
    Develop a list of questions to get to know the students in your classroom.
    Ex: What is the last book you’ve read? What do you like to read?

14. Mind Windows
    Ask students to write their reflections of a reading.

15. Cover Letters
    Ask students to compose a cover letter for a submitted assignment, reflecting on the process, the strengths, the purposes of writing the manuscript.
Instructor/Facilitation Assessment

Check the following activity that most nearly describes my instructor’s interaction with students.
1. The instructor is clear when he/she tells me what to do.
2. The instructor’s questions are helpful in assisting me in making decisions.

Check the following activity that most nearly describes my instructor’s interaction with students.
3. The instructor meets class on time.
4. The instructor’s availability schedule is posted.

Check the following activity that most nearly describes my instructor’s interaction with students.
5. The instructor works effectively with me one on one.
6. The instructor always meets with the class as a whole.

Check the following activity that most nearly describes my instructor’s interaction with students.
6. The instructor always offers me options rather than telling me what to do.
7. The instructor makes corrections to my work that are clear and gives me direction.

Check the following activity that most nearly describes my instructor’s interaction with students.
8. The instructor’s interactions with me, have helped me become a better problem solver.
9. The instructor always has the right answer.

Check the following activity that most nearly describes my instructor’s interaction with students.
10. The instructor always knows the right thing to do.
11. The instructor always gives me several suggestions to choose from.

Check the following activity that most nearly describes my instructor’s interaction with students.
12. The instructor solves problems for me.
13. The instructor lets me work problems out for myself.

Check the following activity that most nearly describes my instructor’s interaction with students.
14. The instructor is more like a band conductor than an advisor.
15. The instructor is more like a coach than a director.

Check the following activity that most nearly describes my instructor’s interaction with students.
16. The instructor is a good listener.
17. The instructor’s instructions are helpful.
18. The instructor uses “What if you ...” statements rather than “You should do this...”

19. The instructor is good at finding answers to my questions.

**Check the following activity that most nearly describes my instructor’s interaction with students.**

20. I always feel that the project is mine and I am responsible for thinking it through.

21. I can count on the instructor coming up with the right idea if I am stuck.

**Check the following activity that most nearly describes my instructor’s interaction with students.**

22. The instructor values my ability to figure things out for myself.

23. My instructor values me following his/her instructions.

**Check the following activity that most nearly describes my instructor’s interaction with students.**

24. The instructor shares with me his/her thinking.

25. I have no idea how the instructor solves problems.

**Check the following activity that most nearly describes my instructor’s interaction with students.**

26. The instructor sets all the timelines for meeting deadlines.

27. I am responsible for the timelines for meeting deadlines.

**Check the following activity that most nearly describes my instructor’s interaction with students.**

28. The instructor comes to class with prepared class activities.

29. The instructor builds the class activity around student’s questions and concerns.

**Check the following activity that most nearly describes my instructor’s interaction with students.**

30. The instructor gives suggestions as to where I can find information.

31. The instructor will find information for me.

**Check the following activity that most nearly describes my instructor’s interaction with students.**

32. The instructor encourages me to discover things for myself.

33. The instructor answers my questions in a way easy for me to understand.

**Check the following activity that most nearly describes my instructor’s interaction with students.**

34. The instructor answers my questions with questions.

35. The instructor always has the right answer.

**Score Sheet**

The following identify learning-centered facilitation behaviors.

2, 4, 6, 8, 13, 15, 16, 18, 20, 22, 24, 27, 29, 30, 32, 34
Self-Assessment Checklist of Questions for the Teacher

This self-assessment checklist of questions aims to be helpful to instructors as they prepare for the new year or as they assess their teaching.

HOW CAN I IMPROVE CONTENT AND MY PRESENTATIONS?

- Is this the year to fine-tune or overhaul a course?
- Is there an area — a lecture — a subject area that never seems to go well? Is it my fault? Is it an oddity, accidental, traditional or inherent?
- What has worked best in past years? Can I incorporate more of it, expand on the subject, spend longer on it, and schedule it where it will do more good?
- Can I drop part of the course? Should I? Would anyone be concerned?
- Is it time to scrap my notes, research trouble areas again, or bring in a guest lecturer?
- Would it help to integrate contemporary material, a current event, the “real world,” a recent research breakthrough, a new school of thought, fresher jargon?
- How thick is the dust? Have I relied for too long on the same dog-eared notes or a tired, dated text? Is my reading list an antique or a bore?
- Are the texts I use the best? Or merely the ones I’m used to, the ones on which I have notes in abundance?
- Have student interests and tastes changed significantly?
- What haven’t I tried? Is there something I can add or a new approach?
- Would rescheduling some of the material help? Can I usefully change the format: — discussion to lecture, lecture to discussion, split the class, ask for seminar leadership from students?
- Have I used demonstration enough? Properly? Are demonstrations most useful at the beginning, the middle, or the end of a class?
- Do I need new demonstrations in some lectures? Which ones?
- Have I used films or the overhead projector effectively? Enough? Too much? Do students prefer the projector or the board? Why?

WHAT IS A REASONABLE WORK LOAD? WHAT IS REALISTIC?

- How much work (readings, assignments, workshops, labs, etc.) can I reasonably and usefully impose? How much outside of class?
- Are my demands heavy, average, low? Are they appropriate?
- Will the students do all that I ask? Should they? Can they?
- What about labs? Do they need to be revised? Are they still relevant?
- How much should I be directly involved in the labs?
- Should a lab precede or follow corresponding lecture materials? Should labs complement or supplement lectures?

WHY DO IT? WHAT IS IT WORTH?

- In a few words and all honesty, what’s the point of the course as I teach it? How easy is it to answer that question?
- What’s the value of the course, and my ways of teaching it, for the student or the discipline?
- If I were a bright, perceptive, committed student, what would I like most about the course and my teaching? What would I like least?
• How can I improve my performance, planning, preparation, and delivery?

WHAT ASSIGNMENTS, DEMANDS, AND RESPONSIBILITIES ARE APPROPRIATE?
• When and what kind? How should tests and papers be scheduled? What options do I have? Have I thought it through carefully?
• Should there be several shorter papers or one long one? Can I or should I allow for individual choice in assigning written work?
• Are my tests enough? Too much? Would more frequent tests work better?
• Can I change - do I want to change - my methods?
• Should I give a lab exam? If I do, how much will it count toward the lab grade? How much will the lab grade count toward the final grade?
• Have the decisions I’ve made in this area worked in the past?
• What do I test for? Do my tests primarily require and reward knowledge ... intelligence ... memory ... stylistic finesse ... breadth and depth of reading ... originality ... effort? What should they test?
• What do I value in my students’ work? Do I make it clear before they write?
• Will I allow sufficient leeway in my assignments to accommodate student interests? If I accept an alternative project, how will I evaluate it?
• What do my tests do for my students?
• Do students learn by preparing for and taking my tests, or just prepare to survive them? Am I satisfied with my answers to that question?
• Would oral, take-home, and open-book exams help?
• Will I use oral exams? Together with written ones? Routinely? Or as a means of assessing students with special problems in writing exams?
• Should I try open-book or take-home exams? Consistently or occasionally?
• What are the limitations on testing methods in my department?

SHALL I “CONDEMN TO FREEDOM” OR PRESCRIBE?
• How specific or prescriptive should my paper assignments be? Should I assign topics? Or require students to devise their own? Which method has worked best in the past for students at the level at which I’ll be teaching?
• If I assign topics, will the library or other facilities be able to meet the demand for crucial materials? How can such research problems be eased?
• If I allow free choice, am I encouraging plagiarism, paper-recycling, or similar abuses?
• Can the students help one another? Should I allow or encourage group or collaborative effort on assignments? Will this improve performance and learning or cause problems for me or the students?
• Would it help to provide students with successful papers from other years, as examples? Would there be a point in having students exchange papers? As a stimulation or a sharing of thoughts or information? Or for criticism and response?
• Can I use the special strengths and knowledge of some students to aid others? Would study groups or study guides based on shared notes and research be useful?
• Do I love footnotes as much as they think? In assigning and grading papers, will I encourage or discourage the use of secondary materials?
• How much research will be enough? Why? Have I adequately explained and justified my position to students in the past?
• How much time and effort is it proper for me to put into helping individual students?
• What kind of help should I give?
• Should I be willing to look at preliminary drafts of assignments, to point out errors and make suggestions? If so, will I extend such help consistently on request? Is that fair to those I don’t help?
• Where can I send students who need more help than I can give?
• Should I allow optional assignments to improve grades? How much weight should such assignments carry?
• Will optional assignments and reading really be optional, or, in effect, required for those who wish to do well? If the latter, can I justify my methods?
• What have my tests told me?
• What have my goals and hopes been for the course? Where they appropriate? Were they fulfilled or disappointed, according to test results?

**HOW WILL I MEASURE THE IMPACT MY COURSE HAD ON STUDENTS?**

• Do I have a clear picture of what I want my students to know at the end of the semester? What skills should they have?
• Do I want them to be able to demonstrate fundamental knowledge or specialized expertise? How do I want my students to apply this knowledge?
• Do I want them to be able to communicate effectively, integrate diverse viewpoints or data?
• Do I want my students to make responsible judgments on specific content issues?
• Should my students be able to work effectively as team members?
• Have I clearly stated these expected outcomes?
• Have I designed my learning activities to help students meet my expectations?
• How will I know if my students have achieved these goals?

*Will this be the year I reread old evaluations, remember my experiences from other years, and do all the grand things I’ve always hoped to do?*

11 Steps to Great Presentations
E-mail mjb@isomedia.com

1. Greet audience warmly: *Smile, look friendly*
2. Ask a question: *Talk into eyes.*
3. Make a promise: *Plant feet solidly.*
4. Say your name: *Animate your body.*
5. State your credentials: *Gesture shoulder-high.*
6. Clarify question handling: *Sit leaning forward.*
7. Explain or persuade: *Speak in short phrases.*
8. Signal end, summarize: *Followed by brief pauses.*
9. Encourage a response: *Drop pitch on endings.*
10. Conclude with hope: *Pitch up for emphasis.*
11. Take questions, comments: *End with a smile and thanks.*

*"The faintest ink is more retentive than the best memory."*
Voice and Body Language for Making Presentations

SPEAK IN SHORT PHRASES
TO SOUND AS CLEAR, confident, and convincing as any broadcaster or professional speaker try to speak—in short phrases—instead of long rambling sentences.

Short phrases of 3 to 14 words seem best. Each phrase contains an idea or thought-unit. This unit needs to be spoken and followed by a clean, brief pause, so that the idea can be absorbed by the listener. "When the words cease, the meaning flows on," says a Chinese proverb.

Then, in order to sound confident, decisive, as if you are an authority,—drop your pitch firmly at the end of each phrase, on the final syllable. Don’t inflect up on endings or you’ll sound uncertain, questioning, nervous or begging for permission. Drop the pitch, not your loudness.

TO INTRODUCE YOURSELF
Try either of these easy techniques to sound confident, professional. Try this on the phone and in person:

I’m Stephanie Lewis

I’m Stephanie

I’m Stephanie Lewis

I’m Roger Anderson

I’m Roger

I’m Rog

I’m Rog

I’m Roger Anderson

I’m Roger

I’m Rog

I’m Roger

EMPHASIZE ONE IDEA PER PHRASE
The purpose of Speaking is not to recite words, but to communicate ideas. To get your ideas across—emphasize one idea in each sentence or phrase (usually one word or two words). To emphasize is to hit, punch, or stress a sound.

Listen to the power of emphasis as you emphasize each word of this sentence, one at a time: HOMER DOESN’T KISS HIS WIFE. Or, how would you punctuate this sentence that was presented to a college freshman class? Woman without her man is a savage.

Here are three ways to emphasize. [1] Pause after the key word (and sometimes pause before also). [2] Pitch up: raise the pitch level of the key word (on the accented syllable of the key word). Pitch higher and you’ll add greater emphasis and importance. [3] Pitch round: round the pitch on the key word, like a hill.

SPEAK WITH HIGH VOCAL ENERGY
"An ounce of energy is worth a pound of technique," wrote Roger Ailes. Speak with genuine enthusiasm for your topic and for your audience. Emotion is contagious.

CLOTHING
Dress to your listener’s expectations. Dress vertically, avoid horizontal lines (ties to belt
Dark jackets convey authority. People like to do business with people who look successful.

FACE
Wear a face that says: "I’m happy to be here." Look friendly and you’ll look more believable. You also add warmth to your voice. Smile at least at the start and end of talks.

EYES
Connect with your listeners: Say each word looking into someone’s eyes—for 1 to 3 seconds—not at your notes, or the wall. Nothing is more important for your success as a speaker in mainstream America.

POSTURE
SIT leaning slightly forward, not straight up or leaning back, arms on the table. STAND so you feel at ease: feet shoulder-width apart, heels closer, toes fanned out so you’re comfortable. Keep your feet planted firmly on the floor 90% of the time, but keep your body loose and animated.

HANDS
Gesture as you do in lively conversation. From a neutral hand position—hands at sides or bent at elbows—gesture with both hands, in front of your body shoulder-high, with live fingers, as if you’re holding a beach ball. Gesture, then return your hands to neutral.

ORAL DELIVERY
[1] In Your Car while driving alone create lines and rehearse, practice out loud.
[2] Tape-Record yourself delivering 30 seconds. Listen for vocal energy, length of phrases, your pitch on endings, pauses, emphasis on key words, enunciation.

[3] Read Out Loud whenever you can: try to have an emotional experience of the meaning of the key words as you read them. Warm up your voice and face muscles by gently yawning, chewing bubble gum (imaginary) vigorously with lips closed. Sing our national anthem. Say the alphabet dropping your pitch as low as possible at the end: A, B, C, D, etc.