

A Brief Summary of the Best Practices in Teaching

Intended to Challenge the Professional Development of All Teachers

Compiled by Tom Drummond North Seattle Community College, 1994, 2002

Collected here, without examples or detailed explanations, are practices that constitute excellence in college teaching. These elements represent the broad range of the most effective actions teachers take, and requisite conditions teachers establish, to facilitate learning. I have tried to make this listing brief, to serve more as a reference to the scope of excellent teaching techniques than as a source of enlightenment. For detailed information on items that are unfamiliar, refer to the works cited.

Recognizing that teaching is both art and science, I advance this list of dimensions of excellence as a starting point for discussions about the performances we as teachers strive for and may help each other obtain. While the skills of teaching are widely researched and described, they are rarely rewarded, mostly, I think, because we do not share a common language about best practices. Instead of directly addressing learning to teach well, we often erroneously assume new teachers know how to teach because they used to be students.

Becoming an excellent college teacher is a continuing, life-long professional challenge, the dimensions of which often go unrecognized. In the general mind, doctors and lawyers are professionals; teachers are not. I believe we could change our semi-professional status if we could agree upon a list of Best Practices such as this one and help each other achieve them. It would help us achieve three goals:

- *college teachers could find consensus on an ever-evolving definition of that constitutes best practices in this amorphous and complex endeavor,*
- *senior faculty could assume a responsibility to develop additions and modifications to the best practices list and actively transmit those practices to new faculty, and*
- *we all could ensure that our colleagues and institutions apply the set of best practices for the ultimate welfare of the learners.*

If we, as faculty, could ever come to agree upon any performance-based list such as this one, our institutions could marshal the resources to accelerate its attainment, clarify the objectives for acquiring tenure, and offer salary rewards for an individual's continued reflective review of teaching practice.

The Best Practices chosen here focus on those aspects of classroom teaching competence that are visible to oneself and to others and thus become useful for formative evaluation. When components of excellence can be defined in language that details teaching actions as confirmable performances, that is, neither minutely technical nor remotely abstract, we could investigate those actions in practice, either collaboratively or individually. For if a component can be self-perceived near the time it occurs, it can be modified or strengthened. That's how professionals, who must engage themselves in reflective practice, get better.

In this spirit I offer a list of what I have struggled to learn to do in my 20+ years of college teaching about teaching. Even though classrooms vary in content and goals, I believe this core set of Best Practices does apply to most adult education environments, in both professional/technical and academic areas, albeit in differing degrees. It is my attempt to specify which of the myriad things and relations in teaching deserve close study. I have endeavored to learn to do each of these things in my college teaching. Have your colleagues? Have you?

I have organized them under twelve headings. When I have used this listing for tenure qualification, the candidate was challenged to pursue an objective under each goal area.

1. LECTURE PRACTICES

effective ways to present new information orally to fit differences in learners

At times information must be transmitted orally to a passive listening audience. But research has shown that after 10 to 20 minutes of continuous lecture, assimilation falls off rapidly. If the teacher must rely on the oral presentation of material, these techniques enhance learner retention.

Lecture/Rhetorical Questioning¹

Talk in 7 to 10 minute segments, pause, ask pre-planned rhetorical questions; learners record their answers in their notes.

Surveys with Exemplifier²

Pause, ask directly for a show of hands: "Raise your hand if you agree...disagree...etc." Ask for a volunteer to speak for each response group.

Turn To Your Partner And...³

Pause, ask each to turn to the person next to them and share examples of the point just made or complete a given phrase or sentence.

Halting Time⁴

Present complex material or directions and then stop so learners have time to think or carry out directions. Visually check to see whether the class appears to understand. If they do, continue.

*Explication de Texte*⁵

By reading and analyzing passages from the text aloud, learners can see higher-order thinking skills and that "criticism" is a legitimate intellectual exercise.

Guided Lecture⁶

Students listen to 15-20 minutes of lecture without taking notes. At the end, they spend five minutes recording all they can recall. The next step involves learners in small discussion groups reconstructing the lecture conceptually with supporting data, preparing complete lecture notes, using the instructor to resolve questions that arise.

Immediate Mastery Quiz⁷

When a regular immediate mastery test is included in the last few minutes of the period, learners retain almost twice as much material, both factual and conceptual.

Story Telling⁸

Stories, metaphor, and myth catch people deeply within, so no longer are listeners functioning as tape recorders subject to the above information overload limits. What human beings have in common

¹ R. Weaver and H. Cotrell, "Using Interactive Images in the Lecture Hall." *Educational Horizons*, 64:4, 180-185.

² M. Hunter, *Reinforcement* (Tip Publications, El Segundo, California), 1983.

³ Weaver and Cotrell.

⁴ Kenneth D. Moore, *Classroom Teaching Skills: A Primer* (Random House, New York) 1989.

⁵ Peter J. Frederick, "Student Involvement: Active Learning in Large Classes." In *Teaching Large Classes Well*, Edited by M.G. Weimer. *New Directions for Teaching and Learning No. 32* (Jossey-Bass, San Francisco) 1987.

⁶ Brenda Wright Kelly and Janis Holmes, "The Guided Lecture Procedure." *Journal of Reading* 22:602-604.

⁷ Robert J. Menges, "Research on Teaching and Learning: The Relevant and the Redundant." *Review of Higher Education* 11: 259-268.

⁸ Joseph Campbell, *The Power of Myth*. (Doubleday, New York, 1988), p. 3-39.

is revealed in myth; stories allow the listener to seek an experience of being alive in them and find clues to answers within themselves. The 10 to 20 minute limit no longer applies.

2. GROUP DISCUSSION TRIGGERS

effective ways to present a common experience to engage a group in a discussion

Awareness of complexity and enhanced understanding results when learners discuss the meaning of events with each other. But to be successful, groups need a common experience to draw them into participation, establish a personal connection with the content, and provide a shared referent from which to exemplify their ideas. There are many kinds of triggers but all are designed to precede group discussion. Participants, therefore, become connected with both a concrete example of the content and each other.

Short Readings

Brief assignments to read in class (especially effective are contrasting viewpoints).

First Person Experience

Works written in a personal voice, autobiographies, biographies, oral histories, diaries, and memoirs, when used as counterpoints to abstract texts, bridge the gap between their own lives and the content under study. Students more readily take part in discussions when they can personally relate to the material.

Individual Task With Review

Problems to solve that apply the concepts presented. Students complete a worksheet or other task and compare the results with their neighbors before the whole class discusses the answers.

Self-assessment Questionnaires

Short surveys of learner attitudes and values.

Total Group Response: Human Graph⁹

Learners literally take a stand on an imaginary graph or continuum. The first few volunteers justify their choice of position, and then the remainder of the class joins them without comment.

Case Studies^{10 11}

A case study is the factual account of human experience centered in a problem or issue faced by a person, group or organization. It can raise a variety of complex issues and stimulate discussions of alternative viewpoints. Typically, case studies are written objectively and include a brief overview of the situation, its context, and the major decisions that must be made. Rather than expecting learners to have a right answer, learners develop their ability to articulate their thoughts, frame problems, generate solutions, and evolve principles that may apply to other situations.

Visual Studies

Seeing first hand creates a common ground. Photographic essays, video programs, and personally made video recordings are examples of ways to bring into the classroom direct depictions of the concepts being discussed.

⁹ Robin Fogarty, *Designs for Cooperative Interactions* (Skylight Publishing, Inc., 1990), p 42.

¹⁰ Gordon E. Greenwood & Forrest W. Parkay, *Case Studies for Teacher Decision Making* (Random House, New York), 1989.

¹¹ Rita Silverman & William M. Welty, "Teaching With Cases." *Journal on Excellence in College Teaching*, 1, 1990, p. 88-97.

Role Play

Learners explore human relations problems by enacting problem situations and then discussing the enactments. Together learners can explore feelings, attitudes, values, and problem solving strategies. It attempts to help individuals find personal meaning within their social world and resolve personal dilemmas with the assistance of the social group.

3. THOUGHTFUL QUESTIONS

formulate questions that foster engagement and confidence

What does it mean to think? Some people would like to be able to “think better”—or more often want other people’s thinking to improve. But research shows that everyone is capable of thinking—the problem is to stop teachers from precluding it. The right kind of questions help—they focus the learner’s attention upon applying their current understanding to the content of current experience in a natural way. Success after perseverance to answer these questions shows learners that they know how to “think.” Note that none of these kinds of questions ask for recall of non-discoverable information (didactic questions).

Discoverable Tutorial Questions

These nine question formulations meet the criteria of being both perceptually based and discoverable. Since these tutorials investigate shared experience, the teacher can lead any learner, who may not at first answer adequately, back to available evidence to find correct answers.

- Description: *What did you see? What happened? What is the difference between...*
- Common Purpose: *What is the purpose or function of...*
- Procedures: *How was this done? What will have to be done?*
- Possibilities: *What else could ...? How could we...?*
- Prediction: *What will happen next?*
- Justification: *How can you tell? What evidence led you to...*
- Rationale for reality: *Why? What is the reason?*
- Generalization: *What is the same about ... and ...? What could you generalize from these events?*
- Definition: *What does ... mean?*

Wait Time¹²

After posing one of these tutorials, learners need at least 5 seconds in order to process it and begin the formulation of an answer.

4. REFLECTIVE RESPONSES TO LEARNER CONTRIBUTIONS

establish mutually beneficial communication by reflective listening

When a learner contributes to the discussion or asks a question, taking the initiative to learn, what is the best way to respond? To facilitate self-discovery and self-appropriated learning, effective teachers respond without changing the topic and share their own information or perspective with mutual respect and without domination. These three reflective responses, when used in sequence, constitute a “responding convention,” a standard way to develop habits of talking that release the potentialities

¹²M.B. Rowe, *Teaching Science as Continuous Inquiry* (McGraw Hill, New York), 1978.

of the learner and promote mutually significant sharing by both the teacher and the learner. Used in this order they sequence the amount of teacher control.

Paraphrase

While remaining alert to both the intellectual and emotional aspects of learner contributions, rephrase the underlying message the learner is sending in one's own words, not the learner's words. This especially applies when the learner says something new, something more than the commonplace. 'Parroting' the learners words or routinely beginning, "I hear you saying..." is both irritating and condescending.

Parallel Personal Comment

Without changing the topic or bending it in the slightest, talk about current feelings or a past experience that matches what the learner has said. Usually statements start with "I..."

Leading Query On Learner's Topic

Ask for clarification of aspects of the comment without bending or shifting it to one's own agenda. Such responses include, "I don't understand this part." "Could you elaborate or give an example?" and references to others, "Who can build on what she is saying?"

5. REWARDING LEARNER PARTICIPATION

support learner actions with effective, well-timed positives

All teaching moves learners into areas of risk and incompetence. So often the job of a teacher is to find nascent deftness when it is easier to notice the maladroit. The methods chosen to administer those positives, however, send messages about what is important to achieve. Are learners supposed to work toward external approval or their own performance? Are grades the true reward? Or are learners supposed to learn to enjoy the quest itself? Teachers answer these questions through the manner in which they support improvement.

The best rewards are not contrived, foster personal reflection and independence, and actually work, that is, learners maintain new abilities or do better. Effective teachers support emerging initiative, cooperation and perseverance with well-timed positives in these forms:

Avoid Praise¹³

Praise, the expression of judgment, is less successful in rewarding learner performance than the techniques listed below. It tends to foster approval seeking rather than independence. Examples: "Good question." "That's a nice weld."

Description

Describe objectively those aspects of learner performance needing support, avoiding a personal evaluation: "That's a topic we need to discuss." "That weld is even." State a culturally accepted conclusion a group of dispassionate observers would concede: "That's a pertinent question." "That weld is just like the book."

Narration

Detail the action a learner takes immediately as it occurs. Narrations usually begin with "You..." Example: "You're raising an issue that needs discussion." "You're obviously trying to fit the pieces together."

¹³ Haim Ginott, *Teacher and Child*. (Macmillan, New York), 1971.

Self-Talk

Talk about your own thoughts or prior personal experience. Example: "I have wondered that, too." "Questions like that have always intrigued me."

Nonverbal or Vocal Sounds

Smile. Wink. Thumbs up. Gestures of excitement and success. "Wow!" "Indeedee-do." Whistle.

Personal Feelings

Describe your emotional reactions as a participant learner, a member of the group, expressing deep, genuine, personal feeling. "What a joy for me to listen to this discussion!" "I get discouraged, too."

Intrinsically-Phrased Reward Statements

Positive expressions about emerging learner performance and achievement highlight internal feelings of self-worth and self-satisfaction (without praise, which is an extrinsic judgment).

Enjoyment—"That was fun!" "I get pleasure from that, too." **Competence**—"You did it!" "That is mastered!" **Cleverness**—"That was tricky." "Creative." **Growth**—"You've taken a step forward." "Change has occurred!"

6. ACTIVE LEARNING STRATEGIES

foster active, constructive participation

All research on people, and on their brains, shows we learn by doing. Learning is a constructing process. Here are the choices available in the literature on teaching. The problem is selecting the type of activity to match the purpose the teacher has in mind.

Construction Spiral¹⁴

Ask a sequence of questions, beginning at a reflex level, in a three-step learning cycle—(1) individual writing for 3-5 minutes, (2) small group sharing in trios or pairs, and (3) whole class, non-evaluative compilation. This natural human learning process enables the construction of understandings and concepts.

Round

Each person in turn expresses their point of view on a given topic, or passes, while others listen. Used to elicit a range of viewpoints and build a sense of safe participation.

Brainstorm

Solicit, and compile for all to see, alternative possibilities without judgments. Used to generate ideas, encourage creativity, involve the whole group, and demonstrate that people working together can create more than the individual alone.

Writing in Class

Focus questions, in-class journals, lecture or reading summaries and in-class essays can improve the learning of the subject matter and, with clear objectives and feedback, improve writing skills, too. See also Classroom Assessment Techniques.¹⁵

¹⁴ Rita Smilkstein, *We're Born to Learn*. (Corwin Press, Inc., Thousand Oaks, California), 2003. pp 152-158.

¹⁵ K. Patricia Cross and Thomas A. Angelo, *Classroom Assessment Techniques: A Handbook for Faculty*, Second Edition. (Jossey-Bass Publishers, San Francisco, California), 1993.

Simulations and Games¹⁶

By creating circumstances that are momentarily real, learners can practice coping with stressful, unfamiliar or complex situations. Simulations and games, with specific guiding principles, rules, and structured relationships, can last several hours or even days.

Peer Teaching¹⁷

By explaining conceptual relationships to others, tutors define their own understanding.

- *Question Pairs*—learners prepare for class by reading an assignment and generating questions focused on the major points or issues raised. At the next class meeting pairs are randomly assigned. Partners alternately ask questions of each other and provide corrective feedback as necessary.
- *Learning Cells*—Each learner reads different selections and then teaches the essence of the material to his or her randomly assigned partner.

Examinations¹⁸

Scheduling an exam stimulates learners to study. Completion, true false, and multiple choice force memorization of facts and statements. Essay examinations force re-reading and attaining an overall general concept of the material. It is a rather obvious way to involve learners in doing something and getting them to think about what they are doing.

7. COOPERATIVE GROUP ASSIGNMENTS

assign formal cooperative tasks

One form of active learning deserves special attention because it overtly places the learners as workers, demands that each process beliefs and construct expression with co-workers, and forces the achievement of a group goal. That interdependence affects three broad and interrelated outcomes: effort exerted to achieve, quality of relationships among participants, and psychosocial adjustment. Ninety years of research and 600 studies show cooperative learning results in more higher-level reasoning, more frequent generation of new ideas and solutions, and greater transfer of what is learned within one situation to another. Cooperative learning groups embrace five key elements: positive interdependence, individual accountability, group processing, social skills, and face-to-face interaction. Typically three to five learners are placed in heterogeneous groups. All cooperative designs have specific objectives, performance criteria and reward systems. In order for them to be successful, teachers must expect to spend time building cooperative skills and enforcing group self-assessment of them.¹⁹

Team Member Teaching²⁰

Knowledge Outcomes: Like a jigsaw puzzle, each member of the team is assigned a portion of the whole. Ultimately responsible for knowing all, each group member teaches the others about their piece. Learners need explicit preparation in how to effectively communicate information to others.

¹⁶ Paul Cloke, "Applied Rural Geography and Planning: A Simple Gaming Technique." *Journal of Geography in Higher Education* 11(1): 35-45.

¹⁷ Charles C. Bonwell and James A. Eison, "Active Learning: Creating Excitement in the Classroom" *ASHE-ERIC Higher Education Report No.1*. Washington, D.C.: The George Washington University, School of Education and Human Development. 1991.

¹⁸ Bonwell and Eison, p. 50-52.

¹⁹ David W. Johnson, Roger T. Johnson and Karl A. Smith, "Cooperative Learning: Increasing College Faculty Instructional Productivity." *ASHE-ERIC Higher Education Report No.4*. Washington, D.C.: The George Washington University, School of Education and Human Development. 1991.

²⁰ Robert E. Slavin, *Cooperative Learning: Theory, Research, and Practice*, Second Edition (Allyn & Bacon, Needham Heights, MA 02194-2310), 1995.

Team Effectiveness Design²¹

Cooperative Skills and Knowledge Outcomes: Whatever material is to be learned is presented to teams in the form of a manuscript or text followed by a multiple choice test requiring conclusions or inferences, not locating information in the readings. After completing the test, learners join teams of five to discuss the questions and arrive at consensus as to the most valid answer to each question, without consulting the reading. Then a key is distributed and learners score individual answers as well as the team answers.

Student Teams-Achievement Divisions²²

Knowledge Outcomes: Learners study the material in heterogeneous groups as above, but instead of taking a test, learners play academic games to show their individual mastery of the subject matter. At a weekly tournament, learners are matched with comparably performing learners from other teams. Assignments to the tournament tables change weekly according to a system that maintains the equality of the competition.

Performance Judging Design²³

Skill Outcomes: Here learners first study how to develop and apply appropriate criteria for judging performance on a skill, such as writing an essay, giving a speech, or constructing a tool chest. They test their cooperatively developed criteria on a product produced anonymously by someone else. Then the learners are assigned the task of creating their own product for other members of the team to review.

Clarifying Attitudes Design²⁴

Attitude Outcomes: The teacher prepares an attitude questionnaire, usually a multiple-choice inventory. Each learner selects from the range of alternatives those that most accurately represent his or her views. Next, teams meet to reach agreement on which of the alternatives represents the soundest action in a particular circumstance. They examine the differences between previous attitudes and discuss together how each may want to be consistent with the agreed-on description of the soundest attitude.

8. GOALS TO GRADES CONNECTIONS

goals, objectives, measures, criteria and grades agree

A formidable obstacle every teacher faces is how to analyze the content of a course, predetermine the outcomes desired, and communicate the necessary performance expectations to the learners in a detailed, congruous syllabus that logically connects goals to the measures for grades. That is, the objectives follow from the goals, the requirements are demonstrations of performance of those objectives, and the evaluation methods reflect attainment of the objectives to measurable criteria. This is rarely simple—at times teachers need their own cooperative learning groups in order to solve the myriad of problems in coordinating course goals, uncovering the traditional discontinuities between goals and grading, and clarifying assessment.

²¹ Jane Srygley Mouton and Robert R. Blake, *Synergogy* (Jossey-Bass Publishers, San Francisco, California), 1984, p. 22-54.

²² Robert E. Slavin.

²³ Mouton and Blake, p. 74-91.

²⁴ Mouton and Blake, p. 92-111.

Goals Stated as Outcomes, Not Processes²⁵

Goals are agreed to by the other faculty in the instructional unit and achieve outcomes desired from an integrated program of study.

Objectives are Performance Outcomes²⁶

Performances that represent achievement of the course goal are phrased using measurable verbs from Bloom's Taxonomy and placed at the level of the taxonomy that reflects the amount of time allocated.

Requirements Clarified

All desired learner outputs, including the criteria for success and relative weights, are clearly specified in advance.

Criterion Referenced Grading²⁷

Learner achievement is measured with respect to a specified standard of quality, on a continuum from zero to perfection, not against other learner's achievements. Performance on each instructional objective is measured at the appropriate level on Bloom's Taxonomy. Includes a pre-assessment. Includes alternative learning activities for those failing to meet criteria.

9. MODELING

represent openness, learning, and trust

As a paragon of personal development, a teacher faces interpersonal challenges in every action he or she takes to engage, facilitate, catalyze, and give life to the opportunity to learn. Great teachers teach by example. It is the authentic life that instructs. These attitudinal qualities of being connected to learning in delight, illumination, and even rapture have been described in many ways, but none clearer perhaps than by Carl Rogers.²⁸

Openness to Experience in the Here and Now

Being truthful, personally in touch with one's own feelings and current experience.

Incorporation into Oneself of The Process of Change

Openness to learning opportunities, belief in oneself as an effective learner, and modeling learning, and its accompanying mistakes, visibly to learners.

Unconditional Positive Regard for Others

Deep trust in the underlying goodness of each person, despite how they appear, with the explicitly expressed belief in each learner's ability to learn and grow.

10. DOUBLE LOOP FEEDBACK²⁹

promote the awareness of how one learns to learn

The times when the teacher corrects performance are often the most difficult as well as the most significant. It is easier to identify errors and deficiencies in the actions of others than to communicate

²⁵ Robert F. Mager, *Goal Analysis* (David S. Lake Publishers, Belmont California), 1984.

²⁶ Robert F. Mager.

²⁷ James O. Hammons and Janice Barnsley, "Everything You Need to Know About Developing a Grading Plan for Your Course (Well, Almost)" in *Journal on Excellence in College Teaching*, Vol.3, 1993, 51-68.

²⁸ Carl R. Rogers, *The Freedom to Learn* (Charles E Merrill Publishing Company, Columbus, Ohio) 1969, p. 102-127.

corrections to them in a way that continues their continued engagement. Because people rarely produce actions that do not make sense to themselves (they act intentionally), they naturally tend to become defensive, confused, or ashamed when criticized or given advice. Yet individualized correction is often the key to improved performance. An effective feedback procedure enables reflection and self-correction without fostering hostility or defensiveness.

Double loop feedback is a method of providing correctives in a way that maintains the learner's continued engagement in the process of acquiring competence and self-confidence. It sequences the statements teacher's make by starting with least inferential and examining both the learner's performance and the evaluator's assumptions at each stage. In double loop learning an open-ended cycle is created where the teacher and the learner cooperatively examine both the learner's performance and the underlying perspectives the teacher brings to regard that performance.

Optimal correction is possible when both parties responsibly work for error detection at each level of inference before proceeding to the next. In other words, get the facts right first; then work to agree upon what "most people would agree" those facts to mean. As opposed to the natural tendency to think of judgments and opinions first, this procedure holds them in abeyance.

Step 1. Objective Description of Facts

State the facts as you see them:

- a. "There are 14 misspelled words here."
- b. "Since I assigned the class the task, you have asked me four questions."
- c. "You pointed your finger at the person you addressed."

Get agreement, for correcting errors may not be possible unless both parties agree to a common set of facts.

Step 2. Culturally Accepted (socially-constructed) Meaning

Describe what a jury or group of informed, dispassionate observers would conclude:

- a. "Most people would say it hasn't been spell-checked. Do you agree?"
- b. "Most people would say you are using me as the first resource not the handouts or your friends. What do you think?"
- c. "Most people would agree that non-verbal gesture implies an adversarial rather than cooperative stance. don't you think?"

Again, get agreement. Usually the learner will either justify or correct when the behavior is recognized as holding an accepted meaning. This level of inference is the same used by journalists and anthropologists to describe events and actions as viewed from a culturally specific viewpoint. That viewpoint, too, is also suspect and, to be fair, should be examined simultaneously—thus the term "double loop."

Step 3. Judgments and Personal Opinions

After the above have been discussed and agreed upon, the judgments of both parties can be stated without inducing animosity or defensiveness. At times it may be wise to check first with the recipient before moving to this stage: "Would you like my opinion?"

- a. "That many mistakes imply you either don't care or are ignorant."
- b. "I would like to see you find more answers independently."
- c. "It is more effective to speak about yourself than about others."

²⁹ Chris Argyris, *Reasoning, Learning, and Action*. (Jossey-Bass Publishers, San Francisco, California), 1982, p. 181.

11. CLIMATE SETTING

regulate the physical and mental climate

A large portion of teaching effectiveness involves setting the stage; it comes with the territory. Solve comfort issues first and the learning path is smoother. Research shows that successful teachers spend 10% of classroom time optimizing the arrangement of the physical setting as well as the psychological setting—a climate of collaborativeness, supportiveness, openness, pleasure, and humanness.³⁰

Meet the Learner's Needs for Physical Comfort and Accessibility

Insure a comfortable environment where basic needs for all learners are met.

Define Negotiable and Non-negotiable Areas

Clearly specify those aspects of class performance that are the instructor's responsibility, such as essential procedures, external constraints, performance requirements (such as attendance), and summative evaluation — and those parts of the course that have mutual responsibility, such as seating arrangements, which may be negotiable.

Clarify the Instructor's Role

Impart the explicit assumption that the teacher is here to facilitate learning by providing resources, tasks, and support. The teacher is not the fount of all knowledge. The teacher trusts the learners to want to learn and therefore will take responsibility for their own learning.

Clarify the Learner's Role as a Member of a Learning Community

Clarify expectations the learners have for optimizing their own gain, as well as, optimizing the establishment of constructive relationships with each other. A learning community exists when one's own actions simultaneously enhance both the self and the community welfare.

12. FOSTERING LEARNER RESPONSIBILITY

transfer responsibility for discovering, planning and evaluating much of their learning

Engagement is the first task for every course of study. Effective teachers offer ways for the learners to take an active role, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate strategies, and reflecting upon the outcomes.

Effective teachers offer ways for the learners to take an active role, for at least a portion of the course, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate strategies, and evaluating the outcomes, both internal and external.³¹

Invite the Learner's Participation

People tend to feel committed to any decision in proportion to the extent to which they have participated in making it. Their participation is a decision they make, as openly and independently as possible, in the opportunity a course provides. Leaders can optimize learner's readiness and willingness by offering an invitation to step into the learning process and take responsibility for their own learning. These topics constitute that invitation:

1. conveying commonalities that the group shares,

³⁰ Malcolm S. Knowles and Associates, *Androgogy in Action* (Jossey-Bass Publishers, San Francisco, California), 1984.

³¹ Malcolm S. Knowles and Associates.

2. describing the possibilities that could be attained in an ideal future,
3. fostering a discussion about those aspects of that ideal that are present in the current situation,
4. inviting the explicit commitment of every person to take action, both for themselves and toward the betterment of each other.

Draw Forth Past Experience

Although many different activities can be created to enable learning, the teacher's initial role is to set conditions to draw forth the past experience of each and every learner. One way, for example, is to create conditions for each learner to represent aspects of their experience in this content area, orally, in writing, in drawing, etc., share those representations with each other, and then compile together a summary of what the group knows currently. Initial questions may arise in the discussion that can guide subsequent experiences.

This ground-setting collaboration explicitly involves everyone, acknowledges each person's uniqueness, and sets the stage for participant responsibility for learning. When "what we know now" is compared to future possibilities -- by way of models of competence, needs of society or organizations, or ideals and values -- learners can begin to identify experiences that are more likely to provide a natural path for their development.

Involve Learners in Cycles of Investigation and Representation

Investigation is the general process of finding out -- reading, measuring, interviewing, observation, etc. *Representation* is the transformation of experiences into expressions in the various means we have for conveying experience -- words, drawings, diagrams, formulae, dances, poems, models, sculptures, etc. The former provides new input; the latter conveys the meaning of experience in some output. Each investigation is followed by a representation and sharing that constructs new understanding, opens inquiry, and informs the teacher of the uniqueness of each learner.

Involve Learners in Formulating Their Inquiry

Promote attainment of at least a portion of the course requirements through flexible contracts by which the learner

1. translates a learning need into a path of inquiry with investigations and representations specified,
2. identifies, with reflective help, resources and strategies for accomplishing a final product,
3. specifies the evidence that will indicate accomplishment of the dimensions of that product, and
4. participates in determining how this evidence will be judged or evaluated.

Involve Learners in Reflecting Upon Their Learning

Teachers document the course of the learning experience, gathering notes, audio and video recordings, learner's initial products, and dialog. For example, Classroom Assessment Techniques gather information to guide the adjustments both teachers and learners need to make to improve learning.³² These are available continuously on an informal basis as the learners work individually and in groups. At the end of the experience, learners reflect together upon -what has occurred for them over the duration of the work. This reflection socially constructs meta-cognitive understanding of learning as a human activity. The elements of risk, playful presentness, interpersonal support, the honoring of uniqueness of individual expression, acknowledgement of the challenges inherent in the representation of experience, and the rewards of accomplishment are apparent in the experiences of

³² K. Patricia Cross and Thomas A. Angelo.

the group. If the leader explicitly sets structures to draw these elements out, participants have the opportunity to view themselves as lifelong learners, more able to assume responsibility for their next steps in learning.

The words of John Dewey offer guidance in this endeavor.³³ The teacher, as leader, brings a mature view of learner development, which will hopefully unfold over time, and brings a thoughtful perspective on the long-term aims of this educational endeavor. The teacher has experience in the evolution of knowledge, skills and dispositions that lay beyond the learner's awareness. The teacher also brings his or her evolving understanding of the relation of the current study to what it means to be human. The content of a learning opportunity is ultimately social; it relates to what it means to be fully enabled to act for the welfare of self and society. From maturity of experience, the teacher brings a sympathetic understanding of individuals and processes that open communication and collaboration among all involved.

Learning to learn, to acquire the essential knowledge, skills and dispositions to participate in what John Dewey calls the *reflective situation*, is the essential aim of education.

- On the one hand, the learner is evolving an attitude of direct open non-defensive attitude of engagement in new areas of learning, an open-mindedness that welcomes suggestions and information, an absorption or engrossment that brings full attention to bear, and a responsibility to make clear choices and accept the results. These dispositions become a matter of knowledge as a result of repeated experiences of reflection.
- On the other hand, the teacher is evolving also. Each individual learner's method, or way of attack, upon a problem is present in the continuity of his or her experience, acquired habits and interests. Teachers study these ways in order to illuminate and bring openness in the opportunities and challenges he or she provides to the next learners. In this way, reflective processes enable both teachers and learners to become "experienced."

In sum, the experience of the classroom itself is continually open to analysis. By involving every participant in reflection, holding a mirror to what they do, the teacher both illuminates and engenders the dispositions to learn.

³³ John Dewey, *Democracy and Education* (The Free Press, New York, New York), 1916, 1944.