MOVING BEYOND THE LECTURE

TABLE OF CONTENTS

CRITERIA FOR DEVELOPING LEARNING OBJECTIVES

(Checklist)

_____1.   Relevant to learners needs?

_____2.   Consistent with overall learning goals? Program philosophy?

_____3.   Consistent with knowledge and skills of instructors?

_____4.   Stated in behavioral terms? State what the learner should be able to do? State how should the learner be able to respond?

_____5.   Stated in clear language?

_____6.   Narrow and specific?

_____7.   Achievable in terms of time constraints?

_____8.   Achievable in terms of learning resources?

_____9.   Suitable for evaluating learning results? Do they imply how instructors can know whether the objective has been achieved?

Learning Objectives Should be Written Using the Acronym
SMART

S - SPECIFIC.   Objectives should be written in very specific terms to avoid confusion. They define results to be accomplished.

M – MEASURABLE.   How will we know they are accomplished?

A – ATTAINABLE.   Objectives should be challenging, yet attainable.

R – RELEVANT.   Objectives should be relevant to the topic to be taught.

T – TIME BOUND.   Objectives should consider the amount of time for the session.
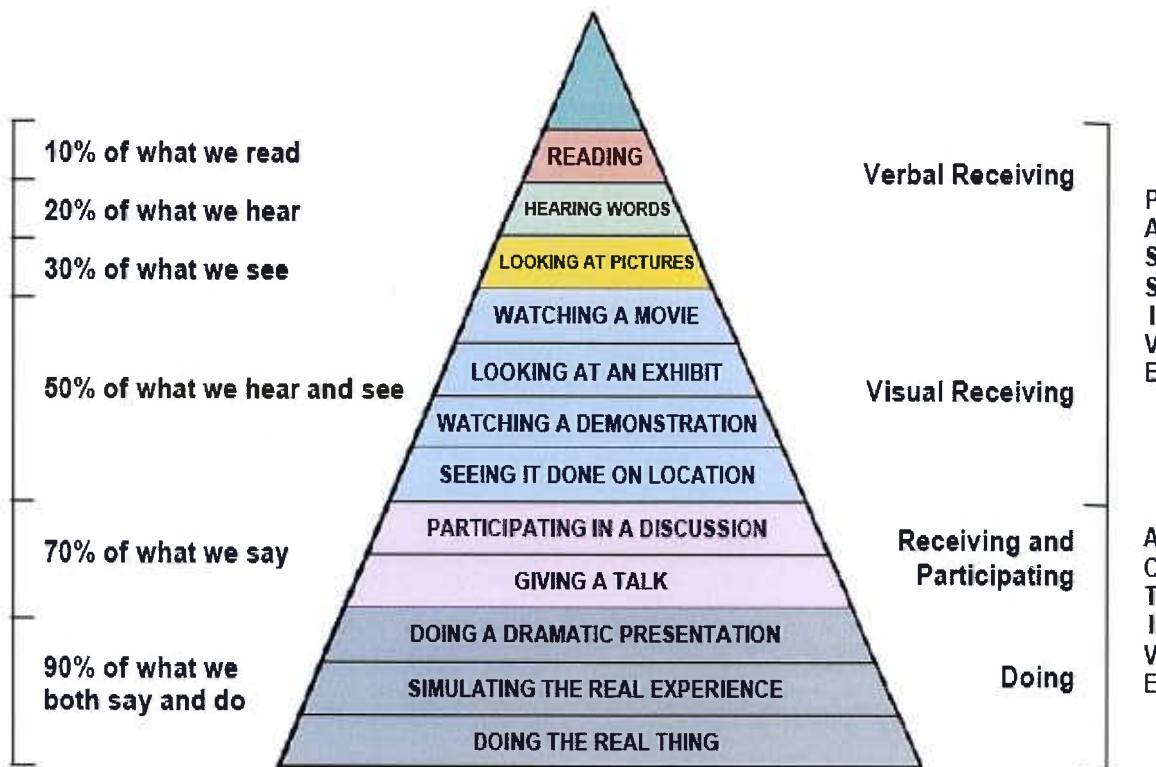
DALE'S LEARNING CONE OF EXPERIENCE

Below is an outline of the advantages and disadvantages of specific learning methods a faculty member should become acquainted with. It shows graphically various learning activities grouped by levels of abstraction (right column below) and indicates their relative effectiveness as teachign methods (left column below).

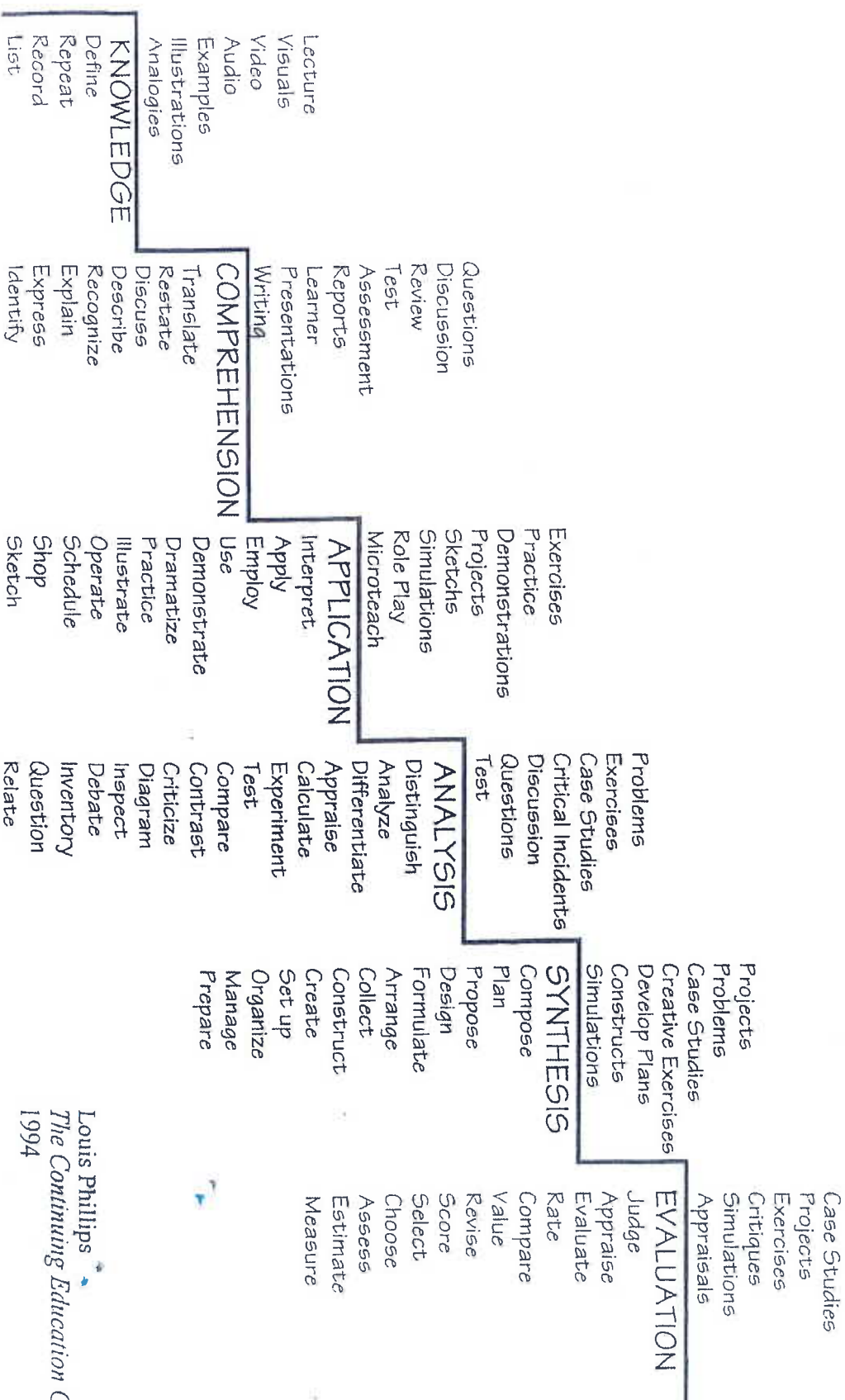## CONE OF LEARNING
WE TEND TO REMEMBER OUR LEVEL OF INVOLVEMENT
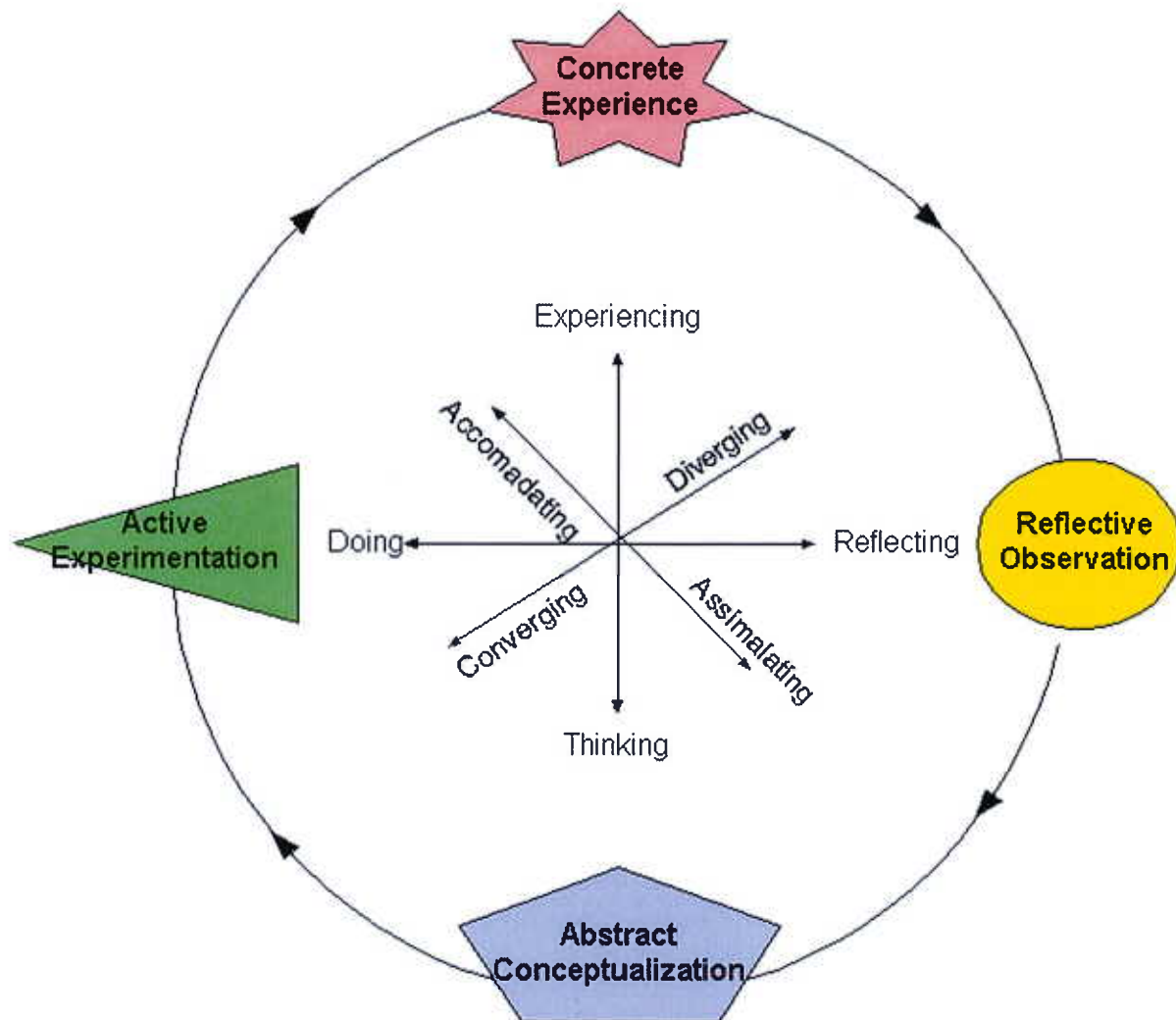(developed and revised by Bruce Hyland from material by Edgar Dale)

10% of what we read	READING	Verbal Receiving
20% of what we hear	HEARING WORDS	
30% of what we see	LOOKING AT PICTURES	
	WATCHING A MOVIE	
50% of what we hear and see	LOOKING AT AN EXHIBIT	Visual Receiving
	WATCHING A DEMONSTRATION	
	SEEING IT DONE ON LOCATION	
70% of what we say	PARTICIPATING IN A DISCUSSION	Receiving and Participating
	GIVING A TALK	
90% of what we both say and do	DOING A DRAMATIC PRESENTATION	Doing
	SIMULATING THE REAL EXPERIENCE	
	DOING THE REAL THING	

PASSIVE / ACTIVE

Edgar Dale, *Audio-Visual Methods in Teaching* (3rd Edition). Holt, Rinehart, and Winston (1969).

You will note that the instructional techniques classified in Dale's Cone of Experience range in a hierarchy of levels from the simple to the complex. That is to say, a teaching method that appeals to only one sense, such as reading or hearing, is simple, but one that appeals to more senses or a combination is complex and more likely to result in a retention of learning.

Suggested Instructional Strategies for Use with Each Level of Bloom's Taxonomy

KNOWLEDGE
Lecture
Visuals
Video
Audio
Examples
Illustrations
Analogies

Define
Repeat
Record
List

COMPREHENSION
Questions
Discussion
Review
Test
Assessment
Reports
Learner Presentations
Writing

Translate
Restate
Discuss
Describe
Recognize
Explain
Express
Identify

APPLICATION
Exercises
Practice
Demonstrations
Projects
Sketchs
Simulations
Role Play
Microteach

Interpret
Apply
Employ
Use
Demonstrate
Dramatize
Practice
Illustrate
Operate
Schedule
Shop
Sketch

ANALYSIS
Problems
Exercises
Case Studies
Critical Incidents
Discussion
Questions
Test

Distinguish
Analyze
Differentiate
Appraise
Calculate
Experiment
Test
Compare
Contrast
Criticize
Diagram
Inspect
Debate
Inventory
Question
Relate

SYNTHESIS
Projects
Problems
Case Studies
Creative Exercises
Develop Plans
Constructs
Simulations

Compose
Plan
Propose
Design
Formulate
Arrange
Collect
Construct
Create
Set up
Organize
Manage
Prepare

EVALUATION
Case Studies
Projects
Critiques
Exercises
Simulations
Appraisals

Judge
Appraise
Evaluate
Rate
Compare
Value
Revise
Score
Select
Choose
Assess
Estimate
Measure

THE KOLB CIRCLE OF LEARNING

TEACHING STRATEGIES AND THE LEARNING CIRCLE

Direct or Concrete Experience
Activities which involve the learner in the experience either physically or emotionally. Hands-on, uses the senses, engages the learner effectively. May have to be vicarious experience. "Here and now" data.
- Recalling past experience
- Role play
- Demonstration
- Observation
- Case studies
- Films
- Interviews
- Self-tests

Reflections on Experience
Activities which require the learner to step back and look at experience, get perspectives of others, make connections to other experiences.
- Structured small group discussions
- Reflective papers
- Journals
- Copying notes
- Asking learners how they react to a session
- Asking learners to make connections to other learning
- Asking learners to discuss class session with other people
- Socratic dialogue
- Formulating questions

Abstractions or Principles
Information from authoritative sources. Using research and specialized knowledge from the law and other disciplines to develop principles. "There and then" data.
- Print (benchbooks, journal articles and other readings)
- Authoritative guidelines (checklists, rules, procedural steps, chronologies)
- Lectures
- Films
- Quick reference guides
- Forms, charts, documents
- Flowcharts

Application
Opportunities for the learners to try out principles or theories in problem-solving.
- Role play
- Individual and group projects
- Video-taping of practice session
- "What if" situations
- Devising plans of action
- Problem-solving activities

Patricia H. Murrell & Charles Claxton

LEARNING MODES AND CAPACITIES FOR LIVING

Concrete Experience
- Contributes to increased affective functioning
- Enlarges repertoire of appropriate emotional responses
- Promotes higher order sentiments, including capactity of intimacy
- Promotes valuing

Reflective Observation
- Sharpens perceptual capabilities
- Potential for reducing capacity for empathy
- Increases perspective taking
- Contributes to ability to discern and assign meaning
- Increases tolerance

Abstract Conceptualization
- Develops sophisticated symbolized proficiency
- Enables us to think in abstractions
- Permits appreciation for many higher order concepts (i.e., God, love, Justice)
- Helps in discriminating between facts
- Helps in defining reality
- Sharpens analytical and digital thinking
- Increases capacity for logic

Active Experimentation
- Increases behavioral complexity
- Helps refine actions, nuance
- Behavior becomes more congruent with knowledge
- Develops self-control
- Actions become more appropriate for circumstance
- Control of temper and violent behavior

As one matures and transits the circle repeatedly, constantly recycling and integrating the dialectic conflicts among the four modes, one moves to greater creativity and growth. The capacities increasingly impact on each other and contribute to each other, i.e., as one's perceptual capacities increase, so does one's behavioral repertoire.

The circle this becomes a helix or a cone, the four modes positioned at some distance forming the floor, and with distance decreasing as the modes are engaged at increasing levels of sophistication and complexity.

2/5/92

ADULT EDUCATION LEARNING TECHNIQUES

Pre-tests/Self-tests

Note-Taking Forms

Commitment Methods (i.e., gavel rotation, stop signs, hand raising)

Prizes (lottery tickets, book store gift certificates, etc.)

Games (i.e., jeopardy game show)

Team Competition

Break-Outs/Small Discussion Groups

Role-Playing [use of props (hats), costumes, (robe for judge)]

Reporting Solutions (i.e., transparencies, flipcharts, large "post-its")

Audience Questions and Answers (index cards)

Brain Storming

Case Studies

War Stories

Panel Discussions/Debates

Open Forum

Demonstrations (video, live)

Handouts

Overheads/Transparencies/PowerPoint

Questionnaires

Outside Testimony

"Lecture"

Presentation Methods and Activities

Type of Presentation	Best Use	Audience Status	Special Aspects	For Best Results
Lecture	To convey large amounts of information in a short time.	Passive-may produce inattention or boredom	Implies superiority of the speaker, which negates the adult education principle of mutuality	Break into 45-minute segments Allow questions throughout Integrate with other methods
Debate and Panel Discussion	To show controversy and diversity	Active psychological, emotional, and physical involvement, especially if questions are asked	Needs a moderator	Inform panel of program objectives Allow each panelist a set time for presenting views Actively engage each panelist in answering participants' questions
Small Group Activity	To Convey: • Personal Experiences • Individual Knowledge • Specific Perspective • Consensus on Issues • Responses and Reactions	Every individual participates Shared ownership in educational outcome	Provides opportunity for learners to practice using the information conveyed	**Must have:** • Concrete objectives • Clear and written instructions • Assigned time allocations Must be integral part of the topic being conveyed 5-7 people per group; minimum of 3, maximum of 9
Demonstration	To model new skills	Drawn into program	Eases tension learners may feel about trying out new information	Inform all players of the expected outcome; provide script
Experimental Activity-Role Play	To test new information and personal abilities in life-like situations	Learners are part of the program, giving them ownership and building trust in faculty, each other, and use of new information	Provides opportunity for learners to apply new information with little risk and no consequence for error	**Preplan** • Have clearly stated instructions • Establish appropriate timeframes • Monitor the activity as it happens • Be flexible in outcomes • Tie the experience back to the information presented • Conduct structured discussions following activity
Individual Activity	To convey facts, directions, individual action plans, and application of new information	Learners are part of the program and gain ownership in its success	Learners are in control and can experience a sense of individual accomplishment and enhanced self-esteem	Volunteers should share work with faculty for discussion

Based on information contained in Curriculum, Program and Faculty Development; Managing People, Processes and Product, Waldrop and Conner, 1994, JERITT

CHECKLIST FOR EFFECTIVE TEACHING

IS THE CONTENT...

_____ Relevant to the audience you are teaching?

_____ Practical for the responsibilities of the participants?

_____ Important, urgent, new, and/or critical to the audience?

_____ Focused (can be developed in time frame and structure of course)?

DO THE TEACHING METHODS...

_____ Provide learners an opportunity to acquire information, process it, structure it and try it out?

_____ Encourage learners to actively participate in the learning experience?

_____ Keep learner interest and provide variety?

ARE THE VISUALS...

_____ Used appropriately to make major points?

_____ Well prepared and add interest (readable, simple, clear)?

_____ Feasible within the time and space available?

DO THE MATERIALS...

_____ Provide support for the presentation?

_____ Enable the participant to concentrate on the presentation without worrying about excessive note-taking?

_____ Include critical case citations and/or bibliographic citations?

_____ Look good? Are they clear and readable?

_____ Provide a logical, practical format that enables participants to follow the presentation?