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The Dynamic of a Living Lecture in Career and Technical Education

Abstract

This chapter introduces the lecture as a long standard learning technique. The background is provided with the extensive value and scope, including the elements of good lectures. Weakness of the lecture centers around its being overused and/or misused. Strengths of the lecture include its familiarity, well accepted, and provides much information in a short period of time. A theoretical context is provided for maximizing the benefit of a lecture, which includes: guiding questions for use; a foundational learning theory; stressing engagement and interaction as integral; and, a large group theory to heighten engagement and interaction. Actually coupling listening teams (clarification, rebuttal, elaboration, application) with the lecture will make the lecture dynamic and vibrant. Fifteen additional groupings with varying purposes may be used to enhance the lecture with further engagement and interaction. Future trends will see stronger emphasis on including other supportive learning techniques in conjunction with the lecture to enhance its value and benefit.

Introduction

The lecture is one of the oldest and most direct learning/teaching educational techniques. Thus, since it has been so universally used, it has almost acquired a hallowed distinction of importance. Its use in career and technical education may have influenced it to approach becoming considered as sacred. The long period of time of its life has influenced many people to confuse lecturing and learning/teaching as being synonymous.

A lecture, as the etymology of the word suggests, was originally a reading, especially a reading aloud. In modern usage it has been extended to a formal oral exposition of a topic (Griffith. 1973). The lecture is used to present a lot of information on a topic/subject, and its greatest value is probably one of the most efficient ways for providing a large number of facts in a short period of time.

In adult education, however, the lecture is coming to be less depended upon as skill is gained in other learning and teaching techniques that involve a greater degree of active participation by students. It is helpful in introducing subjects that are new, in summarizing the literature of any given field, in recapping the work acquired during a course, and in integrating diverse materials, ideas, along with concepts into an orderly system of thought.

From a different point of view, the lecture is largely a one-way process of communication from teacher to participant. It does not allow for much interaction between students and teacher, and among the students. Although not in a specific sense, but in a general sense it takes into account the needs, interests, and feelings of individuals. The lecture has its pros and cons, has some value, but by itself can go only so far in accomplishing the educational result that may be hoped for by the lecturer and the participants.

The objectives of this chapter are: To set forth the value and scope of the lecture as it has been used throughout its long life; to present some of the weaknesses and strengths of the lecture; and, to provide a theoretical context for the why and how the lecture needs to be used to maximize its benefit; and, to articulate how the lecture may become dynamic and brought to life vibrantly as it is creatively combined with other educational methods, formats, techniques, sub-techniques, and devices.

Background

Lectures go way back in history as a means to deliver volumes of information, but the results have been questionable as to how much of that information is retained and internalized. It has had some very important aspects as to its scope and value. Knowles (1950) indicates that a good lecture has the following characteristics. It is well organized, with ideas developed in logical sequence. When a generalization is made, an illustration drawn from familiar experiences of participants is included. The sequence starts with simpler materials and moves to the increasingly complex. Present material is to be related to past and future material. Main points are listed, enlarged upon in turn, and next are reviewed. At the end, the main points and ideas are summarized and it is completed with a summary with conclusions being drawn.

Value and Scope of the Lecture

Beal, et al., (1962) thinks the lecture has some dynamic characteristics. It allows for complete and detailed information without the distraction of interruptions. Conveying content to a group in this way is very rapid. The lecture is controlled by the speaker, is an abstract form of group interaction, and therefore requires a high level of speaker competence and audience cooperation. It also permits participants to be passive or active in their attention. It requires an audience definitely wishing to learn. Utmost care is given to avoid stating half truths or distortion of facts. Any emotional appeals included are done tastefully and not bombastically. It is a very commonly used technique.

Zelko (1967) suggests that the lecture may be regarded by many as old-fashioned or eclipsed by some newer techniques, but still remains a viable way to instruct. It is a prepared presentation of knowledge, information, motivation, persuading and influencing attitudes. If it is considered good, it must motivate group interest, be well organized and clear. Clear organization means: Starting at one point in time, continuing logically, and moving from that point through the location; using topical or logical sequence that seems to best suit the points at hand; launching with the point easiest to comprehend and moving toward more difficult minor and then major points of interest; discussing a plan or process that effects the future; developing a need or problem situation and then show a solution. The good lecture is developed and supported by concrete examples, illustrations and comparisons, statistics and data, and quotation. If possible, the actual presentation needs to engender exchanging ideas, response, interest, understanding, pleasure or perplexity as the case may be.

Berry (1968) adds that the lecture may be used to motivate as you introduce the subject, arousing interest as the stage is set for what is to come. It enables going directly to the desired objective without the attention of the group being diverted. To be most beneficial, language will be used that is conversational and easy to understand, preferably with short, accurate sentences. Using it as a summary at the end of a session may also be beneficial.

This (1972) puts forward the idea that if a lecture is used at all, it needs to be laced with cogent questions that are not supportive of the concepts being conveyed. He adds an interesting twist that a lecture can serve as a symbolic

healer in secular evangelism to reduce the tension, frustrations, and possible feelings of guilt arising from the structure of the highly competitive world in which we live.

Griffith (1973) asserts that it will be stimulating if adjusted to the attention span of the listeners. Focus needs to be on enriching the lives of the learners, used to explain terms, clarify difficult concepts, summarize, and evaluate.

Boyd (1975) gave a very telling opinion in which he addresses approaches and methods on how to conduct supervisory training. He includes in the book such categories as: Knowing the job of the trainer and the supervisor; determining what training the supervisor needs; designing training approaches to help supervisors grow; examples of training approaches and methods; and, evaluating training to improve its effectiveness. The only place I could find in the book where he refers to the lecture is in a workshop on the topic of *Operations Supervisors' Performance Standards*, in which he provides limited space for a *brief lecture* on MBO [Management by Objectives] and what is meant by planning, directing and controlling.

Elbe (1976, 1988) characterizes the lecture as discourse, and as such provides elements that make it excellent. These elements are: The material fits the time available for the lecture; precise examples and illustrations are unrelentingly included; allusions to the personal or the world outside, arousing curiosity, providing surprise, and using casual humor enhance its use; room for improvisation quality is provided within its scope; providing for frequent breathing space lends credibility; and, the ending maintains continuity with what has gone before and what lies ahead.

Renner (1983) provides a few tricks of the lecturing trade. Limit it to six major points. Summaries at the beginning and end are appropriate. An occasional pause is helpful to give listeners a chance for time to catch up and summarize for themselves. Articulate time for questions and stick to it. A little humor injected helps participants retain more learning. Although participants expect to be lectured to, limit the time devoted (perhaps 10 minutes at most) to the dreaded boring-lecture-monster.

Custer (1984) opines that a straight lecture is the most appropriate method for a presentation in some instances. He states that the straight lecture is most appropriate when: The group is over 40 or 50 people; information is

straightforward and likely to prompt few questions or changes in attitudes or habit patterns; time for the presentation is very limited; and/or, the lecturer has exceptional skills in holding the attention of a large group. Nonetheless, he offers the caution that even in these situations (*a straight lecture*), presenters often stop during the lecture asking for questions or feedback.

GP Courseware (n. d.) in addressing the usefulness of the lecture, indicate that it is a verbal presentation by the instructor, has a place in instruction, may be appropriate for the audience with limited background in a topic, presents an organized body of ideas or information, and presented in such a way as to assist encoding by the learner. It provides for active involvement of the learners.

Freedman and Yarbrough (1985) take the attention from the lecture to the lecturer when he indicates more than any other method (*teaching and learning*) a lecture is a performance, the lecturer is the focus of 'star', and the set, props, and script affect the outcome. The outcome or statement of purpose is essential and will elicit participants' comprehension and recall of those ideas in the future. The lecturer will be clear up front what outcomes are to be produced.

Cranton (1989) calls the lecture an instructor-centered technique (that is, the majority of the content conveyed directly by the instructor). It is efficient and effective for large groups when providing lower levels of the cognitive domain (knowledge and comprehension). It has minimum use at the higher (more complicated) levels of the cognitive domain and for some aspects of the affective domain.

Eitington (1996) shares some very positive sides to the lecture. The growth activity to which we have been most exposed is the lecture when it works. It grabs our attention, sharpens the differentiation between alternative actions, captures our involvement and interest, motivates us to new experience, and gets us emotionally engaged. The good lecture disciplines our use of time and our actions in a way we cannot or have not done for ourselves.

Ukens (2001) alternates between calling it a lecture or lecturette, in which information is quickly conveyed to large numbers of people not knowledgeable in the topic when interaction or discussion is not desired or is not possible. A straight lecture is effective in certain circumstances: When the learners have zero grounding in the subject matter, when rules and

regulations have to be passed along, and when matters of finance, fact, and law are being discussed.

Vella (2001) folds the lecture into a learning task. The lecture seeks to ask, tell in dialogue, address whose voice is heard in the learning situation, invites clarifying questions from the learners, sets the learning task, and reflects the cognitive, affective, and psychomotor aspects of learning.

Wang (2008b) labels the lecture as informative speaking. It is most appropriately used when: The primary goal of the learning transaction is cognitive transfer; information is organized and presented in a short time frame; it provides a framework for learning activities and further study; difficult concepts, problems, or ideas are identified, explained, and clarified; a controversial issue is analyzed; relationships are demonstrated among apparently dissimilar ideas, and between previously learned and new information; learners beliefs, attitudes, and behaviors are challenged; a creative mind at work is modeled; an expert's thought process as the lecture 'thinks out loud'; and, the audience is stimulated or inspired to further inquiry. The lecture needs to be laced with meaningful examples, frequent summaries, simple language, and with an appropriate speed of delivery.

Despite all the plaudits emphasizing the benefits for using the lecture in learning, there are some who are hesitant about it. In a cycle of learning, it seems to be somewhat lacking in closing the loop. Action on what is suggested in the lecture is difficult to take, when one is just listening to someone speaking. So, let us consider some of the weaknesses of the lecture.

Weaknesses of the Lecture

Eitington (1996) loses no love on the lecture. It has been: Continually cussed and discussed; moved off center stage by newer involving methods; lowering motivation, curiosity and creativity in learners; hard to tell if the message is getting through; has high 'tune out' and 'turn off' potential; delivered poorly; ignoring various listening and learning styles of participants; disorganized; dull, boring, and a waste of time; ignoring the old adage that the mind can absorb only as much as the seat can endure; an opportunity for the speaker to 'talk down' to the audience; very limited in helping retention of learning last more than 24 hours; unappreciated in a

democratic culture; endorsing the authority figure concept; archaic as a teaching device since Socrates gave it up in 450 B.C; and, disallowing well formulated questions that may lead learners to improved insight. He also suggests that the lecture is a golden opportunity for some lecturers to exemplify: How little about how adults learn they know; their extremely limited range of facilitation skills; playing only to the bright participants; over-burdening participants with detailed content; discounting their vital roles of setting directions, answering questions, providing feedback, and helping learners define objectives or solve problems; willingness to surrender ownership of learning, thus shortchanging participants; and, too much confidence in words and their own voices, despite the well-known fact that listeners have short attention spans and poor retention rates.

Beal, et al. (1962) offers cautions about using the lecture which underscores its weakness and disadvantage. It may be overused. It is inferior to some other techniques for bringing out divergent points of view upon a topic. It can not move a group toward consensus or action. It does not bring about a resolution of differences of opinion among a group. It does not bring to light the most unique and interesting experience of individuals to a group. It does not help one to see the point of view of others in a controversial situation. It is the most deceptively easy way out of diverting a group from its real purpose. It deals more in abstractions than concrete reality. It is a poor response to a group who definitely wishes to learn.

Wang (2008b) asserts some of the negatives of lecturing. It may be misused. It exposes the audience to one person's views. It may present inaccurate information without being challenged. It may provide no verbal interaction between the speaker and the audience. It may discourage learner involvement in the teaching – learning transaction. Feedback from the audience may too subtle to determine the effects of the lecture. The lecture is often judged on the entertainment quality to the audience rather than on the worthwhileness of the content. Lectures are many times not spoken loudly enough, with clear diction, having appropriate choice of words, and accompanied with changing voice inflections for emphasis and variety.

Nonetheless, there are still some who would not be willing to dismiss the lecture. They consider that there are strengths to the lecture, and some of the strength comes as a result of coupling it with other methods and techniques. Let us hear what they have to say.

Strengths of the Lecture

Zelko (1967) extols some of the strengths and qualities of the lecture. Its direct and clear nature grows out of the fact that the instructor is in more control of the instruction than with any other method. The purpose, scope, organization and sequence of points, type and detail of development, manner of stating points, and conservation of time are all within the instructor's control.

Blackburn (1984) says that the lecture has the advantage of being the most familiar teaching technique with adult learners. If your main concern is to provide information that is for short term retention only, then the lecture is just the correct choice. Lectures are of best benefit when they are coupled with a change of pace, and a variety of other techniques. When lecturing, provide a road map or outline to indicate to your listeners where you are going, how you are going to get there, and how long it will take; so that, they may anticipate events, a change of pace, following a logical sequence, relating familiar information to new material, examples from participants' personal experiences, readings, or previous discussions they may have had with others. Include organized handouts, structured notes, and space for participants to add their own ideas. Use gestures to emphasize points, move about the room, ask questions and wait for answers, pose problems to be solved, get them into discussion groups, and have them give demonstrations.

Apps (1991) said that the lecture is the most criticized of all the teaching tools. Lectures may be used effectively, especially in conjunction with other techniques. There is a place for short, succinct lectures. The lecture may be enhanced with stories and humor to keep interest and help amplify major points. The lecture needs to be laced with as simple and concrete language as the subject matter allows. A printed handout with the major points of the lecture will be deeply appreciated.

Despite the fact that there are those who would say that the lecture should be used in combination with other supportive techniques to maximize the benefits, not much in the way of a theory is provided that supports the idea. As an adult educator I have found over the years that I need to have an educationally sound reason for doing what I do, or I find myself going in many directions, instead of being clear about the direction I am headed. Following are some ideas to support this.

A Theoretical Context for Using the Lecture to Maximum Benefit

I ask myself three guiding questions when considering the choice of any adult learning method or technique (including the lecture) that I may think about using in an adult learning experience where I am in charge. I seek to answer these questions with an educationally sound answer. The questions follow. How does my selection and use of this method or technique fit into my understanding of the way adults learn, change or grow (what is my learning theory)? What position does this method or technique hold in the context of the learning goals or objectives toward which I am working in the adult learning / teaching situation (what is my learning design for this experience)? What immediate and observable learning needs does this adult learning technique or method meet at this time with these participants (what is the specific relevance now)? It may be well for each of us and, incidentally, an improvement for our field when we as professionals are preparing for and conducting learning experiences, to ask and answer for ourselves these questions (Henschke, 1975).

My theory about how adults learn is very much in line with Knowles' (1995, 1996) theory of andragogy – the art and science of helping adults learn. It has six assumptions and eight process elements.

Assumptions:

Concept of the learner – As adults, we have a deep psychological need to be self-directing—to be perceived by others and treated by others as able to take responsibility for ourselves.

Role of the learner's experience – Adults possess a greater volume and a different quality of experience than youths. It means that adults are themselves the richest learning resource for one another for many kinds of learning.

Readiness to learn – It is when adults experience a need to know or be able to do something to perform more effectively in some aspect of their lives — marriage, the birth of children, the loss of a job, divorce, the death of a friend or relative, or a change of residence.

Orientation to learning – adults enter an educational activity with a life-, task-, or problem-centered orientation to learning.

Motivation to learn in adults – They are much more internally oriented (self-esteem, confidence, recognition by others) than

externally oriented (chance for promotion, change of technology).

Why learn something – Adults have a need to know a reason that makes sense to them, as to why they should learn some particular thing, rather than because the teacher said so.

Process Elements:

Preparing the learners for the program – Learners become informed on the contents of this experience.

Setting the climate – A climate conducive to learning is a prerequisite for effective learning. Two aspects of climate are important: physical and psychological.

Involving learners in mutual planning – Learners sharing the responsibility for planning learning activities with the facilitator.

Diagnosing their own learning needs – Learners can share in small groups what they perceive their needs and interests to be regarding the acquisition of knowledge, understanding, skill, attitude, value and interest in this learning experience

Translating the learning needs into objectives – Participants now face the task of translating them into learning objectives— positive statements of directions of growth

Designing a pattern of learning experiences – This plan (mutually designed by the leaders and the participants) will include identifying the resources most relevant to each objective and the most effective strategies for utilizing these resources.

Helping adult learners manage and carry out their learning plans – Learning contracts are a most effective way to help learners structure and conduct their learning.

Evaluating the extent to which the learners have achieved their objectives – Finding out what is really happening inside the learners and how differently they are performing in life.

You may be oriented toward another adult learning theory that guides your practice. However, it is important that one have an adult learning theory that guides your practice. It is my considered opinion that it is best for all concerned that the educator has one that guides her/his practice.

The next element that I think is so crucial in the context of using the lecture to maximum benefit is the issue of engagement. I recently heard that in

most lectures there are 73 % of the people who are not engaged. This means that only 27 % are engaged. This just won't do. If we are to use the lecture to maximum benefit, the engagement needs to be at least 73 % if not much higher. We need to be trying for 95 % or above.

Moser (2008) in addressing a group of adult educators concerning the connection between higher education and society emphasized the necessity of engagement, which is a meaningful and mutually beneficial collaboration with partners. These partners may be in our audience listening to our lectures; partners who come from education, business, public and social service, non-profit sector; partners who are contributors to the theoretical base of adult, vocational, career, and technical education.

Fite (1963) in describing the impetus for building the Kellogg Center for Continuing Education at the University of Oklahoma indicated that Thurman White's vision made it different from any other Kellogg Center around the USA. White's vision was to conceptualize space and its role in learning promulgated the acceptance of lifelong learning. Thus, it became a complex of buildings built in such a way that would facilitate interaction and engagement among those who would come to be involved in continuing education.

All of this focuses on a theory of large group meetings (Knowles, 1970, 1980) which is a prominent part of conferences. This is premised on the idea that the educative quality of the large group meetings is a direct function of the quality and quantity of the interaction and engagement; and, that the interaction and engagement are influenced by the platform, audience, and the relationship between the two.

Thus, formulating questions to help choose various learning techniques (including lectures), assumptions and processes for infusing life into learning, strong emphasis on engagement and interaction in learning, and influencing the upward swing in the quality of learning, all combine to help prepare the lecture to become more dynamic. However, this must be coupled with the actual implementing of a higher percentage of participation and retained learning.

How the Lecture May Become Dynamic and Brought to Life Vibrantly

Before a lecture is presented, the audience (large, relatively large, medium sized, or smaller) will be given a handout centered on the topic that will be presented in the lecture. The audience also may be asked to serve as 'listening teams' according to the section of the room they are sitting in – one section to listen to the lecture for points they wish to have clarified (the clarification team), a second section listen to the lecture for points with which they disagree or take issue (the rebuttal team), the third section to listen to the lecture for points requiring elaboration (the elaboration team), and a fourth section to listen to the lecture for problems of practical application they wish the speaker to address (the application team). (Knowles, 1970, 1980; Henschke, 1975).

The lecture would be between five and seven minutes. After the short lecture the teams are asked to 'buzz' in groups of four or five to pool their thinking about points they want raised, or questions they have generated which they are prepared to ask. Time for the 'buzz' group work may be gauged according to when the 'decibel' level in the groups gets quieter (perhaps five or six minutes). Following this work, one member (an appointed spokesperson from each group) gives a summary of its deliberations, or asks one question, and the speaker responds to each item in turn, until time runs out or all the items are discussed. This process maintains a high level of engagement and interaction.

I have used this process with great success since 1971, The first time I used it was with a Rotary Club in rural Missouri, when presenting my vision of the adult education program I would implement in that region. I published an article about this process (Henschke, 1975). I used it at a national adult education conference, a regional adult education conference, and a state adult education conference to illustrate it as a learning / teaching technique. I demonstrated the use of it in an online course with graduate adult education students. I used it with 100 conference participants at the Arabian Society for Human Resource Management in Egypt, where the topic was "Staying Ahead of the Curve of Human Capital Management." I used it on Instructional Television with 80 Doctoral students in North Dakota on the topic of "Andragogy, Malcolm S. Knowles, and Dynamic Adult Learning." I used it with university faculty with the topic being on "How to Work with Adult Learners." I used it with Nursing faculty with the topic being "Understanding the Theory of Large Group Meetings and How the Lecture

May Be Used to Great Benefit.” These are just a few of the times that I have used this learning technique.

In addition to the interactive lecture process coupled with listening teams described earlier, the lecture could be used with the following groups and the purposes for which each is brought together, as illustrated in Table 1. These procedures could be followed in responding to and dealing with the content that was presented in the lecture. The rationale for this is that one of the components [activity units] of learning design models is small groups of various sizes and for a variety of purposes (Knowles, 1970).

Table 1. How the lecture may become dynamic and brought to life vibrantly

<u>GROUPS</u>	<u>ORGANIZED FOR THE PURPOSE OF</u>
+ Topical Discussion	1. Reacting to - 2. Testing the Meaning of - 3. Sharing Ideas about - + Informational Inputs on a Given Topic - From Reading - From Speakers
+ Laboratory	1. Analyzing Group Behavior 2. Experimenting with New Behavior 3. Sharing [Providing] Feedback Regarding The Effects of Various Behavior
+ Special Interest	1. Categorizing Interests of Participants 2. Describing Experiences 3. Exploring Common Concerns
+ Problem-Solving	1. Developing Solutions to Problems of Concern To the Total Assembly + Procedural Matters + Substantive Issues
+ Planning	1. Making Plans for Activities within the Design 2. Generating Plans for Back Home Application

GROUPS

ORGANIZED FOR THE PURPOSE OF

+ Instructional

1. Receiving Instruction (Facilitation of Learning) Through the Services of Resource Experts in Specialized Areas of
 - + Knowledge
 - + Skill
 - + Value
 - + Understanding
 - + Attitude
 - + Interest

+ Inquiry

1. Searching Out Information, and
2. Reporting Their Findings to the Total Assembly

+ Evaluation

1. Sculpturing Proposals for Evaluating the Results of the Activity
 - +For the Approval of the Total Assembly
 - +Perhaps Executing the Approved Plans

+ Skill Practice

1. Practicing Specified Categories of Skills

+ Consultative

1. Giving Consultative Help to One Another

+ Operational

1. Carrying Responsibility for Operation of The Activity
 - +Room Arrangements
 - +Refreshments
 - +Materials Preparation
 - +Equipment Operation

+ Learning-Teaching Teams

1. Taking Responsibility for Learning All They Can About a Content Unit
2. Engaging the Total Assembly in an Active Learning Experience of the Content They Acquired

GROUPS

ORGANIZED FOR THE PURPOSE OF

+ Dyads

(Two-Persons) 1. Helping Each Other By

- +Exchanging Personal Experiences
- +Coaching Mutually
- + Planning Strategies
- +Generating Assistance for Each Other in Additional Ways

+ Triads

(Three Persons)

1. Announcing to the Others the Help Each Needs
2. Providing Ideas for Addressing Each Person's Needs
3. Inviting a Few Groups to Tell the Best Ideas to the Total Assembly
4. Other Mutually Helpful Suggestions

+ Buzz Groups

(Four or Five
Persons
Randomly
Assigned)

1. Meeting in the General Assembly
 - +Pooling Problems
 - +Brainstorming Ideas
 - +Recording Reactions
2. Reporting These Ideas Through A Spokesperson to the General Assembly

Future Trends

Renner (1983) quite early suggests the a lecturer mix activities in such a way that the participants are alternately passive (sit, hear, see) and active (problem-solve, write, construct, discuss, move around, walk, speak,

converse with others, and operate equipment. He also adds that extra time be allowed for working with and thinking about complex materials, perhaps providing handouts before the lecture. Switching to techniques other than lecturing helps him (and perhaps will help others in the future): Become less tied to his notes and his spot in front of the audience; have more time and energy to spend on helping participants learn; be more available to learners and assist them in taking charge of their own learning; allow the participants to share responsibility for the success of the learning activity. He cautions that one experiment with new ideas only at a pace that is personally comfortable to the lecturer.

Eitington (1996) characterizes his thoughts about future trends by prefacing his remarks with a begrudging – ‘if you must lecture’ here are some things that you make certain to include. A wide variety of ideas may be: Make certain to structure the techniques in combination with the lecture is such a way that will help the adults to actively learn; have as wide a variety of techniques as is possible to use with the lecture; help then set directions, encourage them asking questions and respond to them, provide feedback, and help them set objectives and solve problems. Try a panel presentation from the audience. Have them do pre-work in reading. Ask the audience to answer such questions or thought stimulators as: Why delegate? What are the purposes of delegation? What are the problems in delegation? What controls make delegation work? Other elements may be included: Pre-work in case or problem analysis, problem census, problem swap, interest inventory, incident for involvement, problem probe, exercise excitement, anxiety reducer, structured note taking, flipchart fill-up, present vs. preferred status, quiz the expert, the two-step, and thought stimulator. Mid-talk interventions of various kinds are suggested, as is a question and answer period.

Wang (2008a) included a section of a chapter on the future trend that strongly focuses in learner-centered learning. There are five key changes to practice in this area: The balance of power between the teacher and participants in teaching; the balance of power between the teacher and participants in classrooms; the balance of power in the relationship between the teacher and participants; focus on an expanded function of the content we teach; and, the alternative purposes of evaluation. In the future the emphasis will need to be placed on using content as a means to learning instead of making certain the lecture is completed and the content is ‘covered’. Teachers / lecturers in the future will need to help learners