

State of Connecticut Train-the-Trainer

Certificate Program 2010-2011



Module 4
Curriculum Design and Methods of Instruction
Participant Handouts



Training and Development Terminology: Abbreviations

ADDIE – Analysis, Design, Development, Implementation, Evaluation

AOEs – Areas of Expertise

ASTD – American Society for Training and Development

ARCS – Attention, Relevance, Confidence, Satisfaction

CAI – Computer Aided Instruction

CBT – Computer Based Training

CPM – Critical Path Method

CTDN – Connecticut Training and Development Network

CPLP™ – Certified Professional in Learning and Performance

DAS – Department of Administrative Services

HR – Human Resources

HRD – Human Resource Development

HPI – Human Performance Improvement

ISD – Instructional Systems Design

JITT – Just-in-Time Training

KSA – *(Two uses)* Knowledge (or cognitive), Skills (or psychomotor) and Attitude (or affective) OR Knowledge, Skills, and Ability

LMS – Learning Management System

MBTI – Myers-Briggs Type Indicator (16 types based on extraversion or introversion; intuition or sensing; thinking or feeling, judging or perceiving)

OD – Organizational Development

OJT – On-the-Job Training

PERT – Performance Evaluation and Review Technique

RID – Rapid Instructional Design

RFP – Request for Proposals

ROI – Return on Investment

SDL – Self-Directed Learning

SHRM – Society for Human Resource Management

SME – Subject Matter Expert

SWOT – Strengths, Weaknesses, Opportunities and Threats

WBT – Web-Based Training

WLP – Workplace Learning and Performance



Training and Development Terminology: Glossary

Accelerated Learning: An approach to learning that honors the different learning preferences of each individual learner and utilizes experiential learning exercises (such as role plays, mnemonics, props, music, etc.) to enhance long-term retention by the learner.

Active Practice: The performance of job-related tasks and duties by trainees during training.

ADDIE: An instructional systems design model with five (5) phases:

Analysis: Process of gathering data to identify specific needs – the “who”, “what” “where”, “when” and “why” of the design process.

Design: The planning stage.

Development: The phase in which training materials and content are selected and created/developed based on learning objectives.

Implementation: Occurs when the course is delivered, whether in person or electronically.

Evaluation: The ongoing process of developing and improving instructional materials based on feedback received during and following implementation.

Adult Learning Theory: A term that encompasses the collective theories and practices of how adults learn and acquire knowledge. Popularized by Malcolm Knowles, adult learning theory provides the foundation.

Andragogy: The adult learning theory popularized by Malcolm Knowles, based on five key principles that influence how adults learn: self-concept, prior experience, readiness to learn, orientation to learning, and motivation to learn.

Asynchronous Training/Learning: A Scenario that does not require the trainer and the trainee to participate at the same time; email or threaded discussions are two examples.

Audience Analysis: The demographic information (e.g., age, education level, primary language, tenure with the organization) about your audience and determining how much your audience already knows about the topic.

Avatar: A computer user's representation of himself/herself or alter ego, whether in the form of a three-dimensional model used in computer games, a two-dimensional icon (picture) used on Internet forums and other communities, or a text construct found on early systems such as MUDs. (In computer gaming, a **MUD (Multi-User Dungeon, Domain or Dimension)** is a multi-player computer game that combines elements of role-playing games, hack and slash style computer games and social chat rooms.) It is an "object" representing the embodiment of the user. The term "avatar" can also refer to the personality connected with the screen name, or handle, of an Internet user.

Behavior Modeling: Copying someone else's behavior by observing how another person deals with a problem.

Benchmarking: The practice of measuring an organization, department or process by its strengths and weaknesses against similar organizations for the purpose of objectively defining and improving the work of trainers and HRD professionals.

Bloom (Benjamin) Taxonomy of Learning: A classification system for different categories or domains of learning: cognitive (knowledge), psychomotor (skills); and affective (attitude); sometimes referred to as KSAs (*see also Learning Taxonomy*).

Coaching: A process in which a more experienced person, or coach, provides a worker or workers with constructive advice and feedback with the goal of improving performance (See also *Mentoring* which focuses on career development and advancement).

Cognitivism: A "tell" approach to learning, based on the theory that learning occurs through exposure to logically presented information, usually involving lecture.

Computer-Based Training (CBT): Interactive instructional experience between a computer and a learner in which the computer provides the majority of the stimulus and the learner responds, resulting in progress toward increased skills or knowledge. Has a more complicated branching program of mediation and answering than Computer Aided Instruction (CAI). Now an all-encompassing term used to describe any computer-delivered training including CD-ROM and the World Wide Web. Some people still use the term CBT to refer only to old-time text-only training.

Competency-Based Instruction/Training: Instruction that is organized around a set of learning objectives based upon the knowledge, skills and attitudes required to perform a set of skills called competencies. Evaluation of student success is based on competent performance of the skills. Normative measurement is specifically excluded from competency-based instruction.

Correlation: The relationship between two sets of data, that when one changes, the other is likely to make a corresponding change. If the changes are in the same direction, then there is a positive correlation. If it is in the opposite direction, then it is a negative correlation.

Course: A planned, organized series of learning experiences related to a particular topic or group of tasks. This term may be applied to trainer or facilitator-led experiences, or self-instruction for training, education or development.

Course Map: A chart that depicts the designed sequence for events of a course.

Course Prerequisite: Required or necessary as a prior condition, for example, a course, knowledge or competence that is required prior to taking an advanced course.

Courseware: The media, either text; computer program; or CD-ROM, that contains the instructional content of the course.

Criterion Referenced Tests: A test in which the results can be used to determine a student's progress toward mastery of a content area. Performance is compared to an expected level of mastery in a content area rather than to other students' scores. The "criterion" is the standard of performance established as the passing score for the test.

Cross-Training: Providing training in several different areas or functions. This provides backup workers when the primary worker is unavailable.

Curriculum: The combination of different training courses arranged in a sequence. The aggregate of courses of study given in a learning environment. The courses are arranged in a sequence to make learning a subject easier. In schools, a curriculum spans several grades, for example, the math curriculum. In business, it can run for days, weeks, months, or years. Learners enter it at various points depending on their job experience and the needs of the business.

Deficiency: Failure to meet a set performance standard.

Delivery: Any method of transferring content to learners, including instructor-led training, Web-based training, CD-ROM, books, etc.

Design/Development*: The process of structuring content (e.g., knowledge, information, theories, concepts, and procedures); instructional strategies; and media into meaningful learning experiences with the result of enhanced individual performance, business unit performance or both. ***Development** may also refer to the creation of training materials or courses (see ADDIE for training).

Design Phase: The second of the Instructional System Design phases. The learning objectives, tests, and the required skills and knowledge for a task are constructed and sequenced.

Design Review: A technique for evaluating a proposed design to ensure that: adequate resources are available to meet time deadlines; it will work successfully; it can be built within a reasonable cost; and it meets the organization's needs.

Development: Learning or other types of activities that prepare a person for additional job responsibilities and enable them to gain knowledge or skills. Has no direct relation to a particular job but helps individuals and organizations cope with a rapidly changing environment. Examples include: stretch assignment, courses, experiential learning.

Development Phase: The third of the Instructional System Design phases. The purpose of this phase is to develop and validate the instructional material (courseware).

Distance Learning: An educational situation in which the instructor and students are separated by time, location or both. Courses are delivered to remote locations via synchronous or asynchronous instruction.

Environmental Analysis: The culture of the organization and the level of management support. The environmental analysis may also look at the compensation plan.

Evaluation: A process for appraising training to determine its value; the determination of the effectiveness of training program, a measure of the extent to which objectives were met.

Evaluation Phase: The fifth of Instructional System Design phases. The purpose of this phase is to determine the value or worth of the instructional program. This phase is actually conducted during and between all the other phases.

Experiential Learning: A learning activity having a behavioral based hierarchy that allows the student to experience and practice job related tasks and functions during a training session

Feedback: Providing learners with information about the nature of an action and its result in relation to some criterion of acceptability. It provides the flow of information back to the learner so that actual performance can be compared with planned performance. Feedback can be positive, negative, or neutral. Feedback is almost always considered external while reinforcement can be external or intrinsic (i.e., generated by the individual).

Flow: To move or run smoothly with unbroken continuity; to proceed steadily and easily; to exhibit a smooth or graceful continuity; the sequence in which operations are performed; an apparent ease or effortlessness of performance. (*See also sequencing.*)

Force Field Analysis: A diagnosis tool developed by Kurt Lewin to assess favorable and unfavorable impacts when solving a problem.

Front-End Analysis: The "front end" phase of the Instructional Strategy Design (ISD) process in which the job is analyzed, tasks are selected for training, task performance measures are constructed, existing courses are reviewed, and the instructional setting tentatively determined.

Gantt Chart: A horizontal bar chart used in project management that graphically displays the time relationship of each step in managing a particular project.

Gap Analysis: The analysis of the difference between where you are now and where you want to be. Understanding what the gap is helps to focus the training and determine later on whether you have been successful or not.

Goal: An end state or condition toward which human effort is directed.

Handbook: A document prepared specifically to provide guidance information. Handbooks are used for the presentation of general information, procedural and technical use data, or design information related to commodities, processes, practices, and services.

Handout: Supporting information to be used by the learner as reference material in a training program.

Hard Skills: A term used to describe technical skills or skills that result in a tangible product (*as opposed to Soft Skills*).

Human Capital: A term used to describe the collective knowledge, skills, competencies, and value of the people in an organization.

Human Resource Development (HRD): An organized learning experience, conducted in a definite time period, to increase the possibility of improving job performance and growth.

Immediate Confirmation: Reinforcement and feedback are most effective when given as soon as possible after training.

Implementation Phase: The fourth of the Instructional System Design phases. The instruction is delivered to the learners during this phase.

Individual Development Plan (also known as a Learning Plan): A detailed plan of learning activities and experiences that describes what learners will do and use; associated with the competency-based approach to training and with self-instruction.

Information Mapping: A method for communicating information in a structured way. It provides an organized approach for presenting new information, ideas and relationships between information.

Instruction: The delivery of information to enable learning. The process by which knowledge and skills are transferred to students. Instruction applies to both training and education.

Instructional Analysis: The procedures applied to an instructional goal in order to identify the relevant skills and their subordinate skills and information required for a learner to achieve the goal.

Instructional Design: The philosophy, methodology, and approach used to deliver information. Some courseware aspects include question strategy, level of interaction, reinforcement, and branching complexity.

Instructional Method: A component of the instructional strategy defining a particular means for accomplishing the objective. For example a traditional instructor led instructional strategy may be accomplished using the lecture method, a Socratic lecture technique, and a defined step-by-step questioning procedure. Also called "method of instruction".

Instructional Setting: The location and physical characteristics of the area in which instruction takes place. The setting can be in a classroom, a laboratory, a field, or workplace location. An example is: a clean, well lighted, temperature controlled classroom equipped with individual desks, chairs, and individual video monitors.

Instructional Strategies (also known as Learning Strategies): Activities that determine how learning will take place, including role plays, games, case studies, facilitative discussion and simulations. The approach used to present information in a manner that achieves learning. Approaches include tutorial, gaming, simulation, etc. Aspects of instructional strategies include the order of presentation, level of interaction,

feedback, remediation, testing strategies, and the medium used to present the information.

Instructional Technology: The use of technology (computers, compact disc, interactive media, modem, satellite, teleconferencing, etc.) to support learning.

Instructor: An individual who gives knowledge or information to learners in a systematic manner by presenting information, directing structured learning experiences, and managing group discussions and activities.

Interactive Training: An umbrella term that includes both computer-based and multimedia training.

Instrument: An HRD device such as an assessment, checklist, questionnaire, survey or test used to gather information.

Job Analysis: The process of identifying all duties and responsibilities and the respective tasks done on a daily, weekly, monthly or yearly basis.

Job Description: A formal statement of duties, qualifications, and responsibilities associated with a job.

Learning: A relatively permanent change in behavioral potentiality, that can be measured, that occurs as a result of reinforced practice; gaining knowledge, skills, or developing a behavior through study, instruction, or experience.

Learning Activities: Events intended to promote trainee learning.

Learning Curve: A curve reflecting the rate of improvement in performing a new task as a learner practices and uses her newly acquired skills.

Learning Decay: A decrease of learned skills over a period of time. Decay can be retarded by the conduct of sustainment training.

Learning Management System (LMS): Infrastructure platform through which learning content is delivered and managed. A combination of software tools perform a variety of functions related to online and offline training administration and performance management.

Learning Objectives: Statements about what the learner should know and be able to do as a result of training.

Learning Organization: Any organization where learning never ends, in which a continuous process of improvement is systemic and allows for organization and individual growth.

Learning Strategies (also known as Instructional Strategies): Activities that determine how learning will take place, including role plays, games, case studies, facilitative discussion and simulations.

Learning Style: An individual's approach to learning that involves the way he or she behaves, feels, and processes information.

Learning Taxonomy (Bloom's Hierarchy): A taxonomic classification of cognitive, affective and psychomotor behaviors for the purposes of test design invented by Benjamin Bloom and his colleagues.

Lesson: A segment of instruction that contains a learning objective and information to be imparted to the student.

Lesson Plan: A detailed plan of instructional activities and describes what trainers and facilitators will do and use.

Lifelong Learning: The concept of 'continuous personal development' through student centered (self-actualized) learning.

Likert Scale: A linear scale used in data collection to rate statements and attitudes, for example a scale ranging from 1 to 5

Massed practice: Performance of all the practice at once.

Media: The means by which material is presented to learners; e.g. film, slides, computers, etc.

Mentoring: The career development practice of using a more experienced individual tutor or group to share wisdom and expertise with a protégé over a specific period of time. Three types of mentoring commonly used are one-on-one, group or virtual.

Metrics: Numerical attributes that are used as the basis for judging productivity, proficiency, performance and worth.

Mind Map: A record of information that uses branching lines to relate connections of topics to one another in idea association.

Model: A representation or example of an idea, object, process or phenomenon used in describing ideas and processes.

Module: A unit of instruction, especially one that can stand alone, to be learned independent of other units.

Needs Analysis: A process uses to pinpoint the cause of a perceived training problem. The amount, kind and depth of training that needs to be developed is identified. The first step that should be completed before attempting to design a training program.

Objective: A target or purpose that when combined with other objectives, leads to a goal. Examples of learning-related objectives are: **Behavioral** which specifies the particular new behavior that an individual should be able to perform after training; **Affective** a learning objective specifying the acquisition of particular attitudes, values or feelings; and, **Learning** a clear, measurable statement of behavior that a learner demonstrates when the training is considered a success.

Organization Development (OD): Various activities and interventions designed to improve the relationships between people and business units.

Pedagogy: an informal philosophy of teaching that focuses on what the instructor does rather than what the participants learn. Usually references the teaching of children.

Performance: The accomplishment of a task in accordance with a set standard of completeness and accuracy.

Performance Analysis: The process by which professionals partner with clients to identify and respond to opportunities and problems, and through study of individuals and the organization, to determine an appropriate cross-functional solution system. Performance analysis is a systematic and systemic approach to engaging with the client. It is the process by which we determine when and how to use education and information resources.

Performance-Based Instruction: Instruction which develops learner performance proficiency via task-based learning objectives written with an action verb. Learners prove competency by actual performance of the objectives to the established standards.

Performance Deficiency: The inability of a unit or individual to perform the required tasks to the established standard.

Performance Gap: The delta between desired and actual performance.

Performance Improvement: A systematic process of discovering and analyzing human performance improvement gaps, planning for future improvements in human performance, designing and developing cost-effective and ethically-justifiable interventions to close performance gaps, implementing the interventions, and evaluating the financial and non-financial results.

Performance Measures: The actions that can be objectively observed and measured to determine if a task performer has performed the task to the prescribed standard.

Programmed Learning: A procedure that provides information to the learner in small steps, guarantees immediate feedback concerning whether or not the material was learned properly and allows the learner the pace with which she can go through the material.

Reinforcement: Law of effect states that people tend to repeat behaviors that are rewarded and avoid behaviors that are punished.

Segmented Training: Modification of existing formal courses into discrete portions.

Seminar: Formal presentation by one or more experts in which the attendees are encouraged to discuss the subject matter.

Sequencing: Arranging the teaching points, teaching steps, and criterion steps into the most appropriate order for effective learning.

Sequential Training: The ordering of training so that the learning of new or more complex skills/knowledge is built on and reinforces previously learned material.

Skill Assessment/Analysis: The systematic review of component attitudes, aptitudes and practices of experienced workers within a particular job.

Skill Deficiency: Are non-performers not performing as desired because they don't know how to do it? If their lives depended on it, would they still not be able to perform?

Skill Derivation: With a task analysis in hand, it is possible to answer the question, "What would anyone have to know or be able to do before being ready to practice the entire task?" All of the skills that anyone would need to have are systematically derived from the task/skill analysis.

Skill Hierarchy: A picture that shows the prerequisite relationships between skills. It shows which are subordinate to others; that is, which must be learned before others can usefully be attempted.

Smile Sheet (also known as Happy Sheet): A nickname for the instructor and class training evaluation forms used in Level 1 (Kirkpatrick) evaluations.

Soft Skills Training: Refers to the type of training that does not have a tangible product result. Typically, this type of training encompasses skills training in the areas of communication and presentation, leadership and management, human resources, sales and marketing, professional development, customer service, team building, etc. (See also *Hard Skills Training*)

Spaced Practice: Several practice sessions spaced over a period of hours or days.

SWOT (Strengths, Weakness, Opportunities and Threats): An analysis tool used in strategic planning to establish environmental factors from within and outside an organization.

Subject Matter Expert (SME): A person perceived to have significant expertise and organizational credibility in a particular subject matter.

Synchronous Training: A scenario that involves the trainer and the trainee participating at the same time. It often refers to electronic or web-based training.

Systems Thinking: A conceptual framework that encompasses the whole, making patterns (and ways to change them) more understandable.

360-Degree Feedback: A performance assessment process where appraisals come from a variety of perspectives, including co-workers, clients, internal and external customers and supervisors

Target population: The total collection of a population that is scheduled to enter a given instructional program.

Task Analysis: The process of identifying the specific steps to correctly perform a job function. The task analysis involves the systematic process of identifying specific tasks to be trained; and a detailed analysis of each of those tasks. Task analysis information can be used as the foundation for: developing instructional objectives, identifying and selecting appropriate instructional strategies, sequencing instructional content, identifying and selecting appropriate instructional media, and designing performance evaluation tools. It is always done in the context of a specific job. It facilitates training program design by providing a description of the fundamental elements of a job.

Teaching point: The smallest increment of information to which a learner may be expected to respond; a statement of fact or a procedural step in the performance of a task; the precise information you want a learner to know or respond to.

Training: Learning that is directly related to the person's current job. Training is required on the basis of a need for improved current job performance.

Training Needs Analysis: Assessment of the training requirements of a target group in terms of number of trainees, their educational and professional background, their present level of competence and the desired behavior or skill level acquired at the completion of training.

Training Objective (also known as Learning Objective or Course Objective): A statement of what the instructor hopes to accomplish during the training session. Measurable intended end result of a training program expressed in terms of the desired behavior or skill level, conditions under which it has to occur, and the benchmark against which it will be measured.

Training Plan: Trainer's outline of the training process he or she will use in a training program.

Training Program: A significant long-term training activity which comprises a series of courses and usually has a flexible time and cost budget.

Transfer of Learning/Training: The process of learning delivery and retention and implementation back on the job.

Workshop: Training class or seminar in which the participants work individually and/or in groups to solve actual work related tasks to gain hands-on experience.

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A – Z List of Instructional Strategies

Behavior Modeling: A technique in which desired behavior is shown to learners. The behavior is analyzed and studied; then follows an opportunity for learners to practice the behavior with guidance and feedback.

Blended Learning: The practice of using several training delivery methods in one curriculum. It typically refers to the combination of classroom instruction and any type of training that includes self-directed use of online capabilities.

Brainstorming: An instructional strategy that promotes the generation of ideas without evaluation or analysis.

Buzz Group: A large group is divided into smaller groups for the purposes of having a quick discussion. Smaller groups meet simultaneously for a short duration to react to a topic, generate ideas or questions, discuss an issue, etc. Also known as a small group discussion.

Case Study: A written account of a real or fictitious event or situation, including facts and opinions in enough detail for learners to analyze the problem or problems presented and make decision to solve the problem.

16

Action Maze: A variation of a case study in which learners solve a problem or case by making decisions. Their decisions determine what they will see or handle next. The consequences of the decisions learners make provide them with insight and feedback.

Mini Case – A modification in which a brief situation or scenario is described and learners discuss how the case should be handled. Usually characterized by only key facts and by brevity in discussion. Often used to give examples of situations and procedures.

Clinic: Trainees meet to analyze a problem they have encountered and script potential responses.

Coaching: A process in which a more experienced person, or coach, provides a worker or workers with constructive advice and feedback with the goal of improving performance (See also *Mentoring* which focuses on career development and advancement).

Collaborative Learning: An instructional approach in which learners and instructors share the responsibilities for learning and work together to determine how the session should progress.

Cracker Barrel Presentation: Features a number of guest speakers seated at various stations throughout the training room; participants rotate among the stations/experts.

Debates:

Formal – Features a recognized set of rules and traditional procedures. Learners present best arguments for and against a proposal or question and try to defeat the opposing team.

Informal – Features a more flexible set of rules. The purpose of an informal debate is to help learners work together to understand a common issue; to hear other points of view; and to express opinions about topics that matter to them.

Didactic Design: Instructional design in which the student is presented information and asked to respond to questions.

Demonstration: Learners observe the performance of a task or procedure. The demonstration may be live or pre-recorded.

Demonstration-Performance Method: A learning experience in which students observe and then participate in a sequence of events designed to teach a procedure, a technique, or an operation, frequently combining oral explanation with the operation or handling of systems, equipment, or materials.

Discovery Learning: Learning without a teacher; usually in a controlled (i.e. pre-designed) set-up, and under supervision.

Drill: A session of repetitive practice designed to increase efficiency, improve the quality of performance, or aid retention.

DVDs: DVD's, videos, etc. are often used to grab attention, present information quickly, illustrate hard-to-grasp concepts, demonstrate correct and incorrect performance of skills, and to motivate viewers.

E-learning: A term covering a wide set of applications and processes such as web-based learning, computer-based learning, virtual classroom and digital collaboration. Delivery of content may be via the Internet/Intranet/Extranet, audio and video tape, satellite broadcast, etc.

Energizer: An activity designed to invigorate a group.

Exercise: Structured learning experiences supported by instructions and debrief explanation with application to the job; allows for discovery or application of concepts.

Face-to-Face (F2F): Students and teachers are in the same location at the same time.

Facilitative Discussion (Facilitation/Guided Discussion): A planned, two-way discussion where the facilitator draws out learning points from the learner by asking questions. As the learners make the points, the facilitator supplements and applies the learning and transitions to the next learning point. Best used when learners know something about the topic.

Fish Bowl: A modification of a large-group discussion in which the group is divided into two smaller groups. The “inner” circle discusses an issue or does an exercise while the “outer” circle observes and then offers observations and feedback. Discussion can then be reversed.

Games: Training activities that blend activity, competition and fun with simulation.

Gaming: A technique in which the student is presented situations involving choice and risks. The choices and the consequences resemble real-life situations, and the players are reinforced for various decisions. Gaming is typically an enjoyable learning method for the student.

Graphic Organizers: A handout that helps trainees take notes during a movie, a lecture, etc.

Guidance Package: A complete self-instructional package that guides the learner through various methods and media to achieve specific learning objectives and directs the learner activities in the performance of a task.

Guided Discussion Method: A learning experience in which students participate in an instructor-controlled, interactive process of sharing information and experiences related to achieving an instructional objective.

Hands-on: Student practice on actual equipment, simulators, or training aids.

Handbook: A document prepared specifically to provide guidance information. Handbooks are used for the presentation of general information, procedural and technical use data, or design information related to commodities, processes, practices, and services.

Handouts: There are three types of handouts. 1.) Those that help trainees follow as the instructor makes a presentation or guides a discussion, such as topic outlines, models, diagrams, or a few key words for note taking. 2.) Those that are task oriented, such as the rules and procedures for an activity or game, case studies, answer sheets, etc. and 3.) Those that provide learners with continued opportunities for learning after training has ended, such as pertinent quotes, bibliographies or resource sheets, reprints of articles, etc.

Icebreakers: Activities conducted at the beginning of training programs that introduce participants to one another, may introduce content and in general help participants ease into the program.

Internet-based Training: Delivery of educational content via a Web browser over the internet or intranet. It provides links to learning resources outside of the course, such as references, email, bulletin boards, and discussion.

Interview Subject Matter Experts: Learners are provided the opportunity to interview and question a resource person. Sometimes the interview is conducted by someone else and the learners simply observe. Other times, interviewing is assigned to pairs or small groups as an activity meant to occur outside of class time.

Introduction: A major section of a lesson designed to establish a common ground between the presenter and students, to capture and hold attention, to outline the lesson and relate it to the overall course, to point out benefits to the student, and to lead the student into the body of the lesson; usually contains attention step, motivation step, and overview. A segment that provides a general statement of the course content, target population, why the student is studying the material, and appropriate motivation to gain the student's attention.

Jigsaw: Learners are divided into groups of no more than five “home” groups. Each group researches and becomes an expert on a particular piece of a topic, theme, or issue. Home groups are then divided to form new “expert” groups (each expert group includes one learner from each of the home groups). Each member of the expert groups shares specific expertise with the others.

Job Aid (Performance Aid): A device designed for use on the job and providing guidance or assistance on the performance of a specific task or skill. May be printed or on-line. Used in situations where it is not feasible or worthwhile to commit the procedure to memory before on-the-job activity. Often these are paper-based and posted on the wall in plain sight or in a small reference notebook. They can also be decals, manuals, cards, etc. Job aids reduce the amount of recall necessary and minimizing error.

Just-in-Time Training (JITT): A method of providing training when it is needed. Its advantages are: Eliminates the need for refresher training due to subject knowledge loss experienced if training proceeds over an extended period of time (prevents decay if the learner cannot use the material upon returning to the job). Prevents training being wasted on people who leave the job before the training and allows the learners to receive training when they need it...not weeks or months later.

Key Questions: Distribute key questions to think about before viewing a movie, giving a lecture, etc. When done, debrief with the entire group by discussing the questions. Alternatively, ask the group to shout out questions about the topic that they hope will be addressed. Ask the group to bear these questions in mind as they watch the movie, listen to the lecture, etc.

Lead-off Question: A question initiated by the presenter that is usually directed to a group of students at the beginning of a lesson or main point and designed to generate discussion.

Learning Contracts: A method for providing individualized instruction and developing learner responsibility. Contracts map-out, in advance, what the learning plan will be; what the learner and instructor/organization will commit to doing; and may identify a specific time period, resources, etc.

Learning Log: A useful writing-to-learn strategy that provides learners opportunities to document a continuous record of their learning's, reflections, reactions, thoughts, and plans; and to review their log from time to time to discern patterns, gain insights, recognize progress, etc.

Lecture: Information as knowledge, theories and concepts presented in a one-way format by the facilitators; participants ask questions for clarification.

Mind Map: A mind map is a diagram or graphic organizer used to represent words, ideas, tasks, or other items linked to and arranged around a central key word or idea. Usually used to generate, visualize, structure, and classify ideas and to aid in study, organizing, problem solving, brainstorming, decision making, and writing.

Modeling: The facilitator or some other leader (e.g., videotape) demonstrates a skill or behavior, which is then analyzed and practiced by the learners. Learners receive feedback on their practice.

Multimedia Training: An instructional system that incorporates all or various instructional methods and media. It describes any application that uses multiple media (graphics, text, animation, audio, video), but multimedia is primarily thought of as any application that uses high-bandwidth media (audio and video) and is most often delivered on CD-ROM.

Nudge Your Neighbor (or Neighbor Discussions): A quick method to create participation and engagement of learners. Learners are asked to speak to the person next to them for a few minutes to raise an issue, answer a question, generate a question to ask, review content just covered, etc.

On-Line (Web) Training: See internet-based training and web-based instruction.

On-the-Job-Training (OJT): Formal training for learning the skills and knowledge to perform a job that takes place in the actual work environment. Usually, a professional trainer or an experienced employee serves as the course instructor, and employs the principles of learning (participation, repetition, relevance, transference, and feedback). Often supported by formal classroom training.

Panel / Stump the Chumps: Veteran employees form a panel of 3 to 4 members and field questions, sample phone calls, etc. from the audience. If the question is not adequately fielded, then the questioner is allowed to take a spot on the panel.

Peer Review: Form pairs. Ask each pair to designate one of their members as “A” and one as “B”. Flip a coin to see who begins. If A wins, A explains to B the content just covered, the movie just viewed, etc. as if B hadn’t even been in the room. B can ask questions along the way. When all are done, the “B’s provide the entire group with a synopsis of what the A’s have told them.

Practical Exercise: A technique used during a training session that permits students to acquire and practice the knowledge, skills, and attitudes necessary to successfully perform one or more training objectives.

Practice: Repeated and systematic performance to gain proficiency using the psychomotor, cognitive, and affective skills, acquired in the training phase. Initial practice occurs while the student is acquiring skills; proficiency practice occurs at intervals after training so that the skills may be refreshed. Practice enables the student to perform the job proficiently.

Quiz: A short test administered by the instructor to measure achievement on material recently taught or on any small, newly completed unit of work. Can be oral, written, online.

Readings: Learners are assigned materials to read in order to cover course content or prepare for a group discussion. Assignments can occur before, during, or after training sessions.

Reflection: Learners are given time to review and think about what has been learned, assess its applicability, or think about how to make it work in their setting.

Role Plays: A structured exercise where learners are given a problem situation and assigned predetermined roles. The learner must reenact the situation and solve the problem situation.

Scenario Planning: Adapted from military intelligence, an analysis and planning method used by organizations to make flexible long-term plans.

Self-Paced Learning: Learning initiated and directed by the learner. The term is used by some organizations now to include computer-based, web-based and multimedia training.

Self Study: An independent training activity for the learner which may take the form of reading; a tutorial accessed via the internet; a CD or DVD, etc.

Self Teaching Packages: Self instructional study units sent to the learner's location.

Shout-Out: A quick method for review. Ask the group to shout out a number between 3 and 10. Say someone shouts out 5. Ask the group to shout out five key points about the content just covered. As they shout out, the instructor counts until five has been reached. Instructor adds any important pieces that have been left out or any erroneous information. Optional: Reward any additional key points made beyond five. Can be implemented with small groups as well.

Simulation: Any representation or imitation of reality. An instructional strategy used to teach problem solving, procedures, or operations by immersing learners in situations resembling reality or job-like conditions. The learners actions can be analyzed, feedback about specific errors provided, and performance can be scored. Simulations provide safe environments for users to practice real-world skills. They can be especially important in situations where real errors would be too dangerous or too expensive.

Slip Writing: A quick method of generating questions from learners by asking everyone to write their main question on a slip of paper and pass it to the instructor. The instructor reads all the questions and either answers or refers questions back to the group. Can be used to enable learners to ask questions anonymously.

Storyboard: A series of pictures which support the action and content that will be contained in an audiovisual sequence.

Storytelling: One method used during training. It refers to a facilitator or trainer who explains key lessons or themes out of his or her own experience or that of others and then related the experience to the topic.

Study Guide: Materials that provide a map for learners to follow in learning a subject. Can include many types of activities and materials. Used individually or in groups.

Tabletop Analysis: Using a facilitator, a small group of (3-10) subject matter experts convene to identify the various tasks to be performed. Through brainstorming and consensus building, the team develops a sequential list of tasks. Following this process, the team determines which tasks should be trained. Task selection is based on the frequency, difficulty, criticality and the consequences of error or poor performance.

Teach Back: A technique in which participants are given a portion of content that they introduce to the rest of the participants in a classroom training setting.

Tutorial: An instructional program that presents new information to the student efficiently and provides practice exercises based on that information. A lesson design used to teach an entire concept. Interactive instruction that asks questions based on the information presented, requests student responses, and evaluates student responses. It is self-paced, accommodates a variety of users, and generally involves some questioning, branching, and options for review.

Vestibule Training: A variant of job rotation in which a separate work area is set up for a learner so that the actual work situation does not pressure the learner, (e.g. cockpit simulator).

Web-Based Instruction (WBI): Web-based Instruction is delivered over public or private computer networks and displayed by a Web browser. WBI is available in many formats and several terms are linked to it; on-line courseware, distance education on-line, etc. WBI is not downloaded computer-based training (CBT), but rather on-demand training stored on a server and accessed across a network. WBI can be updated very rapidly, and access to the training controlled by the training provider.

World Cafe: A conversational process, the World Café is an innovative yet simple methodology for hosting conversations about various topics, questions, and issues. These conversations link and build on each other as people move between groups, cross-pollinate ideas, and discover new insights into the questions or issues that are under focus. As a process, the World Café can evoke and make visible the collective intelligence of any group, thus increasing people's capacity for effective action in pursuit of common aims. For more information, go to: <http://www.theworldcafe.com/>.

Workbook: A handout that contains procedures and exercises designed to assist the learner in achieving the learning objectives.

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Selecting Instructional Methods Checklist

	Yes	No
Are instructional strategies based on the learning objectives?	<input type="checkbox"/>	<input type="checkbox"/>
Have the learning needs of trainees been taken into account?	<input type="checkbox"/>	<input type="checkbox"/>
Are methods long enough to accomplish the objectives and short enough to keep trainees' attention?	<input type="checkbox"/>	<input type="checkbox"/>
Are instructional methods appropriate for the amount of time available overall?	<input type="checkbox"/>	<input type="checkbox"/>
Are the strategies too costly to develop in terms of time, money, or resources?	<input type="checkbox"/>	<input type="checkbox"/>
Are methods focused on the tasks and sub-tasks that are the most important or the most difficult to learn?	<input type="checkbox"/>	<input type="checkbox"/>
Are there some activities that can be handled by a job aid or supplemental handouts?	<input type="checkbox"/>	<input type="checkbox"/>
Are there an adequate number of review activities?	<input type="checkbox"/>	<input type="checkbox"/>
Are the methods selected appropriate for the size of the group?	<input type="checkbox"/>	<input type="checkbox"/>
Are the methods selected appropriate for the learning styles of trainees?	<input type="checkbox"/>	<input type="checkbox"/>
Do activities adhere to adult learning principles?	<input type="checkbox"/>	<input type="checkbox"/>
Are learning activities geared towards trainees' jobs (job relevant)?	<input type="checkbox"/>	<input type="checkbox"/>
Are a variety of methods included?	<input type="checkbox"/>	<input type="checkbox"/>
Are some methods over-used?	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

Sources:

- Langevin Learning Services: <http://www.langevin.com/>
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