An Overview: Exactly what are teaching models and why are they so important to the quality of instruction?

Simply put models of teaching deal with the ways in which learning environments and instructional experiences can be constructed, sequenced, or delivered.

If you are a practicing educator at any level, you may not yet realize this, but you need not reinvent the wheel when you are looking for effective ways to teach. There are literally hundreds of models of teaching and learning. To reiterate, simply put models deal with the ways in which learning environments and instructional experiences can be constructed, sequenced, or delivered. They may provide theoretical or instructional frameworks, patterns, or examples for any number of educational components -- curricula, teaching techniques, instructional groupings, classroom management plans, content development, sequencing, delivery, the development of support materials, presentation methods, etc. Teaching models may even be discipline or student-population specific.

Models of teaching and learning are critical pieces to instructional planning and delivery because they help educators:

1) develop highly tuned and more varied professional repertoires;
2) allow them to reach larger numbers for students more effectively;
3) create either more uniform, or varied, or effective instructional events, guided by targeted subjects, content, or processes;
4) understand curricular foci better, especially as different models can be matched specifically to both learning outcomes and/or targeted learning populations;
5) gain needed insights into why some methods work with some learners, while others do not;
6) radically modify or redesign existing methods of teaching and instructional delivery so that emerging or altered instructional techniques may better meet the needs of today's students.

If you have ever used elements from Gardner’s Multiple Intelligences, or Madeline Hunter’s lock-step lesson formula for Mastery Learning, or Bernice McCarthy’s Learning Styles 4-mat Model, or KWL (know, want to know, learned), or the Graffiti Model, or perhaps Six Traits Writing, or the Fishbowl Discussion model to formulate and deliver a lesson, then you have already used a teaching model. You may have even created your own models of teaching but didn’t know it.

Aligned to teaching beliefs:

Traditionally, models of teaching are represented by a broad array of teaching systems, each system containing a distinctive philosophical foundation, or theory of learning basis, with related pedagogical methodologies. Most models can be loosely fitted into one of four or five distinct families of educational psychology - social; information-processing; personal; behavioral systems are the traditional ones, with constructivist added lately. Models falling into the first four categories have strong histories of research, development, and usage as most have been both refined and tested in the field. Plus, each of these divisions, to include constructivism, has a
distinctive theory of learning orientation. (A test of four family preferences – see which one you believe in most. Four Families Philosophy Survey and the key four family test key)

Often what happens in schools is that school administrators buy into a certain philosophical orientation. Based on those beliefs administrators may choose favorite models to want to see implemented in their schools. They may also offer mandatory professional development training in related models with the strong expectations of seeing all teachers using the selected methods.

But what happens when teachers don’t have the same belief system that guides the chosen model? When there is no alignment between one’s personal beliefs and suggested or imposed practices, teachers tend to bulk at using these methods, often simply shutting the door and hoping to teach in their preferred way.

An example of a model vs belief conflict: While intellectually I realized the potential power of behavioral management models to actively change students’ actions, at least in the short term, throughout my public teaching career at a deeply personal level I had a strong aversion to using these techniques as my first course of action. Many of the methods labeled as behavioral modification use operant conditioning as a basis. At a deeply rooted level I don’t appreciate treating children like trained seals – for me it chafed at my professional and personal beliefs. This aversion does not mean that I was incapable of using behavioral techniques. Indeed, schools by the very nature of the organization of the institution are very rooted in behavioral models. If I noticed that students were only motivated by external rewards or punishments, I could certainly implement behavioral models, but emotionally I never felt fully committed to these methodologies. Indeed, if I started out having to use extrinsic behavioral rewards, often I would gradually phase these techniques out in favor of more intrinsic methods.

My end point is that each family of models has strengths and weaknesses, and there is a great deal of diversity in the available array of models. A preference for one set of models over another does not necessarily imply superiority or heightened usefulness. It may simply be the compatible alignment of ones underlying beliefs to those that direct the model. There are no one-size-fits all models of teaching, and all models are not appropriate for all instructional scenarios. In point of fact, there are models that are a better match for certain tasks. Increasing the diversity of one’s teaching techniques is the primary power of learning about models. The more models teachers investigate and practice, the more techniques they will have at their disposal and the better their chances at optimizing efforts to successfully reach and teach their students.

Details - Families of models:

Basically there are two types of models of teaching – ones that can be cleanly categorized and placed into one of the classic philosophical orientation groupings - social; information-processing; personal; or behavioral systems; or ones that are hybrid/mixed models that have combined elements from different families of learning like those that can be labeled as constructivist.

Descriptions of each of the traditional families:

Personal source (aka Personalist): This group of approaches acknowledges the uniqueness of each learner. Methods in this category foster the importance of individuals in creating, directing, and structuring personal meaning. Also models in this area are often targeted to foster things like self-esteem, self-efficacy, emotional and personal understanding and acceptance. Carl Roger’s Non-directive Teaching Model would be a good example for this group.

Social interaction: This group of methods aims at building learning communities and purports to develop productive ways of interacting in a democratic setting. These models also emphasize that human learning occurs in social settings and through modeled behaviors and social exchanges. The Schaftel’s Role Playing Model is one of
the more popular models in this group. Donald Oliver’s The Jurisprudence Model also exemplifies a form of social learning.

Information processing: This is the largest grouping of approaches aimed at emphasizing ways of learning specific information and of acquiring and organizing data, solving problems, and developing concepts and language. As the categorical title obviously implies, models confined to this category deal with intellectual development, powers of reasoning and logic, aiding students in organizing and retaining information, and in enhancing their metacognitive functions. Primary examples designate in this area of might be David Ausubel’s Advanced Organizers, or Jerome Bruner’s Concept Attainment models.

Behavioral: Behavioral techniques are amenable to highly structured outcomes that concentrate on observable objectives such as learning to read, physical skills, behavioral and emotional adaptations and restructuring. These models are highly structured with finite goals toward specific pre-determined ends. B. F. Skinner is one of the more well know developers of behavioral techniques like his Operant Conditioning.

Common features: Models usually contain common features and these may include:

- An identified purpose or area of concentration (For instance the Six Traits Writing Model is designed for writing, while Synectics was formulated to stimulate creative thought and solutions);
- Underlying explicit and implicit assumptions about the characteristics of learners and about the teaching-learning process (These are directly tied to guiding tenets of the different divisions of educational psychology and theories of learning. For instance in Behavioral Models students are seen as being generally passive but able to respond and to be motivated through different forms of directed stimulation.)
- Guidelines for developing specific educational experiences;
- Definite patterns and requirements for each instructional event; plus
- A body of research surrounding their development and implementation, and/or an evaluation of their effectiveness.

Traditional Parts of a Model:

In Joyce, Weil, and Calhoun’s Models of Teaching (2008) they note that in order to be designated a bona fide model, it should qualify in 6 of the following areas.

Focus is the central intent of the model. Focal components revolve around the main objective of the model. Is it the focus of the learning event to encourage learning by manipulating thought or types of thinking; growth in learning through external stimuli or rewards; social learning, or social and emotional growth through interaction; or increased levels of self-achievement and personal growth through personally directed choices? Models are usually developed with a focus, an end-game, or specific intention in mind. For instance, Madeline Hunter’s very popular Mastery Teaching concept focuses on presenting materials in a tightly controlled, very repetitive way so that learners have optimal opportunities to get content, concepts, or processes right the first time. Another example – in cooperative learning models the focus is on the importance of social interchange and peer support in learning new things. Therefore models differ one from the other in terms of their primary objective or focal point of their intended outcomes.
**Syntax** describes the model’s structure and includes the sequence of steps involved in the organization of the model. It includes the major components and the phases of unfolding, or the sequencing of steps, and describes how the model progresses. Obviously the syntax can be quite different for each model.

**Principles of Reaction** tell the teacher how to regard the learner and how to respond to what the learner does during the use of the model. Often responses in using a designated model should be appropriate and selectively specific. This element is concerned with the teacher’s reactions to the students’ responses. This portion of the model alerts the teacher on how to react to the responses of the students. It is here that the teacher learns whether the learners have been actively involved in the model’s processes and steps.

**The Social System** describes the interactions between students and teacher as each model is viewed as if it were a mini society. Since every teaching model is different, each model will have its own social system and rules of engagement. This portion concerns the interactive roles and relationships between the teacher and the student, expected norms, and which student behaviors should be rewarded. These may be overtly described or simply inferred. Depending on the philosophical orientation of the model, in some models the role of the teachers is dominant, while in others his or her role is passive. In some models the roles center on the teacher, and in others the concentration is on the students. There are still other models that require shared roles whereby teachers and students share roles equally. In this segment both motivational strategies and tactics for engaging students could be discussed too.

**Support system** defines the supporting conditions required to implement the model successfully. ‘Support’ refers to any additional requirements, beyond the usual general human skills and capabilities, that are needed to implement the model. This component relates to any additional requirements beyond those generally possessed by teachers or found in schools. What requirements are needed to make this model work? Are special skills or knowledge needed; or is there special equipment, media, or learning environment requirements that need to be accessed in using this model? This support would also include special books, films, laboratory kits, reference materials, permissions, facilities, etc.

**Application and effects** are rather apparent – how can the students use what the model teaches? Application is the utility of the model as it can be transferred to other situations. Each model attempts to implement some change in learners and influence their thinking, feelings, social interactions, or physical movements in some way so that those changes can be transferred to other situations and experiences.

**Leslie’s Note:** Many models of teaching were created long before Joyce, Weil and Calhoun developed their 6 elements of a model list above. In the models these authors selected for their book they examine the individual components for each chosen model thus making it easy for readers to see how each category works. But for the many teaching models not showcased in the Joyce, Weil, and Calhoun *Models of Teaching* text you may have to dig into the literature surrounding the model to discern if all, or any, of the 6 elements are there.

**Samples of Models and Links to more information:** *Underlined model titles indicate links in the description.

**Leslie’s Note:** Sometimes the supposed “official” classification of selected models changes as classifications can be somewhat subjective depending on the philosophical orientation and educational intentions of the model and the viewer/user. This should not diminish their effectiveness or value, but rather it is a condition of time and personal analysis. Different classifying authors see different elements. As I indicated earlier, many models are hybrids combining elements from varied theories of learning and this makes them more difficult to pigeon hole correctly.

**Examples of Existing Models with Their Common Family Classifications:**
The listing below is not fully conclusive but places to start your searches. Readers are encouraged to seek out additional models on their own using the titles of the models as search descriptors.

- I have linked some examples of materials from the WWW but you too can find them using the title of the model. Additionally, for use with their classic text on models, Pearson Publishing has sponsored a website that is designed to be a companion to their Joyce, Weil, and Calhoun text at modelsofteaching.org and this may be a good place to augment your online investigations. It is exceptionally helpful in that they have gathered links from YouTube whereby viewers can actually see examples of teachers using or demonstrating the models, or parts of models.
- There are also general teaching strategies sites that include links to both models and individual strategies. A good example of an excellent resource is Kelly Jo Rowan’s site.
- In the listings below, there are hypertexted beginning links, and those selections with an * asterisk are ones where there are links within the definitions. Please explore those examples for more ideas.

Please, if you find exceptional examples, write to me so I too can add this information and we can spread the word! If a link is down please contact me so that I can remove or correct the link.

**Personal or Personalist Models:**

- **Nondirective teaching**: Focuses on self-awareness, understanding, autonomy, and self-concept (There are a number of Prezi’s (Notasha Folarin), PPTs, and articles (ASCD) on this concept online)
- Developing Positive Self-Concepts
- **Relaxation and stress reduction**: Exploring personal goals for relaxation, or using self-initiated relaxation techniques to calm anxieties in social settings. There are many models that use this theme as a basis.
- **Selection, Detection, Connection Model**: A self-directed teaching model for highly intrinsically motivated high school students.

**Social Learning Models:**

- **Classroom Meeting**: Strengthens responsibility towards self and others. This model has rules and structure and specified intentions.
- **Cooperative or Collaborative Learning**: Collective arrangement and division of tasks, sharing results and ideas. There are a number of authors claiming this model - significantly Johnson and Johnson, and also Robert Slavin. There are also cooperative models that have more specific purposes like the Jigsaw Model.
- **Graffiti Model**: Graffiti is a cooperative learning structure in which students are asked to give written responses to questions posed by a teacher
- **Group Investigation**: Focuses on interpersonal group skills as students engage in acquiring information
- **Jigsaw Model**: Originally, the jigsaw concept was developed in the 1960’s to facilitate racial integration. As an educational model it falls into the Social Family of methods. There are several variations of this model. Here is another page on creating jigsaw lessons, a sample lesson plan using the model.
- **Jurisprudential**: Uses the jurisprudential frame of reference to solve social issues (see 2nd example)
- **Laboratory Method**: Group/interpersonal skills, personal awareness, and flexibility skills are stressed in this model
- **Role Playing**: Role play as a teaching strategy PDF by Jarvis, Odell, and Torioano - In role play students assume roles and become the source of their inquiry.
- **Sociodrama**: Students assume roles, acting out issues in order to facilitate awareness and understanding about concepts or important issues
- **Social Inquiry**: Problem solving using social issues
Information Processing Models: (this is the fastest growing family of models)

- **Advance Organizer Model**: Increases the efficiency of information-processing capacities. There are several kinds so there is a lot of possibilities and varieties - expository, narrative, skimming, or graphic. This piece from John Hendron is an excellent overview of the process and usage of this model, plus he has included samples and resource links.

- **Cognitive Growth Development**: Mainly focuses on general intellectual development

- **Cognitive Views of Learning**: Focuses on the processes within the learners. Strategies are developed to encode and retrieve information (Kauchak & Eggen, 1998)

- **Critical Thinking**: Deals with a series of dialogs and exercises designed to get students to think at higher levels and at levels that engage critical appraisal or critical thinking. (see the works of Richard Paul for primary methods and examples.[Paul, 2005])

- **Inductive Thinking Model/Inquiry Training Model**: Focuses on the development of inductive mental processes and academic reasoning. This model includes the work of Hilda Taba who is linked below. Here is fun and informative overview of teaching the inductive process and a comparison of how it differs from the direct teaching from Byrdseed.

- **Concept Attainment**: Focuses on developing inductive reasoning & conceptual knowledge

- **Inquiry Training**: Engages students in causal reasoning, and aids them in developing hypotheses

- **Learning Styles Model**: These plans are devised and written reflecting concepts developed by one of the learning style theorists or followers (such as Kathleen Butler or Bernice McCarthy, Dunn and Dunn, etc.)

- **Memorization**: Improves memory capabilities through a variety of methods and tricks. There are a number of inventive and helpful sites like Williamette's on ideal conditions for memorizing, or commercial sites like Memorize.com with all kinds of cool functions to help students create memory devices. Study guides and strategies also has a great page about create mnemonic devices to aid recall.

- **Multiple Intelligences**: MI plans utilize, or are based on, those 8 intelligences described in the work of Howard Gardner. Samples of related plans here. There are many, many excellent sites based solely on MI Theory.

- **Multi-modal Learning Model**: These plans reflect varied modalities used to encode and retrieve learning. There are generally two basic variations - VAK [visual, auditory, kinesthetic] and VARK [visual, aural, reading, kinesthetic]. See Neil Fleming seems to have gone commercial, his site and test are an excellent overview on modal differences for beginners exploring this concept.

- **Picture Word Inductive** or PWIM - Developed by Models of teaching author Emily Calhoun this model is geared to help children in developing sight and written vocabulary drawing on commonly familiar words. There is also and excellent YouTube demonstrations of this model.

- **Scientific Inquiry Model**: Instructor teaches students the research system of a subject or discipline. Problem solving may be utilized in this model

- **Synectics**: Creative problem solving (Gordon, W. J. J. [1961] and also George M. Prince) In earlier versions of this model it was placed in the Personalist category, later versions place in in the Information Processing format. Personally I think this is where it belongs

- **Taba’s Inductive Reasoning Model**: Advanced thinking can be taught through a series of steps designed to be an active transition between an individual and data. This is a very powerful model and there are a number of good links explaining this concept. Here are two - one simple and one more detailed example from a short research paper from Dr. Mujibul Hasan Siddiqui

Behavioral Models:

- **Desensitization**: Replacing anxieties with relaxation

- **Direct Teaching**: Expert or intermediary offers information this method in probably the oldest method among the teacher-centered models. Also it is more than likely the most universally experienced form of teaching for most of us. This link provides a brief overview but also offers a comparison with other student-centered methods, while this link offers a comprehensive definition of direct instruction with citations.
• **Direct Training**: Develops distinctive predetermined patterns of behavior. Like direct teaching an expert shows a novice how to do something. This is readily used in trade schools and in situations where there are gradations of apprenticeship toward a desired skill or goal.

• **Behaviorism**: Emphasized the importance of observable, external events on learning and the role of reinforcers in influencing those events (Kauchak & Eggen, 1998)

• **Hunter Model, also Mastery Learning**: A highly structured approach to teaching whereby plans are devised using the classic, repetitive lesson model developed by the late Madeline Hunter

• **Self-control**: Uses a series of rewards and internal dialogs to correct or improve social behavior

• **Simulation**: Students deal with hypothetical or social situations and various processes to help their decision-making skills. Progression to an end goal or specified understanding or outcome is plotted.

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**Examples of hybrid or mixed models:**

- **Awareness Training**: Emphasizes self-awareness and interpersonal awareness

- *Constructivism*: An eclectic view of learning that emphasizes: This site does an excellent job of explaining constructivist planning - [Thirteen EdOnline](http://www.thirteen.org/edonline).
  
  - Learners construct their own understanding rather than having it delivered or transmitted to them.
  - New learning depends on prior understanding.
  - Learning is enhanced by social interaction.
  - Authentic learning tasks promote meaningful learning. (Kauchak & Eggen, 1998)

  Constructivist models can be
  - Problem based learning
  - Project based learning

- **Contingency Management**: Deals with facts, concepts, and skills
- **The Flipped Classroom Model** - A succinct, comprehensive overview of the model
- **Holistic-learning**: The focus of holistic education is on relationships - the relationship between linear thinking and intuition, the relationships between various domains of knowledge, the relationship between the individual and community and the relationship between self and Self. In the holistic-curriculum the student examines these relationships so that he/she gains both an awareness of them and the skills necessary to transform the relationships where it is appropriate (Miller, 1988)

- *Paideia*: A model that attempts of instill egalitarian education to all children through the study of enduring classics in an educational system based on the great, unchanging themes and works of human kind. These are topics and works that are timeless, endless, classic – they are the big ideas contained in great works of art, literature and science. Paideia focuses on helping all students to acquire, remember, and understand basic ideas, skills, and facts. The model uses three main methods of teaching - the lecture, coaching, and seminar and is linked through Socratic dialogues between students and teachers. There are numerous website showing schools that use this method.

- **Positive interdependence**: Focuses on achieving personal goals by finding and networking with individuals with like concerns or goals. (Realistically this model melds both personal interests with social needs to establish connections with others with the same goals or concerns. I have also seen it categorized as both a personal model and as a social model.)

- **Problem Solving Model**: These plans reflect general rules for developing skills used in solving problems. In this process the teacher develops a problem; carefully accesses skills needed to solve the problem; and creates conditions and/or parameters that act as guidelines for products or solutions; these same conditions and parameters also serve as evaluation criteria integrated approach to education.

- **Renzulli's Triad Enrichment Model**: Planned inquiry is accelerated through personally chosen research interests
• **Socratic Method:** Using specialized instructor dialogues as a means of direct teaching and to encourage critical thinking and appraisal (Hyman, 1970)

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**A Personal Testament:**

In all of my 310+ credits in higher education, *Models of Teaching and Learning was one of my the most important graduate classes – EVER! I have two very strong regrets about this course. The first is that I wish it had been part of my undergraduate teacher preparation training. My other regret is that this course is not more universal in teacher training programs, or mandatory in advanced educational graduate sequences.

Based on these thoughts, as a professor in teacher education I tried to bring some of the simpler models into my undergraduate classes in educational psychology. Content in educational psychology traditionally covers the distinctive families of learning and the theories that drive them. Adding models of teaching that exemplified these theories seemed like a natural addition to the course so that students could see how theory bridged into practice.

Although many of my students artfully incorporated this training into their lesson planning, I am still not wholly certain they grasped fully the importance of knowing about teaching models. Later in my university career I also developed an online graduate class focused on the models topic. At least at the graduate level I was glad to observe that most of my students did get the importance of knowing about teaching and learning models. Many also had the same initial reaction I did – "why didn't I have this course as an undergraduate?"

That noted, learning about models may be one of those topics that increases in importance and ease of acceptance and applicability as folks age in their professional wisdom and experience. I still feel very compelled to try to spread the word to a broader cyber audience hoping to convince those readers interested in being excellent teachers that learning about teaching models is a very important topic in one’s professional array of teaching tools. This posting is an alert that many models are out there and an encouragement that as an educator you should try to find out more about them beyond this simple introduction.

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**Recommended Texts:**

There are several excellent books on models of teaching. For an overall introduction into the world of models I am partial to the one by Joyce, Weil, and Calhoun. For years, Bruce Joyce and Marsha Weil have been perceived by educational leaders as paramount experts in the area of teaching and learning models. Recently they have joined with Emily Calhoun. In all my years of teaching this content as a graduate level course, I have had no student who was willing to let go of his/her text for resale. They all agreed this is one of those books that was a must have in their collections of professional references. In my mind that is quite an endorsement.

- Joyce, B. & Weil, M., w/Calhoun, E. (2014) *Models of teaching, 9th edition*, Allyn and Bacon. (Pearson Publishing) This is an expensive text but a jewel of a professional reference. If you don't want to buy it for yourself, see if you can get your media specialist or administrator to purchase a copy for your institution's professional development library. Unlike many other reference books, one of the premiere elements in this volume is the Appendix. It is full of very useful forms, and not only ones that will help readers implement the models, but ones designed to improve teaching practices and professional self-evaluation. Again, as noted above, this newer edition encourages readers to use the companion website @modelsofteaching.org, where there are linked videoed examples of demonstrations of many of the models. This video cache from Pearson is an extremely valuable resource!
There are also books on teaching models for special populations. For readers interested in models designated for use with those children who have been labeled as “gifted” learners I would suggest.


References


For further investigations

Other models of teaching explained in this site:

- **The Flipped Classroom**
- **The Madeline Hunter Model**
- **The selection, detection, connection model** - An self-directed, inquiry learning model

Online resources

This list is intended to merely provide examples of sites where you can find more information on models of interest. If you have resources you’d think might provide examples of other models, please send them to me for consideration.

- **Models for teaching science** – schema listing an array of models used in teaching science.
- **University of Central Florida** - Models - Short overviews of the specific steps in several examples of models
- **Concept to Classroom – An overview of 3 constructivist models**