Gaining Attention and Stimulating Motivation

Kim E. Dooley, James R. Lindner, & Larry M. Dooley

What are Gagné’s Nine Events of Instruction and how do these events impact lesson planning? Why use icebreakers and openers in the lesson? How do you stimulate learner motivation? What kinds of things should be included in the lesson closing segment?

Introduction

We are constantly building mental models of the environment we experience. The cognitive map provides a link between the thought process and the physical environment. About 95 percent of all new learning takes place through sight, hearing, and touch. Obviously, most of what comes in through the senses is sorted out very quickly through our perceptual or sensory registry. This process occurs in 3-5 seconds and must go into short term memory for actual processing. Information that is transferred to short-term memory can remain active for about 15-20 seconds without rehearsal and generally has a limit of about 5 items. We can think of short-term memory as a work bench area where we can build, take apart, or rework ideas for eventual storage. It is difficult to remember things for very long, such as a phone number we use for pizza delivery, unless we decide that the information is important. Does this information make sense? Do I understand the information based upon experience? Does it fit into what I know about how the world works? Is it relevant? What is the purpose? If the learner decides that the information presented makes sense and has meaning, then it is more likely to be stored in long-term memory (Atkinson & Shiffrin, 1968; Good & Brophy, 1986).

Making a Memory

Memories are located throughout the brain. Explicit long-term memories are formed in the hippocampus while implicit long-term memories are formed elsewhere. Recall is found in specific locations in the cerebral cortex. The integration of facts and factoids blended with beliefs and experience, imbued with emotion, are combined and stored in different parts of the cortex forming the foundation of recall or reassembly as needed.

Source: Zull, 2002

What does this brief introduction on memory have to do with lesson planning and gaining attention? Everything! Once the instructor moves from the planning
stages of instructional design to the delivery of the program, the ultimate goal is to provide learning objects and authentic experiences to help the learner store the information (knowledge, skill, attitudes, or ability) for use at a later time. That is what we call learning.

**Learning Objects**

Quality instruction achieves its objectives with minimal cost and maximum effectiveness. One way to achieve this goal is through the use of learning objects. Specifically, learning objects are smaller chunks of instruction often stored in a database (rather than a full course or program) that can be used for a variety of settings and audiences. This helps to ensure integration, interoperability and reusability. “The challenge lies in establishing useful standards and relatively seamless processes that can be readily adopted, implemented, maintained and improved by a critical mass of people and organizations” (Hirumi, 2003).

Learning objects contain a measurable objective, an activity, and an assessment that are classified by metadata (Brennan, Funke, & Andersen, 2001). Metadata standards recognize that learning objects can have different attributes, such as document type, document format, didactical context, difficulty level, and interactivity level. While such attributes tell us if we are dealing with an audio, video, text or a graphic file, they do not require objects to contain fundamental instructional elements, such as objectives, activities, assessments, or feedback. Sequencing is difficult to create if you just string together a bunch of small learning objects. Objects assembled from various settings would have no pedagogical or andragogical relationship to each other.

Learners who access objects directly from a database may find them lacking if they do not contain essential instructional elements (Hirumi, 2003).

**Gagné’s Nine Events of Instruction**

How do we ensure that the appropriate instructional elements are present? We believe that it is necessary to create lesson plans to incorporate the objective, activity, and assessment components of the learning object, regardless of the media used. A commonly accepted lesson sequence is the use of Gagne’s Nine Instructional Events.

Based upon the work of Merrill, Li, and Jones (1990), a new design model entitled ID² or Second-Generation Instructional Design Model was based upon Gagne’s work. This model makes a strong link between learning outcomes and the internal/external conditions of learning. In the ID² model, performance is the result of cognitive structure or mental models. The construction of the mental model is facilitated by the instructional strategy and sequence and therefore promotes different learning outcomes (Merrill, Li, & Jones, 1990).

Smith and Ragan (1999) also elaborate on Gagné’s theory, suggesting that the Events of Instruction do not consider learner-centered instruction. The Smith and Ragan model, called Comparison of Generative/Supplantive Strategy (COGSS), helps instructors, instructional designers, and learners determine the balance between instructional strategies and learning strategies based upon context, learner, and task variable. It is evident that Gagné’s work has impacted other instructional design models and theories of teaching and learning.
In Gagné’s book, *The Conditions of Learning* (1965, 1970, 1977) he describes nine events of instruction that serve as guiding principles for designing instructional strategies. We believe that these events can still serve as a guidepost for lesson planning for distance education, if the instructor and/or instructional designer include opportunities for engagement and assessment centered on the learner. We will provide a synopsis and virtual learning example of each event below.

- **Gain Attention (Reception)** – This event helps the learner prepare for the instructional events that follow. It consists of getting acquainted and setting the stage for instruction. The use of icebreakers/openers to help build rapport with the instructor and other learners is a great way to gain attention at the beginning of each learning object. Providing an overview of the equipment, software, and/or plug-ins necessary to access the course content is another dimension of this event. The instructor can send a letter or email to the learner before the course or training program begins to provide a logistical and technological orientation. Learners can also post a bio on the course webpage to help the instructor and other learners get to know one another and bridge the transactional distance. A short survey about technology knowledge and skills can also be given to serve as a needs analysis.

- **Inform the Learner of the Objective(s) (Expectancy)** – The second event involves making the learner aware of the instructional objectives. The instructional design process mentioned the importance of developing objectives, but do not keep them a secret! This encourages the focus on requirements, expectations, evaluation criteria, and materials to be covered. In a learner-centered environment, this can be negotiated with the learner to ensure applicability and transfer of training that is relevant. In a course delivered on-line, the objectives can be listed at the top of the webpage to help the learner gauge the focus of the content, necessary activities, and assessment components.

- **Stimulate Recall of Prior Learning (Retrieval)** – In a learning sequence, stimulating recall allows the learner to scaffold or connect “old” knowledge or skills to help store new information in long-term memory. For example, if teaching or training on a topic with multiple lessons or themes, ask the learners a question pertaining to the previous lesson and tie that into the new content. This can be done as text on the webpage after citing the objectives, in a discussion forum, or through an opening video or audio segment to introduce the new material.

- **Present the Content/Provide Stimuli (Selective Perception)** – For this event, it is important to emphasize active techniques, ones that will help the learner retain the new knowledge, skills, or abilities (competencies), and encourage critical and creative thinking, interactions, and problem-solving. It is important to chunk content in a meaningful way, and to use a variety
of media types to accommodate different learning preferences. Keep in mind that a learning object should stand alone, so do not include references to lesson or module numbers in the media, so that it can be used in another course or program. Reference to the sequence of the content should be made in the interface design instead.

- **Provide Learning Guidance (Semantic Encoding)** – This is the event that helps learners store the information in long-term memory so it can be retrieved later. Activities such as guided note taking, questions, discussion, follow-up activities, interactive study guides, etc., provide opportunities for learning guidance. Provide advanced organizers, such as printed copies of your presentation materials and instructions for small group or virtual team (collaborative learning) assignments.

- **Elicit Performance (Response)** – This event allows the instructor/facilitator to determine if the learner has acquired the necessary competence based upon the instructional objectives. If the objectives were negotiated, as suggested by SCenTRLE (Hirumi, 2002), then meaningfulness and relevancy will be enhanced. This also promotes self-directedness and stimulates motivation for the learner.

- **Provide Feedback (Enforcement)** – Gagné contends that this event helps the instructor/facilitator determine if the intended objective (learning outcome) can be consistently performed and reinforces correct behaviors. Based upon SCenTRLE, we believe that providing feedback is an integral step throughout the learning process and should be a component of every learning activity. This requires special facilitation skills (and time management).

- **Assess Performance (Retrieval)** – This event is an extension of the previous event, in that it determines learner performance based upon outcomes. With SCenTRLE, the learner would develop an evaluation rubric and have expert authenticators determine if the process/product reach the desired learning goals. On a lesson planning level, daily or weekly “performance” checks may take on a more informal role, to include an e-mail confirmation or electronic discussion of progress.

- **Enhance or Reinforce Retention and Transfer (Generalization)** – And finally, the ninth event provides cues/strategies and practice of the newly learned knowledge, skills, or abilities to ensure they are retained and can be applied to new situations. This is extremely important when working with adult audiences. By negotiating learning objectives and outcomes, chances improve that the learner will create an experience that will transfer to their work or educational setting.

**Icebreakers and Openers: Why Use Them?**

The first event of instruction is *Gaining Attention*. This can be done through the use of icebreakers and
openers. Think of it like an IOU—
Icebreakers and Openers increase Understanding. People tend to remember things in threes and most people can remember acronyms. You might think the IOU will be money or a nice prize and it will probably pique your interest (or extrinsic motivation). This is one example of a simple technique to focus attention prior to the delivery of new content.

According to The Winning Trainer (Eitington, 1996) you have two ways to start a course or training program: introduce the group to the content or ease the group into things before directly involving them in the content. An icebreaker is used to ease participants into the learning experience before involving them directly in the content. Icebreakers are typically used to reduce tensions and anxieties, energize the group, and set the tone for the program. In contrast, an opener is used to introduce participants to the content at the outset of the experience. You only have one chance to make a good first impression. Whatever you do sets the stage for your philosophy, style, confidence and competence.

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<th>On-line Icebreaker Ideas</th>
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<td><strong>Two Truths and a Lie</strong> – Have participants send two truths and a lie over a course listserv or threaded discussion list (either whole class or in smaller virtual teams). Have the other learners respond with their guess of the lie.</td>
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<td><strong>Write Your Own Epitaph</strong> – Participants will think about where they think life will lead them (goals and aspirations) and then write their epitaph as others would view their contributions.</td>
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<td><strong>Pass It On</strong> – Each participant will develop a question to “pass on” to the next participant (example: where was the tallest tree you have ever climbed?). The participant then e-mails the question to another participant. The second participant answers the question and then e-mails the response along with the original question on to the next person. The process is repeated until everyone has had a chance to answer. Then the responses are returned to the originator of the question.</td>
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<td><strong>Name Game</strong> – Have each learner create a mnemonic of their first name and use that to describe themselves. Here’s an example. My name is Corky and I have a crazy sense of humor and love to have fun. My hobby is Amateur Radio. My wife is much younger than I and we have a 4-year old. I teach a freshman “Orientation to College” course, and as an “old” guy (compared to by students) I enjoy the company of youngsters.</td>
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Why should you use icebreakers and openers? Icebreakers and openers can serve as an audience analysis and a means to build rapport between the instructor and learners. For example, learners can provide a short bio about themselves and what they would like to learn during the course or training program. This helps the learners get to know each other, helps the instructor determine learning goals and interests, and allows the learners to use the communication technologies in a non-threatening way. This is true in any instructional setting, but even more so in distance education. During the opening segment of the lesson, you will want to “warm up” or energize the participants, inform the learner of the objective(s), stimulate recall of previous lessons (if applicable), and provide advanced organizers to help the learners visualize the path of instruction. Even if you are not confident thinking up your own icebreakers or openers, a variety of web-sites and resources are available to assist you. Most are designed for face-to-face settings, so you may need to adapt them for e-learning.

Using icebreakers and openers helps to build knowledge and make links to past information. It is also an opportunity to vary the pace and learning style preferences. When planning the opening for the lesson, you should consider the composition and expectations of the group, nature and length of the program, culture of the sponsoring organization, and style and personality of the instructor (Eitington, 1996). When making your selection of the icebreaker or opener you will use, think about the amount of time it will take, the novelty of the approach, the creative quality, and whether it will be interesting and exciting, or threatening to the participants.

Stimulating Motivation

Based upon Gagné’s Nine Events of Instruction and the use of icebreakers and openers, let us consider instructional strategies for stimulating motivation and interaction. Motivation theory is not considered to be its own theory of instruction. Motivation theory does fit within the models of instruction that deal with conditions, strategies and goals.

There are four major dimension of motivation within instructional theory: 1) interest, 2) relevance, 3) expectancy, and 4) satisfaction. Interest can be described as stimulating learner’s curiosity. Relevance is determined by whether the instruction satisfies the learner’s personal needs or goals. Expectancy determines the learner’s perceived likelihood of success and feeling of learner control. Satisfaction is determined by how well the learner enjoyed the learning experience.

There is a belief that motivation results from the interaction of various reinforcers that are positive (carrots) and negative (sticks). Grades are often the sticks and carrots of the formal classroom. Grades reflect motivational qualities, such as self-discipline and competitiveness, in addition to academic achievement. When working with adults, what are the differences between intrinsic (self-defined) and extrinsic (externally defined) motivation? External forces are tangible “rewards” while intrinsic forces include personal satisfaction, feelings of self-determination, and competence.

Instructors most skillful at motivating learners recognize the great variations in academic abilities, interests, and attitudes. Because extrinsic motivators are powerful and widespread in our culture, learners are influenced by rewards such as grades. Instructors who de-emphasize
grades and encourage intrinsic motivations must consider activities and evaluation strategies to stimulate learning. Learning does not occur as a result of the design and delivery of the media, but rather by what the learner does with that media. True meaning and understanding of the instructional content takes place when the learners are immersed in the content through engagement and active participation.

Driscoll (1994) noted four components of motivation and corresponding strategies for each. The first is gaining and sustaining attention. We discussed capturing the learners’ attention in the previous sections. Other approaches include stimulating lasting curiosity with problems that invoke mystery and maintaining attention by varying the instructional presentation. The second component of motivation is enhancing relevance. Strategies to enhance relevance include: increasing the utility of instruction by stating (or having the learners determine) how instruction relates to personal and professional goals; providing opportunities for learners’ to match their motives and values with occasions for self-study, leadership, and cooperation; and increasing familiarity of instruction by building on learners’ prior knowledge and abilities. The third component of motivation is building confidence. Strategies that create a positive expectation for success by making instructional goals and objectives clear and provide learners opportunities to successfully attain goals and have a degree of control over their own learning are most effective. The fourth component is generating satisfaction. Create opportunities for learners to use newly acquired skills and use positive reinforcement to compliment their skill development. Also, ensure that standards of assessment are consistent and match with the outcomes designated in the course objectives.

These components are important reminders to put learner-centered instructional design into practice. We will explore various media that can facilitate this process in later chapters. As you begin to design the lessons for online delivery, consider that learners who are motivated can learn regardless of the delivery strategy or medium used (Heinich, Molenda, Russell, Smaldino, 1996). See Table 1.
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<th>Component of Motivation</th>
<th>Corresponding Strategies</th>
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| Gaining & Sustaining ATTENTION | • Capture students’ attention by using novel or unexpected approaches to instruction  
• Stimulate lasting curiosity with problems that invoke mystery  
• Maintain students’ attention by varying the instructional presentation |
| Enhancing RELEVANCE | • Increase the perception of utility by stating (or having learners determine) how instruction relates to personal goals  
• Provide opportunities for matching learners’ motives and values with occasions for self-study, leadership, and cooperation  
• Increase familiarity by building on learner’s prior knowledge |
| Building CONFIDENCE | • Create a positive expectation for success by making clear instructional goals and objectives  
• Provide opportunities for students to successfully attain challenging goals  
• Provide learners with a reasonable degree of control over their own learning |
| Generating SATISFACTION | • Create natural consequences by providing learners with opportunities to use newly acquired skills  
• In the absence of natural consequences, use positive consequences such as verbal praise, real or symbolic rewards  
• Ensure equity by maintaining consistent standards and matching outcomes to expectations |

Closing the Lesson
Just as important as gaining attention in the beginning, the lesson sequence should have a definite closing and component that assures that the learning can be applied to other settings. Learners need meaningful opportunities to apply their learning to work or life in general. The activities used throughout the lesson or course should culminate in an exercise that allows the learners to synthesize the content and make application. Activities such as observation-assessment, practical assignments, role plays, post-session action plans, and contracts can help ensure skill retention and transfer (Eitington, 1996). The closing should also include a wrap-up and review of content delivered and opportunities for evaluating the course and its delivery strategies.

Now that we have examined the events of instruction, how to open and close our lesson, and how to stimulate motivation in our learners, we should have the necessary elements to put these strategies into practice.

References


