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EDUC 641- Learning Theories and Instructional Practice

Learning Theories in the Workplace

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09 July 2017

Abstract

This paper explores the Robert Gagné's Conditions of Learning and Motivational Theory in a corporate workplace environment. The three key points that will be addressed in the paper are the setting, performance standard, and strategy. The setting for the practice will be to apply the learning theories to working adults without prior requisite knowledge of the material. The performance standard will include in-class instruction, visual learning, group assignment, and scenario based assignments that requires the learner to implement material learned from the steps of learning. Motivational theory will supplement Gagné's conditions to address how Motivational Theory can follow the students' thoughts and requirements on individual achievement.

Keywords: conditions of learning, motivational theory, corporate training

Introduction

There are many learning theories used to address different stages of learning. The theories that will be addressed are Robert Gagné's Conditions of Learning and Motivational Theory. Gagné's conditions include Intellectual Skills, Cognitive Strategies, Verbal Information, Motor Skills, and Attitude. To implement the conditions of learning, Gagné's has nine steps that are used to create the instruction necessary for the retention of information by the learners. Motivational Theory addresses the "focus on factors that influence students' engagement in achievement-related activities" (Gredler, 2009). Most learning theories focus on the idea of implementation whereas Motivational Theory addresses the students themselves and how they think to achieve what they want to achieve.

Conditions of Learning

Robert Gagné's conditions were first created for military training. The idea behind Gagné's conditions were structure due to the environment that it was originally created for. The first condition that is address is Intellectual Skills. Intellectual skills are considered the students basic skills. Intellectual skills are the bases of the students learning. This is where students take information that they have acquired such as "speaking, writing, and reading and, in mathematics, using the rules for computation, interpreting word, problems, and verifying problem solutions" (Gredler, 2009). This helps the students put together words and using numbers to compute numerical figures in equations. You cannot simply observe to and gain knowledge but rather the students must put forth the effort to be able to put the information together in a cohesive manner.

The second condition that is addressed in Gagné's conditions is Cognitive Strategies. According to Gagné's, this is the students' way of identifying how they learn. Students would begin to assess their own information retention by learning, remembering, and their thought

process. This is where the students begin to put theories together such as learning the keys to specific spelling of words by following a specific guideline, how to solve problems by focusing on specific word structures in a sentence and where the students can check their own understanding of the material. According to Gredler (2009), “cognitive strategies also assist individuals to manage their thinking by helping them determine when and how to use their verbal information and intellectual skills” (p. 150).

The third condition in Gagné’s theory is Verbal Information. This begins in early childhood when the student first learns how to speak from watching their parents and other people. The toddler begins to learn certain words associated to objects, animals, places, and people. They begin to associate specific words to their mother and father. This is one that continues throughout life as they continue to learn more words associated with the things around them. Through Verbal Information, the learner uses “(a) labels and facts, (b) meaningfully connected selections of prose or poetry, and (c) organized bodies of information” (Gredler, 2009). Verbal information is not just the retention of knowledge but rather how the individual associates this retention to everything around them.

For Gagné, the fourth condition is Motor Skills. To Gredler (2009), she believes that, in some way, all performances can be considered Motor Skills. This is due to the idea that everything requires an action of some kind whether the individual is actively calculating a solution or doing a particular movement. For Motor skills, however, it is difficult to assess the learning and improvement. The individual can learn specific actions by watching and overtime can improve their learning by constant practice. Motor skills are described as “(a) the requirement to develop smoothness of action, precision, and timing and (b) the quality of performance can be attained only through repetition of the exact movements (with feedback from

the environment)” (Gagné, 1997a, 1984, 1985). To learn each action, the individual would first have to learn the order in which it takes to complete the action, then it requires putting the order together and completing the actual task at hand, and with constant practice and feedback will develop the necessary timing for the individual to continue this action with precision and smoothness. The action itself will become automatic over time and would not require a thought process to continue to do the action.

The last condition that was addressed by Gagné was Attitude. This condition is more difficult to understand and analyze because it is much different from the four conditions before it. Attitude depends on the individual and there is no real way to assess how the attitude of the individual will be in a specific learning environment. Gagné (1997a, 1985) addresses that attitude has three aspects and that includes cognitive which is where it expresses relationships associated with learning, the second is affective and this addresses feelings, and the last is behavioral which is shown through readiness or predisposition. Parents and institutions alike try to teach students attitudes or how they should react in a specific situation however, the attitude that are taken on by the students all vary on their own individual beliefs and reinforced by their surroundings and learning through other factors such as television and games.

Using these conditions of learning, Gagné created the nine events for instruction. The first step was to Gain Attention. This action requires the instructor to bring the attention to the students as to why the instruction will be taught. This addresses what the students will be gaining from the instruction that will be presented and how it will benefit them. By gaining the attention of the students, this sets the ground work for the class and help the students understand what they are in the training for. The second step that is addressed is informing the learner of the objectives of the class. Address with the learners what the instructor plans for the students to obtain

throughout the training and what they should be able to do following the completion of the training. This helps the students know what they are supposed to expect from the training.

The third and fourth step is to stimulate recall of prior information and then present the new information to the learner. The recall of the information can be at any point in time. The instructor brings back information that the students have learned either from the day before or from another training session. This sets the base for what the students can expect to build on. Once there is a base for the students, the instructor can then present the new information that the students are expected to learn.

The fifth step is to provide guidance on how the students are expected to complete specific tasks. This can be the instructor providing the students with a list of steps that they can follow to complete the task. The sixth step is to elicit the students' performance. This step requires the students to be able to perform the task based on the information provided and the guidance that the instructor gave to them. This can include putting students into groups and providing them with a scenario in which they would have to apply the information that they have learned to the scenario for a solution.

The seventh step is to provide feedback. This step requires the instructor to evaluate and provide the students with suggestions or additional assistance. Step eight and nine is to assess the performance and enhance retention and transfer of information. The assessment can be that the instructor provides the student with a list of questions to answer or a set of tasks for the students to perform based on the information provided. The students would be assessed based on how well they perform the tasks that are required from them. The retention of information would be for the instructor to address it later and ask the students to perform the task again or for the

instructor to watch them perform the task on the job. In a workplace environment, the last step is very important especially if it is supposed to be part of an everyday function.

Motivational Theory

The study for Motivational Theory addresses the students' "disposition to either strive for success or avoid failure as key motivating factors" (Gredler, 2009). Motivation theory has moved more beyond the classroom into the real world settings and addresses three different types of achievement-related motivation which includes the expectancy-value model, goal orientation, and attribution theory (p. 392).

There are multiple factors that are used to assess the motivational theory and these include the individuals' particular characteristics. It can be affected by social norms and what is perceived to be expected of the individual. Other factors can include the students' perceived reaction to their success and failures, watching others performance and what the students believe to be success and failure and measuring themselves to those standards.

The first model that is addressed is the expectancy-value model. This model, per Gredler (2009), is cognitive and not fully a motivational theory. This is based on the students' expectations due to a factor that they want in themselves such as striving to go to a specific college and having to place well in a specific class due to the college's value on that characteristic. The students would orient their learning to achieve this particular requirement for themselves.

The goal orientation model is different from the expectancy-value model in that the students set the goals for themselves and what purpose they are aiming for to achieve. The performance level is set by the student and can be motivated by things such as ego, the want to master their performance, or the desire to learn the specific topic in its entirety. This theory is

very different due to the fact that it is student driven and not a standard from social norms or any other determining factors besides for the student themselves.

The last in motivation theory is the attribution theory. This is different from both the expectancy-value model and the goal orientation model due to the drive sparking from the outcome driven by the individuals' achievement. The student is now driven to engaging in this particular achievement activity due to an outcome that they were able to gain success from a task.

Strengths and Weaknesses of Gagne's Conditions of Learning

Gagné's Conditions of Learning has many strengths but in turn, also has several weaknesses in his theory. The strengths would be that the instructor would be able to engage the students in the learning material, build student confidence level, structured learning sessions, and the focus on learning retention. With the structure of the nine events of learning, the instructors would be able to present the information to the students in a very specific set of steps. This can be very beneficial for students who prefer instruction in a very structured manner. This also provides students with the ability to interact and learn from other students when if the instructor allows for group learning in step six of the nine events of learning where the instructor elicits the performance. Gagné's conditions of learning also helps build student confidence due to the instruction and giving them the ability to first elicit the performance and receiving instructor feedback prior to being assessed. The students would have the chance to first perform before they are tested on whether or not they understand the material.

The leading weaknesses that was addressed against Gagné's conditions of learning is that the structure of learning may not be ideal for all students. Some learners may be hindered by the repetition of learning and can delay their own progress. The goals identified may not be easily

identified as learning outcomes due to all students being assessed for the same information. Some also argues that the structure does not help student flexibility in information and steps. The last thing is that Gagné's conditions may be too structured due to the fact that the learning was originally created to perform military instruction in a rigorous manner and thus not suitable for the classroom outside of a military setting.

Strengths and Weaknesses of Motivational Theory

The strengths identified for Motivational Theory are mainly identified by the individual. This can be based on what they believe they want to do for themselves especially identified in the expectancy-value and goal orientation model. The individual, in the expectancy-value model, determine their successes and failures based on their perceived want such as explained by Gredler (2009) in which she explains the students would attribute their success and failure based on the requirement of a specific higher education school that they want to attend. For the goal orientation model, this is self-generated because the goals are based on individual desire to succeed and it could be for a number of different reasons set by the individual. As for the attribution theory, although this is set by the individual, is more based on emotion that they perceive from first achieving highly in an event that they have completed successfully and well. Some individuals, especially in a work environment, may be driven by monetary gains.

The weaknesses for this theory includes, especially for goal orientation model, is that the student relies too heavily on their expectation of social norms and their environment. If they fail, it would be perceived by everyone, not just themselves and this can affect the student's confidence in continuing to achieve their tasks. This is also very apparent if the student perceives that they do as well as other classmates even though they work harder than others. For the work environment, at a point, the individual would stop being motivated by monetary motivation and

would seek to reach self-efficacy and this may be detrimental to some individuals because they may never reach self-efficacy.

Instructional Problem

In a corporate environment, a big problem is when an instructor has to teach a class for working adults lacking requisite knowledge. In situations where the class is a group of new hire, there will be individuals who has limited exposure to or has never been exposed to the job task or duties that they are required to perform. When this situation arises, a structured class would be more beneficial to the students thus making Gagné's conditions of learning a great fit for the situation.

By using Gagné's conditions of learning, the instructor would be able to implement the nine events of learning and can start off the class by gaining their attention. Since this would be a new hire class where adults lack the requisite knowledge, the instructor can begin with "starting a quiz, question, quote or statistic pertinent to the topic of the lecture" (Ullah et al, 2010). If the instructor starts off with a brief quiz, this can give the instructor a gauge on the learner's knowledge of the material that will be presented during the class instruction but if the instructor starts the class off with either a quote or a question, there could be classroom discussion. The instructor would then be able to decide how the instruction would proceed in a way that is most beneficial to the students by analyzing their answers.

Using the structure provided by Gagné's nine events, the instructor would then proceed by going over the objectives for the class. This ensures that the learner knows what they should be gaining from the instruction that they will be receiving that they. This is also a tool for the students themselves. If they do not understand the material present or the material presented, they do not feel meet the objectives, they can bring this to the attention of the instructor and thus,

the instruction can be modified to meet the needs of the students. The instructor would then implement the next steps to recall any knowledge by asking them questions of either a previous class or any preconceptions they have on the information that the learners may have on the topic. The instructor would then proceed to the next step in Gagné's requirements and teach the material in class. This would be instructional based; the instructor would provide all the information for the students to take notes and listen as they instruct what the learners need to obtain to survive in their work environment. This can be teaching them the required guidelines or how to access specific information from the company itself. The instructor would then provide the learning guidance material for the students to reference such as internal guidelines and or the intranet so that the students can find the information that they need to reference and in turn would at that point elicit performance. In a setting where adults lack prior knowledge of the information that is being taught, the best way would be for them to learn in a group setting. They can also learn as a whole class through specific activities that would further enhance the learners. The instructor could do activities such as information boards with mixing and matching and providing students with answer cards that they have to attach to the correct information on the board. This would be both hands on and interactive for the class.

Next the instructor would provide feedback to the learners. If the instructor opted for the full class activity, the feedback would be for all the learners to learn together. This is a great method because the instructor would not have to single out any individuals but rather would provide feedback to the class as a whole so they don't make the same mistakes in the future. If the class was split up into groups, the instructor would then address each group individually by sitting in on their group discussion of the activity and providing feedback based on what they hear from the discussion.

Once the feedback is provided, the instructor would assess the students with questions where the student would have to answer in front of the whole class or show a demonstration by using the main computer to show what they have learned in practice. The instructor can also distribute an assessment in the form of a test or quiz to gauge student understand of the material. This can be a test where they would have to perform the work on the computer and write their answer down on paper to show their thought process.

Lastly, to ensure that the students retain the information for the job that they have to do, the instructor would refresh the information in class. The best way for students to retain information would be to have refresher questions that reminds students of the information they learned days before. The instructor would also have questions that would require the students to demonstrate train of thought or have to show on the main computer how they would go about finding the information they would need to do their job in the workplace.

To supplement Gagné's conditions of learning, the instructor, during the retention phase, can include motivation by way of giving rewards for correct answers. This can be anything from providing liberty leave or allowing the students to go to lunch early by five minutes. Some students may be driven by physical rewards and praises and the instructor may benefit from having small prizes that the students can showcase on their desk for the duration of the training. This would include the attribution theory into their motivation.

Discussion

For the learning involved in this instructional focus, Gagné's Conditions of Learning plus the addition of Motivational Theory would help with the retention of information for the learners. This is due to the structure of each phase having to be implemented to begin the next one. This situation also addresses the gauging of prior knowledge of the learners themselves.

Although the situation is that the learners have no requisite knowledge of the material that they are being taught however, there may be preconceived information that they have attained in the past in regard to what the topic is about. This can be anything from what the learners have heard in the past, possibly if they did any research on the company during the interview process and even doing any research before entering the job. In a corporate situation where the employee is a new hire, there could be things that they do not know about the company but they have heard about it before and this could affect their learning. By asking if the students have any prior knowledge, the instructor can determine if they need to add more or less information or could address the information that the students think they already know about.

Gagné's idea of eliciting performance after the presenting of the information also helps with the learners because the instructor would immediately require the students to implement the information they have learned. This requires it so that the students would be able to see immediately how to use the information that just acquired into practice. This procedure will help in the retention of knowledge, especially in a situation where the students will have to produce work. Adding in the step of providing feedback to the students is always a very important factor because it is done prior to the students being assessed. This would give them more confidence so that the instructor can address anything that was incorrect with what the students did prior to them being graded on.

Adding in the motivational theory with the retention of information would encourage the student to associate specific information they learn with the rewards they earned in class. This would make it more likely that they are able to retain the information. Although retention of information as part of Gagné's theory in itself, should be able to help the students remember and transfer, the motivation would add a layer that is more encouraging to the individual. For Ullah

et al (2014), they believe that Gagné's factor of information retention to facilitate memory can be more effective. When there is structure, it is easy for the students to follow along and for the instructor to ensure the information that the students are supposed to obtain will met.

Ullah et al (2014):

Teaching can be more effective if the learning events take into account and facilitate memory. Memory has been divided into sensory memory, short term or working memory and long term memory and depends upon encoding, storage and retrieval. Better encoding results in better retrieval or better memory. It depends upon attention, expecting what is to be learnt and association with prior knowledge. It also results from structuring the content to be learnt, reinforcing it with eliciting learner's performance and a positive, corrective feedback. Assessing performance and retrieval/generalization also help in better encoding. Gagné's 9 events of instruction take care of all these processes and thus ensure better learning and enhanced retention of knowledge.

References

- Gredler, Margaret E. (2009). *Learning and Instruction: Theory Into Practice* (6th ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Gormley, D. K., Colella, C., & Shell, D. L. (2012). Motivating Online Learners Using Attention, Relevance, Confidence, Satisfaction Motivational Theory and Distributed Scaffolding. *Nurse Educator*, 37, 177-180.
- Haque, M. F., Haque, M. A., & Islam, S. (2014). Motivational Theories – A Critical Analysis. *ASA University Review*, 8, 61-69.
- Kroth, M. (2007). Maslow – Move Aside! A Heuristical Motivation Model for Leaders in Career and Technical Education. *Journal of Industrial Teacher Education*, 44, 5-36.
- Smith, P. L., & Ragan, T. J. (1996). Impact of R. M. Gagné's Work on Instructional Theory. *Proceedings of Selected Research and Development Presentation at the 1996 National Convention of the Association for Educational Communications and Technology*, 18, 1-18.
- Ullah, H., Rehman, A. U., & Bibi, S. (2010). Gagné's 9 Events of Instruction – A Time Tested Way to Improve Teaching. *Pakistan Armed Forces Medical Journal*, 65, 535-539
- Zhu, P., St. Amant, K. (2010). An Application of Robert Gagné's Nine Events of Instruction to the Teaching of Website Localization. *Journal of Technical Writing and Communication*, 40, 337-362.