

My Learning Theory - LMeP

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### Abstract

There are a lot of different learning theories in the world and it takes a lot to understand fully what each represents and means. At first, I tried to determine which theory is the best of all the theories and try to determine how I would use it in my organization. However, as time progressed, I determined that there is no theory better than the other. Each of them can be used depending on the circumstances of the training and what is trying to be accomplished. I have taken my favorite principles of theories and combined them into one theory “Louis Meeks at eP” or LMeP and show how I would use it in our current organization.

### My Learning Theory - LMeP

There are a lot of learning theories out there and it is a lot to take in and understand. At first it was easy to relate to behaviorism because it was familiar and the easiest to comprehend. But then as my learning progressed, I was challenged with the stages of information processing, Gagné's Conditions of Learning and constructivist theories. There are all so many details and so much to understand and I continued ask myself. Which one do I use in my work? Which one will be the best in our organization? How will I know it is the best? Until I came to the realization that there is not a better theory. Some may argue there is, but I feel all the different theories have different aspects which can be utilized in different areas of learning across many different industries. In the following paper, I will examine a few key principles of some learning theories which interest me, and I will synthesize them into an overall theory and share how it would be utilized in our organization at ePerformax.

### Literature Review - Theory Examination

The Louis Meeks at eP (LMeP) theory of learning utilizes some of the most basic principles from the major theories of learning. To begin with we will look at two key principles from Radical Behaviorism. The first is strengthening a response through positive reinforcement and negative reinforcement. Driscoll (2005) describes positive reinforcement as "...the presentation of a reinforcer (satisfying stimulus) contingent upon a response that results in the strengthening of that response" (p.37). Negative reinforcement is of course the opposite of positive in which the response is strengthened from the removal of an aversive stimulus. A good example of negative reinforcement would be taking the garbage out in order to have your parent stop scolding you. We do the dishes in order to stop the negative scolding from happening. Positive reinforcement would be getting a bonus allowance for every time you take the trash out

without being told. So, we continue to take the trash out so we can receive additional allowance. Both intend to get the same results but do it in contrary manners. Li, Baker, Warren & Li (2016) explained further “Reinforcement learning theory holds that if an action is followed by positive feedback then that action will have a greater probability of being performed again, whereas if an action is followed by negative feedback then that action will have a lesser probability of being performed again” (p.37). From the time we are children are parents have utilized positive and negative reinforcement. As adults we are familiar with this concept. Not directly as a theory, but in principle and process. All training, most especially in the work environment should encompass some positive and negative reinforcement. It encourages and is easy to relate to.

The second piece of Behaviorism I would include in LMeP is the Personalize System of Instruction (PSI). The PSI was created by Fred Keller in 1968 and was intended to create an entire approach to the way college instruction was based (Driscoll, 2005, p. 59). What makes PSI nice is the fact that course materials are divided up into modules so objectives and learning can be done by learners on their own. There are five characteristics that make up PSI. They are: 1. Emphasis on individual study, 2. Self-pacing, 3. Unit mastery requirement, 4. Use of proctors, and 5. Supplementary instructional techniques.

PSI has been utilized and tested in different areas of instruction. However, has largely ceased being utilized. There is some resurgence and some testing being done in different areas. From colleges courses to individual weight training. What is liked, is the control which is in the student’s hands and they are in control of their own destiny. From a study Foss, Foss, Paynton and Hahn (2014) stated, “The instructors also were pleased that students assumed greater responsibility for their learning in the PSI classes.” From this study it was found that retention was increased by the PSI format. Only one student out of 30 in the Rhetorical Theory class and

1 out of 25 in the Public speaking class withdrew (Foss, et al., 2014). This is in part since each student learns on their own and only takes the quizzes when they are ready to take the quizzes. Of course, there are some time limits because everyone must finish within term.

Not only can PSI be utilized in college or just from educating for classroom, it can also be utilized in the fitness world. In 2012, Pritchard, Penix, Colguitt and McCollum did a study on utilizing PSI in a university weight training course. It was a beginner weight training course over a fifteen-week period. At the time of the test there had been a lot of testing done with Physical Education courses and PSI, but none had been done with weight training. At the end of the course and the test, they had super results and great success. "...PSI is an ideal instructional model for fitness and weight training courses" (Pritchard, et al., 2012, p. 349). Participants were active in class and were able to master the content by testing.

The next principle included in my LMeP, comes from cognitive theory and more specifically cognitive information processing. Understanding the stages of information processing and how the mind works from a sensory input to sensory memory to working memory and then into long term memory is what is important. This process helps instructional designers to understand how the mind works so they can design material for it to be retained and retrieved at later dates by learners. According to Driscoll, "the most common explanations for forgetting are failure to encode, failure to retrieve and interference" (2005, p. 102). "Encoding refers to the process of relating incoming information to concepts and ideas already in memory in such a way that the new material is more memorable" (Driscoll, 2005, p. 89). Failure to retrieve is when the individual cannot access what was already learned and interference is when other information gets in the way of retrieval. No matter if we are in education or in the business world, we are continually trying to educate and better our students and employees. We need to

work to make sure the material we are designing is done in a way so it can be retained and retrieved when it is needed. This means we must build instruction which is meaningful and relevant and builds on the previous knowledge so learners can build connections to be utilized in the future (Driscoll, 2005, p. 77). There are a lot of strategies for enhancing the encoding and memory of learners. Chunking, dual code, elaboration in encoding, and rehearsal are just a few. Utilizing these techniques when designing training helps the encoding and memory process along with cognitive information processing.

The final area I would add into the LMeP, is more than a single principle it is a combination of principles, Gagné's Conditions of Learning. Gagné wrote the conditions of learning in 1965 when he was working with the air force and is a combination of his Taxonomy of Learning Outcomes, Conditions for Learning and Nine Events of Instruction. This entire theory model and process has been utilized for many years in the education world and still has complete use today. We are even seeing it now being incorporated into online/technology training (Cicciarelli, 2008, p.27). What makes it reliable is the ability to start with the learning outcome to create a distinct instruction.

All three areas of Gagné's Conditions of Learning are important, but the simplicity of it and the detailed steps make it very use friendly. For example, if we were going to train someone how to put golf, we would first look at the learning outcomes and select the outcome that best encompasses putting golf. This would be motor skills because putting golf is, "... a motor skill when gradual improvement in the quality of its movement (smoothness, timing) can be attained only by repetition of that movement" (Gagné & Paallak, 1984, p.382). We now would look at the critical learning conditions for motor skills and utilize these in our instruction. Starting with, "1. Present verbal or other guidance to cue the executive subroutine, 2. Arrange repeated

practice, 3. Furnish immediate feedback as to the accuracy of performance, 4. Encourage the use of mental practice” (Driscoll, 2005, p. 367). These conditions can critically influence the learning of the outcome. The next step is to make sure and utilize the Nine Events of Instruction in order to facilitate the activation of learning process. The nine steps do not have to be utilized in order, however Gagné believe most lessons should.

Each of these principles and Gagné’s Conditions of Learning on their own might be simple but combined with the other principles of LMeP they make a powerful tool. To begin with, by having and understanding the cognitive information processing, you can design training which will help the learner encode, retain and retrieve relevant material when needed. By understanding positive and negative reinforcement you can overlay this into the encoding and learning process to encourage good behavior and performance. A structured PSI that is designed utilize Gagné’s Conditions of Learning and you have a very strong designed piece of instruction intended for learners to encode, retain, and retrieve as needed. Not all pieces need to be utilized all the time but working together they can create a strong overall course.

#### Application of Theory at ePerformax

ePerformax is a Philippine Corporation which is a joint venture between a U.S. consulting company and a Philippine conglomerate. We handle customer service phone calls, emails, chats, and social media interactions for our Fortune 500 clients’ customers. There are three sites located in different cities in the Philippines with over 4,000 front-line teammates handling all these interactions 365 days a year, 24 hours a day and 7 days a week.

With all our front-line staff and all the different interactions, they get, we are constantly training, upskilling, retraining and trying to close gaps. We are a performance-based company, so we are only good as our worst employee. This means every one of our employees must be the

best at what they do. We are having to constantly upgrade and reinvent what we have done previously. Most especially the training that has been done.

There are four areas of training in the organization: corporate, management, global communications and products specific. For the purpose of this paper I will focus on the global communications training (GCT) and the products specific (PST) training. The GCT is the training in which all our teammates take in order to be prepared culturally and communications wise for PST.

The first thing I would do in our entire organization is add more positive and negative reinforcement into all aspects of our organization. Not only in our training with GCT, but also in our PST and even simple flows such as our on-boarding process. Gamification is how this would be done. I would have an overall game concept in which over-arches all aspect of the organization. You get badges for attainment in on-boarding, you get a badge for mastery of propositional phases in GCT, you get a badge for completion of a PST, a badge for perfect attendance for the month, and a badge for top performance on a key metric as well. All of these are positive reinforcements to great achievements. There are many ways into doing this, but any encouragement we can give at all aspects make it a better place to work. Hsu (2016) shares, "...gamified workplaces have a 24% higher attendance rate."

In addition to the gamification aspect, I would also make sure that all trainers that are facilitating any kind of training understands positive and negative reinforcement. I would design a facilitating with reinforcement course. It does not have to be anything fancy or long, it just needs to explain to our trainers who impact our front line how important it is to give the appropriate positive and negative feedback in the proper manner. I do not think we do enough time in preparing people to handle classes and we have inexperienced people influencing the

outcomes of trainees and employees negatively because they do not know how to do it appropriately.

The next thing I would do is create a PSI for GCT. The GCT currently is a set curriculum however we know there are 20 areas of which could be taught outside of the curriculum and only if it needed to be taught. Each student would take the courses or modules that are required for each of them and it would be self-paced and on their own. They would work on their areas of prepositions, adverbs, and/or past tenses, etc on their own time in the proctored eLearning lab and then when they are done and ready, they would take a quiz. Once they pass the quiz they would sign up for a reinforcement and redirection class in which an instructor would check to make sure each of them has attained level needed. This would be more efficient as it is all personalized and those who did not need a module would have to take it which would eliminate a lot of people being bored with classroom training, they already understand. This would give each of the learners ownership into their own destiny and control of what they were learning and how. All this of course would tie into the badge system and they gain badge as they earn.

For our PST program I would overall the entire program of all 4 clients and utilize Gagné's Conditions of Learning. None of the training which was created by our clients was done in any design format and if it has it has been tweaked or changed by multiple people who train it. In addition, the training is classroom so there are some consistency factors with how it is being presented.

There are a lot of different learning outcomes for these classes: Verbal information, Intellectual Skills, Cognitive Strategies and even Attitudes. Each of these outcomes and the instruction would have to be designed properly so the outcome are accomplished. For example,

our teammates must make decisions on how to handle some 200+ interaction types, but most of the interaction types are a small 25-30. It would be important to implore cognitive strategies in order to get the employee to encode and retain these 25-30 interaction types. Cognitive information processing would become important here to help in the encoding and retention process. In order to do that we would have to do a lot of repetitive and drilling exercises in simulated environments which incorporate visual display.

Instead of all the training being in the classroom, it would become a blended environment with online training and classroom proctored facilitation. The instructor and the online learning would utilize the Nine Events of Instruction to activate the process of learning by 1. Gaining attention for reception, 2. Informing learners of objective fore expectancy, 3. Stimulating recall of prior learning for retrieval to working memory (CIP) 4. Presenting the content for selective perception, 5. Providing “learning guidance” for semantic encoding, 6. Eliciting performance for responding, 7. Providing feedback for reinforcement, 8. Assessing performance for retrieval and reinforcement and 9. Enhancing retention and transfer for Retrieval and generalization (Driscoll, 2005, p. 373). By utilizing this principle alone, the training for PST would not only help learners to encode and retain, but it would also help to drive overall performance once they go out the live production.

At ePerformax we have no one that is formally trained in Learning Design and our training is all classroom facilitated. We are in the process of making it better, but there are a lot of opportunities. I took an interest in trying to make the training better from a scientific perspective because I did not understand how to solve the problems. Therefore, I am working on my LDT Master. Now with the learning theories and specifically my learning theory LMeP I can utilize them to help the entire organization to have better training and overall better performance.

## References

- Cicciarelli, M. (2008). A Description of Online Instructors Use of Design Theory. *International Journal of Information and Communication Technology Education (IJICTE)*, 4(1), 25-32.
- Driscoll, M. (2005). *Psychology of learning for instruction* (3rd ed.). Boston: Pearson Allyn and Bacon.
- Foss, K. A., Foss, S., Paynton, S., & Hahn, L. (2014). Increasing College Retention with a Personalized System of Instruction: A Case Study. *Journal of Case Studies in Education*, 5, Journal of Case Studies in Education, 2014, Vol.5.
- Gagné, R., Pallak, M. S. (1984). Learning outcomes and their effects: Useful categories of human performance. *American Psychologist*, 39(4), 377-385.
- Hsu, K. (2016, August 26). Build Your Team and Increase Engagement with Gamification. Retrieved from: <https://hrdailyadvisor.blr.com/2016/08/26/build-team-increase-engagement-gamification/>
- Kelly, R., & Kuhlen, R. G. (1966). Comparison of the effects of positive and negative vicarious reinforcement in an operant learning task. *Journal of Educational Psychology*, 57(5), 307-310.
- Li, P., Baker, T. E., Warren, C., & Li, H. (2016). Oscillatory profiles of positive, negative and neutral feedback stimuli during adaptive decision making. *International Journal of Psychophysiology*, 107(C), 37-43.
- Pritchard, T., Penix, K., Colquitt, G., & McCollum, S. (2012). Effects of a Weight Training Personalized System of Instruction Course on Fitness Levels and Knowledge. *Physical Educator*, 69(4), 342-359.

