Jesus Teaching Through Discovery

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**Summary:** Examining discovery teaching, using the model of Jesus as teacher.

**Introduction**

What made Jesus’ teaching effective? Jesus’ teaching was effective because it resulted in changing the hearers’ heart and having the hearer apply his message to their lives. Jesus’ teaching amazed listeners, for example, after hearing the Sermon on the Mount the crowds were amazed (Matthew 7:28). He taught ordinary, unschooled, disciples for three years and their teaching changed the entire world of their time and continues to affect our world today. The hearers of his teaching opened their “eyes and ears”. What made his teaching so successful? His teaching consisted of a set of procedures. Jesus identified the teaching moments; facilitated inquiry by giving inspiring questions, enabled audiences to formulate hypothesizes through insights, and encouraged his audiences to apply their learning to practical situations.

Jesus knew that learning was not simply memorizing facts or reciting the Law of Moses. Learning involved organizing new facts to existing schema and applying that new information. His teaching is typically a discovery learning process. The following article will review Jesus’ teaching method through the modern lens of discovery learning.

**Discovery learning: definition and characteristics**

Discovery learning is derived from cognitivism-based learning. Cognitivism emerged in the 1950s as a counteraction to Behaviorism which used the association of stimuli and responses in education. Cognitive theories emphasize making knowledge meaningful and helping learners organize and relate new information to existing knowledge in memory (Ertmer & Newby, 1993). In cognitive-based learning, there are two teaching methods: teaching through discovery and teaching through exposition (Woolfolk, 2004). The former, suggested by Bruner (1961), emphasizes the importance of understanding the structure of a subject being studied as the basis for true understanding through the inductive reasoning process. The exposition-based teaching format, suggested by Ausubel (1963), emphasized reception of information in which the teacher presents materials in a complete, organized form, moving from broadest to more specific concepts. In contrast to discovery learning, exposition learning uses deductive reasoning. Woodfolk (2004) clarifies three stages of exposition learning: (1) begin with an advance organizer; (2) present content in terms of similarities and differences using specific examples; (3) relate content back to advance organizer.

Discovery learning emphasizes understanding concepts or relationships. It is useful for higher levels of learning. Gagne’s (1965) lists eight categories of learning. The list is hierarchical in the sense that it proceeds from a simple conditioning type of learning up to complex learning, like combining rules to solve problems. Discovery learning is necessary to learn an ill-defined content, such as concept learning, rule learning, and problem-solving learning.

Discovery learning is a type of inductive learning (Schunk, 2004). Learners find regularities and relationships from studying specific examples and learning materials. The teacher presents a set of instances and examples in which learners can develop or formulate a rule or principle through discovery (Driscoll, 2005). In order to grasp the structure of information, learners must identify key principles through inductive reasoning rather than simply accepting the teacher’s explanation. Therefore, discovery learning is constructivist-based and is a transforming process in which learners are actively involved to find a rule or principle. In this type of learning, learners develop their minds by using insights and intuitions to go beyond the data and find
relationships and organizing structures.

There are several misunderstandings about discovery learning. First, discovery learning is not a student-centered educational format (Duffy & Cunningham, 1996). The success of discovery learning does not depend on the learners’ capacity of self-inquiry for completing a task, but on the teachers’ teaching methods or strategies for learners to complete a learning task successfully. In discovery learning, the learners have to find the answer which the teacher has planned for them to discover. It is best handled when it is directed and guided by the teacher (Schunk, 2004). The teacher arranges activities in which the learner searches, manipulates, explores, and investigates. Furthermore, discovery learning is not independent learning. Unguided discovery learning activities prove unmanageable and unproductive (Woolfolk, 2004).

Lastly, discovering learning is not a one-time event, but an on-going knowledge construction process. The key element of discovery learning is the learner’s finding regularities and relationships in the environment through reflections after completing a task (Driscoll, 2005). Learners reflect on what they have done and why they were successful (or unsuccessful). As Bruner (1961) points out, the aim of discovery learning is to make the learner as an autonomous and self-propelled thinker as possible. Reflection upon the problems and re-establishment of the hypothesis makes the learners understand the situation clearly and through the process the learners make the knowledge their own.

**Discovery learning process**

What makes discovery learning effective and successful? Bruner (1973) provides some insights. However, Bruner does not provide a model for the discovery learning process. To him, the most important factor for successful discovery learning is the learners’ well prepared mind (Bruner, 1961, p.22). Discovery learning is not a learner-oriented process, but a teacher-guided process in which learners inquire to find underlying principles and relationships between concepts. Therefore successful discovery learning depends on the teacher’s capacity to provide appropriate examples, effective learning experiences, as well as practical evaluation capacities. In order to implement effective discovery learning, I recommend a four-stage model: (1) inspiring learners by identifying teachable moments; (2) guiding inquiry with intriguing questions; (3) allowing learners to explore hypotheses; (4) encouraging application. However, within the core of the processes lies the trustworthy relationship between the teacher and the learner. Discovery learning is not the transactional associations between the stimulus and the responses, but the transformational heart-to-heart relationship (Yount, 1996). Davis (2004) suggests the ‘peripatetic relationship,’ means the two-way communicative relationship in which teachers interactive with students in their daily lives. The following figure depicts the general process of discovery learning:

![Figure 1: Discovery learning process](attachment:image.png)

First, teachers should identify teachable moments. Learning can be maximized when learners can be motivated internally. This is closely related to a learner’s readiness for learning. The teacher should consider a learners’ developmental level of cognitive functioning (Driscoll, 2005). A teacher should start the discovery learning process with relevant questions that relate to a learners’ context and experience. This will lead learners’ to active involvement in a learning session.

After identifying the teachable moment, then the teacher guides the student by presenting examples, non-examples and learning materials. Discovery learning is inductive reasoning in which the learner is guided by a set of predefined learning procedures.

The question and answer session with examples and learning resources will be continued until the learner discovers interrelationships and general principles in the subject matter. The learner will formulate an appropriate hypothesis and test it during the inquiry session. This phase is the key of discovery learning. The process of discovery is not simply accepting a teachers’ idea or explanation. It is an active knowledge construction process in which the learner devises strategies for searching and finding the regularities and relationships in the subject matter. As Bruner (1961) mentioned, discovery is the process of rearranging or transforming evidence in such a way that one is enabled to go beyond the evidence so assembled to additional new insights.

That is, the well-developed mind, the intellectual
mind, creates from experience ‘generic coding systems’ that permit one to go beyond the data to new and possibly fruitful predictions (Bruner, 1957, p. 234).

The last phase of discovery learning is to apply the lesson learned to learners’ practical situations. Learning is significant when it is transferred to another situation. The teacher should encourage students to solve a problem by using strategies and principles that the learner learned during the discovery learning session.

**Discovery Learning: Jesus’ Teaching Style**

The power of teaching can be seen in the result of Jesus’ instruction. His teaching resulted in instantaneous and explosive audience responses (Minear, 1982). Jesus had a wonderful reputation as a teacher among a great multitude of people from a wide area. Crowds were amazed at his teaching (Matthew 7:28; 22:33). Why was Jesus’ teaching so amazing and why were the hearers astonished? How did he teach his ordinary, unschooled, disciples to make a huge impact in their world and on the Jewish leaders of their day (Acts 4:13)?

If we wanted to classify Jesus’ teaching method in modern terms it would be classified as the discovery learning method. He followed the four phases of the discovery learning process. In this section, Jesus’ teaching principles and methods will be reviewed based on the characteristics of discovery learning.

There is one important point to remember when considering why Jesus’ teaching method was so effective. Jesus’ teaching method is quite different from the Jewish leaders’ teaching style. The purpose of Jesus’ teaching is to train his disciples to be more fully like him (Luke 6:40). Hence the outcome of his teaching is to change their mindset and transform the world as he commanded. However, the Jewish religious leaders emphasized propagating the laws by reciting them. Table 1 shows the basic differences between Jesus and the Jewish leaders’ teaching.

**Table 1 - Comparison the teaching between Jewish leaders and Jesus**

<table>
<thead>
<tr>
<th>Purpose of teaching</th>
<th>Jewish Leaders</th>
<th>Jesus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissemination of information: Remembering the Law</td>
<td>Teaching disciples fully like Jesus (Luke 6:40)</td>
<td></td>
</tr>
<tr>
<td>Teaching methods</td>
<td>Recitation, memorization Mouth-to-mouth</td>
<td>Reasoning (listening &amp; questioning) Luke 2:46-47 Relations-oriented (heart-to-heart)</td>
</tr>
<tr>
<td>Teaching target</td>
<td>Behavioral change by observing customs and Laws</td>
<td>Integrating heart and behaviors, visible and invisible areas</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Mastery of content</td>
<td>Transform their lives by applying the learning</td>
</tr>
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Jesus is interested in changing mindsets, not simply in changing the outward behaviors. His teaching is through discovery which emphasizes reasoning, listening, and asking questions. Luke 2:46-47 says that “after three days they found him in the temple courts, sitting among the teachers, listening to them and asking them questions. Everyone who heard him was amazed at his understanding and his answers” (Italics for emphasis). Also, Jesus’ teaching emphasizes learning and application together. The reason why Jesus so harshly criticized Pharisees and teachers of the law as hypocrites was that they taught only by their words and focused on the observation of the law while what they were teaching they themselves did not follow perfectly (Matthew 23:3). Jesus’ teaching always emphasized to application to practical context. After explaining the parable of the Good Samaritan, Jesus said, “Do this and you will live” (Luke 10:28). Knowing the unknown and applying the knowledge to practical context are two essential learning components. The Jewish leaders were effective in teaching the Law to Jews without practicing it themselves.

To make learning effective, Jesus teaches through discovery learning which consists of four phases: (1) identifying teachable moments; (2) guiding inquiry with intriguing questions; (3) allowing exploration of a
hypothesis; and (4) encouraging application.

**Jesus’ discovering teaching process**

Phase 1. Identifying teachable moments. Jesus knew his hearers (Matthew 9:4; John 2:24; 6:64). He recognized that a teachable moment occurs any time and in any circumstance if learners’ emotional responses in learning are provoked. Jesus knew how emotions can be connected to his teaching. His teaching is focused on people’s circumstances, using teaching methods and examples that were intended to speak to that audience in that place and time (Barbules, 2005). Luke 11:1-2 shows how Jesus effectively identifies a teachable moment to teach how to pray. In Matthew 14:31, Jesus knew when he reached his hands to Peter it was to teach faith. His goal was to capitalize on the learners’ readiness to learn. Readiness to learn is often dependent on life events that are particularly significant in the experience of the learner. Jesus knew that his teaching would be greatly impacted when He used resources that were relevant to the audiences’ lives such as birds, lilies, a wineskin, a storm, taxes, a tunic, mustard seeds, sheep, goats, nets, fish, little children, and a Roman coin.

When identifying the teachable moment, learners are eager to acquire information that helps them answer questions, meet requirements, or cope with their situations. In the same way, Christian educators must build on a learners’ prior knowledge and teach in a way that relates to the learners’ experience. By seeking points of relevance in teaching, learners actively participate in the learning activities (Richards & Bredfeldt, 1998).

Phase 2. Guiding inquiry with intriguing questions. Jesus’ teaching was mainly oral (Burbules, 2005). However, his questions are neither in an essay style nor a simple true/false format. Jesus asked questions to review general principles and to inspire audiences’ to think deeply about the content. There is a big difference between Jesus’ teaching and other Jewish religious leaders teaching. Jewish religious leaders’ teaching primarily focused on repetition so their learners would remember their teaching’s verbatim (Warden, 1998). In the same way, Jesus motivated learners by adopting such teaching methods to inspire learners to think deeply. The following list some of Jesus’ teaching methods (Warden, 1998, pp.70-71);

1. Contrast- a maxim that contrasts one thing with another. (see Matthew 6:19-20)
2. Enigma: a maxim that is purposefully vague or obscure, in order to challenge students to think. (see Matthew 24:28)
3. Humor: a maxim that presents a truth a way that seems ludicrous or unexpected. (see Matthew 19:24)
4. Hyperbole: a maxim that uses exaggeration to emphasize a truth or principle. (See Matthew 5:29)
5. Hypostasis: a maxim that renames a person thing in order to describe or emphasize its inherent qualities. (see Matthew 16:6b)
6. Metaphor: a maxim that compares two people or things by directly equating them. (see Matthew 5:14a)
7. Metonymy: a maxim that uses symbolic language to describe or explain the truth. (see Matthew 5:14b)
8. Paradox: a maxim that appears to sound contradictory but really isn’t. (see Matthew 10:39)
9. Personification: a maxim that ascribes human characteristics to things that are not human. (see John 3:8).
10. Pun: a maxim that contains similar-sounding words with different meanings, or the same word with two meanings. (see John 3:3)
11. Simile: a maxim that compares two people or things by using ‘like’ or ‘as.’ (see Matthew 4:30-32).

Jesus’ teaching allowed hearers many levels of uncertainty and ambiguity. All the maxims listed above are examples of the techniques in which Jesus’ cemented his teaching in the minds of his listeners. These techniques in his teaching had a powerful effect on his
listeners. They would remember the teaching and later think more deeply about his message with new insights and intuitions. Even a simple maxim can inspire questions for his listeners that might take them a while to think on. He used parables with the masses for the same reason. Parables are not meant to be understood by everybody (Matthew 13:35), but he waited until he was alone with his disciples to explain them the true meaning of the parables (Matthew 13:10-15; Mark 5:33-34). Those who truly hungered for righteousness would follow and learn and grow (Yount, 1996). Mark 4:33 says, “With many similar parables Jesus spoke the word to them, as much as they could understand.” Jesus rarely spoon-fed the truth to his disciples. He usually mentioned, “he who has ears let him hear (Matthew 11:15, 13:9, 43, Mark 4:23; Luke 14:35). Instead, his use of parables invited them to grapple with questions they might not have otherwise considered (Warden, 1998).

Phase 3. Allowing exploration of a hypothesis. Jesus' teaching is not simply pouring new information or ideas into listeners' heads. The ambiguity and indirectness of figurative language is the key point of Jesus' teaching.

His heavy reliance on figurative utterance suggests that moral guidance requires more general guideposts, and that moral sensitivity is not gained primarily through exhortation, but through the thoughtful internalization of proverbs, examples, and cases, the analysis of which opens up a process of moral reflection that guides conduct in a less determined manner. (Burbucks, 2005, p.4)

Jesus criticizes the Pharisee’s superficial and technical teachings that don’t impact and change learners’ behaviors. The Pharisee’s teaching resulted in “though seeing, they do not see; though hearing, they do not hear or understand (Matthew 13:13). However, Jesus’ teachings make the learners’ ears and eyes open. “But blessed are your eyes because they see, and your ears because they hear” (Matthew 13:16). All audiences did not understand Jesus’ teaching. Only those who truly hungered for righteousness learned his spiritual message and grew.

Jesus believed that learning is gained through deep insights and reflections in which learners review underlying principles and assumptions. He did not simply make declarative statements about the truth. He believes that learning is a changing process of learners in mindset, attitudes, and behaviors. To lead the change, the first thing the learners should do is to unlearn the old principles or learning framework. Jesus was a change master. He knew that the effective change process requires three phases, as Lewin (1958) suggested: unlearning, changing, and relearning. The unlearning phase focuses on disconfirming a person’s former belief system. Before change can occur, learners must reexamine many cherished assumptions about prior learning. Unlearning is the breaking down of old ways of doing things so that learners are ready to accept new learning. Jesus knew the importance of unlearning in which values and beliefs should be challenged before learners accept new learning.

Piaget (1985) explains the learning process with the disequilibrium theory. When people come across ideas that conflict with their existing schema, disequilibrium occurs. Disequilibrium is a strong motivator to learn. Disequilibrium can be overcome by accepting a new idea or new knowledge. Jesus used questions to inspire audiences to formulate new schema that challenged their existing framework of ideas. Learning is a changing process in which assumptions of old principles and beliefs must be dealt with before accepting new ideas and new learning. In order to accept new knowledge and skills, learners should explore the new relationships and new regularities through the discovery process. Jesus’ questions always inspire his audiences to unlearn old schemata and to explore a new way of thinking and encourage his listeners to change their perspectives.

Jesus and the Jewish leader’s teaching had different purposes. The purpose of the Jewish leaders’ teaching was to observe the law and the traditions (Matthew 15:1-2). It was based on memorization, and following regulations. Jesus’ teaching was targeted toward the internal side of human beings rather than the outward observation of the law. For example, in one situation, one of his listeners asked him, “What is the greatest commandment?” Jesus said “to love God with all your heart, with all your understanding and with all your strength” (Mark 12:33). In Matthew 15:11, the Pharisees criticized Jesus because his disciples did not wash their hands before they ate. This broke the tradition of the law. However, Jesus redefined the term uncleanness to the evilness that came out of a men's
mouth which ultimately came out of a men’s heart. The Jewish leaders’ teachings on murder (Matthew 5:21), adultery (Matthew 5:27), divorce (Matthew 5:31), oaths (Matthew 5:33), revenge (Matthew 5:38) and love (Matthew 5:43) were focused on observing the law in visible ways. Jesus’ teaching always focused on human mindsets. For example He spoke about the topics of murder (Matthew 5:22), adultery (Matthew 5:28), divorce (Matthew 5:32), oaths (Matthew 5:34), revenge (Matthew 5:39) and love (Matthew 5:44). Jesus used the existing schema in the listeners mind as a starting point to propel the listener to establish new relationships and new schema. This resulted in the listener developing a new schema. Although, Jesus never stated what the new schema should be clearly and declaratively. Instead, He presented examples that his audiences thought about deeply through discovery and intuitions. They formulated a hypothesis underlying Jesus’ questions and tested it until they found the new schema. Finally Jesus would ask his disciples, “Have you understood all things?” (Matthew 13:51), or “do you still not understand?” (Mark 8:21).

Phase 4. Encouraging application. Encouraging the lesson gained to the real context is another essential part of Jesus’ teaching. In Matthew 23:2-7, Jesus criticized the teachers of the law and Pharisees for “they do not practice what they preach (verse 3). Teaching mainly consists of two parts: understanding mentally and applying it practically. The main teaching activities of the scribes and the Pharisees were simply citation of a Moses’ law (Powell, 1995). That’s why Jesus reprimanded them as ‘hypocrites’ (Matthew 6:5, 7:5, 23:28). They did a good job at memorizing and reciting the law but not applying it to their lives.

Jesus encouraged his disciples to apply the learning from him. After explaining the parable of the good Samaritans, Jesus encouraged the expert in the law to apply the learning, ‘go and do likewise’ (Luke 10:37). When Jesus forgave an adulterous woman, he said, “…go now and leave your life of sin.”

Learning is a change process. (See Luke 6: 49). As Lewin (1958) formulated, learning requires three phases: first, learners have to leave from the old schema (unlearning). Second, learners must accept new ideas and knowledge (changing). The last phase is to personalize the new learning by applying it to the practical context (relearning). Application is an essential part of educational process that Jesus always emphasized to His disciples. Paul also urges his Christian friends in Philippi, ‘wherever you have learned or received or heard from me, or seen in me- put it into practice’ (Philippians 4:9).

Conclusion

Jesus’ teaching made a huge impact on his audiences, including his disciples. He taught through the discovery learning process. His listeners had an active role in the learning process. This is in contrast to the passive learning paradigm at the time of exact recitation or memorization of content established by the Jewish leaders. Jesus’ teaching is opposite to expository teaching. According to Ausubel (1963), expository learning involves a teacher presenting materials in detailed and organized form so that learners acquire knowledge primarily through reception. Jesus’ methods inspired the learners’ active inquiry process. Learners constructed and organized his teaching based on their own experiences. Their lives would be transformed as they applied his teaching to their lives. Rather than simply making clear statements about truth, He used ‘thinking’ questions to inspired learners to see the new relationships and new principles.

Jesus’ teaching method matched modern discovery learning. His teaching always followed four phases of discovery learning: (1) inspiring learners by identifying teachable moments; (2) guiding inquiry with intriguing questions; (3) allowing learners to explore hypotheses; (4) encouraging application.

Jesus trained his disciples through discovery learning for three years and eventually they were fully trained like their master (Luke 6:40). Jesus inspired his listeners by identifying teachable moments, guided inquiry with intriguing questions, allowed them to explore hypotheses, and encouraged them to apply the learning to their lives. Through discovery learning, his disciples were able to fully understand the message from their master, and finally they became effective teachers, imitating their master.

References


The Bible. New International Version.


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