

THE MOST RELEVANT LEARNING THEORIES FOR HOMESCHOOLERS

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## Table of Contents

<b>Introduction</b> .....	<b>3</b>
<b>Why Is Learning Theory Important For Homeschoolers?</b> .....	<b>3</b>
<b>Relevant Learning Theories</b> .....	<b>4</b>
Multiple Intelligences .....	4
Constructionism .....	6
Active Learning .....	7
<b>Similarities and Differences Between These Learning Theories</b> .....	<b>8</b>
<b>Most Homeschool-Relevant Learning Theory</b> .....	<b>9</b>
<b>Experiences With These Learning Theories</b> .....	<b>10</b>
<b>Conclusion</b> .....	<b>10</b>
<b>References</b> .....	<b>12</b>

## **Introduction**

Learning theories are integral to our understanding of how the human mind works and how actual, meaningful learning takes place. Throughout the course of modern history, many learning theories have arisen from the findings of several innovative researchers. From constructivism to cognitive dissonance, these theories are varied and sometimes relate to the same aspects of learning and development, helping us to see the issue from different angles and perspectives. Seeing so many different theories about how learning takes place can seem confusing and overwhelming, but when you take a closer look you can see that many of these theories can work hand-in-hand and help create a deeper understanding of the learning process.

### **Why is Learning Theory Important For Homeschoolers?**

This deeper understanding of the learning process can be especially helpful for homeschool educators, many of whom have not been formally trained in education or developmental psychology. Yet the focus of the application of these learning theories is almost exclusively within the traditional classroom environment and homeschool educators are frequently forgotten when considering different learning environments. Due to my interest in homeschool education as a homeschool educator myself, I will be tackling the topic of the relevance of these learning theories to the homeschool environment and how understanding the basics of these theories and applying them in this unique and flexible learning environment can help homeschool parents to be more effective educators.

Of the widely known learning theories available, a few of them stand out as being relevant to the homeschool learning environment. These theories are: Multiple Intelligences, Constructionism and Active Learning. These theories are relevant to homeschooling due to their

focus on the student and their interests and needs. Because of the innately student-centered nature of homeschooling, these learning theories are complementary and understanding them and incorporating them into the homeschool environment can help provide homeschool educators with a more solid and theoretical foundation for their child's education.

### **Relevant Learning Theories**

Of the many learning theories brought to us from innovative education researchers of the past, I have narrowed down the list to the three theories that not only are most relevant to the homeschool education environment, but the ones that could also be most effective and helpful in providing a rich, rewarding and student-centered learning environment at home. These three learning theories are: Multiple Intelligences, Constructionism, and Active Learning.

#### **Multiple Intelligences**

The concept of Multiple Intelligences came from the work of Howard Gardner, a professor at Harvard University in the 1980s (Edutopia, 2013). He observed through his work that different students had different aptitudes for varying types of activities and knowledge and noted that approaching learning through different types of activities where the learner had an aptitude increased their success in learning the topic. This led to his theory of Multiple Intelligences – the idea that there are many different types of intelligence that can be possessed by humans and that each one can relate to “different ways of processing information” (Edutopia, 2013).

He broke these multiple intelligences down into 8 different types: Verbal-Linguistic, Logical-Mathematical, Visual-Spatial, Musical, Naturalistic, Bodily-Kinesthetic, Interpersonal and Intrapersonal.

***Verbal-Linguistic Intelligence.*** This type of intelligence is related to the ability to analyse and create things such as written and oral communication.

***Logical-Mathematical Intelligence.*** This type of intelligence is related to the ability to create and solve complex mathematical problems.

***Visual-Spatial Intelligence.*** This type of intelligence is related to the ability create and comprehend graphical information.

***Musical Intelligence.*** This type of intelligence is related to the ability to create and understand various types of sounds.

***Naturalistic Intelligence.*** This type of intelligence is related to the ability to “identify and distinguish among different types of plants, animals, and weather formations found in the natural world” (Edutopia, 2013).

***Bodily-Kinesthetic.*** This type of intelligence is related to the ability to use “one’s own body to create products or solve problems” (Edutopia, 2013).

***Interpersonal Intelligence.*** This type of intelligence is related to the ability to “recognize and understand other people’s moods, desires, motivations, and intentions” (Edutopia, 2013).

***Intrapersonal Intelligence.*** This type of intelligence is related to the “ability to recognize and assess those same characteristics within themselves” (Edutopia, 2013).

The concept of multiple intelligences is relevant in understanding each learner’s unique needs and for approaching learning in a way that utilizes each learner’s existing abilities, to increase the effectiveness of such learning activities. While it is often confused with learning styles, however, it is important to note that the theory of multiple intelligences is not necessarily related to the actual methods of instruction (visual vs. auditory, etc.) but more to tailoring the

learning experience to concepts and ways of thinking that the learner is already familiar and comfortable with.

The concept of pluralization is also relevant to the theory of multiple intelligences, as “students are more engaged and learn best when they are given various ways to demonstrate their knowledge and skills, which also helps teachers more accurately assess student learning” (cited in Marenus, 2020). These concepts of multiple intelligence can also be helpful for a homeschool educator to understand, as it allows them to see their child from a variety of perspectives and to evaluate their areas of strength, in order to approach learning in a way that will be the most effective and successful for their unique child.

### **Constructionism**

Another learning theory that is relevant to the homeschool environment is Constructionism. This learning theory was built upon the foundations of the work of innovative researchers such as Maria Montessori, John Dewey and Jean Piaget (Flores, 2016). Seymour Papert, the pioneer of the Constructionist education movement, was an MIT professor who saw the crucial role that technology would play in education, as it would “allow young learners to construct their knowledge of various subjects through personal inquiry and creativity” (Flores, 2016).

Papert’s vision of education included an emphasis on using technology to solve problems and promote creativity and his theory led to the creation of programming languages such as Scratch, which is a simple language for introducing children to programming (Wikipedia, n.d.). Because of the focus on technology, constructionist theory has mostly been used within the domains of science and mathematics, but is finding its place among other subjects as well (Wikipedia, n.d.).

The Constructionism theory is relevant and useful for homeschool educators, especially those whose children have a high interest in and aptitude for technology, in the way that it focuses on using forward-thinking technology to enhance learning and promote creativity. In a flexible homeschool learning environment, such methods could allow the more “techie” children to focus on using technology in ways that will develop their technological skills while covering a variety of other needed topics. This can give them a head start in preparing for entering the workforce in a technical field, such as computer programming and set them up for success.

### **Active Learning**

The theory of Active Learning originated from the research work of several educational theorists, including Dewey, Piaget and Vygotsky and draws upon different areas, such as cognitive development and educational psychology (Pardjono, 2016). The main idea is that active learning activities can promote more meaningful learning than traditional learning activities, such as lectures, as students can learn through experience (Yale University, n.d.).

As with many things, the concept of Active Learning has been somewhat hard to define, as it can have many meanings to many different people. But the main point is that it is based on a different view of learning that what was traditionally thought, that education simply involved teachers giving information and students receiving that information (Pardjono, 2016). Active learning allows students to be much more involved in their own learning and because of that, can be much more effective. As Dewey once stated, “active learning knowledge is individual experience organized and constructed through learning” (cited in Pardjono, 2016), as he believed that learning happened through these experiences and not through traditional methods.

One popular definition for Active Learning is that it is “anything that involves students in doing things and thinking about the things they are doing” (cited in Yale University, n.d.) and it

also involves the concept of Metacognition, which involves students becoming aware of how they learn. Through this awareness, students can become more effective learners. Teachers can also employ certain recommendations in their classrooms to promote a more active and inclusive learning environment, such as retrieval practice, clarification pauses and think-pair-share activities (Yale University,n.d.). These practices can be supplemented by creating a physical classroom environment that is conducive to active learning, such as including a classroom layout that is flexible and open (Yale University, n.d.).

In the context of homeschool education, active learning can be a very flexible and complementary approach to what homeschoolers already tend to do. By tailoring learning activities to the child’s interests, aptitudes and needs, and creating interesting, “intellectually exciting” (Cambridge International Education, n.d.) lessons, homeschool educators can engage their children in the learning process more effectively and instill in them a lifelong love of learning.

### **Similarities and Differences Between These Learning Theories**

As the learning theories most relevant for a homeschooling environment, all three of these focus on the student and how they learn through experience, rather than the traditional idea of learning by being given information from a teacher. They promote the idea of the student constructing their knowledge through their learning experiences and recognize the fact that the teacher’s role is to aid in this process, rather than to control it. They also all take into the account the innate uniqueness of each student and how their interests and needs can play a huge role in how they learn. Learning about the learner and then approaching teaching them in a way that fits them and sets them up for success, is the main point of all of these learning theories.



While all of these learning theories are somewhat interconnected and can in many cases be used together to create a well-rounded learning experience, it also helps to look at the ways in which they are different and can provide different perspectives on the learning process. One difference is in the level of customization offered to individual students. While the theory of Multiple Intelligences directly takes into account the personalities and aptitudes of each student, in order to tailor their learning experience to what works for them, the other two theories are more focused on the overall learning environment of a classroom and how the teacher approaches teaching altogether, more as a facilitator than one instilling information within the students. Another difference is in the focus on more social activities in active learning, as opposed to the more individual-centered learning activities promoted by the other two theories. That said, in a flexible homeschool environment, any of these theories could be adapted to work well on an individual basis.

### **Most Homeschool-Relevant Learning Theory**

Of these learning theories that are applicable to the homeschool environment, the most relevant one, however, is Active Learning. Due to its flexible nature and hands-on approach to learning, it is a perfect match for the open-ended learning that can take place outside of the traditional classroom. Using the concepts from this theory, homeschool educators can design engaging, relevant learning activities, involving relevant real-world problem-solving that will enable more meaningful learning. That said, I think that any of these theories work best when used hand-in-hand with other relevant theories and methods, and that is the beauty of homeschool education – it can be an ever-changing, fluid and adaptable experience that supports the child as they grow and mature and change.

### **Experiences With These Learning Theories**

In my own experience homeschooling my daughter, we have tried a variety of approaches over the years. What we have discovered along the way is that rather than trying to fit the school environment into our home, we needed to embrace the “differentness” of the environment and use it to our advantage. Through the use of flexible learning approaches, such as student-centered and self-directed activities, I saw a greater engagement and more meaningful learning. I have also seen the benefits of constructionist approaches focusing on the technology and creativity, as I have guided my daughter into things such as computer programming and digital art. The theory of Multiple Intelligences also resonates with my experiences, as I have seen first-hand the results of working with my daughter’s innate abilities and very visual nature. As could be explained by a high degree of visual-spatial intelligence, she is very artistic and sensitive to fine details and is very receptive to visual representations of abstract concepts.

This has been especially clear in working with her in mathematics. A switch to a more visual approach to multiplication, commonly used in Japan (and also known as “line multiplication”), made her immediately and enthusiastically jump into easily multiplying multi-digit numbers, when she had previously struggled to understand basic multiplication using traditional U.S. methods. I can definitely see the applicability of the concept of Multiple Intelligences within the homeschool environment as yet another tool for homeschool parents to use to tailor their child’s learning to something that fits their personality, needs and ambitions.

### **Conclusion**

In conclusion, while learning theories are mostly considered within the confines of the traditional classroom environment, their applicability within a homeschool environment cannot be denied. Homeschool educators could benefit from learning about these theories and adding

them to their educational toolbelt. From insights into how children learn, to ideas for engaging and enriching learning activities, to embracing their child's innate intelligences in certain areas, knowledge of these theories could help them to create effective lessons and activities, tailored to their child, that provide meaningful learning and take advantage of the unique homeschool environment to set their children up for a successful future.

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