

INTRODUCTION TO SENSORIAL –PART ONE

OUTLINE

1. Introduction
2. Senses
3. Experience is key
4. What do we mean by senses?
5. Types of senses
6. Stereo Gnostics sense
7. Role of senses in our lives
8. Processing intelligence
9. Generalized concepts
10. Abstraction
11. Intelligence
12. Refinement of senses
13. Materialized abstraction
14. Principle of isolation
15. Principle of limitation
16. Types of activity
17. Conclusion

INTRODUCTION TO SENSORIAL –PART ONE

Introduction

According to Dr.Montessori, when the child comes into the Casa at 2.5 years, he comes in with a lot of experience and interaction with humans and the environment, unlike the newborn who has no experience. This experience is practical from the first day of his life, this experience is what he built up and he won over his environment with his controlled movement which Montessori calls conquest.

Senses

As the child grows his senses also grow through movements the child could interact with the environment. He could hold things pick up things. He learned to control his moments through experience by the age of 2. He could climb stairs, hold few things etc .He explored the environment through his movement but the information from the environment came through his senses, he is now a sensorial explorer. The senses are a point of contact between the self and the environment and we are aware of everything around us. Every experience of a child is a multi sensory experience, even when the newborn is breastfeeding it is a multi sensory experience, even while having a bath they can feel the temperature of water, feel the soap and smell the shampoo. All these things happen only through senses. Even when we are far away we can hear water filling in the bucket. We can hear through a sense of hearing. So the child gets his information about the environment with the help of his senses.

Experience is key

The more the child is allowed to do things, the more rich his experience with senses will become. If a child is prevented all the time or has obstacles whenever he's doing something, he is prevented from having experiences in life opinion whenever he's doing something we should never stop him because it would be valuable information for the child. When the child has lot of experiences, the child will have great sense of information. When the child is left alone the nature guides him to survive, survival will push the child towards experiences. The child has more multi sensory exploration. Younger the child, more the multi sensory exploration. In this period .They touch and grab everything around them, the children manipulate the environment, they are unafraid and uninhibited. They recreate the environment within them. Children seek experiences; they need

INTRODUCTION TO SENSORIAL –PART ONE

different kind of experiences. The exploration is always through hand, the child always tends to put things into their mouth. When they put the hand into the mouth we must not stop them, instead we can give them a wooden spoon or something to bite etc. They would have had many experiences by the age of two before they come into the Casa. They have already understood the cause and effect of the environment; they are like scientists who have understood the process of life their senses have helped them reach this point.

What do we mean by senses?

Senses are like scouts, scouts are people who go ahead of the army to get information to the main army. They collect information such as where the enemy is hiding, How many people are there, what weapons they have. Senses are points of contact between the child and the environment so the senses bring back information to the child mind from the environment. They help us to perceive everything in the environment, most senses have receptors that receive information for example eyes receive visual senses takes and information from the outer world.

Types of senses

1. Vision

Vision is a very powerful human sense we use it to process and gather a lot of information from the environment. We can also make a contact with environment from a very far distance.

2. Hearing

Auditory sense helps us quite a lot if our senses are well trained. Our ears listen to sounds. We can't hear things in the environment even if it's from quite a distance.

3. Smell

Our nose can smell but our smelling sense is not as powerful as animals like dogs. Dogs have very powerful smelling sense, they have different capabilities. Our senses are crude we depend on smell almost always. Smell connects us to our past memories and emotions. The sense of smell is very significant in our lives.

INTRODUCTION TO SENSORIAL –PART ONE

4. Touch

Touch is a complex sense; there are many aspects to touch.

A. Tactile sense

When we touch and feel something it can be either smooth or rough. The lighter we touch the more information you get.

B. Thermic sense

We can experience temperature; it can even travel through distance. Even without touching something we can sense whether it is hot or cold. This is called thermic sense and it is a kind of sense of touch.

c. Baric sense

We can sense the weight of object. For example our grandmothers can just hold a chain in their palm and tell us what the weight is. In order to represent an object from falling down due to gravity we put a lot of effort to hold it. The effort equals the weight of the object.

4. Taste

Smell and taste are closely connected. Food is the University of our Life, it is a basic connection. We have just four days but the combination gives us a great sense of taste and smell. Food is the basis of our survival. A child can have a lot of sensory experience around food. We only eat something if it is visually appealing and while eating some foods we can hear the crunch so basically all senses are involved while we taste food.

Stereognistic sense

We usually can visualise things with our minds, if we want our phone or keys from our handbag we just put our hand into the handbag and take it, we feel the texture imagine the colour, and it gives us a mental image of the object. So it is possible for us to recognise something we cannot see. This sense was called stereognistic sense. Objects can be visualised and we can find them. This is the knowledge of the form of the object. 3 dimensional objects can be visualised too. It's just that we compare the visual image and identify the object. Before the children come into the Casa at 2.5 years they have already

INTRODUCTION TO SENSORIAL –PART ONE

experienced the entire senses the child can hear even before birth when he's in the womb and the rest the child takes everything from the environment.

Role of senses in our lives

Other than giving us information we have to understand the nature of the senses and how do they work? When we see here or touch, it doesn't take place at the point of contact. It helps us to see but eyes don't see vision works even beyond that, the light that falls on the retina that is processed is very complex. The image translates into understanding of what we see. The stimulus must be processed. When light falls on the retina, the information is sent to the brain through our Nerves, Which are the information transmitters. Finally we see through a brain. This is a very complex process.

Processing intelligence

The stimulus that comes to us must be received and processed. When processed, intelligence is built. The newborn is born without intelligence. They have the capacity to build it. All the sensory activities in the environment will help the child build their intelligence. Throughout the first plane of development the child will build it. This is totally dependent on sensory experiences. The senses reach the brain through the nerves and then the child builds and understanding of the environment or world. They use this to make decisions; the knowledge is the final process of what they take in. Human beings are capable of holding ideas that is not thought of the outside world, they formulate concepts. This happens by repeated experiences of the same thing.

Generalised concepts

Generalised concept is the basis of intelligence. It is a key. It helps in eliminating something that is not essential. Ideas are formed from multiple experiences. We can eliminate the essential concepts and create a generalised concept. Humans build from experiences. By having repeated sensorial experiences we gain a concept and the memory is involved in it, that memory gives a stimulus to the understanding we won't remember but we will know. Memory works temporarily to give stimulus to the senses. Once we are familiar through repeated experiences, memory stops working and we create the knowledge that stays with us. Specific multiple experiences lead to generalised concepts for example we see

INTRODUCTION TO SENSORIAL –PART ONE

that, tomato, onion, potato are all vegetables so this is a generalised concept that all these are vegetables.

Humans can leave behind a lot of things and that's how the mind works. Through many layers of experiences we create generalised concepts. When there's damage in the mind we cannot make generalizations for mentally unstable kids it's difficult to make generalizations.

Abstraction

Generalization is very essential to human beings, we do it all the time, and it's an idea. This is the marvellous miracle of the mind. An abstract idea only exists in the mind they do not exist in reality; the process of creating abstract ideas is called abstraction. The idea represents the quality of anything. We have also extracted qualities of matter; quality could belong to any object. It is an extraction from human objects. We can hold and name these objects and experience the qualities. All these notions come through our senses. These senses will build abstract concepts intelligence; it helps us to understand the quality of all objects. Finally it helps us to understand the nature of the world.

Senses

∨

Intelligence

(Repeated sensorial experience)

∨

Abstraction

∨

Quality

(Essential aspects of anything in the world)

No material form in the world

(Exists only in the mind)

Our experience depends on the ability to hold these qualities

INTRODUCTION TO SENSORIAL –PART ONE

Intelligence

When the child is born, they don't have intelligence or qualities. The child only has potential and possibilities that they will gain based on what they need. We need to draw out qualities from the environment. Intelligence is a creative force it helps put together things in a unique way to create new ideas. From repeated experiences we can generalise notions and create knowledge base with which we can predict the future. If we can predict with past experiences then that is the use of intelligence. It helps in predicting the unknown based on experiences and reality. Every human activity depends on prediction otherwise we are unsure. Based on experiences we are able to make accurate predictions which make our life simple if our senses do not give us right information then production or intelligence do not serve us well.

Refinement of senses

Humans have the ability to refine and take in more through senses. Refined senses give us a lot of information. Sensitive periods are associated with this. Refinement of senses provides more information which makes prediction better which in turn makes our abstract notions accurate and hence we can understand our environment and the world better. The most important aspect of sensorial activities is it supports the process of building intelligence in the child.

Materialised abstraction

All abstract notions help the child to build their environment. We need to bring abstract ideas into the life of the child, this is really very challenging. As a result Dr Montessori brought in abstract concepts by introducing it to the hands of children. This is called materialised abstraction. For this we have a series of identical objects that differ only in one quality and because of that only the different quality is highlighted. It gets drawn to the curious child and the child's psychology. Because when things are exactly the same the attention is less. Only the one that is different and contrasting draws the attention. So that is why we put an abstract quality into materials.

Principle of isolation

INTRODUCTION TO SENSORIAL –PART ONE

Materialised abstraction feeds the child sensitive. It helps them with order it leads the child from within. The child needs order. The child has to be helped to bring in order from the environment. We need to have abstract ideas with one highlighted order. This is called principle of isolation where every feature is similar except for

1. Intelligence looks at all the stimulus and makes contrast comparison.

Comparison means looking for difference between two objects. In differences also we have great contrast. It is always easy to note huge differences. For similar objects the difference is less.

When objects are identical, there is no difference. Interplay between different contrast and identical ones is the activity for the mind this is how the world is classified. Through the ability to compare the child builds intelligence in his work. We can compare and eliminate ones that are contrast and gradually find out the identical ones. Pairing is a very key idea of how we approach sensorial activities.

Principle of limitation

Not too much nor too less, we need to have limited materials in the environment. Too many materials confuse the children. If there are too less then it is not clear. Materialised abstraction is based on principle of isolation and principle of limitation. Activities that are offered for material is abstraction are based on comparison. Comparison is interplay between contrast, different and identical objects. We need to look and find out; it is a mental activity for classification. Arriving at conclusion happens through pairing. Human mind looks for order or patterns it always look for comparison.

Types of activity

In another activity, we put similar blocks in the end starting from light to dark or dark to light and then put them in order. This is called grading period if there are many blocks, we sort order them in groups. They are identical objects but more than 2, not just a pair. Here we group identities so there are three types of activities.

1. Pairing – finding two identical ones among all the other objects
2. Grading - isolating one extreme and finding the closest to the previous one
3. Sorting - grouping ones which are identical

INTRODUCTION TO SENSORIAL –PART ONE

Conclusion

Practical life activity is more of real work and coordination of moments mainly of the body. But sensorial is purely the work of the mind, our responsibility is to give the sensorial explorer a complete sensorial experience.