Stages of mental development when Brunner (Brunner theory)

Famous theory of Brunner in the United States because it used terms and methods most suited to the American way of thinking on the one hand and because it is linked to cognitive development in children learning theory of hand.

1. Stage concrete (practical style):
Behavior of the child motor is the first pattern of thinking in children and consists in what the child from the actions of some things and where occupies the outside world represented physically through everyday experiences, which invites him to representation in practice such as touch, taste and moving objects and catching is not surprising that young children understand environment around him through what he is doing in this environment of examples that a child's learning to ride a bicycle What he does here is more than any other is not words, not mental images and fantasies, but who is assisted in mastering this skill is what he is doing the movements and mastery of these movements on the bike. (When Piaget called the sensorimotor stage)

2. Stage picture (imagine):
Is represented in multiple forms of fantasies sensual and visual imagery is a form of representation is more advanced and complicated than the first shape and that this ability is very important for the child is able to take advantage of the things that are found in front of him to provide mental images of the child along with his tendency innate and nature around organization and composition allow it to age in the second and third prediction of the simple, appreciation and understanding of information .. That the baby feels the age of three sensory attributes to him all that clear gloss or dark color, sound, sharp or strong smell to attract the attention of the child.

3. Stage naked (is):
With the growth takes words slowly replacing the things represented by the use of language as a tool for thinking any Tduatha is important, child little used language as an extension of what the impact of the things which it refers to things and gradually only uses words to replace things are not present now, in order to use the child language as a tool for thought must be a world of experience in the light of the principles of organization that are similar in form to the principles of the structural meaning and without special training and Brunner is believed that the child up for Rushd it still depends on the previous two phases to a large extent, regardless of the language spoken.
The essential idea behind the Avatar is that there is a word indicates something or are linked at the same time this random thing but what is striking in the language as one of the specialized terms in activity is that the symbolic link in one of its manifestations, a syntax to mature more quickly than up to in the other manifestations Vtafl five years can assemble words and sentences.

Bruner's ideas in science education: -

1. Learning scientific concepts: Brunner believes that there are five important elements for the concept of scientific and that facilitate learning and these elements are:
   A - The name of the concept: the label element is an important factor because it helps the learner to remember some of the qualities that belong to the concept.
B - the definition of the concept: It is the phrase that describes the qualities or relations between the basic components of the concept.
C - the characteristics of the concept: helping to define the concept and include color, number, size, etc. ...
D - the value of Concept: This element specifies the value of the concept for other concepts.
E - Examples of concepts: the use of examples of the concept in order to clarify and facilitate learning.

2 - discovery learning:
Brunner asserts that what is found by the student himself of the scientific facts, concepts, principles and relations between them more useful for students and the wider use and lasts in the memory longer than the information stored. 
In the process of discovery, the student is the focus of the educational process, students also learn to learn the world in his lab. 
Brunner believes that the learner, regardless of their age and level of mental development is able to expand its capabilities through the development and testing of hypotheses under the guidance teacher and guidance. 
1. Mode (Brunner) a set of points. Can be counted Terms of learning and discovery requirements are ...
1 - raising the attention of students learning the subject ..
Before Abdamodua lesson we must make sure that students on the degree of attention and vigilance and the desire Fayaltalm because this group to a high degree of importance and can not happen without him learning. We do not expect the student to learn, or acquire the information and his mind is busy in other things, sees no early importance of this issue for him. And Yemen for the teacher to achieve Alasttharaldharoria to attract the attention of students in several ways, it starts asking for some Alqzaialmerthbth relevance or importance of this issue for their own lives and the lives of people in Almojtmabashkl year. 2 - Taking into account the levels of students -
Oneetm can not learn if the teacher did not take as the mental level of students Onaltlamiv As we know, in any year of study or level of education, have different levels of mental Analesnoat and other phases. Therefore, teaching should reflect these levels. We appreciate Mutiralmadrs live up thinking that the students and provide them with the necessary expertise, but that should Akonfa framework and the limits of their abilities, it is only necessary to understand the teacher, and understands these capabilities, and learn how to know which students. Do not deal with the Elementary level students the same images as if they were in high school, and the same logic does not Aderstalbh high school the same way that he taught students in the Elementary level. 
3 - sequence information: 
Cons (Brunner) that many of the Modoatimcn taught to students at different stages, but it depends on how Altiniz these topics, and this is what is called curriculum-helix or spiral, forces, to the curriculum can be re-Many of the themes in the different educational levels, but Bashkelmusa by , and using multiple learning styles of the other hand, for him Akmintalim child in primary school the idea of cooperation through the organization of activities within the Alvsalehol this concept, but in the middle stage, it can be addressed to the concept of Khalalaltard to the idea of cooperative societies for example, and visits her, and the study objectives, and Kadintql pupils in secondary school to study the issue of cooperation between States
in Jawanbalaguetsadah example, study the basic idea of the establishment of the Cooperation Council for the Gulf States. We note that in this one subject presented to the students the different stages but Bmistroaatausa and more complex and complicated.

4 - feedback:

Necessary level of Onaaraf student performance in each stage of learning, because the enhancement of the Adaúhalhala. And then starting it to the other steps and stages of performance, or modify the course of Hmaalawl. That the feedback from the concept of behaviorist approaches to the promotion of behavior Mnganb, but different from that feedback shows the extent of failure or success in Adaouallmiv the other hand. After these conditions becomes the student is ready and the Mthaia Talmbalakchav.

Benefits of discovery learning when Brunner: -
1 - increase the effectiveness and power of intelligence.
2 - the transition from dependence on others to rely on self-esteem and thinking.
3 - Learn the steps and discovery, such as access to information and organized, transformed and saved and processed.
4 - the discovery process to help remember information for a long time and apply what students learn in new situations.

Science teacher and the theory of Brunner: -
- The science teacher must be aware of the dimensions of Brunner's theory and its applications.
- Recognize the levels of economic growth of his students to give them the right content to their level and abilities.
He sees Brunner that it is imperative to the learning theories into account the nature of individuals and the scientific knowledge and of access to knowledge and thought Brunner to any subject or any content can be taught to any child at any age when the teacher works on display content and the level of difficulty appropriate for the level of child development knowledge.
- The science teacher should be familiar with the manner of discovery and the different steps.
- The teacher able to teach students the concepts of information processing and basic skills that can be applied in other educational positions.
- For teaching: the teacher to recognize what is available in his school and the potential of materials and tools available in the school can serve the discovery process and to overcome the difficulties faced by students during the discovery process.
- And the student is the focus of the educational process and the teacher as a mentor and guide.
- Clarify the goals of the students.