

Theories – dtlls



Bruner ??“ Bruners constructivist theory is based upon the study of cognition.

A major theme in this theory is that “ learning is an active process in which learners construct new ideas or concepts based upon their current/past knowledge” (Kearsely 1994b). Cognitive structures are used to provide meaning and organization to experiences and allows the individual to go beyond the information given. According to Bruner, the instructor should try and encourage students to construct hypotheses, makes decisions, and discover principles by themselves (Kearsley 1994b). The instructors task is to “ translate information to be learned into a format appropriate to the learners current state of understanding” and organize it in a spiral manner “ so that the student continually builds upon what they have already learned.” As far as instruction is concerned, the instructor should try and encourage students to discover principles by themselves. The instructor and student should engage in an active dialog (i. e., Socratic learning).

The task of the instructor is to translate information to be learned into a format appropriate to the learners current state of understanding.

Curriculum should be organized in a spiral manner so that the student continually builds upon what they have already learned. Like Piaget and Vygotsky, Bruner believes the child has to learn for itself by making sense of its own environment.? In fact Bruner could be seen as an ??? extreme constructivist??™ since he believes the World we experience is a product of our mind.? What we perceive and think of as our World is constructed through our mind as a product of symbolic processes.

? Bruner rejected the idea of stages as popularized by Piaget and to a lesser extent Vygotsky.? Rather than looking at the ages of developmental changes Bruner concentrates more on how knowledge is represented and organized as the child develops.? Unlike Piaget and Vygotsky, neither of whom tailored their work directly towards education, Bruner seems to have had the education process in mind throughout the formulation of his theory.

Unlike Piaget, Bruner believes that the process of cognitive development can be speeded up with the aid of teachers and, like Vygotsky, believes that scaffolding provided by the more competent is an essential part of the teaching process.? So teachers are seen as important, as is the role of language and communication that facilitates scaffolding and language use (symbolic mode) by the child.? Teachers are seen as essential in the Brunerian classroom.? They need to be aware of the child??™s mode(s) of representation, provide scaffolding and speed up development.? Teachers have since been expected to increase the rate of cognitive development.? In terms of education the influence of the modes is similar to Piaget??™s stages, in that the teacher needs to be aware of the mode(s) being used by each child and structure their teaching, resources and activities around these modes.? So for example, early teaching will centre on the enactive mode so activities will need to be hands on and practical in nature.

the differences between the behavioural and cognitive psychology. To help understand the differences between cognitivism and behaviourism, Malm quoted M. S. Chodorow and S. K. Manning (1993, p. 73) ??? showing that what was learned was more complex than simple associations or even linear chains of associations.

??? In reflecting on these difference theories, there are situations that could reinforce both theories, just as Bruner mentioned (1966, p. 18). Malm (1993, p. 70) wrote regarding cognitivism ??? that behaviour is a result of the way in which the subject categorizes and transforms stimulus situations.???

Through his experiences, Bruner desired to know ??? how people reach their high-water mark??? (1966, p.

4), it was not the job of a teacher to determine to goals of education, but teachers can definitely influence those goals. When a student recognizes that cognitive or intellectual mastery has occurred, they will have an intrinsic reward. As part of this intrinsic reward is the realization that those skills that have been mastered can be transferred to other domains (1966, p. 30).

In the same vein of thought, as the students advance through school and are successful, then their confidence will increase (1966, p. 120). Both of these ideas promote the concept of skills and confidence increasing in an upward spiral, not just a cycle. This ties in with the motivational factors migrating from mostly extrinsic motivation to mostly intrinsic motivation.

Constructivism is related to Discovery Learning. Dr. Tomei (1998) stated:??? Discovery Learning matches cognitive development.

??? Hassard??™s (2000) interpretation of Bruner??™s philosophy of Discovery Learning is ??? that students learn best by discovery and that the learner is a problem solver who interacts with the environment testing hypotheses and developing generalizations. Central to Bruner??™s philosophy on Discovery Learning are three stages, or modes. The first is enactive, then iconic, followed by symbolic. The enactive stage is one of action. The learner??™s

actions can be varied, but the uses of manipulatives are important here since they have to be able to touch, feel, move, etc. the object. The iconic stage is a visualization stage.

The learners use images, drawings, and graphics to represent the concept being discovered. The third stage of symbolic representation involves using symbols, language (here is Bruner's linguistic philosophy in practice), and logical statements to represent the abstract part of the concept being taught. With the Discovery Learning model, it is important for the teacher to teach to, or model for, the students the discovery process. In the end, it is the process that will have more value for the students than the actual knowledge learned. Vygotsky's greatest contribution was in recognising the importance of social interaction in the cognitive development of children.

? Vygotsky does not consider the importance of the child's desire to learn. Vygotsky did not say what types of social interaction are best for encouraging learning. Vygotsky emphasises the role of social interaction in teaching and this is where his greatest contribution has been.? Effective teachers are those with more knowledge than the child and can include peers.? Teachers need to provide scaffolding and be able to adjust the level of assistance they provide depending upon the progress of the child. One area in which scaffolding appears to have been used successfully is in the area of peer tutoring. Vygotsky emphasises that anyone with more knowledge than the child can act as teacher, be it an adult, older child or a more advanced child of the same age (peer).? In the classroom situation the more advanced child can act as tutor and since he/she is of similar age they

should have a good understanding of the tutees situation and should also be working in the same ZPD.

? KOLBKolb explains that different people naturally prefer a certain single different learning style. Various factors influence a persons preferred style: We use Honey & Mumford learning styles questionnaire (VARK) to discover learners preferred learning style to ensure we can accommodate the learner effectively with resources to ensure learning is taking place, such as visual aids, quizzes, practical, presentations, role play etc. The Kolb model is a circle, but it may be better thought of as a spiral, one in which students move through the four modes again and again at increasing levels of complexity. recommended using a variety of teaching methods instead of trying to link specific strategies with learning styles Also, sharing with students the reasoning behind the design of a course can help them understand the connections between the course objectives and assignments in the course. A balance between action and reflection is consistent with Kolb??™s notion In reflective observation, they look back on this subjective experience and ask related questions: What was that like Have I ever had an experience like that before How did that feel The Kolb model is a circle, but it may be better thought of as a spiral, one in which students move through the four modes again and again at increasing levels of complexity. We believe that the ability to understand and use theory in education. providing confirmation of students??™ current thinking, presenting contradictions to students??™ assumptions, and providing continuity for students as they develop new ways of looking at themselves, their profession, and their world. I have proposed that teaching around the Kolb experiential learning cycle fosters

development, Finally, we have acknowledged that student development is not just an individual instructor's responsibility but the responsibility of an entire program.

Skinner In terms of the concept of learning, the process tends to be passive with regard to the behaviorist theory. The learner uses low level processing skills to understand material and the material is often isolated from real-world contexts or situations. Little responsibility is placed on the learner concerning his/her own education. Typical classroom instruction consistent with the behaviorist theory includes; classroom management, rote memorization. The behaviorist approach to teaching has practical applications in education.

In particular, understanding basic skills and core subject knowledge. The approach of using positive and negative reinforcements to elicit desired behaviors of students is also useful in establishing and maintaining classroom management. Bandura Self efficacy's roles for the teacherx Modelling or demonstrationx Setting a clear goal or image of the desired outcomex Providing basic knowledge and skills needed as the foundation forthe taskx Providing guided practice with corrective feedbackx Giving students the opportunity to reflect on their learningSelf efficacyAccording to Albert Bandura, peoples judgments of their own ability to deal with different situations is central to their actions.

These actions include what they choose to do, how much effort they invest in activities, how long they persist in the face ofadversity, and whether they approach the tasks anxiously or assuredly. These judgments, called ??? self

efficacy,???) may or may not be accurate, but they arise from four main information sources. In decreasing order of their strength, these sources are: performance attainments, observations of other people, verbal persuasion, and physiological state.

Successes raise our self efficacy, while failures lower it. Failures are particularly likely to lower our self efficacy if they occur early in the learning process and are not due to lack of effort or difficult situations. Observing other people similar to us performing successfully can strengthen our beliefs that we can perform similar tasks, especially when the tasks are unfamiliar. Verbal persuasion from a credible source also can help. Finally, we (both teachers and learners) need to re-interpret our anxiety or nervousness in difficult situations as excitement or anticipation, rather than as an ominous sign of vulnerability. Each of the educational theories presented here can guide our teaching practices. Some theories will be more helpful than others in particular contexts. However, several principles also emerge from these theories, and these can provide helpful guidance for medical educators.

Bandura's social learning theory “ emphasizes the importance of observing and modeling the behaviors, attitudes, and emotional reactions of others” (Kearsley 1994c). It has been applied extensively to the understanding of aggression (Bandura 1973, as cited in Kearsley 1994c) and psychological disorders. Bandura states: Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behavior is learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed, and on later occasions this

coded information serves as a guide for action (1977, as cited in Kearsley 1994c). “ Strategies consistent with social learning theories include mentoring, apprenticeship, on the job training, and internships” (Ross-Gordon 1998, 217). Conclusion on Bandura In Bandura’s own words: “most human behavior is learned observationally through modeling: From observing others, one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action” (p.

22) The above quote summarizes Bandura’s theory. Conclusions This article has attempted to show how the gap between educational theory and practice can be bridged. By using teaching and learning methods based on educational theories and derived principles, medical educators will become more effective teachers. This will enhance the development of knowledge, skills, and positive attitudes in their learners, and improve the next generation of teachers.

Strengths & weaknesses to theory Learning theory Strengths: 1. We do learn by association (classical conditioning). This was demonstrated by Pavlov he struck a bell when the dogs were fed.

If the bell was sounded in close association with their meal, the dogs learnt to associate the sound of the bell with food. After a while, at the mere sound of the bell, they responded by drooling. Weaknesses: 1. The approach is reductionist. Behaviour is reduced to simple associations between behaviour and the environment.

It ignores the cognitive factors that have been shown to be important in behaviour, however you could also add that social learning theory was developed to overcome these issues. 2. Also not all behaviour is learnt. This approach would argue that anger is a learned trait however the biological approach offers some alternative explanations.

They argue that hormones such as testosterone determine our behaviour. E.g. someone is angry, behaviourist would say they have imitated the behaviour but the biological approach would argue that this person is aggressive due to high levels of testosterone. Evolutionary Theory Strengths: 1. It can offer some explanations about behaviours such as aggression. Males would fight each other for territory in hunter gatherer times and so it may explain aggression today, that we have inherited this trait from our ancestors because the more aggressive we are the likely we are to survive and pass on our genes.

Weaknesses: 1. It can't be falsified because assumptions are mainly based on non-testable hypothesis. If we can't test the hypothesis the validity of the theory must always be questioned. 2.

It heavily realises on animal research. Can we generalize from animals to humans There are clear qualitative differences between humans and animals, we no longer have to behave in certain ways to survive and pass on our genes like animals do. 3. Also some behaviour are not always adaptive. Anorexia is explained by evolutionary theorists as adaptive because some members in hunter gatherer times would starve themselves when food was scarce. However if it was adaptive to starve yourself then surely it would be

found equally in men and women, but more women suffer from it. The more maladaptive the behaviour the more likely it will go away but anorexia is on the rise.

This suggests there are other reasons that determine our behaviour such as psychological or cognitive Learning Theories – Some Strengths and Weaknesses What are the perceived strengths and weaknesses of using certain theoretical approaches to instructional design Behaviorism Weakness - the learner may find themselves in a situation where the stimulus for the correct response does not occur, therefore the learner cannot respond. - A worker who has been conditioned to respond to a certain cue at work stops production when an anomaly occurs because they do not understand the system. Strength - the learner is focused on a clear goal and can respond automatically to the cues of that goal. - W.

W. II pilots were conditioned to react to silhouettes of enemy planes, a response which one would hope became automatic. Cognitivism Weakness - the learner learns a way to accomplish a task, but it may not be the best way, or suited to the learner or the situation. For example, logging onto the internet on one computer may not be the same as logging in on another computer. Strength - the goal is to train learners to do a task the same way to enable consistency.

- Logging onto and off of a workplace computer is the same for all employees; it may be important do an exact routine to avoid problems.

Constructivism Weakness - in a situation where conformity is essential divergent thinking and action may cause problems. Imagine the fun Revenue

Canada would have if every person decided to report their taxes in their own way – although, there probably are some very “constructive” approaches used within the system we have. Strength – because the learner is able to interpret multiple realities, the learner is better able to deal with real life situations.

If a learner can problem solve, they may better apply their existing knowledge to a novel situation.(Schuman, 1996)Each learning style has its strong and weak points. To balance different needs of their students, teachers should provide learning objectives in many different ways and in that way ensure that all learning styles are covered. Although Kolb’s theory is widely accepted and has its use for improving performances especially in higher education, there are a number of problems with the model (Greenway, R. 2004). David Kolb is putting forward a particular learning style model. The problem here is that the experiential learning model does not apply to all situations. Another problem is that Kolb’s theory provides only limited number of factors that influence learning.

It doesn’t explain psychodynamic, social, and institutional aspects of learning. It is important to have in mind that people differ in their learning type over time and over situations. Different approaches may be needed even to same person in different situations. Strengths of Cognitive Theory? First, as discussed, research has provided a lot of knowledge about how people think and perceive and has consequently provided a lot of support for cognitive theory. Second, perhaps because of these positive findings, cognitive theory has gained in popularity both in the professional and pop psychology arenas. Weaknesses of Cognitive Theory? Like all

theories, the cognitive perspective is not free from criticism.? First, behaviorists see this theory as weak due to the abstract nature of thoughts and the difficulty in defining them.? What may be seen as self-critical by one researcher may look like a rational remark by another.? Second, there is no agreed upon definition or application of the theory.? It is seen as fairly new and while it receives a great deal of research, the underlying theory of personality development is weak at best.? So while it may have very positive outcomes in treatment, it does not provide a solid understanding of development.? For the neo-Freudian, this might mean that cognitive therapy is only a temporary approach and does not address the real reason behind a personality issue.

Badura Strengths * Interdisciplinary and integrative * Helps link agency and social structure * SCT passes the test of self-reference * Strong research methodology * One of only a handful of social scientists to discuss fortuity * Path models * Many applications leading to social betterment

Weaknesses * Perhaps gives too much weight to human freedom of action * Perhaps gives too much weight to human rationality * Downplays biological and upward causation (he does a great job on downward causation: agency/mind directing one??™s intentionality and behavior) * Perhaps tries to include too much conceptual territory in a single theory