

Constructivism: Pedagogy

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Postmodern Period (1900 -2000) Millennium (2000 - 3000)

- ❑ Criticism of modernism(1500-1900);
- ❑ Criticism of scientific method & positivism as moral considerations were lacking in decisions;
- ❑ Viability is of more important as compared to validity;
- ❑ Logic/scientific approach is not always applicable in handling societal issues;

Socio-cultural, political, economic, considerations in postmodernism(1900-2000) and millennium(2000-3000)

Focus on the following socio-cultural, political, economic, considerations in postmodernism(1900-2000) and millennium(2000-3000):

- ❑ Equality and justice;
- ❑ Multiple pathways and plurality;
- ❑ Diversity and difference;
- ❑ Fragmentation, diversity, discontinuity, contingency, *pragmatism*, multiplicity, and connections.
- ❑ Gender and identity

Constructivism and Education at various Levels of Education

Constructivist knowledge and transferable skills,

Constructivist pedagogy,

Constructivist instruction

Constructivist formative and summative assessment

Constructivism: A theory about knowledge and learning

- ❑ Constructivism is a theory about knowledge and learning(Kumar &Gupta, 2009, p.40)

Constructivist Assumptions in Education (Kumar & Gupta, 2009, p.40; Matthews, 2003, p.57)

- ❑ Constructivist epistemology assumes that learners construct their own knowledge on the basis of interaction with their environment.
- ❑ Social Interactions and context are necessary for learning to occur;
- ❑ The learner has an active role in interpreting the learning process, education should be child directed not teacher directed;

Constructivist Assumptions in Education

(Kumar & Gupta, 2009, p.40; Matthews, 2003, p.57)

- ❑ Constructivist teachers need to adapt their teaching style, approach, and content to the specific developmental stage of the child;
- ❑ The motivation to learn is internally generated by the child (intrinsic motivation);
- ❑ Developmentally based educational proponents argue that drill, corrective feedback, and the use of incentives are inhibitory to the naturally occurring learning process (e.g., Deci & Ryan, 1985).

Insights of Dewey and Piaget

John Dewey(1902,1956): Knowledge creation by **active participation of individual/reorganisation of experience/reflection**)

Jean Piaget(1972). Knowledge as a **process of inquiry and reasoning/assimilation and accommodation**)

Insights of Vygotsky and Freire

Lev Vygotsky(1978): Knowledge construction is explained with the help of *Zone of proximal development* (the distance between the actual development level as determined by independent problem solving) and level of potential development (as determined through problem –solving under adult guidance or in collaboration with more capable person/social &cultural context);

Paulo Freire(1994): Problem solving education/knowledge is constructed by involving *critical thinking skills* of individual

Epistemological Constructivism

❖ Epistemological constructivism

Knowledge is a compilation of human made constructions.

Examples:

- ✓ Radical constructivism(Von Glasersfield);Emphasis is on ability of human beings to use understandings they create to help them navigate life.
- ✓ Kelly's Personal Constructivism.
- ✓ Cognitive constructivism (Jean Piaget);

Hermeneutic Constructivism

❖ Hermeneutic Constructivism:

Knowledge is the product of the linguistic activity of a community of observers. There is a role of language, discourse and communication.

Hermeneutic Constructivism

EXAMPLES

- ❖ Social Constructivism(lev Vygotsky);
- ❖ Pragmatic constructivism: It incorporates the insights from Dewey's pragmatism, epistemological constructivism and hermeneutic constructivism

Pragmatic Constructivism: Features

- Purposeful change In environment and reflection of change;**
- Integration of thinking and doing/act;**
- Balance between teacher active role and student –directed learning;**
- More emphasis on good practice teaching;**

Pragmatic Constructivism: Features

- ❑ **Ability to interpret students' actions and responses;**
- ❑ **Ability to interpret students' knowledge, and make modifications when they discover that students have not grasped what they were supposed to.**
- ❑ **Pragmatic constructivist discourse is both descriptive and prescriptive, one that can offer some concrete guidance and recommendations for educators.**

Constructivist Pedagogy: Online and offline

Online constructivist learner-centred methodologies

- ❑ Class share
- ❑ Web quest
- ❑ Online learning environments/systems;

Constructivist Pedagogy: Online and offline

- ❑ ICT integration across curriculum;
- ❑ Content - pedagogical-technology knowledge classroom transactions
- ❑ Flipped classroom
- ❑ Robotics;
- ❑ Others

Constructivist Pedagogy: Online and offline

- ❑ Lead lectures
- ❑ Role playing;
- ❑ Gaming
- ❑ Small group work(reflective workshop and tutorials)
- ❑ Large group work(seminars/conferences/debates/quiz etc);
- ❑ Peer feedback and teacher feedback methods ;
- ❑ Reflective journal entries/ reflective diary writing;

The Course Descriptor: Embedded Pedagogy

INTRODUCTION/LEARNING OUTCOMES/READINGS/PEDAGOGY/

- Introduction of the course
- Learning Outcomes for the specified time e.g. one week
 - Course content for the week and reading resources
- The classroom activities/ out-of- classroom activities/ self-directed activities for deep learning on contents of the week
 - The small group activities/oral presentations/hand-out activities/reflections/writing of reflective journal etc.
- Facilitation, positive Interaction, feedback (peer feedback and teacher feedback) and assessment of level of desired learning for the purpose of achieving learning outcomes

Further Reading

Gordon, M. (2009). Toward a pragmatic discourse of constructivism: reflections on lessons from practice. *Educational Studies*, 45, 39 – 58. DOI: 10.1080/00131940802546894

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