

CONSTRUCTIVISM

J. Piaget

Biography, 2014



J. Dewey

(Total Biography, 2103)



Julie Dewhurst

"CONSTRUCTIVISM IS AN APPROACH TO TEACHING AND LEARNING BASED ON THE PREMISE THAT COGNITION (LEARNING) IS THE RESULT OF "MENTAL CONSTRUCTION." IN OTHER WORDS, STUDENTS LEARN BY FITTING NEW INFORMATION TOGETHER WITH WHAT THEY ALREADY KNOW. CONSTRUCTIVISTS BELIEVE THAT LEARNING IS AFFECTED BY THE CONTEXT IN WHICH AN IDEA IS TAUGHT AS WELL AS BY STUDENTS' BELIEFS AND ATTITUDES." (BADA, 2015, P. 66)

Piaget

Assimilation

- Fitting a new experience into an existing mental structure
- This he referred to as schema

Accommodation

- Revising an existing schema because of a new experience
- Equilibrium is cognitive stability achieved through both

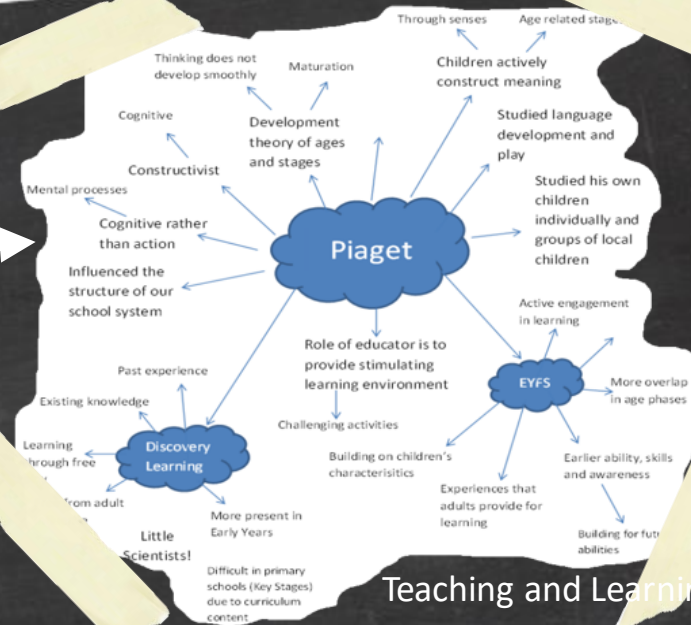
Dewey

Construct, create and inquire

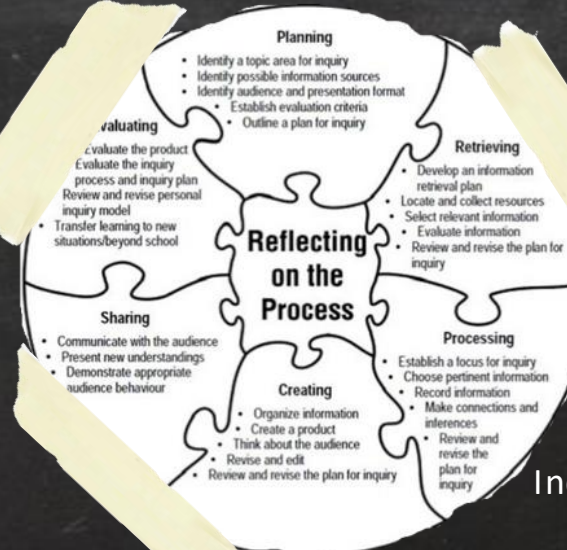
- Students learn by doing
- Learning should expand and engage

Education

- Schools should be seen as an extension of society
- Students should play an active role in it



Teaching and Learning (2019)



Inquiry model (2019)

Benefits of Constructivism

- ☐ Children learn more as they are actively involved
- ☐ Constructivism concentrates on learning how to think and understand
- ☐ Constructivism learning is transferable
- ☐ Constructivism gives students ownership of what they learn, assignments are very often designed by them
- ☐ Constructivism stimulates and engages students by putting them in a real-life context
- ☐ Constructivism promotes social and communication skills by creating a classroom that emphasizes collaboration.

(Alanazi, 2106, p.3)



Criticism of Constructivism

- ☐ Constructivism promotes students to learn with minimal instruction leading to lack of direction
 - ☐ It ignores the importance and structure of working memory
 - ☐ Students working without direction can become frustrated and lost
- (Alanazi, 2016, p.2)

CONSTRUCTIVISM IN THE CLASSROOM

PROJECT – DESIGN A ROLLERCOASTER THEME PARK



(The Insight program, 2019)

ENGLISH

BUSINESS STUDIES

MEDIA STUDIES

MATHS

IT

CROSS CURRICULUM OF LITERACY, NUMERACY AND DIGITAL COMPETENCE

- TRIGONOMETRY
- AREA
- COST
- DESIGN
- THE ECONOMY
- ADVERTISING

The Curriculum for Wales is changing, the new curriculum will be used throughout all schools in Wales by 2022.

"The curriculum will have more emphasis on equipping young people for life. It will built their ability to learn new skills and apply their subject knowledge more positively and creatively."

"They will also get a deep understanding of how to thrive in an increasingly digital world...preparing them for opportunitites and risks the online world presents"

"Teachers will have more freedom to teach in ways they feel will have the best outcomes for their learners."

(New school curriculum overview, 2019)

SUCCESSFUL FUTURES

- ambitious, capable learners who:**
- › set themselves high standards and seek and enjoy challenge
 - › are building up a body of knowledge and have the skills to connect and apply that knowledge in different contexts
 - › are questioning and enjoy solving problems
 - › can communicate effectively in different contexts and settings, with confidence in English and Welsh
 - › can understand and apply mathematical concepts they are learning about
 - › can understand and apply mathematical concepts
 - › use digital technologies creatively to communicate, find and analyse information
 - › undertake research and evaluate critically what they find and **are ready to learn throughout their lives.**

- enterprising, creative contributors who:**
- › connect and apply their knowledge and skills to create ideas and products
 - › think creatively to reframe and solve problems
 - › identify and grasp opportunities
 - › take measured risks
 - › lead and play different roles in teams effectively and responsibly
 - › express ideas and emotions through different media
 - › give of their energy and skills so that other people will benefit and **are ready to play a full part in life and work.**

(Welsh Government, 2015)

Piaget believed that "assimilation and accommodation require an active learner, not a passive one, because problem-solving skills cannot be taught, they be discovered".
(Mcloed, 2018)

NEW CURRICULUM FOR WALES (DONALDSON)

Dewey believed the learner needs active discovery rather than the passive remembering of facts and figures
(Aubrey and Riley, 2019, p.10)

Dewey's principles that children need to be ready to take on an active and confident part in society

Although Piaget did not directly link his theories to education they were extremely influential to furthering educational policy and teaching practice. His theories led to the Plowden report (1967)

"A school is not merely a teaching shop, it must transmit values and attitudes. It is a community in which children learn to live first and foremost as children and not as future adults"
(The Plowden Report, 1967)

- resilient, confident individuals who:**
- › have secure values and are establishing their spiritual and ethical beliefs
 - › are building their mental and emotional well-being by developing confidence, resilience and empathy
 - › apply knowledge about the impact of diet and exercise on physical and mental health in their daily lives
 - › know how to find the information and support to keep safe and well
 - › take part in physical activity
 - › take measured decisions about lifestyle and manage risk
 - › have the confidence to participate in performance
 - › form positive relationships based upon trust and mutual respect
 - › face and overcome challenge
 - › have the skills and knowledge to manage everyday life as independently as they can and **are ready to lead fulfilling lives as valued members of society.**

(Welsh Government, 2015)

- ethical, informed citizens who:**
- › find, evaluate and use evidence in forming views
 - › engage with contemporary issues based upon their knowledge and values
 - › understand and exercise their human and democratic responsibilities and rights
 - › understand and consider the impact of their actions when making choices and acting
 - › are knowledgeable about their culture, community, society and the world, now and in the past
 - › respect the needs and rights of others, as a member of a diverse society
 - › show their commitment to the sustainability of the planet and **are ready to be citizens of Wales and the world.**

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