筑波大學

SEAMEO
School Network

Constructivism in Education

Lesson 1 : Background of Constructivism

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Lesson	Topic	Lecturer
1	Background of Constructivism	Jun Kawaguchi,University of Tsukuba
2	Theory of Knowledge	Carol Inugai-Dixon, University of Tsukuba
3	Critical Thinking through Art	Nami Sasaki, Tsuru University
4	Practices to Enhance Thinking Skills	Masami Migaki, International Pacific University
5	Reflection of the Whole Lesson	Jun Kawaguchi, University of Tsukuba

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Have you ever heard of the term **VUCA**?

V Volatility
U Uncertainty
C Complexity
A Ambiguity

21st century = **VUCA** world

- Globalization
  - Global issues
- Technological innovation
  - change of social structure
  - change of work environment
- Information society
  - information literacy
- COVID-19

How do you imagine
the future of **education**?

Traditional education

- Students were required to **memorize knowledge** that was given to them by the teacher
- Every student has to do and think the same way just like how the teacher instructed.

- produces workers
- eliminates individual characteristics
- diminishes creativity
- treating students as machines to be fed knowledge

In VUCA world education…

- Students need to…
  - be able to adapt and work on questions or issues where there are no correct answers, by utilizing knowledge.
  - develop creative thinking skills so they can adapt to the rapidly changing world.
  - develop lifelong learning skills so they can constantly update their knowledge appropriately with time.

- Schools should not be a place where knowledge is provided to students, but a place where students construct knowledge independently.

What does it mean to construct knowledge?

Please pause the video for 10 minutes to think of your answer to this question.

What does it mean to construct knowledge?

Constructivism

- Constructivism is based on the idea that **reality is constructed socially by humans though their experiences.**
- It has not only influenced the education field, but also other fields in Humanities and Social Sciences such as Psychology, and Social Sciences.
- It questions the theory of **Positivism.**

From the perspective of constructivism…

- Learning is **not about transferring knowledge, but it is about the process of constructing knowledge independently.**

   →Constructivism is questioning the traditional way of education, in terms of how people teach, learn, and assess, as well as how the learning environment should look like.

What are some methods that can be used to construct knowledge?

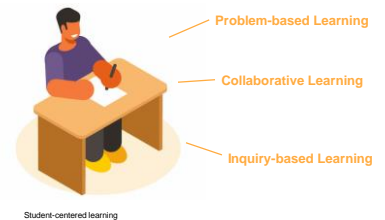Please pause the video for 10 minutes to think of your answer to this question.

What are some methods that can be used to construct knowledge?

Methods to construct knowledge

Skills:
- **Research Skills**
- **Critical Thinking Skills**
- **Creative Thinking Skills**
- **Communication Skills**
- **Social Skills**
- **Self-management Skills**

Problem-based Learning

Collaborative Learning

Inquiry-based Learning

Student-centered learning

International Baccalaureate (IB)

- An education program implemented around the world
- Student centered program
- Focuses on inquiry-based learning

Approaches to Learning (ATL)
by the International Baccalaureate (2019)

How can teachers facilitate in fostering these skills in students?

Please pause the video for 10 minutes to think of your answer to this question.

How can teachers facilitate in fostering these skills in students?

IB Approaches to Learning in the classroom

Communication skills
- Teachers demonstrate how to listen and respect different opinions and values

→ Intercultural Understanding

Social skills
- Students share responsibility in decision-making

→ Leadership

Self-management skills
- Students make plans for short and long term assignments

Thinking skills
- Students consider ideas from multiple different perspectives

→ Creative and Critical Thinking

Research skills
- Students think of the benefits and limitations of different information sources

Teachers give meaningful feedback so students can improve their skills

References

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Saxton, S. E., & Hill, I. (2014). The International Baccalaureate (IB) programme: An International Gateway to higher education and beyond. *Higher Learning Research Communications, 4*(3), 42. https://doi.org/10.18870/hlrc.v4i3.123

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See you in Lesson 2!

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