

Technology-Enhanced Learning - Activity Plan

Set theory

Name: Md. Golam Dostagir

Level: Secondary

Grade / Course: Class-8 , Mathematics

Length of Activity: 50 minutes

Lesson Summary:

Students will denote set, classification of set, component of set and solution of set related problem using set theory. This is explain using PowerPoint presentation and group work.

Lesson Objective:

To provide students with an opportunity to learn set theory, using set theory solve some set related problem and various operation of set theory.

Resources/Technology – Teachers:

- ❖ Interactive Whiteboard
- ❖ Online Resources
- ❖ OER's
- ❖ Social media
- ❖ Multimedia content and Projector

Online Resources:

- <https://www.britannica.com/topic/set-theory>
- <https://brilliant.org/wiki/set-theory/>
- https://en.wikibooks.org/wiki/Discrete_Mathematics/Set_theory
- https://en.wikipedia.org/wiki/Set_theory
- <https://www.teachers.gov.bd/>
- <http://www.mathsisfun.com/sets/>
- <http://settheory.net/>

Resources/Technology – Students

- ❖ Computer Lab or Student Laptop setting personal access to the Internet
- ❖ Worksheet/ Learning Materials
- ❖ Social media

Online Resources:

- <http://www.mbacrystalball.com/blog/2015/10/09/set-theory-tutorial/>
- <https://www.youtube.com/watch?v=rRk0d6P4oUI>
- <https://www.youtube.com/watch?v=vGelH3Jibt4>
- <http://settheory.net/>
- https://www.youtube.com/watch?time_continue=5&v=jAfNg3ylZAI

Intended Learning Outcomes:

- ✓ Students will define set.
- ✓ Students will operate set related problem.
- ✓ Students will do union and intersection of two set with van diagram.

Instructional Activities

- ✓ The facilitator will review and present materials using interactive whiteboard and multimedia projector examples to the whole class. (15 minutes).
- ✓ Teacher to provide instructions on how to solve set related problem and the web links to the resources provided to students. (15 minutes)
- ✓ Students are given time to complete the lesson activities. (30 minutes)

Learner Assessment

Student will solve some set related problem like the follows:

If A, B, C are three sets, Proof $(A \cup B) \cap C = (A \cap C) \cup (B \cap C)$.