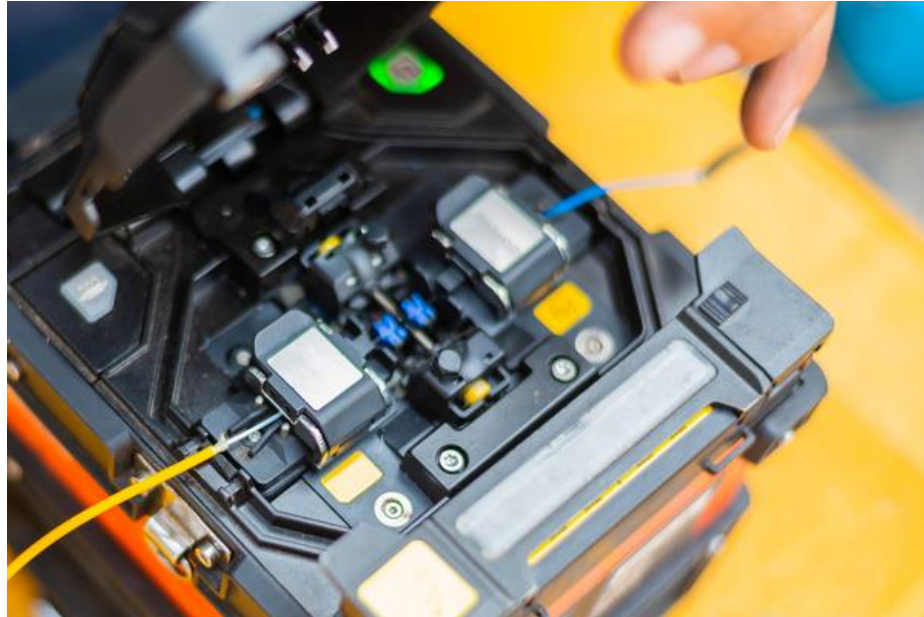


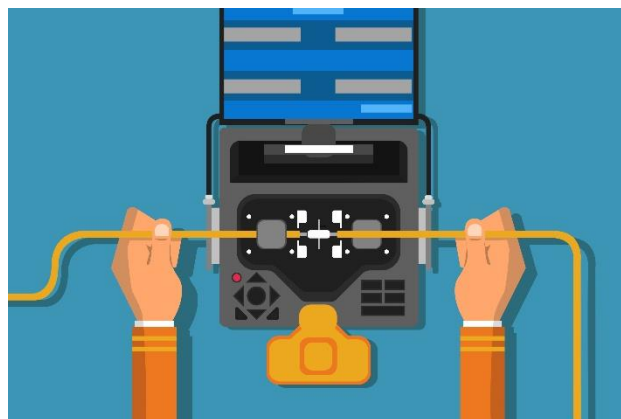
**Date:** 3 July 2024

**Today Task:** Following are the task performed today at BVM School Kitchlu Nagar Branch

- ✓ Fiber optic splicing is done at server room and Madhav Block and media converter is connected to it.
  - Fiber optic splicing is the process of joining two fiber optic cables together to create a continuous path for data transmission.
  - It's often used when cable runs are too long for a single length of fiber or when joining two different types of cable together.
  - Just Like From **Madhav Block reception to Server room** the Optic Fiber cable are wired underground that are splicing at both the end and the media converter is connected at the both end.



**Fig 1:** Splicing to Fiber Optic Cable to connect the splicer



**Fig 2:** Fusion Splicing

**Fusion splicing:** It uses an electric arc to melt the ends of the fibers together. This method is faster and more efficient than other techniques. The ultimate goal is to fuse two fibers together so that light passing through the fibers is not scattered or reflected back by the splice.

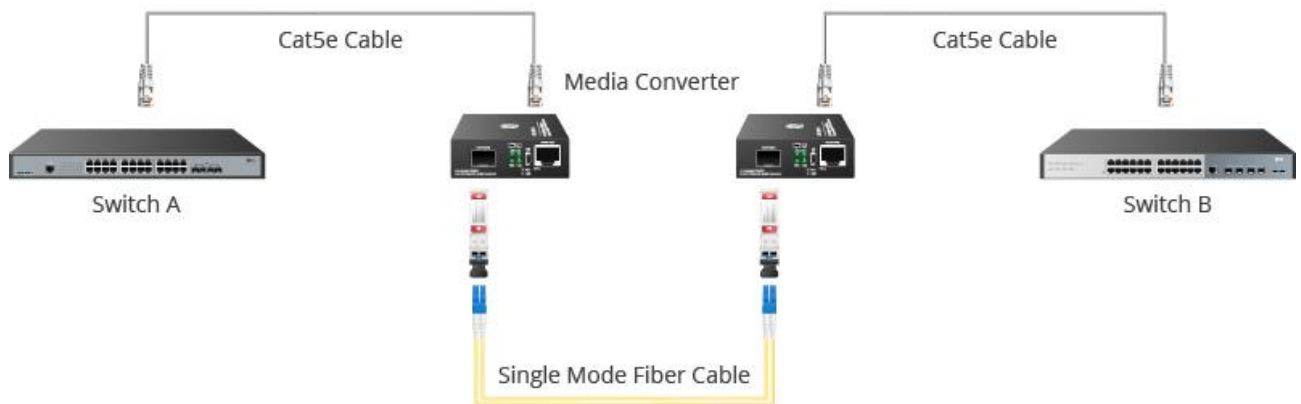
However, the initial investment for fusion splicing is much higher than mechanical splicing.

**Mechanical splicing:** Aligns and holds the fibers in place using an index matching fluid. This method requires less of an initial investment, but it costs more per splice.

**Media Converter:** A media converter is a device that converts signals from one type of media to another. For example, a media converter can convert signals from a copper Ethernet cable to fiber optic cable, or vice versa.



**Fig 3:** Media Converter



**Fig 4:** Working diagram of Media Converter