Faculti Summary
https://staging.faculti.net/hacking-an-iot-home-new-opportunities-for-cyber-security-education-combining-remote-learning-with-cyber-physical-systems/

This video video describes a project focused on improving cybersecurity education, particularly in home environments, and adapting to challenges posed by the COVID-19 pandemic. With many people working from home and using connected devices, the project aimed to educate individuals about the security implications of these devices. The initiative involved creating an Internet of Things (IoT) home setup filled with various smart devices (like cameras, doorbells, and appliances) and linking them to a "capture the flag" platform for educational purposes.

During the project, students engaged in challenges that allowed them to remotely control the devices in a demonstrative way— such as making light bulbs flash, activating fans, and triggering a vacuum cleaner through their solved tasks. This video video hands-on, remote interaction emphasized the growing importance of understanding cybersecurity in a digital and connected world. The key takeaway for students was recognizing the real-world impact their actions from different geographical locations could have on a remote environment.

The project also highlighted the need to rethink traditional approaches to cybersecurity education, moving away from solely classroom-based learning to embracing remote, practical experiences that reflect the realities of today's technology. Overall, it aimed to balance security and convenience in technology use, emphasizing risk management, understanding vulnerabilities, and the significance of individual decision-making in cybersecurity practices.