Telemedicine

5.61
Unit 5, Lesson 6
Explanation
The designed world is the product of a design process, which provides ways to turn resources - materials, tools and machines, people, information, energy, capital, and time - into products and services.
The Lesson Big Idea

Telemedicine reflects the convergence of technological advances in a number of fields, including medicine, telecommunications, virtual presence, computer engineering, informatics, artificial intelligence, robotics, materials science, and perceptual psychology.
What is Telemedicine?

- The American Telemedicine Association defines Telemedicine as: “Telemedicine is the use of medical information exchanged from one site to another via electronic communications to improve patients' health status.”
What is Telemedicine?

- Videoconferencing, transmission of still images, e-health including patient portals, remote monitoring of vital signs, continuing medical education and nursing call centers are all considered part of telemedicine and telehealth.

- Word processing is not considered part of telemedicine.
Examples of Telemedicine

- Doctors sending out x-rays to be reviewed by specialists outside of the hospital.
- Health workers and people in remote areas using communication systems, including webcams, to speak with specialists in another region regarding their health concerns.
- The monitoring of health data, such as cholesterol levels, in a database for access by doctors and patients.
Examples of Telemedicine

- Medical related images and simulations available to educate patients and assist in the implementation of patient treatment plans and continuing medical education.
- Phone networks created for in-home caregivers to contact doctors and specialists for treatment decisions.
The Technologies Of Telemedicine

- Wireless and broadband
- Satellites
- Databases
- Fiber optics
- Mobile communication devices
- Video and Audio transmitting devices
- Electrocardiogram
- Network Security systems