Beta Presentation
Making STEM Papers Accessible to ASL Users

The Capstone Experience

Team Microsoft

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Project Overview

• Enable ASL users to interpret STEM papers
• By making a translation reading tool
• Accessible as a Chrome extension
System Architecture
Input using Highlight Functionality
Science

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For other uses, see Science (disambiguation).

Science is a systematic endeavor that builds and organizes knowledge in the form of testable explanations and predictions about the universe. Science may be as old as the human species,[5] and some of the earliest archeological evidence for scientific reasoning is 30,000 years old.[6] The earliest written records in the history of science come from Ancient Egypt and Mesopotamia in around 3000-2500 BCE.

Their contributions to mathematics, astronomy, and medicine entered and shaped Greek natural philosophy of classical antiquity. These attempts were made to provide explanations of events in the physical world based on natural causes.[5][6] After the fall of the Roman Empire, knowledge of Greek conceptions of the world deteriorated in Western Europe during the early centuries (400 to 500 CE) of the Middle Ages,[7][8] but was preserved in the Muslim world during the Islamic Golden Age[9][10] and later by the efforts of Byzantine Greek philosophers, who themselves had preserved the Greek manuscripts from the dying Byzantine Empire.

The recovery and assimilation of Greek works and Islamic inquiries into Western Europe in the 10th to 13th century was later transformed by the Scientific Revolution that began in the 16th century[11] as new ideas from previous Greek conceptions and traditions.[12] The scientific method soon played a greater role in knowledge of the 19th century that many of the institutional and professional features of science began to take shape,[13] along with the concept of “natural science” itself.

Modern science is typically divided into three major branches:[14] natural sciences (e.g., biology, chemistry, and physics), and psychology, and sociology), which study individuals and societies,[15] the formal sciences (e.g., logic, mathematics, and formal logic), and the rules and axioms of science.[16][17][18] There is disagreement whether the formal sciences are science disciplines.[19][20][21][22][23][24] because they use scientific knowledge for practical purposes, such as in engineering and medicine.[15][16][17][18]

New knowledge in science is advanced by research from scientists who are motivated by curiosity about the world and a desire to solve problems.[25][26][27] Contemporary scientific research is highly collaborative and is usually done by teams in academic and research institutions,[28] government agencies, and companies.[29][30] The practical impact of their work has led to the emergence of science policies that seek to influence the scientific enterprise by prioritizing the ethical and moral development of commercial products, and environmental protection.

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Input using Right-Click Functionality
Output

Lookup Videos:

Science

Systematic
Input using Search Bar
What’s left to do?

• Stretch Goals
  ▪ Resizing

• Other Tasks
  ▪ Bug Fixes
  ▪ Refine ML Model
Questions?