

JSD High School Science Curriculum

Innovation and Application

Understand that scientific innovations may affect our economy, safety, environment, health and society and that these effects may be long or short term, positive or negative and expected or unexpected.

- *Discuss the ramifications of scientific evidence on the economy, safety, and environmental issues of a local or global problem.*
- *Recognize that the value of any given technology may be different for different groups of people and at different points in time (e.g., different uses of snow machines in different regions of Alaska).*
- *Identify that progress in science and invention is highly interrelated to what else is happening in society*
- *Research how social, economic, and political forces strongly influence which technology will be developed and used.*
- *Predict and evaluate the possible effects of a recent scientific discovery, invention, or scientific breakthrough.*

Recommend solutions to everyday problems by applying scientific knowledge and skills.

- *Use scientific knowledge and skills to recommend solutions to everyday problems.*
- *Research a current problem, identify possible solutions, and evaluate the impact of each solution.*

Evaluate the scientific and social merits of solution to everyday problems.

- *Critique and defend possible solutions to everyday problems.*

Apply scientific knowledge and skills to understand issues and everyday events.

- *Apply tools of the scientist to understand a local or global issue.*

Participate in reasoned discussions of public policy related to scientific innovation and proposed technological solution to problems.

- *Participate in local or global discussions*

Act upon reasoned decisions and evaluate the effectiveness of the action.

- *Act on decisions made on an issue.*