

# Emerging Technologies

## *Script for SkillsUSA Video #2*

“If there’s one thing that always stays the same, it’s change. From the covered wagon to the luxury automobile, from the telegraph to teleconferencing, mankind has always struggled to make the impossible possible, the dream reality.

Experts believe the reality of the new millennium will be shaped by what they call “ET’s.”

No, Not those “e.t.’s”

These E.t.’s are “Emerging Technologies,” technologies that will be shaping and forever changing our way of life.

The roots of these emerging technologies stretch back to The first industrial revolution, which began in the early 1700s with the invention of the steam engine. This revolution was driven by mechanical developments that dramatically altered methods of production.

In the late 1800s, The second industrial revolution was triggered by inventors like Thomas Edison and Alexander graham bell. This revolution, characterized by the invention of the light bulb and the telephone, was driven by the growing use of electricity and electronics.

Today, the world is in the midst of a **Third** Industrial Revolution, a revolution of technology, driven by the unparalleled advancements of the computer.

It’s estimated that computer performance has improved a million times since its invention over 50 years ago, which has led to revolutionary innovations in all scientific and technological fields. In turn, these innovations are changing the face of numerous industries, with perhaps the greatest changes yet to come.

Within the next decade, manufacturing industries will see an increase in computer-integrated and automated manufacturing, which could result in manual labor factory jobs declining to less than ten percent of the workforce by 2015. lasers, robotics, and nanotechnology—which involves the creation of microscopic machines—will play major roles in the production methods of the future.

Advancements in genetic engineering will allow farmers to adopt alternative techniques—such as precision farming and hydroponics—which will use computer technology to increase farming efficiency.

It’s estimated that the emerging communication technologies will have a more profound impact on our society than the advent of the automobile, nuclear power, and electricity **combined**.

Telecommunications is making the world a much smaller place, as instant communication across geographic boundaries is becoming commonplace. fiber optics, wireless communications, and orbital technologies are already making recent advances in communication obsolete.

Alternative energies ... teleworking ... virtual reality ... smart robots ... automated highways...they’re all coming. and soon.

In fact, over the next three decades, experts believe we'll witness the most striking technological advances that civilization has ever seen.

Those who will benefit most from this new revolution will be those who are prepared to meet advancing technology with advanced skills. Because while technology may be increasing, the number of skilled workers—in almost all fields—is not keeping pace. that's why The success stories of tomorrow will be made possible by the skills training of today.

There's no playing hide-and-seek with the future. Because ready-or-not, here it comes.

Be ready..."

*Run time: approximately 4 minutes*