

TECHNOLOGY- 8

SELECTIVE UNIT 5 (S05)

(Projects in Emerging Technology)
(July 2017)

Unit Statement: As technology is constantly changing, this unit provides a place for teacher/student to introduce and explore new and emerging technologies or software. The student will identify, research, gain a basic knowledge of, discuss and evaluate these technologies. A student will also explore the impact these new technologies have on information systems, business, and society. A student will research a chosen emerging technology in detail and present their findings to their classmates as to teach others the use and potential of the emerging technology. These may be individual projects, small group projects, or projects for the entire class.

Essential Outcomes: (must be assessed for mastery)

1. **The Student Will** research the latest important technologies available.
2. **TSW** develop a heightened attention to emerging technologies and how to track pertinent developments.
3. **TSW** discuss the advantages, disadvantages, and prospects of current emerging technologies.
4. **TSW** present to class, in depth, a chosen emerging technology, based on independent research.
5. **TSW** gain practical experience using emerging technologies.
6. **TSW** explain why it is important to keep up-to-date with emerging technologies.

Suggested Materials/Software:

New software and hardware are to be deemed by instructor as appropriate and comprehensive to support the technology. In many cases these software applications can be found without cost and without waiting on the Internet. There may also be reduced school sets that are viable for student exploration.

Suggested Websites & Activities:

- Research an emerging technology, putting together a PowerPoint presentation showing its advantages, disadvantages, and potential impact on business or culture.
- Research trends in consumer electronics, search for reviews, blogs, and news articles.
- Acquire new hardware or apps and create an in-depth video review and share with the class or share on the internet.

- Have students select a new or exciting technology and track its development over the next few weeks. Create a news alert using Google Alerts or another news monitoring service and report on the development of this technology over time.
 - Robotics and automation
 - Blockchain technology
 - Mobile tech
 - Virtual reality
 - Skynet
 - Artificial intelligence

- Arrange a fieldtrip to a nearby high-tech technology store or business so students can gain practical experience using emerging technologies.

- Just a few examples of websites that lists new trends in emerging technology.
 - <https://www.engadget.com/>
 - <http://www.theverge.com/tech>
 - <https://arstechnica.com/>

- Destiny Webpath Express (found on QSI schools Library site)
Use this search engine to find age-appropriate websites that align with this unit.

ASSESSMENT RUBRIC FOUND ON FOLLOWING PAGE.....

Assessment Rubric – S05 – Emerging Tech

Student Name: _____ **Date:** _____

To receive a ‘B’ the student must show ‘B’ level mastery on ALL Essential Outcomes. (TSW’s)

To receive an ‘A’, the student must show ‘A’ level mastery on 4 of 6 available and ‘B’ level mastery on all remaining TSW’s.

TSW	‘A’ Level Mastery	‘B’ Level Mastery	‘P’ Progress
1. Research the latest important technologies available.	The student can research the latest technologies and justify why they are significant.	The student can research the latest technologies.	
2. Develop a heightened attention to emerging technologies and how to track pertinent developments.	The student can predict emerging technologies and explain best practices in how to track pertinent developments.	The student can develop a heightened attention to emerging technologies and track pertinent developments.	
3. Discuss the advantages, disadvantages, and prospects of current emerging technologies.	The student can discriminate between and justify their position on the advantages, disadvantages, and prospects of current emerging technologies.	The student can discuss the advantages, disadvantages, and prospects of current emerging technologies.	
4. Present to class, in depth, a chosen emerging technology, based on independent research.		The student can present to the class a chosen emerging technology based on research.	
5. Gain practical experience using emerging technologies.		The student can gain practical experience using emerging technologies.	
6. Explain why it is important to keep up-to-date with emerging technologies.	The student can justify why it is important to keep up-to-date with emerging technologies.	The student can explain why it is important to keep up-to-date with emerging technologies.	