Lesson Plan

Information Technology Skills: Choosing Appropriate Software

Objective: Students will identify the various uses for popular software applications and choose the appropriate software application for a variety of work-related tasks.

Workplace Readiness Skill: **Maintain working knowledge of current information-technology (IT) systems.**

*Maintaining working knowledge of current IT systems may include, but is not limited to,*

* *hardware and devices (e.g., peripherals)*
* *software and applications*
* *cloud-based services*
* *file-sharing techniques*
* *emerging technologies*
* *troubleshooting protocols and techniques.*

*Microsoft Imagine Academy (MSIA) offers classroom resources and materials and instructional techniques that will help enhance instruction and learning for this concept. Using the school’s membership ID and product key for the Microsoft Imagine Academy, all resources are available through the* [*MSIA Member Dashboard*](https://member.imagineacademy.microsoft.com/) *(*<https://member.imagineacademy.microsoft.com/>) *on the Microsoft site.*

* *To access the curriculum resources, select the Classroom Tile from the member site.*
* *To access downloadable curriculum resources including the MOAC e-Book, Lesson Plans, and Study Guides select Curriculum Overview - Curriculum Downloads.*
* *To access Online Learning videos and tutorials select Online Learning Directory tile.*
* *For more information visit:* [*How to Get Started with Microsoft Imagine Academy Program*](http://www.doe.virginia.gov/instruction/career_technical/ms_it_academy/index.shtml) *(*<http://www.doe.virginia.gov/instruction/career_technical/ms_it_academy/index.shtml>)*.*

Correlations to Other Workplace Readiness Skills:

* Demonstrate work ethic.
* Demonstrate big-picture thinking.
* Manage time and resources.
* Demonstrate an understanding of information security.
* Demonstrate professionalism.
* Demonstrate reading and writing skills.

Correlations to Virginia Standards of Learning (SOL):

* English: 6.1, 6.2, 6.3, 6.6, 6.9, 7.1, 7.2, 7.3, 7.6, 7.9, 8.2, 8.6, 8.7, 8.9, 9.1, 9.5, 9.8, 10.1, 10.5, 10.8, 11.5, 11.8, 12.1, 12.5
* History and Social Science: CE.14, VUS.15

Instructional Steps:

1. ***Ask students what they think of when they hear the word software.*** Brainstorm, then define key terms:
	1. **Software** refers to the programs and related information used by a computer.
	2. **Application software** is the software you use to do everyday tasks at home, school, and work.
	3. **Proprietary software** is software you buy. Some proprietary software is available to install on a computer, while some is available to the customer via the Internet (Software as a Service [SaaS]).
	4. **Open-source software** refers to programs that are free and publicly available. Open-source programming code can be copied, adapted, or changed since there are usually few licensing and copyright restrictions on it.
2. ***List types of software used every day at home or at school/work.*** Record examples so that students can see the breadth of options. Examples may include commonly used software such as Microsoft (MS) Word and PowerPoint. Point out examples that may be less well-known to students, such as TurboTax, Adobe InDesign, and StorageCraft (backup/recovery software), and discuss that businesses sometimes use specialized, industry-specific software. An example would be an architecture company using computer-aided design (CAD) software. Additionally, emphasize that software choices are constantly changing and evolving.
3. ***Ask students to research software applications in small groups.*** Assign each student group a software application (see examples on Handout #1). Use Handout #1 to guide student inquiry. Students should have access to computers and the Internet to conduct this research.
4. ***Ask students to present findings.*** Ask each group to report to the rest of the class on their software research. If possible, have student groups briefly demonstrate the way the software works. (If students do not have access to a particular type of software for this purpose, they may be able to locate a YouTube video demonstration to share.) Take notes.
5. ***Assess students; ask them to apply what they’ve learned to a workplace situation.*** Use Handout #2 to present students with various workplace scenarios. In each scenario, describe what type of software might be helpful. Have students discuss their choices while evaluating the various workplace scenarios.

Formative Assessment**:**

* Use the “Presentation Assessment Rubric” to assess each group’s presentation. These may also be used as a peer evaluation tool.
* Assess students’ ability to apply what they’ve learned to workplace scenarios through their responses to the activity on Handout #2.

Options for Adaptation/Differentiation:

* To offer scaffolding to students, a whole-group walk-through of Handout #1 will offer greater guidance.
* To assist students without email addresses, or those who may have professionally inappropriate (e.g., cutiepie@aol.com) email addresses, build in an extra class period to create professional email addresses (with parental permission).
* To offer an enrichment opportunity, ask students to create a PowerPoint slide show demonstrating what the class has learned about software applications in the workplace.

Suggestions for Follow-up:

* Ask students to present a PowerPoint slide show demonstrating what they’ve learned about software applications to another class.
* Ask students to design a bulletin board with “Software Options and Tips for Productivity,” to extend and communicate their learning.
* Tie an upcoming project to this lesson and ask students to consider at least two software applications that will assist them with that project.
* Ask students to interview a professional about the types of software he/she uses in the workplace, and how each of those types of software assists with productivity. Share/discuss interviews as a class.

Teacher Resources

[Soft Skills to Pay the Bills — Mastering Soft Skills for Workplace Success](https://www.dol.gov/odep/topics/youth/softskills/) (<https://www.dol.gov/odep/topics/youth/softskills/>), U.S. Department of Labor, Office of Disability Employment Policy.

[Workplace Readiness Skills (WRS) Assessment: Virginia Overview](https://www.ctecs.org/virginia/virginia-overview) (<https://www.ctecs.org/virginia/virginia-overview>), Career and Technical Education Consortium of States (CTECS).

[Workplace Readiness Skills (WRS) for the Commonwealth: Instructional Resources](http://cteresource.org/wrs/index.html) (<http://cteresource.org/wrs/index.html>), Career and Technical Education (CTE) Resource Center.

***ftware solution that involves backup and retrieval of data.***