

Name \_\_\_\_\_

Date \_\_\_\_\_

## Education Technology and Chainsaws

The chainsaw is a powerful tool. With it, people can cut down trees faster and more efficiently than they can with an old-fashioned saw. Should the chainsaw be misused, however, the person operating it just might find him or herself missing a finger—or worse. Like a chainsaw, the computer is also a powerful tool. With it, teachers can enhance the classroom experience in a variety of ways, from showing PowerPoint presentations to initiating international pen pal programs for their students via email. But while misuse of the computer will probably not result in lost limbs, there are other dangers that must be considered when computers are brought into a classroom.



To investigate the way technology is currently being used in our school district, I recently spoke with Jeanine Lowell, who teaches social studies at Lake Town Middle School. Mrs. Lowell informed me that computers, which were introduced into her classroom six years ago, have helped to increase student motivation and prepare her students for life in a technological society. "These kids are probably going to be using some kind of computer system when they graduate from high school," Lowell noted. "It's important that we provide a proper introduction to them in the classroom." Lowell also observed that the computers have made it easier to promote interdisciplinary learning, so that students can work on a project or topic that relates to more than one subject.

For example, last month Mrs. Lowell worked with Lake Town Middle School's math teacher, Stuart Judson, to develop a project on the global population. Each day, students checked the U.S. Census Bureau's "pop clock" website, which constantly monitors and posts the changing population of the United States and the world. Using this resource, students in Mr. Judson's class made three different kinds of graphs showing the rapid rate of change. In Mrs. Lowell's class, students discussed the implications of rapid population growth on world politics and the global economy. "Next year," Mrs. Lowell said, "We're also going to work with Ms. Bickford, who teaches earth science. She's got some fantastic ideas for projects involving the growing population's impact on the environment."

With all of these benefits, however, come a few drawbacks. Although Mrs. Lowell has nearly wallpapered her room with warnings that state: "The computer is NOT A TOY," not everyone in the class agrees with this idea. Mrs. Lowell informed me that students get easily distracted by the many temptations of the internet, and that many students are quite adept at making it look as if they are doing work when they are really checking their email or watching videos—what Mrs. Lowell referred to as the modern-day equivalent of hiding a comic book inside your textbook. "You've got to be three steps ahead," she told me, "if you want to stay on top of what they're actually doing on the computer."

And what, exactly, are they doing? While surfing websites about video games or television shows may distract students from the lesson, these diversions are rather benign in comparison to the other things hiding in the corners of the World Wide Web. Tens of thousands of websites feature inappropriate content for young people. Most schools—including Lake Town Middle—use some type of blocking software to ensure that students cannot access these sites at school. More sophisticated programs use a server-based, network-wide program instead of software that runs on individual computers. Research has shown that these server-based blocking programs provide better security, because tech-savvy students can disable the software on an individual computer. One of the most widely used blocking programs, and the one used by both Lake town and the entire district, is Bess. The Bess program was selected for the district by a committee of parents, teachers, and administrators and is constantly monitored and updated by a team of technical experts. Mrs. Lowell explained to me that when students try to access websites that are deemed inappropriate (such as adult sites) or distracting (such as games), a golden retriever named Bess appears on the screen instead of the blocked site.

Mrs. Lowell was eager to show me exactly how Bess worked. Using her computer at the front of the room, she entered the URL for an adult magazine's website into the address bar and hit enter, expecting Bess to appear on the screen and refuse us access to the site. To our surprise, however, instead of being met with a cheerful golden retriever, we were greeted by an equally cheerful golden blonde, in what I shall assume was a flesh-colored bikini. Mrs. Lowell was stunned. "This shouldn't happen!" She then tried the same thing with a gambling website, and again she gained access. Bess was only successful when Mrs. Lowell attempted to visit an adult website on one of the student computers. This time, Bess faithfully appeared on the screen and informed us that the website we were trying to access had been blocked. "I don't understand it," Mrs. Lowell remarked. "That first computer should have been blocked too. It's a staff computer, but really, that shouldn't make a difference. We're all linked to the same server."

I guess some Lake town teachers can get more than world news on their lunch breaks.

This unexpected development proved one thing to me: there is no fail-safe substitute for the watchful eye of a good teacher like Jeanine Lowell. There are also no electronic cure-alls for any of education's many challenges. Technology is a useful tool, but that is all it is: a tool, which is something used by people to accomplish a task, not a substitute for the people who use it. We must all remember that it is the teachers—not the technology—who provide the greatest asset to our children's education.

- 1) This passage would most likely be found in a
- A. local newspaper
  - B. general interest magazine
  - C. magazine about the latest technology
  - D. teacher handbook

- 2) The author apparently believes that computers in the classroom
- A. ultimately do more harm than good
  - B. should only be used by trained professionals like Jeanine Lowell
  - C. are helpful teaching aids, but not substitute teachers
  - D. are more useful for the teachers than they are for the students
- 3) In the discussion of the chainsaw and the computer in paragraph 1, the author uses which of the following literary devices?
- I. Analogy, characterized by establishing a relationship based on similarities between two ideas or Concepts. This often works to convey a new idea by using a familiar idea as the basis for understanding.
  - II. Parallelism, characterized by the repetition of similar grammatical constructions in a series of Related words, phrases, or clauses.
  - III. Personification, characterized by attributing human traits or characteristics to inanimate objects Or animals.
- A. I only
  - B. I and II only
  - C. II and III only
  - D. I, II, and III
- 4) In paragraph 2, Jeanine Lowell discusses all of the following benefits of computer use in the classroom EXCEPT
- A. increased preparation for the computer systems students will later encounter in the workplace
  - B. opportunities for learning across different subjects
  - C. ease of sharing ideas with people living across the globe
  - D. improved motivation in the classroom
- 5) As used in paragraph 4, which is the best synonym for **adept**?
- A. ashamed
  - B. skilled
  - C. deceitful
  - D. bold

- 6) As used in paragraph 5, which is the best antonym for **benign**?
- A. harmful
  - B. exciting
  - C. difficult
  - D. educational
- 7) According to the passage, the best way for teachers to prevent students from accessing inappropriate or distracting materials on school computers is to
- A. post warning signs throughout the classroom
  - B. carefully monitor what students are doing on the computers
  - C. use client-based software programs on individual computers
  - D. use server-based software programs on networked computers
- 8) In paragraph 7, the author jokes: “I guess some Laketown teachers can get more than world news on their lunch breaks.” The author likely makes this assumption because
- A. in paragraph 4, the author observes that “tech-savvy students can disable the software on an individual computer”
  - B. in paragraph 5, the author revealed that the Bess software was “selected for the district by a committee of parents, teachers, and administrators”
  - C. in paragraph 6, Mrs. Lowell was able to access inappropriate materials on her computer at the front of the classroom
  - D. in paragraph 6, the Bess software failed to block an adult website on the student computers
- 9) How does your school handle internet access in the classroom? What are the rules? Do you believe the rules are necessary? Are they effective? Explain.

---

---

---

---

---

---

---

---

---

---

## Answers and Explanations

1) A

Core Standard: **Integration of Knowledge**

In paragraph 2, the author refers to “our school district.” The use of the word “our” suggests a sense of shared community among the author and readers that one is likely to find in a local publication. The formal tone, investigative approach, and quotes from a reliable source are all characteristics of a newspaper article. For these reasons, this passage would most likely be found in a local newspaper. Therefore **(A)** is correct.

Since the use of “our” indicates a shared community and local audience, this passage would likely not appear in a general interest magazine, which is not necessarily a local publication. This makes **(B)** incorrect.

Although this passage does discuss technology, the focus of the article is primarily on education, not technology. The passage also does not contain information to make us think the security system represents the latest technology. This makes **(C)** incorrect.

Finally, the purpose of a teacher handbook is to give teachers guidelines for how to conduct their classes, but the tone of this passage is not instructional. Also, although this passage might be of interest to teachers, it is directed at a wider audience than just teachers. Therefore **(D)** is incorrect.

2) C

Core Standard: **Integration of Knowledge**

Throughout the passage, the author discusses the benefits and dangers of using computers in the classroom. The author argues that computers can be very useful, but they also have some risks. In the final paragraph, the author argues that “it is teachers—not the technology—who provide the greatest asset to our children’s education.” This idea means that computers are good supplements to instruction, but no replacement for teachers. This idea is restated in choice **(C)**, making it correct.

The author does not present an opinion about whether computers ultimately do more harm than good, so **(A)** is incorrect.

The author compliments Jeanine Lowell’s use of computers in the classroom, but he or she does not imply that only trained professionals should use them. This means **(B)** is incorrect.

The author notes that teachers may be able to access websites that students cannot, but that does not mean the author thinks computers are more useful for the teachers than the students, so **(D)** is incorrect.

**3) B**Core Standard: **Key Ideas and Details**

In the first paragraph, the author compares a chainsaw to a computer. The author states that the chainsaw is “a powerful tool,” and outlines its benefits and drawbacks. Then the author adds that the computer, “like the chainsaw,” is “also a powerful tool,” mentioning its benefits and introducing the idea of possible drawbacks. This comparison is made to clarify the idea that tools can be both helpful and dangerous, which supports the author’s opinion, as stated in the final paragraph: “Technology is a useful tool, but that is all it is—a tool.” Since this comparison is made to explain and clarify a larger point, it is an analogy. This supports **option (I)**.

The author also uses parallelism, repeating similar grammatical constructions to make his or her points: “The chainsaw is a powerful tool. With it, people can cut down trees faster and more efficiently than they can with an old-fashioned saw....Like the chainsaw, the computer is also a powerful tool. With it, teachers can enhance the classroom experience in a variety of ways.” The repetition of the short sentence (“The\_\_\_\_\_is a powerful tool”) and the introductory phrase “with it” are examples of parallelism. This supports **option (II)**.

The author does not give human attributes to anything non-human in the passage, which eliminates **Option (III)**.

Therefore **(B)** is correct.

**4) C**Core Standard: **Key Ideas and Details**

The easiest way to arrive at the correct answer to this question is to use process of elimination. In paragraph 2, Mrs. Lowell states, “These kids are probably going to be using some kind of computer system when they graduate from high school...It’s important that we provide a proper introduction to them in the classroom.” This means we can eliminate **(A)**.

Mrs. Lowell also claims that “computers have made it easier to promote interdisciplinary learning,” an example of which would be “a project or topic that relates to more than one subject.” This means we can eliminate **(B)**.

She also says that in her experience, computers “increase student motivation.” This means we can eliminate **(D)**.

Although sharing ideas with people all over the world is also a benefit of computers in the classroom, it is not discussed in paragraph 2 by Mrs. Lowell. Instead, the author in paragraph 1 mentions “initiating international pen pal programs for...students via email.” Therefore **(C)** is correct.

5) B

Core Standard: **Craft and Structure**

**Adept** (*adjective*): highly skilled or very proficient at something.

In paragraph 4, the author discusses Mrs. Lowell's struggles to monitor the students' use of the computer. According to Mrs. Lowell, "many students are quite adept at making it look as if they are doing work when they are really checking their email or watching videos." If it is harder for teachers to monitor students who are *adept* at pretending to work, we can infer that these students are very good, or skilled, at pretending to do work while actually checking email or watching videos. This means that *skilled* is a good synonym for adept. Therefore **(B)** is correct.

We do not know from the passage whether the students are *ashamed* of pretending to do work or not—we only know they are good at it, making the teacher's job harder. This makes **(A)** incorrect.

While the students are being *deceitful* by pretending to work, we would not say people are deceitful at something. We would, however, say that they are good at something. This means **(C)** is incorrect.

Some people may consider it *bold* to pretend to do work, but the passage only implies that the students are good at it, not that they are bold. Therefore **(D)** is incorrect.

6) A

Core Standard: **Craft and Structure**

**Benign** (*adjective*): neutral or harmless in effect or influence.

In paragraph 5, the author notes that while "surfing websites about video games or television shows may distract students from the lesson, these diversions are rather benign in comparison to the other things hiding in the corners of the World Wide Web." The next sentence specifically highlights websites "that feature inappropriate content for young people." From this information we can understand that the other things "hiding in the corners of the World Wide Web" are inappropriate adult websites. In comparison to websites containing adult material, websites about video games and television shows seem fairly harmless. Harmless is a good definition for *benign*. Since the question asks for an antonym, *harmful* is the best choice, which means **(A)** is correct.

Based on the information in the passage, we cannot say whether students would find websites about video games and television shows more or less *exciting* than websites with adult content, so **(B)** is incorrect.

The other things hiding in the corners of the World Wide Web are not necessarily easier than websites about video games and television shows, so *difficult* is not an antonym for benign. This means **(C)** is incorrect.

None of the types of websites mentioned (with video games and television shows or with adult Content) are particularly *educational*, so **(D)** is incorrect.

7) B

Core Standard: **Integration of Knowledge**

Although the passage does mention all of these solutions, in paragraph 4 and the last paragraph, the author suggests that the best way to keep students from accessing inappropriate or distracting websites is for the teacher to keep a close watch on the students. In paragraph 4, Mrs. Lowell is quoted as saying that a teacher must keep “three steps ahead” of the students if he or she wants “to stay on top of what they’re actually doing on the computer.” In the last paragraph, the author writes: “there is no fail-safe substitute for the watchful eye of a good teacher.” This lets us know that the best way for teachers to prevent students from accessing inappropriate or distracting materials on school computers is to carefully monitor what students are doing on the computers. Choice **(B)** is correct.

While Mrs. Lowell does post warning signs throughout her classroom, in paragraph 4 the author explains that these signs alone are not very effective. This means **(A)** is incorrect.

In paragraph 5, the author states, “Research has shown that these server-based blocking programs provide better security, because tech-savvy students can disable the software on an individual computer.” This means that the software programs on individual computers are less effective than server-based programs on networked computers, so **(C)** is incorrect.

In paragraph 7, the author relays his experience with the server-based software program Bess, which did not function as it should have to block websites. This means that **(D)** is incorrect.

8) C

Core Standard: **Integration of Knowledge**

In paragraph 6, Mrs. Lowell is able to access adult websites on the staff computer at the front of the room. She is not able to access the same websites on the student computers. Because Mrs. Lowell can access inappropriate websites on a staff computer, the author suggests that teachers might be accessing these websites on their lunch breaks. This lets us know that the author likely makes this assumption because in paragraph 6, Mrs. Lowell was able to access inappropriate materials on her computer at the front of the classroom. Therefore **(C)** is correct.

Students disabling the software would not necessarily give teachers access to the blocked websites, so **(A)** is incorrect.

The fact that teachers helped select the Bess software does not lead the author to assume that teachers may access blocked websites on their lunch breaks. Therefore **(B)** is incorrect.

The Bess software did work on the student computers, just not on the staff computers, so **(D)** is incorrect.