

SECTION 1

You should spend about 20 minutes on Questions 1-13, which are based on Reading Passage

The Value of a College Degree

Escalating cost of higher education is causing many to question the value of continuing education beyond high school. Many wonders whether the high cost of tuition, the opportunity cost of choosing college over full-time employment, and the accumulation of thousands of dollars of debt is, in the long run, worth the investment. The risk is especially large for low-income families who have a difficult time making ends meet without the additional burden of college tuition and fees.

In order to determine whether higher education is worth the investment, it is useful to examine what is known about the value of higher education and the rates of return on investment to both the individual and to society.

The Economic Value of Higher Education

There is considerable support for the notion that the rate of return on investment in higher education is high enough to warrant the financial burden associated with pursuing a college degree. Though the earnings differential between college and high school graduates varies over time, college graduates, on average, earn more than high school graduates. According to the Census Bureau, over an adult's working life, high school graduates earn an average of \$1.2 million; associate's degree holders earn about \$1.6 million; and bachelor's degree holders earn about \$2.1 million (Day and Newburger, 2002).

These sizeable differences in lifetime earnings put the costs of college study in realistic perspective. Most students today—about 80 percent of all students—enrol either in public four-year colleges or in public two-year colleges. According to the U.S. Department of Education report, Think College Early, a full-time student at a public four-year college pays an average of \$8,655 for in-state tuition, room, and board (U.S. Department of Education, 2002). A full-time student in a public two-year college pays an average of \$1,359 per year in tuition (U.S. Department of Education, 2002).

These statistics support the contention that, though the cost of higher education is significant, given the earnings disparity that exists between those who earn a bachelor's degree and those who do not, the individual rate of return on investment in higher education is sufficiently high to warrant the cost.

Other Benefits of Higher Education

College graduates also enjoy benefits beyond increased income. A 1998 report published by the Institute for Higher Education Policy reviews the individual benefits that college graduates enjoy, including higher levels of saving, increased personal/professional mobility, improved quality of life for their offspring, better consumer decision making, and more hobbies and leisure activities (Institute for Higher Education Policy, 1998). According to a report published by the Carnegie Foundation, non-monetary individual benefits of higher education include the tendency for post-secondary students to become more open-minded, more cultured, more rational, more consistent, and less authoritarian; these benefits are also passed along to succeeding generations (Rowley and Hurtado, 2002). Additionally, college attendance has been shown to "decrease prejudice, enhance knowledge of world affairs and enhance social status" while increasing economic and job security for those who earn bachelor's degrees (Ibid.). Research has also consistently shown a positive correlation between completion of higher education and good health, not only for oneself, but also for one's children. In fact, "parental schooling levels (after controlling for differences in earnings) are positively correlated with the health status of their children" and Increased schooling (and higher relative income) are correlated with lower mortality rates for given age brackets" (Cohn and Geske, 1992).

The Social Value of Higher Education

A number of studies have shown a high correlation between higher education and cultural and family values, and economic growth. According to Elchanan Cohn and Terry Geske (1992), there is the tendency for more highly educated women to spend more time with their children; these women tend to use this time to better prepare their children for the future. Cohn and Geske (1992) report that "college graduates appear to have a more optimistic view of their past and future personal progress."

Public benefits of attending college include increased tax revenues, greater workplace productivity, increased consumption, increased workforce flexibility, and decreased reliance on government financial support (Institute for Higher Education Policy, 1998)

Conclusion

While it is clear that investment in a college degree, especially for those students in the lowest income brackets, is a financial burden, the long-term benefits to individuals as well as to society at large, appear to far outweigh the costs.

Questions 1-4

Do the following statements agree with the information in Reading Passage 1? In boxes 1-

4 on your Answer Sheet, write

TRUE if the statement is true according to the passage. FALSE

if the statement contradicts the passage.

NOT GIVEN if there is no information about this in the passage.

- 1. The cost of a college education has remained steady for several years.
- 2. Some people have to borrow large amounts of money to pay for college.
- 3. About 80 percent of college students study at public colleges.
- 4. Public colleges cost less than private colleges.

Questions 5-9

Complete the fact sheet below.

Choose NO MORE THAN THREE WORDS from the passage for each answer

Financial Costs and Benefits of Higher Education

The average high school graduate makes a little more than one million dollars in 5 _____ The average person with an associate’s degree earns 6 _____ The average 7 _____ makes over two million dollars.
The average student at a four-year college spends 8 _____ \$ a year on classes, housing, and food.
The average student at a two-year college spends \$1,359 on 9 _____

Questions 10-13

The list below shows some benefits which college graduates may enjoy more of as compared to non-college graduates. Which four of these benefits are mentioned in the article? Write the appropriate letters A-G in boxes 10-13 on your Answer Sheet.

- A They own bigger houses.
- B They are more optimistic about their lives.
- C They save more money.
- D They enjoy more recreational activities.
- E They have healthier children.
- F They travel more frequently.
- G They make more purchases.

PASSAGE 2

You should spend about 20 minutes on Questions 14-26, which are based on Reading Passage

Less Television, Less Violence and Aggression

Cutting back on television, videos, and video games reduces acts of aggression among schoolchildren, according to a study by Dr. Thomas Robinson and others from the Stanford University School of Medicine. The study, published in the January 2001 issue of the Archives of Pediatric and Adolescent Medicine, found that third- and fourth-grade students who took part in a curriculum to reduce their TV, video, and video game use engaged in fewer acts of verbal and physical aggression than their peers. The study took place in two similar San Jose, California, elementary schools. Students in one school underwent an 18-lesson, 6-month program designed to limit their media usage, while the others did not. Both groups of students had similar reports of aggressive behaviour at the beginning of the study. After the sixmonth program, however, the two groups had very real differences. The students who cut back on their TV time engaged in six fewer acts of verbal aggression per hour and rated 2.4 percent fewer of their classmates as aggressive after the program. Physical acts of violence, parental reports of aggressive behaviour, and perceptions of a mean and scary world also decreased, but the authors suggest further study to solidify these results.

Although many studies have shown that children who watch a lot of TV are more likely to act violently, this report further verifies that television, videos, and video games actually cause the violent behaviour, and it is among the first to evaluate a solution to the problem. Teachers at the intervention school included the program in their existing curriculum. Early lessons encouraged students to keep track of and report on the time they spent watching TV or videos, or playing Video games, to motivate them to limit those activities on their own. The initial lessons were followed by TV-Turnoff, an organisation that encourages less TV viewing. For ten days, students were challenged to go without television, videos, or video games. After that, teachers encouraged the students to stay within a media allowance of seven hours per week. Almost all students participated in the Turnoff, and most stayed under their budget for the following weeks. Additional lessons encouraged children to use their time more selectively, and many of the final lessons had students themselves advocate reducing screen activities.

This study is by no means the first to find a link between television and violence. Virtually all of 3,500 research studies on the subject in the past 40 years have shown the same relationship, according to the American Academy of Pediatrics. Among the most noteworthy studies is Dr. Leonard D. Eron’s, which found that exposure to television violence in childhood is the strongest predictor of aggressive behaviour later in life—stronger even than violent behaviour as children. The more violent television the subjects watched at age eight, the more serious was their aggressive behaviour even 22 years later. Another study by Dr. Brandon S. Centerwall found that murder rates climb after the introduction of television. In the United States and Canada, murder rates doubled 10 to 15 years after the introduction of television, after the first TV generation grew up.

Centerwall tested this pattern in South Africa, where television broadcasts were banned until 1975. Murder rates in South Africa remained relatively steady from the mid-1940s through the mid- 1970s. By 1987, however, the murder rate had increased 130 percent from its 1974 level.

The murder rates in the United States and Canada had levelled off in the meantime. Centerwall’s study implies that the medium of television, not just the content, promotes violence and the current study by Dr. Robinson supports that conclusion. The Turnoff did not specifically target violent television, nor did the following allowance period. Reducing television in general reduces aggressive behaviour. Even television that is not “violent” is more violent than real life and may lead viewers to believe that violence is funny, inconsequential, and a viable solution to problems. Also, watching television of any content robs us of the time to interact with real people. Watching too much TV may inhibit the skills and patience we need to get along with others without resorting to aggression. TV, as a medium, promotes aggression and violence. The best solution is to turn it off.

Questions 14-20

Complete the summary using words from the box below. Write your answers in boxes 1420 on your Answer Sheet.

parents	
teachers six	
months	
violently	eighteen days
watched	classmates
TV scared	nonviolent
less TV	programs time of
	day number of
	hours avoided TV
	favourite programs

A study that was published in January 2001 found that when children 14_____ less, they behaved less 15_____. Students in a California elementary school participated in the study, which lasted 16_____. By the end of the study, the children’s behaviour had changed. For example, the children’s 17_____ reported that the children were acting less violently than before. During the study, the children kept a record of the 18_____ they watched TV. Then, for ten days, they 19_____. Near the end of the study, the students began to suggest watching 20_____.

Questions 21-24

Do the following statements agree with the information in Reading Passage 2? In boxes 21- 24 write

- TRUE if the statement is true according to the passage.
- FALSE if the statement contradicts the passage.
- NOT GIVEN if there is no information about this in the passage.

- 21. Only one study has found a connection between TV and violent behaviour.
- 22. There were more murders in Canada after people began watching TV.
- 23. The United States has more violence on TV than other countries.
- 24. TV was introduced in South Africa in the 1940s.

Questions 25 and 26

For each question, choose the correct letter A-D and write it in boxes 25 and 26 on your Answer Sheet.

- 25. According to the passage,
 - A only children are affected by violence on TV.
 - B only violent TV programs cause violent behaviour.
 - C children who watch too much TV get poor grades in school.
 - D watching a lot of TV may keep us from learning important social skills.
- 26. The authors of this passage believe that A some violent TV programs are funny.
 - A some violent TV programs are funny
 - B the best plan is to stop watching TV completely.
 - C it’s better to watch TV with other people than on your own.
 - D seven hours a week of TV watching is acceptable

Reading Passage 3

You should spend about 20 minutes on Questions 27-40, which are based on Reading Passage 3 below.

Issues Affecting the South Resident Orcas

A

Orcas, also known as killer whales, are opportunistic feeders, which means they will take a variety of different prey species. J, K, and L pods (specific groups of orcas found in the region) are almost exclusively fish eaters. Some studies show that up to 90 percent of their diet is salmon, with Chinook salmon being far and away their favourite. During the last 50 years, hundreds of wild runs of salmon have become extinct due to habitat loss and overfishing of wild stocks. Many of the extinct salmon stocks are the winter runs of Chinook and Coho. Although the surviving stocks have probably been sufficient to sustain the resident pods, many of the runs that have been lost were undoubtedly traditional resources favoured by the resident orcas. This may be affecting the whales' nutrition in the winter and may require them to change their patterns of movement in order to search for food.

Other studies with tagged whales have shown that they regularly dive up to 800 feet in this area. Researchers tend to think that during these deep dives the whales may be feeding on bottom fish. Bottom fish species in this area would include halibut, rockfish, lingcod, and greenling. Scientists estimate that today's lingcod population in northern Puget Sound and the Strait of Georgia is only 2 percent of what it was in 1950. The average size of rockfish in the recreational catch has also declined by several inches since the 1970s, which is indicative of overfishing. In some locations, certain rockfish species have disappeared entirely. So even if bottom fish are not a major food resource for the whales, the present low numbers of available fish increases the pressure on orcas and all marine animals to find food. (For more information on bottom fish see the San Juan County Bottom Fish Recovery Program.)

B

Toxic substances accumulate in higher concentrations as they move up the food chain. Because orcas are at the top of several different food chains in the environment, they tend to be more affected by pollutants than other sea creatures. Examinations of stranded killer whales have shown some extremely high levels of lead, mercury, and polychlorinated hydrocarbons. Abandoned marine toxic waste dumps and present levels of industrial and human refuse pollution of the inland waters probably presents the most serious threat to the continued existence of this orca population. Unfortunately, the total remedy to this huge problem would be broad societal changes on many fronts. But because of the fact that orcas are so popular, they may be the best species to use as a focal point in bringing about the many changes that need to be made in order to protect the marine environment as a whole from further toxic poisoning.

C

The waters around the San Juan Islands are extremely busy due to international commercial shipping, fishing, whale watching, and pleasure boating. On a busy weekend day in the summer, it is not uncommon to see numerous boats in the vicinity of the whales as they travel through the area. The potential impacts from all this vessel traffic with regard to the whales and other marine animals in the area could be tremendous.

The surfacing and breathing space of marine birds and mammals is a critical aspect of their habitat, which the animals must consciously deal with on a moment-to-moment basis throughout their lifetimes. With all the boating activity in the vicinity, there are three ways in which surface impacts are most likely to affect marine animals: (a) collision, (b) collision avoidance, and (c) exhaust emissions in breathing pockets.

The first two impacts are very obvious and don't just apply to vessels with motors. Kayakers even present a problem here because they're so quiet. Marine animals, busy hunting and feeding under the surface of the water, may not be aware that there is a kayak above them and actually hit the bottom of it as they surface to breathe.

The third impact is one most people don't even think of. When there are numerous boats in the area, especially idling boats, there are a lot of exhaust fumes being spewed out on the surface of the water. When the whale comes up to take a nice big breath of "fresh" air, it instead gets a nice big breath of exhaust fumes. It's hard to say how greatly this affects the animals, but think how breathing polluted air affects us (i.e., smog in large cities like Los Angeles, breathing the foul air while sitting in traffic jams, etc).

D

Similar to surface impacts, a primary source of acoustic pollution for this population of orcas would also be derived from the cumulative underwater noise of vessel traffic. For cetaceans, the underwater sound environment is perhaps the most critical component of their sensory and behavioural lives. Orcas communicate with each other over short and long distances with a variety of clicks, chirps, squeaks, and whistles, along with using echolocation to locate prey and to navigate. They may also rely on passive listening as a primary sensory source. The long-term impacts from noise pollution would not likely show up as noticeable behavioural changes in habitat use, but rather as sensory damage or gradual reduction in population health. A new study at The Whale Museum called the Sea-Sound Remote Sensing Network has begun studying underwater acoustics and its relationship to orca communication.

Questions 27-30

Reading Passage 3 has four sections (A-D). Choose the most suitable heading for each section from the list of headings below.

List of Headings

27. Section A	I Top Ocean Predators
28. Section B	II Toxic Exposure
29. Section C	III Declining Fish Populations
30. Section D	IV Pleasure Boating in the San Juan Islands w Underwater Noise
	V Underwater Noise
	VI Smog in Large Cities
	VI Impact of Boat Traffic

Write the appropriate number (I-VII) in boxes 27-30 on your Answer Sheet. There are more headings than sections, so you will not use all of them.

Questions 31-32

For each question, choose the appropriate letter A-D and write it in boxes 31 and 32 on your Answer Sheet

31. Killer whales (orcas) in the J, K, and L pods prefer to eat **A** halibut.
B a type of salmon.
C a variety of animals.
D fish living at the bottom of the sea.
32. Some groups of salmon have become extinct because **A** they have lost places to live.
B whales have eaten them.
C they don't get good nutrition.
D the winters in the area are too cold.

Questions 33-40

Complete the chart below.
Choose **NO MORE THAN THREE WORDS** For each answer. Write your answers in boxes 33-40 on your Answer Sheet.

Cause	
	Effect
Scientists believe some whales feed 33_____	
	These whales dive very deep.

Scientists believe that the area is being overfished.	
	Rockfish caught today is 34_____ than rockfish caught in the past
Orcas are at the top of the ocean food chain	35_____ affects orcas more than it does other sea animals
Orcas are a 36_____ species	
	We can use orcas to make society aware of the problem of marine pollution
People enjoy boating, fishing, and whale watching in the San Juan Islands	On weekends there are 37_____ near the whales
Kayaks are 38_____	Marine animals hit them when they come up for air
A lot of boats keep their motors running	
	Whales breathe 39_____
Boats are noisy	Whales have difficulty 40_____

