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Technical
and Professional
Communications 12

JUNE 2001

Course Code = TPC

Student Instructions

1. Place the stickers with your Personal Education Number (PEN) in the allotted spaces above. **Under no circumstance is your name or identification, other than your Personal Education Number, to appear on this booklet.**
2. Ensure that in addition to this examination booklet, you have an **Examination Response Form**. Follow the directions on the front of the Response Form.
3. **Disqualification** from the examination will result if you bring books, paper, notes or unauthorized electronic devices into the examination room.
4. When instructed to open this booklet, **check the numbering of the pages** to ensure that they are numbered in sequence from page one to the last page, which is identified by **END OF EXAMINATION**.
5. At the end of the examination, place your Response Form inside the front cover of this booklet and return the booklet and your Response Form to the supervisor.

Question 1:

1. .

(2)

Question 2:

2. .

(2)

Question 3:

3. .

(2)

Question 4:

4. .

(4)

Question 5:

5. .

(20)

Question 6:

6. .

(35)

**TECHNICAL
AND PROFESSIONAL
COMMUNICATIONS 12**

JUNE 2001

COURSE CODE = TPC

GENERAL INSTRUCTIONS

1. Aside from an approved calculator, electronic devices, including dictionaries and pagers, are **not** permitted in the examination room.
2. All multiple-choice answers must be entered on the Response Form using an **HB pencil**. Multiple-choice answers entered in this examination booklet will **not** be marked.
3. For each of the written-response questions, write your answer in the space provided in this booklet.
4. Ensure that you use language and content appropriate to the purpose and audience of this examination. Failure to comply may result in your paper being awarded a zero.
5. This examination is designed to be completed in **two hours**. *Students may, however, take up to 30 minutes of additional time to finish.*

**TECHNICAL AND PROFESSIONAL COMMUNICATIONS 12
PROVINCIAL EXAMINATION**

	Value	Suggested Time
1. This examination consists of five parts:		
PART A: Communication Concepts	10	8
PART B: Reading Comprehension	18	25
PART C: Editing	7	7
PART D: Design	20	20
PART E: Case Study	35	60
	Total: 90 marks	120 minutes

- A hand-held calculator may be used for this examination; however, computers, calculators with a QWERTY keyboard, and electronic writing pads will not be allowed. Students must not bring any external devices to support calculators, such as manuals, printed or electronic cards, printers, memory expansion chips or cards, or external keyboards. Students may have more than one calculator available during the examination. Calculators may not be shared and must not have the ability to either transmit or receive electronic signals.
- You may use a ruler or geometry set to create any graphics required for the Design and Case Study parts.

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PART A: COMMUNICATION CONCEPTS

Value: 10 marks

Suggested Time: 8 minutes

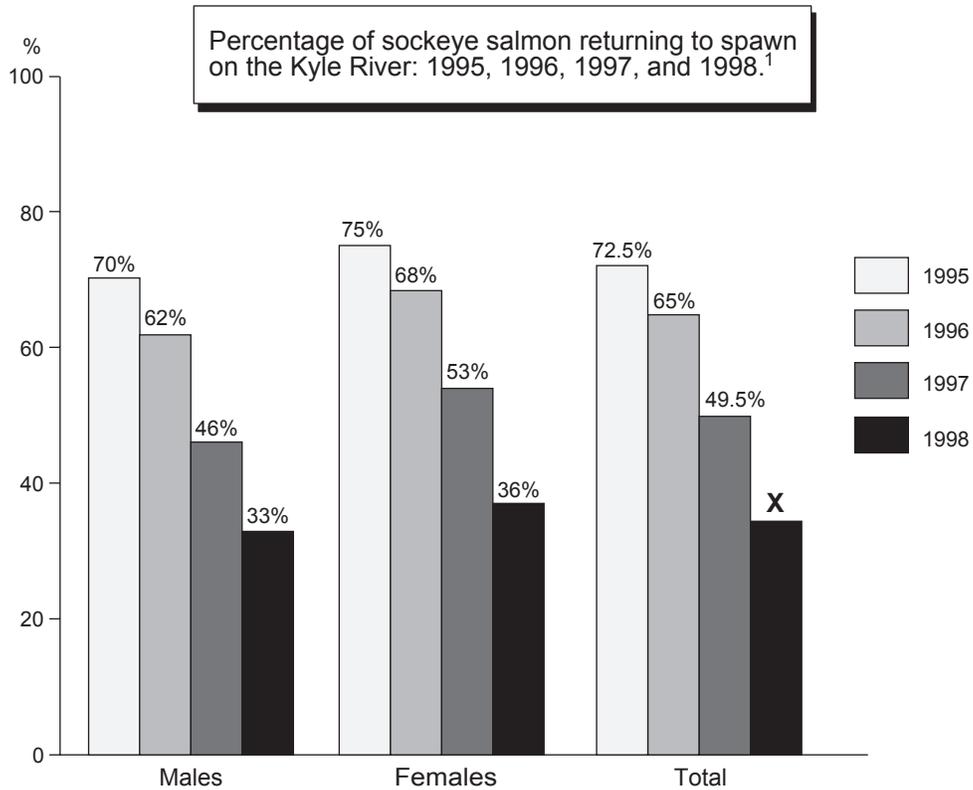
INSTRUCTIONS: For each multiple-choice question, select the **best** answer and record your choice on the Response Form provided. Using an HB pencil, completely fill in the circle that has the letter corresponding to your answer.

1. Which of the following items in a bibliography entry should be put in italics?
 - A. title of a book
 - B. date of publication
 - C. place of publication
 - D. author's family name

2. All of the following are elements of the back matter of a formal report **except** the
 - A. glossary.
 - B. appendices.
 - C. bibliography.
 - D. executive summary.

3. The form that is not a summary of a longer work is
 - A. a brief.
 - B. a précis.
 - C. a proposal.
 - D. an abstract.

Use the following graph to answer questions 4 and 5.



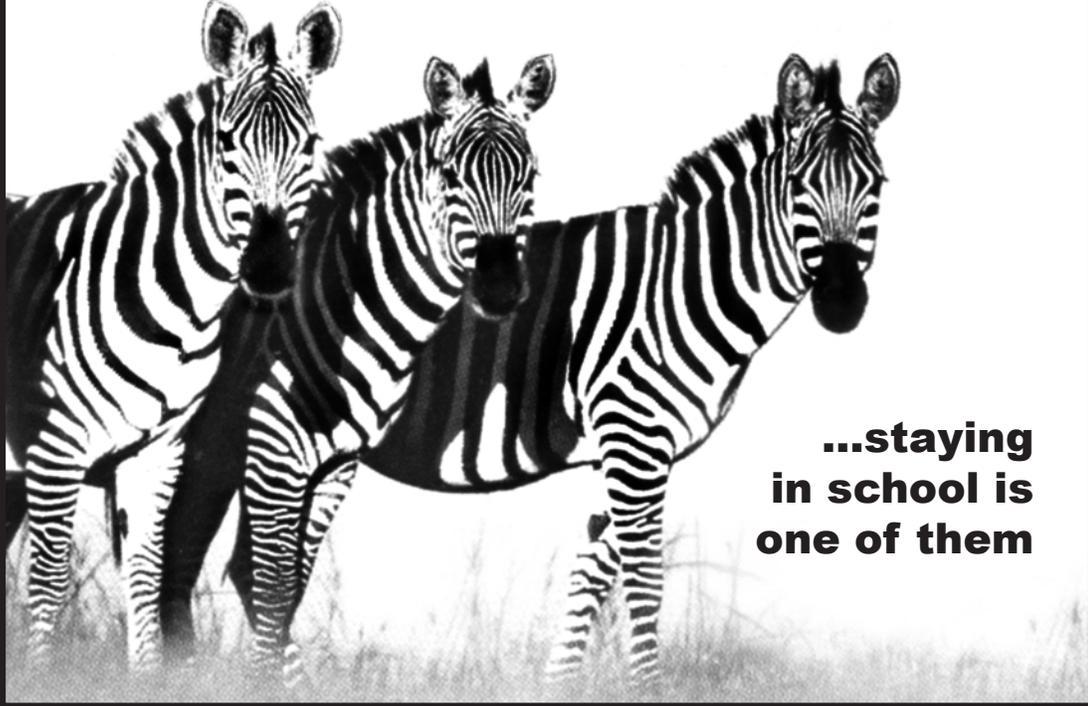
¹Sampling conducted during August, September and October.

Pesh Research Inc., 1999.

4. For what gender and in which time period did the most significant change in the yearly number of returning salmon occur?
- A. among males, 1996–1997
 - B. among males, 1997–1998
 - C. among females, 1996–1997
 - D. among females, 1997–1998
5. Assuming that 50% of returning salmon are male, what was the total percentage of returning sockeye salmon in 1998?
- A. 34.0%
 - B. 34.5%
 - C. 35.0%
 - D. 35.5%

Use the following advertisement to answer questions 6 and 7.

**Few things in life are
black and white...**



**...staying
in school is
one of them**

654 FL Minden Pictures

6. Which of the following is evident in the advertisement?
- A. repetition
 - B. understatement
 - C. figurative language
 - D. a substantiated claim
7. The **primary** function of the picture in the advertisement is to
- A. create emotional appeal.
 - B. encourage the reader to make a choice.
 - C. illustrate the importance of staying in school.
 - D. reinforce the simplicity of the written message.

8. Shareware is software that
- A. the user must pay for immediately.
 - B. can only be accessed across a network.
 - C. cannot be copied between two computers.
 - D. a user can try out for a limited time before having to pay for it.
9. The term “spammer” refers to
- A. unwanted e-mail.
 - B. a device to ensure privacy.
 - C. a device which breaches privacy.
 - D. a distributor of unsolicited e-mail.
10. A security system that prevents intruders from accessing a local network from the Internet, and also prevents legitimate users from logging on to the Internet from a local network, is known as
- A. a node.
 - B. a firewall.
 - C. a gateway.
 - D. an Ethernet.

PART B: READING COMPREHENSION

Value: 18 marks

Suggested Time: 25 minutes

INSTRUCTIONS: Read the following article carefully. For questions 11 to 18, select the **best** answer and record your choice on the Response Form provided.



1 After *Voyager 2* had completed its visit to Saturn in 1981, NASA announced a 53-month, 916-million-mile journey beyond Saturn that would take *Voyager* directly through the heart of the densely populated Uranian system and produce what promised to be dazzling pictures.

2 Long ago, ground-based scientists discovered that Uranus is a planet like no other in the solar system. While the other eight planets orbit more or less upright, Uranus is tipped loopily on its side,

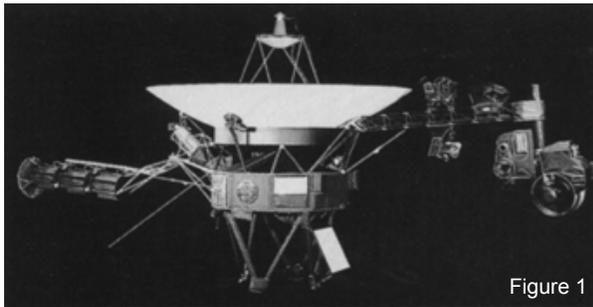


Figure 1

Voyager 2 carries cameras in the boom at right; the huge central dish is a communication antenna.

toppled so that it rotates, with one pole pointing back toward the sun and the other pointing off into space. The planet probably assumed this position as a result of a collision long ago with a projectile at least as big as Earth. Whatever tipped over this world, such an odd posture meant no end of navigational headaches for spacecraft trajectory planners. Stars flickering on and off in the vicinity of the planet indicated that Uranus probably had at least nine faint rings, all of which were also turned at a sharp angle to the horizontal. Also circling the planet were five comparatively large moons—

Miranda, Ariel, Umbriel, Titania and Oberon, ranging from 292 to 978 miles in diameter. How many other smaller moons there might be, flying at how many other vertiginous angles, was impossible to say.

3 Tiptoeing through this planetary train wreck, and doing so in a way that would give *Voyager 2* some hope of flying on to Neptune afterward, would require some creative navigation—and some compromises. The way the mission overseers viewed things, if they were going to get out of the Uranian system intact, they would be able to make a close flyby only of the smallest known Uranian moon, Miranda, using its comparatively gentle gravity field to nudge the ship along. This trajectory would help the ship keep a safe distance from both the planet itself and the other satellites—a prudent precaution, but one that would prevent *Voyager* from taking anything better than arm's-length pictures. Nonetheless, arm's length was still breathtakingly closer than any human or robotic eye had ever been to Uranus before.

A FACE WITHOUT EXPRESSION

4 Superficially, Uranus promised to be magnificent. With a diameter of 32 000 miles, it is the fourth largest body in the solar system, four times bigger than Earth, and more than ten times bigger than a nugget world like Mercury. Scientists expected that Uranus' vast, swampy atmosphere would almost certainly be a dynamic one. Its fields of radiated energy would almost certainly be crackling ones. It would, on the whole, be a planet well worth studying. However, when *Voyager 2* looked toward the planet, it

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essentially saw nothing at all—just a plain, soft blue sphere. Instruments were able to discern a curious corkscrew magnetic trail following Uranus as the planet simultaneously rotated on its side and revolved around the sun, but apart from those barely illuminating findings, Uranus showed *Voyager* a face that was expressionless.

FAIRY-DUST BANDS

5 However, *Voyager* hadn't necessarily come to see the planet; it had come to see the objects that circled the planet, and those objects delivered on their promise. The ring system that Earth-based astronomers thought they saw through their telescopes indeed orbited upright, circling the planet's vertical equator. The rings were fine and faint formations, but not so fine and faint that the cameras didn't reveal two additional ones that had never been spotted from Earth, bringing the total number of fairy-dust bands to eleven. Like the rings around Jupiter and Saturn, the Uranian formations are probably the remains of a shattered moon. And like the other planets' rings, these probably will not last forever, decaying and crumbling and eventually falling out of orbit altogether.

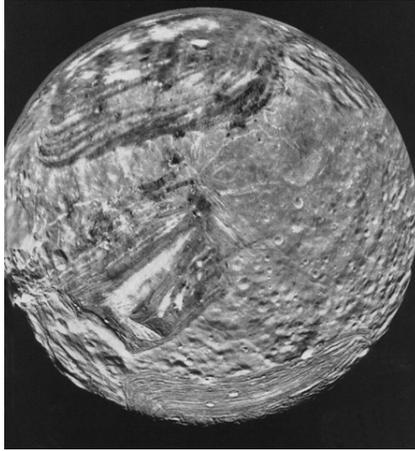
MOON HARVEST

6 The Uranian moon harvest turned out to be huge. The five known and relatively large moons had all been tracked in orbits between 80 500 and 362 000 miles high. When *Voyager 2* pointed its cameras closer to Uranus and focused them down to spot smaller objects, a whole school of tiny moons swam into view. As nearly as scientists could make out, there are at least ten previously unknown boulderlike bodies, measuring between 16 and 95 miles in diameter, circling the planet. All of the moons are dark sooty things, reflecting barely seven percent of the light that struck them. Such floating lumps of coal looked to be exceedingly old and exceedingly rich in carbon—one more piece of evidence that the solar system as a whole is fairly awash in the fundamental stuff of biology. The moons' orderly orbits suggested that they were not captured bodies snatched out of the skies by Uranian gravity but instead had formed in place when the planet itself did. As heavenly bodies went, the ten new moons were significant

more for their decorativeness than for any new scientific insights they offered.

MIRANDA: A FRACTURED WORLD

7 Measuring just 292 miles across, Miranda is the lowest flying of the five larger moons, and thus lies deeper than any of the others within the Uranian gravity well. The tidal squeezing that this has caused the moon to experience has evidently taken its toll. When *Voyager 2* made its Miranda flyby, scientists saw sheer scarps climbing three miles into the sky; cliff faces scarred by parallel cat-like scratches, apparently created when huge fault blocks rubbed against one another; whole chunks of surface that appeared to be broken and tipped; vast fault lines running for miles through the crust; and sudden changes in the moon's reflectivity, with dark, dull expanses lying in a quilt-work pattern next to bright, glassy ones.



Miranda, Uranus' smallest major moon.

8 Clearly, the *Voyager* team's initial analysis was a plausible one. This is a damaged world, a broken world, a world that had been broken into rubble as many as five times in its past only to shrug off

the insult and gravitationally reassemble itself, fusing its shards together in an increasingly chaotic order. Had the breakup occurred only once, the *Voyager* scientists might have attributed it to a chance meteor hit. That it appeared to have happened again and again almost certainly pointed the finger at gravitational pumping, a tidal violence caused by both the tug of giant Uranus lying beneath the moon and the intermittent turbulence caused by Ariel, Umbriel, Titania, and Oberon passing repeatedly overhead. These forces had helped break Miranda up in the past, and as long as they continued to exist, they would be likely to do so again.

9 If the moon is indeed going to crumble once more, however, it is going to crumble alone. Less than a day after *Voyager 2* arrived in the Uranian system, the well-travelled interplanetary ship sped past Uranus, past its 11 rings, and past the last of its 15 moons. *Voyager 2* had three more years and one more planet ahead of it before it left the solar system altogether. After that, it would travel on into space forever.

by Jeffrey Kluger

11. In paragraph 3, the author states that to keep *Voyager 2* safe, the trajectory planners had to give up
- A. a close flyby of Miranda.
 - B. close pictures of all of the moons.
 - C. the use of Miranda's gravity field.
 - D. the closest pictures of Uranus to date.
12. In paragraph 3, "prudent" means
- A. safe.
 - B. initial.
 - C. obvious.
 - D. sensible.
13. The fact that *Voyager 2* saw "a plain, soft blue sphere" (paragraph 4) is
- A. ironic.
 - B. logical.
 - C. predictable.
 - D. inconsequential.
14. According to paragraph 6, the tiny moons seem to
- A. be highly reflective of light.
 - B. offer new scientific insights.
 - C. contain elements necessary for life.
 - D. have been initially captured by Uranian gravity.
15. In paragraph 8, the sentence beginning "This is a damaged world..."
- A. is a cliché.
 - B. is an exaggeration.
 - C. uses understatement.
 - D. uses parallel structure.
16. According to the article, Miranda was shattered and re-formed as a result of
- A. glacial action.
 - B. turbulent winds.
 - C. collisions with meteors.
 - D. gravity from the Uranian system.

17. According to information provided by *Voyager 2*, how many moons orbit Uranus?

- A. 5
- B. 10
- C. 11
- D. 15

18. The audience **most likely** targeted by this article is

- A. NASA engineers.
- B. professional astronomers.
- C. educated people from many fields.
- D. people with no knowledge of planets.

INSTRUCTIONS: Answer questions 1 to 4 based on the article “Beyond Saturn.” Complete sentences are not required.

1. From paragraph 2, name **two** distinct characteristics of the Uranian system. **(2 marks)**

Characteristic 1: _____

Characteristic 2: _____

2. Identify **two** hypotheses that scientists have held as to how Miranda became a damaged world. **(2 marks)**

Hypothesis 1: _____

Hypothesis 2: _____

3. The author uses figurative language throughout the article. **Quote one** example of figurative language and explain how it contributes to the reader's understanding. **(2 marks)**

Quote: _____

Explanation: _____

4. Other than Figure 2, identify **two** design techniques used in the layout of the article and explain how each helps to convey the author's meaning. **(4 marks)**

Technique 1: _____

Explanation: _____

Technique 2: _____

Explanation: _____

PART C: EDITING

Value: 7 marks

Suggested Time: 7 minutes

INSTRUCTIONS: You are a consultant for an office design company. You have prepared the following e-mail to send to a customer. Before sending the message, you will need to edit it for clarity and consistency. For questions 19 to 25, select the **best** answer and record your choice on the Response Form provided.

To: brobinson@smalltech.com
From: jredmond@rfgconsulting.com
Subject: Expansion Options
Cc:
Bcc:
X-Attachments:

- 1 Last week, you asked me to investigate some expansion options for your growing company.
- 2 I have arrived at three possible options, all of which would suit your criteria.
- 3 At that time, you indicated to me that you wanted to be able to create new office space to support your network expansion and allow for six new work areas for additional programmers.
- 4 You may wish to redesign your current offices, renovate the currently vacant floor in your building and move there, or leasing a larger area in the new Stanford building downtown. The specific strengths and weaknesses of each option are outlined in my attached report.
- 5 _____ any of these options would be acceptable, my recommendation is for you to renovate and move within your building. Overall, this option would be the most cost-effective and would also cause the least disruption to both your employees and clientele.
- 6 I would be happy to meet to discuss this further after you have read my report, please call me at your convenience.

19. Paragraph 2 should

- A. remain as written.
- B. be combined with paragraph 3.
- C. be rewritten in the passive voice.
- D. be moved to the beginning of paragraph 4.

20. In paragraph 3, the language is primarily

- A. wordy.
- B. concise.
- C. technical.
- D. colloquial.

21. The **main** weakness of paragraph 4 is that it
- A. lacks specific details.
 - B. lacks correct punctuation.
 - C. contains faulty parallel structure.
 - D. contains faulty subject-verb agreement.
22. Within the context of the entire e-mail, which of the following **best** begins the first sentence of paragraph 5?
- A. Since
 - B. However
 - C. Although
 - D. Generally
23. In the following sentence from paragraph 5, which part contains an error?
- A. Overall, this option
 - B. would be the most cost-affective
 - C. and would also cause the least disruption
 - D. to both your employees and clientele.
24. What is the **best** revision of the underlined portion in paragraph 6?
- A. after you have read my report: please call me
 - B. after you have read my report. Please call me
 - C. after you have read my report, but please call me
 - D. after you have read my report, and please call me
25. The primary purpose of this e-mail is to
- A. inform.
 - B. explain.
 - C. describe.
 - D. persuade.

Organization and Planning
(this will not be marked)

	1st	2nd	Total
Design			

PART D: DESIGN

Value: 20 marks

Suggested Time: 20 minutes

INSTRUCTIONS: Read the situation below and create an appropriate product (complete with title). You may wish to use visual representation to enhance the message.

- underline words to indicate *italics*
-  words to indicate **bold**
-  use a box to indicate the look and placement of a graphic

5. You are Dominique Spearing, the top student in your school's music program. While you like playing in the school band, what really excites you is playing with *The Riders*, the rock band you belong to with your friends. Your parents have let you practise in their garage, but now, after only a few weeks and even though you do not practise after 9:00 at night, they and the neighbours are starting to complain about the noise.

You have decided that the best way for *The Nite Riders* to find a new place to practise is to put up posters in all the local music stores. For the posters to produce the desired result, you must include the following information presented in a well-organized and effective manner.

You must let people know that *The Nite Riders* are willing to do odd jobs in and around the practice location in exchange for the use of the facility. You are aware of the fact that one of the group's members may be quitting soon. Therefore, you want to mention that anyone who might be interested in joining the band, and who can play a number of instruments, should contact you. You want a place that is available weekends or evenings. The band is made up of mature and responsible people. Your telephone number is 555-ROCK. The place you are looking for will ideally have an area to store musical instruments and be located in a part of town where the neighbours will not be disturbed. Preferably, you are looking for a place where people love music.

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Organization and Planning
(this will not be marked)

PART E: CASE STUDY

Value: 35 marks (Content: 20 marks; Visual Design: 15 marks) Suggested Time: 60 minutes

INSTRUCTIONS: Read the scenario below and write a standard business memorandum. For ease of navigation, it is expected that you will include supporting visuals. For emphasis in your work

- underline words to indicate *italics*,
- **circle** words to indicate **bold**.

6. Scenario:

You are Sandra Lowe, production supervisor for the Winter 2000 Concert Project undertaken by the Media Arts 12 class at Roberts Secondary School. The project is now finished and you must provide a completion report as part of a memo to your teacher.

Ms. Kelsey, your teacher, was asked on November 28, 2000 if your class would be interested in producing videotapes of the three local elementary schools' Winter Concerts. The videos would be sold to parents as keepsakes for \$10 each and all proceeds would be donated to the local food bank. Your class eagerly agreed to put its budding production skills to practical use on this school / community project.

Three production teams were created (one for each school) and you were selected as the production supervisor. Each team videotaped the concert dress rehearsals (scheduled two days before each concert performance), the afternoon concert, and the evening concert at their assigned school. Beaver Valley Elementary's concerts were held on December 10, 2000 at 12:30 p.m. and 7:30 p.m., and Crawford Elementary's concerts were held on December 11, 2000 at 1:30 p.m. and 7:00 p.m. Wilson Road Elementary also held its concerts on December 11, 2000 at 1:00 p.m. and 7:30 p.m. After the taping was complete, the teams edited their tapes and produced final videotapes for distribution.

Prepaid orders for the videotapes were taken at the time of the concerts. It was estimated that approximately 50 orders would be received from parents at each school. The delivery date was set for December 22 — the last day of school before winter break. Blank camcorder tape was available from the Media Arts class, but the project would be charged \$20 per tape used. For ease of editing, it was decided that each performance would be recorded on a separate camcorder tape. Blank videotapes for duplicating the final productions would be purchased in bulk for \$2 each.

There were numerous surprises during the project. First, during Beaver Valley Elementary's dress rehearsal there was a power failure during the last 30 minutes of school. The two split grade 6/7 classes weren't taped, so the edited version had to rely on what was taped during the actual performance. At Crawford Elementary, a child tripped over the extension cord to the camcorder during the afternoon performance. Recording stopped for approximately 5 minutes. Before the evening concert, a production team member purchased duct tape for \$4.50 from the drug store so the cord could be held firmly in place. Orders received were beyond project participants' wildest expectations: Beaver Valley Elementary — 89, Crawford Elementary — 135, and Wilson Road Elementary — 126. It became impossible to deliver all of the tapes by the stated delivery date. School principals were contacted and told that the parents' copies would not be available until January 20.

The last of the tapes were delivered to parents on January 20, 2001.

Task: Write a completion report for the Winter 2000 Concert Project detailing the project description, including a summary of the project events, and a comparison of the estimated and actual revenues and expenses. Address the memorandum to your teacher, Ms. Kelsey.

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ACKNOWLEDGEMENTS

Jeffrey Kluger. "Beyond Saturn." *Discover*. July 1999: 68–75.