uue	e:		
	ents that show that you understand the article. (A summary or statement of the main important sections may serve this purpose.)		
 Questions you have that show what you are wondering about as you read. 			
Notes that differentiate between fact and opinion.			
	Observations about how the author's craft (organization, word choice, perspective, support) and choices affect the article.		
You	our margin notes are part of your score for this assessment.		
Stu	udentSSID		
Теа	eacher Class Period		
Scł	shool School District		

STUDENTS PROGRAMMED TO HELP OUT THEIR RIVALS

Robots battle for supremacy in Portland this weekend, but for their young creators, the games are a "coopetition."

By Bill Graves

The Oregonian, March 7, 2009

Two groups of three robots, all towing round trailers, bounce about like bumper cars in a fenced area called the crater as they scoop up soccersized balls and shoot or spit them into their opponents' trailers. The group that sinks the most balls wins. This is how 54 robots – each representing a team of high school students from Oregon, Hawaii, Alaska, California, Idaho or Washington – are slugging it out this weekend at Portland's Memorial Coliseum for a chance to go on to international competition in Atlanta next month.

The final rounds of competition, which are free and open to the public, will be between 1 and 3 p.m. today. While the competition is fierce, it is softened by uncommon civility and geared to produce future scientists and leaders.

In the first two-minute round Friday, a robot built by a team from the Saint George's private school in Spokane failed to move. Minutes later, in another area called the pit, Eric Anderson, 15, and Ian McNee, 17, members of a team from Meridian, Idaho, were helping the Spokane team fix some chains, a battery cable and other problems.

"You don't want them not to show up." McNee said. "We want everybody to compete."

The robot makers display team spirit with cheers, mascots, shirts, flags, buttons, hats and capes, but they also commonly help one another as part of what they call "gracious professionalism." It is a value that the

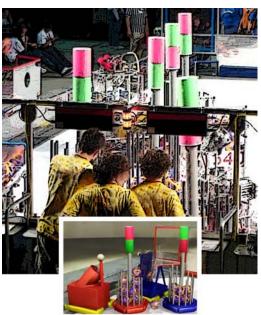
Notes on my thoughts, reactions and questions as I read:

Reading and Literature

hundreds of coaches and sponsors and thousands of adult mentors try to foster in students.

The robotic crowd calls this brand of sportsmanship "coopetition," Says Deb Mumm-Hill, Northwest regional director in West Linn of For Inspiration and Recognition of Science and Technology, a nonprofit that organizes the competition in an effort to steer more students into science, engineering and mathematics.

"We're a work force development group," she said. Today's workers need to work in teams and with other teams and countries to solve the world's



complex problems, she said.

To develop those skills, the robotics competition uses a sports model to engage students, she said, "but we took out the bad part, the 'braggadocio' and 'crush your opponent.""

The regional contest, Oregon's sixth, is one of 44 Robotics Competitions staged worldwide by FIRST. Teams range in size from five to 40 students, but average about 28. They bring together students of diverse backgrounds, interests and ages, just as the modern workplace does. The Oregon City team, for

example, has about 30 members,

ages 14 to 18. It defies stereotypes with a balance of girls and boys and three female captains.

On Thursday morning, the Oregon City team was in the pit helping the Gresham High team program its computer. Gresham's team has only five members, two of whom learned how to program from scratch this year.

"We've been mentoring them all year long," said Roger Collier, coach for Oregon City, which offers some level of robotics training in all of its schools, even the elementary ones. "We sent 10 kids at a time to help them." Teams for the last group of three robots still standing after the elimination rounds today go to the international contest in Atlanta. So will the best rookie team, the team that has done the most to promote the FIRST program, and the team with the best-engineered robot.

Teams must each raise \$6,000 to build their robots during the same six-week winter period. Students said they commonly worked on their projects daily from the time they got out of school until midnight and 16 hours a day on weekends. They are expected not only to build and program a working robot, but also to raise money, brand and promote their machines, create a Web site and mentor younger students.

Notes on my thoughts, reactions and questions as I read:

Erica Smith, 18, a senior, had plans to go to Portland State University to study art or English before a friend invited her to join the Oregon City robot team last year. She soon found herself learning how to weld, wire circuits, run a machine lathe and organize a team. She's one of the team captains this year and plans to attend Heriot-Watt University in Scotland next year to study artificial intelligence.

"This has been the most amazing and life-altering program I've ever been in," she said. "It has given me so many skills. ...It changed the way I view the world. It helped me realize this is the future."

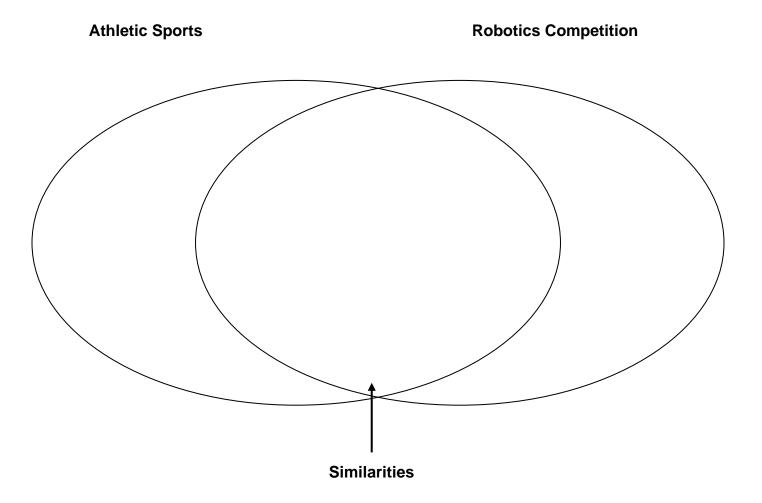
"Students Programmed to Help Out their Rivals" By Bill Graves, <u>The Oregonian</u>, March 7, 2009. Used by permission of <u>The Oregonian</u>.

Notes on my thoughts, reactions and questions as I read:

1. If you were trying to summarize this article for someone who had not read it, what would you say about it?

2. A new word has been created by the Robotics event, "coopetition." Explain what this word means and give examples of how it is demonstrated by the teams at the regional event.

3. Using the Venn diagram below, compare participation in athletic sports to participation in the robotics competition. Include both **similarities** and **differences** from the article and your own experience.



4. Although the article doesn't explain directly how Deb Mumm-Hill feels about athletic competitions, the author gives some clues about her attitude. Explain how Ms. Mumm-Hill views sports competitions, using examples or quotes from the article to support your perspective.

5. Using the chart below, give 2 examples of figurative language (simile, metaphor, or personification) from the article and explain how each example helps make the writing more effective.

Check the Type	Text from Article	How it Makes the Writing Effective
Simile Metaphor		
Personification		
Simile		
Metaphor		
Personification		

6. A newspaper article is supposed to report information factually, but the author can sway readers' opinions by the information he emphasizes or omits. How does Bill Graves present information in this article in a way that is likely to influence the reader's opinion? Give specific examples from the text.