

Experiences With ExploraVision Raise the Bar

"ExploraVision is an innovative and exciting avenue to introduce students to STEM disciplines."

Francis Eberle, Executive Director, NSTA

"ExploraVision makes students stretch their minds. They begin to realize that their learning and their abilities have so much potential. ExploraVision encourages students to be lifelong learners and problem solvers."

Teacher, Grades K-3

"Because of ExploraVision, I have discovered students' talents that are not used in the day-to-day experiences of middle school science. ExploraVision also complements my classroom objectives where I stress many different learning and study skills that need to be mastered at this age."

Teacher, Grades 7-9

"ExploraVision has taught me lessons I will carry with me into college and beyond."

Student, Grades 10-12



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ExploraVision is a hands-on, minds-on project that inspires students and fuels imagination. It's what science is all about.



2011-2012
Competition
Registration
Now Open

Awarding up to
\$240,000

in Savings Bonds for K-12 Students

www.exploravision.org/2012

All entries
will receive
a special
gift!

TOSHIBA
Leading Innovation >>>

NSTA National
Science
Teachers
Association

SHAPING THE FUTURE OF YOUR SCIENCE STUDENTS

What is ExploraVision?

ExploraVision is a competition for K–12 students of all interest, skill, and ability levels. The competition encourages students to combine their imaginations with the tools of science to create and explore a vision of a future technology.

Students work in groups of two, three or four, and are guided by a team coach and an optional mentor. Each team selects a technology, or an aspect of a technology, which is present in the home, school, or community, or any other technology relevant to their lives. They will explore what the technology does, how it works, and how, when, and why it was invented. The students must then project into the future what that technology could be like 20 years from now and determine what scientific breakthroughs need to occur to make it a reality.

Project Submission Rules

Entrants:

- must be full-time K–12 students
- must be currently enrolled in and attending a public, private, or home school in the United States or Canada
- must not be older than 21
- must submit only one project per year

Projects:

- must be received at NSTA or submitted online by 5:00pm EST, February 1, 2012
- must consist of an ExploraVision entry form, an Abstract, a Project Description, Bibliography, and five Sample Web Pages

Role of the Teacher/Coach

The ExploraVision experience offers teachers the opportunity to play a critical role in teaching, coaching, and mentoring. Teachers who coach an ExploraVision team can utilize the competition broadly, incorporating the project into his/her curriculum, putting into practice many of the National Science Education Standards, particularly in the areas of “science and technology” and “science in personal and social perspectives.” The experience of competing encourages science and interdisciplinary learning called for in the Standards. Teams also have the option of working with a mentor who can be a professional, parent, educator, or other adult advisor.



What Students Can Achieve

- Interdisciplinary learning
- Inquiry-based learning
- Credentials for résumé-building
- Problem-solving and critical-thinking skills
- Strong communications skill-building
- Experience working in cooperative learning groups
- Recognition of importance of science for all students
- Student commitment and initiative development

Prizes for Students

Students on 24 regional winning teams receive a Toshiba Camileo HD Camcorder. 500 Honorable Mention teams receive a special ExploraVision prize. Each member of the four first-place national finalist teams receives a U.S. Savings Bond worth \$10,000 at maturity. Second-place winners each receive a \$5,000 U.S. Savings Bond. First- and second-place Canadian winners each receive Canada Savings Bonds for the equivalent issue price in Canadian dollars. National finalist team members and their parents or guardians receive an expenses-paid trip to Washington, DC, in June for ExploraVision Awards Weekend, where they will be recognized for their outstanding achievement and meet with congressional representatives.



Prizes for Coaches, Mentors, and Schools

The coach and mentor of each national finalist team receive an expenses-paid trip to Washington, DC, in June to attend ExploraVision Awards Weekend. In addition, the coach of each national finalist team receives a one-year NSTA membership.



The coach and mentor of each of the 24 regional winning teams receive a Toshiba Camileo HD Camcorder. The schools of the 24 regional winning teams each receive a Toshiba laptop.

- A Toshiba Tablet for the teacher/coach who submits the most projects in each grade category
- A Toshiba Green Classroom Prize Pack for the school that submits the most eligible projects

Managing Your Team Project

		3-WEEK PROGRAM	2-MONTH PROGRAM	4-MONTH PROGRAM
Step 1: Brainstorm	Learn about the competition; view examples of past projects; form student teams.	Days 1–4	Week 1	Weeks 1–2
Step 2: Getting to Know the Subject	Choose a topic; review research methods; students will create a timeline of topic’s history; choose mentor.	Days 5–10	Weeks 2–4	Weeks 3–7
Step 3: Understanding Technological Change	Students present topic examples; discuss about how the technology will have evolved in 20 years; assign drafts of the teams’ “Future Technology and Breakthroughs” project section.	Day 11	Week 5	Week 8
Step 4: Testing the Idea	Each group will present its future technology; consider the pros and cons of their visions in the “Consequences” section.	Days 12–15	Weeks 5–6	Weeks 8–11
Step 5: Presenting the Project	Students prepare project entries and draw out plans for 5 sample web pages; for homework, students complete all sections of the description and write the abstract and bibliography.	Day 16	Week 7	Week 12
Step 6: Final Look	Make last minute revisions; complete Project Entry Form and submit draft of the project.	Days 17–19	Week 7	Weeks 12–14
Step 7: Revisions and Submission	Make final revisions; submit completed projects to NSTA online or via mail.	Days 20–21	Week 8	Weeks 15–16

