



## *Odyssey of the Mind* and the NC Standard Course of Study: Providing Students with Authentic Learning and 21<sup>st</sup> Century Skills

Can a team of elementary students build a vehicle that will travel through an obstacle course and break balloon targets? Is there a way to create a performance that brings famous works of art to life? Can students design a 14gram balsa wood structure that will bear weight? For over 25 years, student teams have presented unique solutions to these types of problems in the Odyssey of the Mind program, an international competition in creativity, critical thinking, and teamwork for elementary through college students.

The 21<sup>st</sup> Century Skills that our schools address in their instructional plans are readily applied to the Odyssey of the Mind program:

<b>21<sup>st</sup> Century Skills</b>	<b>Odyssey of the Mind</b>
Global Awareness	Complex technical and artistic problem solving
Problem Solving	Understanding the problem
Intellectual Curiosity	Research issues within the problem
Collaborative Skills	Teamwork
Creative/Critical Thinking	Generating ideas & brainstorming solutions
Self-Direction	Create- test-improve-retest best problem solutions
Communication	Cooperative planning and problem solving
Authentic Assessment	Continuous improvement of solution
Accountability and Adaptability	Reflection on competition results

Students who participate in the Odyssey of the Mind program acquire skills that prepare them for high stakes testing through enhanced problem-solving abilities and application of critical thinking in response to test items

Students who participate in this program learn skills that they will continue to apply in school and the real-work world including cooperative planning, teamwork, creative problem-solving, and the ability to transfer previous knowledge to new situations for innovative solutions.

Every year, 6 new problems are developed for students to solve and then present their creative solutions in a competitive tournament setting. The specific problem details are different from year to year, but the problem formats are the same: design and build a vehicle that performs tasks; create a technical device for visual effects; create a performance that brings some aspect of classic literature, art, or music to life; build a weight-bearing balsa wood structure; present a humorous performance that solves a difficulty; and a simplified problem for K-2 students.

*Goals from every curriculum area in the NC Standard Course of Study can be applied to the problems in the Odyssey of the Mind program.* Following is a small random sampling of different grade level curriculum goals aligned with Odyssey of the Mind problem solutions:

### ***Problem 1: Vehicle design, construction, and performance***

**Computer Technology Skills — Grades 9-12** [Goal 3 : Arts Education \(Dance, Music, Theatre Arts, Visual Arts\)](#) :The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information.

**English Language Arts — Grade 6** [Goal 1](#): The learner will use language to express individual perspectives drawn from personal or related experience. [Goal 2](#): The learner will explore and analyze information from a variety of sources.

**Mathematics — Grade 3** [Goal 2](#): Spatial Sense, Measurement, and Geometry - The learner will recognize, understand, and use basic geometric properties, and standard units of metric and customary measurement.

**Science — Grade 8** [Goal 1](#):The learner will design and conduct investigations to demonstrate an understanding of scientific inquiry. [Goal 2](#): The learner will demonstrate an understanding of technological design.

### ***Problem 2: Technical/Mechanical device design and creation***

**Computer Technology Skills — Grade 3** [Goal 1](#): The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies. [Goal 3](#): The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information.

**English Language Arts — Grade 9** [Goal 2](#): The learner will explain meaning, describe processes, and answer research questions to inform an audience.

**Mathematics — Grade 7** [Goal 1](#): Number and Operations - The learner will understand and compute with rational numbers. [Goal 2](#): Measurement - The learner will understand and use measurement involving two- and three-dimensional figures.

**Science — Grade 5** [Goal 4](#): The learner will conduct investigations and use appropriate technologies to build an understanding of forces and motion in technological designs.

**Visual Arts Education — Grade 4** [Goal 2](#): The learner will develop skills necessary for understanding and applying media, techniques, and processes.

### ***Problem 3: Classics: performance created to bring to life aspects of art, music, literature, history, and/or geography***

**Dance Arts Education — Grade 4** [Goal 5](#): The learner will demonstrate and understand dance in various cultures and historical periods.

**English Language Arts — Grade 7** [Goal 1](#): The learner will use language to express individual perspectives in response to personal, social, cultural, and historical issues.

**General Music/All Other High School Electives – Grade 9-12 [Goal 9](#):** The learner will understand music in relation to history and culture.

**Information Skills — Grade 3 [Goal 4](#):** The learner will EXPLORE and USE research processes to meet information needs.

**Social Studies — Grade 6 [Goal 7](#):** The learner will assess connections between historical events and contemporary issues.

### ***Problem 4: Design and build a balsa wood structure that supports weight***

**Computer Technology Skills — Grades 9-12 [Goal 3 : Workforce Development \(Agricultural Education, Business and Marketing, Industrial Technology and Human Services, Biotechnology, Health Care, and Career Development\)](#):** The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information.

**English Language Arts — Grade 10 [Goal 2](#):** The learner will evaluate problems, examine cause/effect relationships, and answer research questions to inform an audience.

**Mathematics — Grade 5 [Goal 3](#):** Geometry - The learner will understand and use properties and relationships of plane figures.

**Science — Grade 6 [Goal 2](#):** The learner will demonstrate an understanding of technological design.

### ***Problem 5: Create a humorous performance with a problem-solving storyline***

**Dance Arts Education — Grade 6 [Goal 3](#):** The learner will understand that dance can create and communicate meaning.

**English Language Arts — Grade 3 [Goal 4](#):** The learner will apply strategies and skills to create oral, written, and visual texts.

**Science — Grade 7 [Goal 1](#):** The learner will design and conduct investigations to demonstrate an understanding of scientific inquiry.

**Theatre Arts Education — Grade 3 [Goal 2](#):** The learner will act by interacting in improvisations and assuming roles. [Goal 3](#): The learner will design and produce theatre by conceptualizing and realizing artistic interpretations for informal or formal productions.

### ***Problem 6: Primary problem for K-2 student teams***

**English Language Arts — Kindergarten [Goal 3](#):** The learner will make connections through the use of oral language, written language, and media and technology.

**Mathematics — Grade 1 [Goal 3](#):** Geometry - The learner will identify, describe, draw, and build basic geometric figures.

**Visual Arts Education — Grade 2 [Goal 7](#):** The learner will perceive connections between visual arts and other disciplines.