STEM Learning Experiences

Field Trips (1, 2 & 3-hours)

After-School Programs

Alignment with Standards
NC Essential Standards
NGSS with crosswalks
CCSS (Math & ELA)

Extensions Available
Math, Science, Social Studies, ELA, Art

Designed to fit your curriculum, budget, group size and schedule!

Dr. Stephen L. Page
- Retired superintendent of Henderson County Public Schools
- Former Associate Superintendent of Buncombe County Schools
- Zaniac Asheville Education Advisor & Co-Owner

"As a superintendent of schools and as a principal, I've dedicated my career to educating and mentoring our youth.

Zaniac's STEM enrichment offerings are powerful programs guaranteed to save teachers time, enrich your lesson plans and increase the fun kids have learning at school."

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zaniac™

For Schools (Grades 1–8)

Fun, uniquely engaging STEM enrichment programs for teachers to supplement or add to your curriculum and lesson plans.

Our flexible offerings allow you to bring your students to Zaniac for a full course or field trip, or bring Zaniac directly to your students at your school with on-site instruction during or after school.

Zaniac Asheville
One Town Square Blvd., Ste. 120
(At Biltmore Park Town Square)
828.575.0355
www.ZaniacLearning.com/Asheville

To Schedule Your Zaniac STEM Learning Experience, Field Trip or After-School Program, Contact Reed Bilbray:
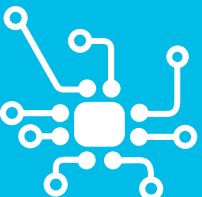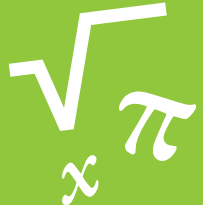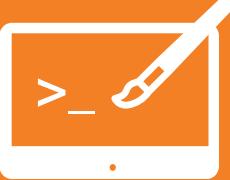**Reed.Bilbray@ZaniacLearning.com**

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STEM Learning Experiences
Field Trips &
After-School Programs

For Schools (Grades 1–8)

3D Printing

Tinkering

Zane Math

Design

Computer Programming

Robotics

Zaniac STEM Learning Experiences For Schools (Grades 1–8)

Computer Programming

Scratch
Your students will learn to use Scratch to code their own interactive stories, animations and games.
Recommended Grade Level: 3-8
NC Essential Standards Alignment*:
5.C.1, 5.AE.1, 7.ML.1, TT.1 (all grades)

Python
Python students learn to work with this intuitive, syntax-based language.
Recommended Grade Level: 5-8
NC Essential Standards Alignment*:
7.ML.1, TT.1 (all grades)

App Creation
Students create their own app using App Inventor 2, a visual programming approach designed by MIT.
Recommended Grade Level: 5-8
NC Essential Standards Alignment*: TT.1 (all grades)

Web Design
Students create their own website, from concept to functional, hosted site.
Recommended Grade Level: 5-8
NC Essential Standards Alignment*: TT.1 (all grades)

*Extensions available for all programs to address other standards covering all subjects and curricula.

Design

3D Printing
Students will be immersed in the engineering and design process, printing their own ideas.
Recommended Grade Level: 3-8
NC Essential Standards Alignment*: TT.1 (all grades)

Fashion Design
Explore color theory, create your own custom garment designs, design and 3D print fashion accessories.
Recommended Grade Level: 5-8
NC Essential Standards Alignment*: TT.1 (all grades)

Tinkering

Circuits
Using littleBits™, learn about basic inputs, outputs, analogs and electricity.
Recommended Grade Level: 1-8
NC Essential Standards Alignment*:
1.P.1, 4.P.3, 6.P.1-3, 7.P.2, TT.1 (all grades)

Microcontrollers
Learn programming logic, work with sensors to explore the science of light and sound, and build creatively with real circuit boards.
Recommended Grade Level: 5-8
NC Essential Standards Alignment*:
Information and Technology (all grades)

Game-Based Learning

GBL: Minecraft™: Physics
Explore Newton's Laws, mechanics, and thermo-dynamics and work with advanced concepts like fluid physics and electromagnetics, all in the Minecraft universe.
Recommended Grade Level: 5-8
NC Essential Standards Alignment*:
5.P.1, 6.P.1, 7.P.1-2, 8.P.2, TT.1 (all grades)

GBL: Minecraft™: Architectural Design
Students learn the basics of urban planning and building design. Explore real-world architectural landmarks, then design a cityscape using Minecraft™ and Tinkercad.
Recommended Grade Level: 5-8
NC Essential Standards Alignment*:
2.AE.1, 2.V.1, 6.C.1, TT.1 (all grades)

GBL: Minecraft™: Galaxy
Learn about Earth's oceans and undersea life, and explore space. Design and build rockets that travel to space in the Minecraft universe.
Recommended Grade Level: 5-8
NC Essential Standards Alignment*:
5.E.1, 6.E.1-2, TT.1 (all grades)

GBL: Minecraft™: Exploration
Students learn Cartesian coordinates and use them to navigate. Explore real science and engineering concepts like biomes and gravity.
Recommended Grade Level: 3-8
NC Essential Standards Alignment*:
5.L.2, 6.L.1-2, 6.E.2, TT.1 (all grades)

Robotics

Simple Machines
Students get an introduction to levers, inclined planes, pulleys, screws, and complete challenges through building motorized mechanisms in teams.
Recommended Grade Level: 2-8
NC Essential Standards Alignment*:
5.P.1, 7.P.1-2, TT.1 (all grades)

Robotics: Design & Build
Students learn the basics of robotics, the scientific method, forces, and design. They build and program robotic solutions.
Recommended Grade Level: 3-8
NC Essential Standards Alignment*:
7.P.1-2, TT.1 (all grades)

Environmental Science
Study concepts like renewables, recycling, energy conservation, and carbon footprints through building wind turbines, and generators, and conveyors.
Recommended Grade Level: 4-8
NC Essential Standards Alignment*:
4.L.1, 5.L.2, 6.L.2-3, 8.E.1, TT.1 (all grades)

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