IF your student finishes their online classwork early…

…You want to **challenge students** with a year-long deep dive into a subject they choose

… Your microschool or pandemic pod needs a structured way to offer project-based learning or research

…You want to spark student's creativity by teaching them the **process of innovation**…

Science Coach
EDUCATE · INNOVATE · ACHIEVE

Then you are looking for the Science Coach Innovation Curriculum!

The Science Coach Innovation Curriculum is a **project-based learning** (PBL) framework that **remotely** steps 6th-12th grade students through the innovation process while allowing easy and effective adult oversight.

Since 2007, Science coach has offered a **full professional development program** and this innovation framework is one of our vital tools which our non-profit is offering to the public for the first time. **This student-facing curriculum is available to schools, individuals, micro-schools or anyone wanting to engage students in fun, individualized and REAL-LIFE project-based learning of THEIR OWN CHOOSING on an affordable monthly or school-year basis.**

Teacher instruction guidance and answer keys embedded within the content upon login. Comprehensive modules and lessons (see next page) that work for students of all abilities.

STUDENTS - Innovation Curriculum engages and supports 6th-12th grade students to REMOTELY:

- Enhance **enrichment of regular classroom subjects** through individualized PBL activities.
- Design an invention and prepare "Shark Tank-like presentations."
- Complete a science fair and/or high-level research project including competition posters and oral presentations.
- Develop an engineering design, ecology or computer-based project.
- Step students through the entire innovation process.
- Complete an innovation journal that provides the necessary online structure and keeps all content and media in one place.

TEACHERS/ADULTS - Teaching PBL in person or remotely is easier because the Innovation Curriculum provides:

- Complete step-by-step guidelines.
- Easy oversight access with status updates on all projects.
- The ability to group students into teams or keep them individually.
- Access to place feedback or mentoring insight directly in the student's online innovation journal.

*The Science Coach Innovation Curriculum development was graciously supported by the Tracy Family Foundation, The Saigh Foundation and the Science Coach Benefactors.

*Science Coach has made Project-Based Learning **EFFECTIVE** and **POSSIBLE** in the new virtual education world.*

Cost

$25/month via credit card

Or 1-time payment of $200 for 9 months (Saves $100!)

Self-Directed Course to

- Create an invention
- Solve a real-life problem
- Do a Science Fair project

Our **Innovation Curriculum** is a methodology curriculum, so it doesn't conflict with content curriculum.

Go to: **ScienceCoach.org/invent** to purchase today.

Module 1: Introduction to Innovation
- Creativity and Innovation
- Working within a Team
- Characteristics of Innovators
- Design Thinking

Module 2: Exploring Ideas for Your Innovation Project
- Why do Independent Exploration?
- Incentives, Motivations, and Market: Exploring Audiences and Relevant Competitions
- Science Changes the World
- Audiences
- Labs, Workshops and the World of Work
- Innovation Methodologies

Module 3: Getting Clear on Your Direction
- Professional Documentation
- Refining your Questions and Understanding the Problem
- Finding Research Questions or Problems around School
- Finding Research Questions or Problems in the Natural World
- Finding Research Questions or Problems Everywhere
- Create Your Question or Problem
- Mentorships and Professional Networks

Module 4: Gathering Relevant Background Information
- What is relevant background information?
- What does it mean to review relevant background information?
- Sources of background information
- Troubleshooting background information reviews
- Conducting your background information review
- Create a hypothesis or specify design requirements

Module 5: Ethics and Integrity
- Intro to Ethics
- Ethical Issues with Living Beings
- Ethical Issues with Handling Information
- Governing Bodies of Ethics
- Ethical Scenarios

Module 6: Designing and Planning Experiments and Tests
- Track Specific Requirements
- Track Specific Process and Planning
- Track Specific Testing
- Designing Track Specific Testing
- Design and Implementation
- Student Presentations

Module 7: Study Designs
- Research Methods
- Observations and Surveys

(Module 7 Continued)
- Surveys and Focus Groups
- Observations: Survey and Focus Group Designs
- Correlations and Causations
- Correlations Study Designs
- Quasi-Experimental and Experimental Study Designs
- Developing a Quasi-Experimental or Experimental Study Design

Module 8: Conducting Experiments and Tests
- Bias and Sampling
- Designing Your Data Collection
- Safety
- Discipline Specific Methods
- Refining Your Process
- Execute Your Project

Module 9: Tools for Analysis
- Descriptive Statistics
- Applying Real World Data
- Analyze Data Using Tools of the Profession, Part 1 and Part 2

Module 10: Data Analysis and Statistics
- Introduction to Analysis and Hypothesis Testing
- Strength of Agreement or Disagreement
- Comparing Mean Values
- Comparing Proportions
- Applying Appropriate Analysis
- Why Good Data is Important

Module 11: Making Sense of Information and Next Steps
- Data Visualization
- Data Organization
- Data Interpretation
- Developing a Conclusion and Discussion Your Conclusion and Discussion

Module 12: Written Communication
- Introduction to Written Communication
- Laying out the Context
- Background Information Review, Materials, Methods Results, Discussion, and Conclusion
- References and Formatting
- Abstracts and Executive Summaries

Module 13: Oral Communication
- Creating Your Presentation or Demonstration
- Creating Your Speech
- Using Props and Visual Aids
- Speaking Techniques
- Practicing Your Speech

Module 14: Reflection

*The Science Coach Innovation Curriculum development was graciously supported by the Tracy Family Foundation, The Saigh Foundation and the Science Coach Benefactors.

Innovation Curriculum Order Form

Science Coach
EDUCATE · INNOVATE · ACHIEVE

School Information	
Name	
District	
Street Address	
City/State/Zip	
Phone #	

Contact Information	
Name	
Title	
Phone	
Email	
Role	

Order Information	
Today's Date	
Number of Students to have access to Innovation Curriculum	**Select one:** ___ Annual license for _____(# of students) * $200 = _____ ___ Annual license of >1000 students ($175 per student for 9 months) _____ (# of students) * $175 = _____ ___ Monthly license for _____(# of students) * $25 = _____/ month (Requires a credit card to be held in the secure system and will be charged monthly on the 1st of the month.)
How will you pay? (Choose #1 or #2 and complete relevant information.)	___ **1. Our PO # is** _____ Please send an invoice to: Name: _____ ____ Use the school address above ____ Address _____ ___ **2. Send the link to enter the credit card securely to:** _____(Name) at this email: _____
Instructions to send student and teacher email addresses	1. No names are needed - just an Excel file (or Google Sheet) that lists ONLY the email address of the students and another sheet in the SAME file with the teacher emails. Or - Download a template from https://bit.ly/SCICLicense 2. Name the file with your two letter state abbreviation, school name and # of students being licensed.(Example: MO Ritenour High School 452.xls) 3. Email the file to: Shawn@ScienceCoach.org You will receive an email verifying receipt.

Return this completed form to: **Shawn@ScienceCoach.org**
For direct phone support or for questions, call Science Coach at: **314-501-1940** or email **Jill@ScienceCoach.org**.