

# EXPLORATIONS LICENSE:

## ESSENTIAL COMPUTER SCIENCE LITERACY

Drawing from Finland's highly successful approach to teaching computer science, this course blends unplugged learning with **block-based programming**, **computational thinking** and core **digital citizenship principles** so students can learn the essential introductory computer science knowledge they need to be successful and safe in today's changed world. Units include:

### The Essentials of Coding

What Code Is  
How Bugs Muck Things Up  
How Code Works

### Cyber Safety

How to Make a Password  
The Rules of Digital Interaction  
Safe Browsing  
How to Report Suspicious Activity

### Learning to Code

Block-Based Programming  
Project Management  
Abstraction

### Digital Citizenship

Netiquette  
Copyrights and Plagiarism  
Cyberbullying

### Hardware vs Software

Computer Components  
Data Storage  
Operating Systems

### The Fundamentals of Algorithms

Sorting  
Divide and Conquer  
Searching

### Core Logic

Loops  
Sequencing  
Selections

### Career Exploration

Who Uses Code  
What Uses Code  
The History and Future of Coding

### All Units...

- ★ Are aligned to ISTE standards
- ★ Utilize a 5E lesson plan design
- ★ Work within the timelines of a multi-disciplinary classroom
- ★ Develop a growth mindset
- ★ Provide cross-disciplinary lesson plans
- ★ Build skills students need to be successful in higher level coding courses

