



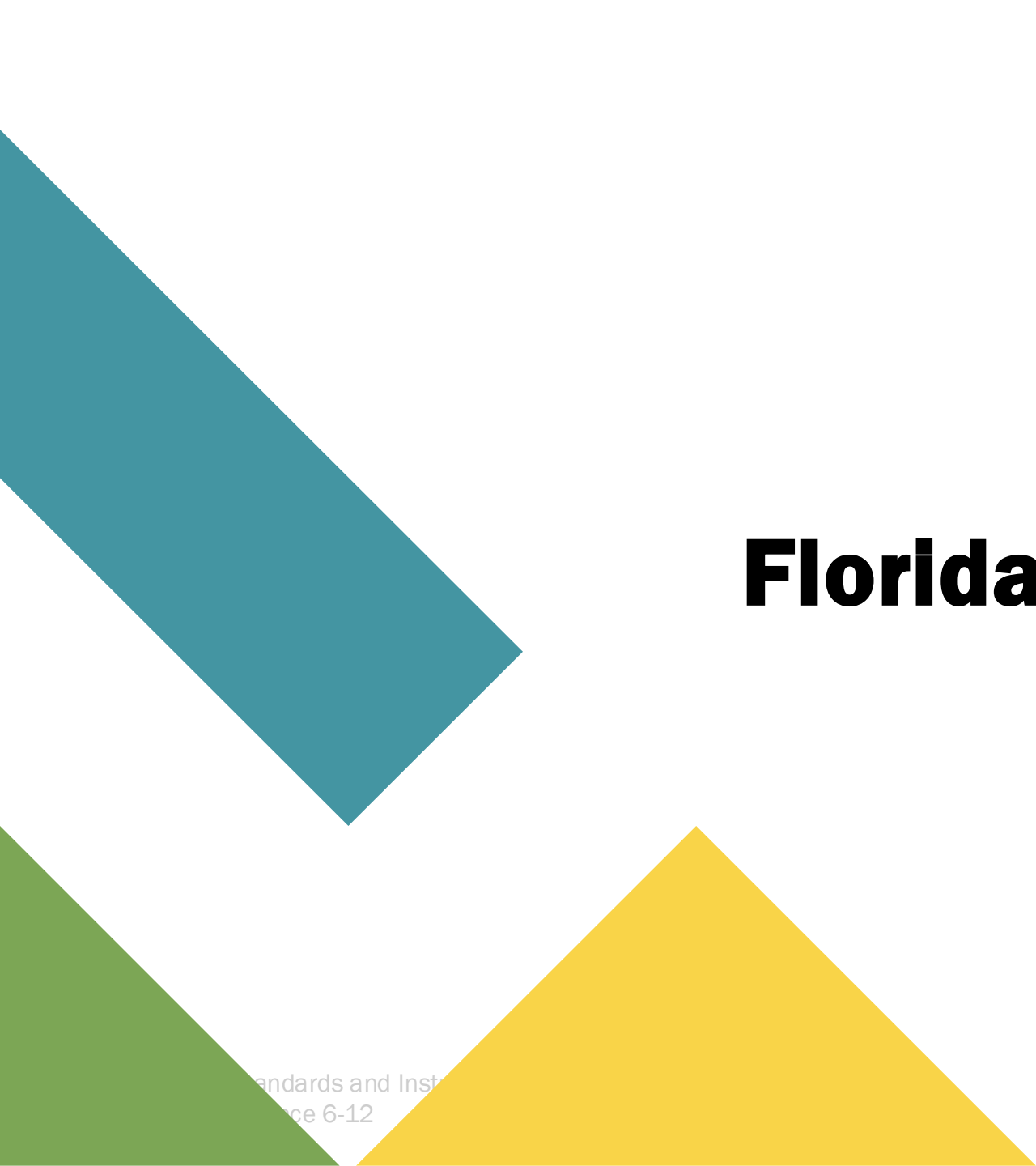
Computer Science 6-12 | Aligning the New Computer Science Standards and the Formula for Success

Session Norms



Session Expectations:

- Take ownership of your learning experience.
- Contribute to a productive learning environment by being an active and engage learning.
- Demonstrate open, honest and respectful communication among each other.



Florida's Formula for Success



FORMULA FOR SUCCESS

$$5 + 5 + T1 + T2 + T3$$

5
CHARACTERISTICS OF
BENCHMARKS-
ALIGNED, HIGH-
QUALITY INSTRUCTION

Horizontally and Vertically Aligned
Balanced Instructional Approaches
Student-Centered
Instruction Informed by Data (Assessments)
Implements Tiered Instruction

5
ASSESSMENT TYPES TO
GATHER STUDENT
DATA

Screening
Progress Monitoring
Diagnostic
Formative
Summative

T1
CORE INSTRUCTION
FOR ALL STUDENTS

Systematic
Scaffolded
Differentiated
Inquiry-Based
Explicit
Progress Monitoring

T2
SUPPLEMENTAL
INSTRUCTION FOR
SOME STUDENTS

Systematic
Small Group Scaffolded Instruction
Differentiated Opportunities to Practice Targeted Skill(s)
Guided Inquiry-Based
Explicit
Frequent Progress Monitoring
Occurs in Addition to Tier 1

T3
INTENSIVE
INSTRUCTION FOR FEW
STUDENTS

Systematic
Smaller Group or One-One Scaffolded Instruction
Differentiated Guided Practice
More Guided Inquiry-Based
Explicit
More Frequent Progress Monitoring
Occurs in Addition to Tier 1 and/or Tier 2

Successful implementation of Florida's Formula for Success includes ways to provide access for ALL students, including students with disabilities (SWD) and English Language Learners (ELL), and incorporates Universal Design for Learning (UDL) principles. Additionally, corrective feedback occurs

What is a Computer?

- When you hear the word computer, what comes to mind?
 - To define Computer Science, we need to define a computer.
- What did we consider when defining what is a computer
 - Did you consider the following questions?
 - Does the device process data?
 - Can it follow a set of instructions (e.g., algorithms)?
 - Does it store or retrieve data?
 - Does it interact with other systems or devices

Reflection



Reflection Questions

- What have you learned about how computers are defined?
- How can. You incorporate this activity or concept in a classroom?

Key Takeaways

- Computer are defined by their ability to process data, follow instructions and store retrieve information
- This exercise helps develop critical thinking and classification skills that can be applied in the classroom

Connecting the formula for success

Based on the “What is a computer” activity which characteristic of benchmarks-aligned, high-quality instruction was utilized?

5 CHARACTERISTICS OF BENCHMARKS- ALIGNED, HIGH- QUALITY INSTRUCTION

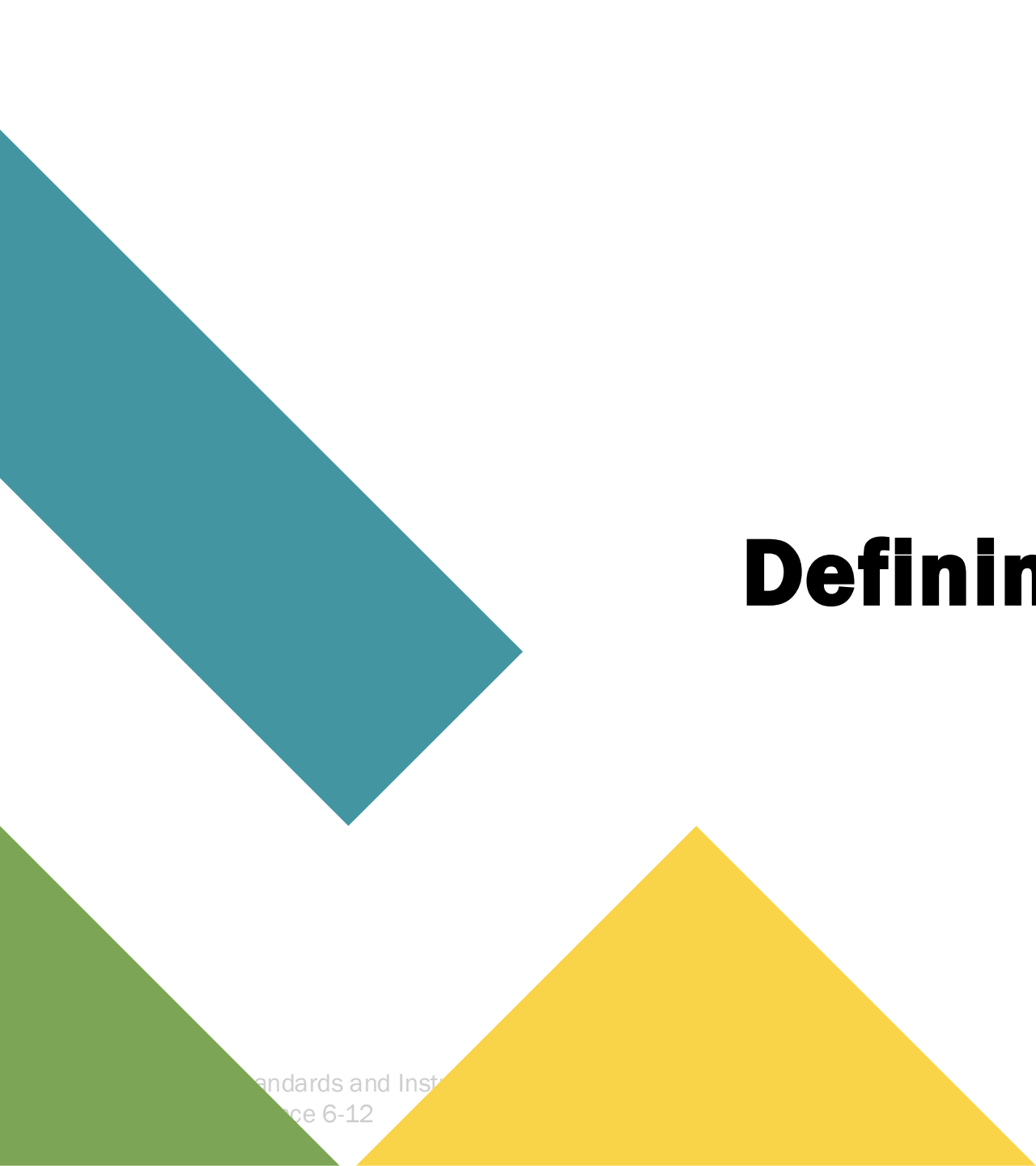
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Defining Computer Science

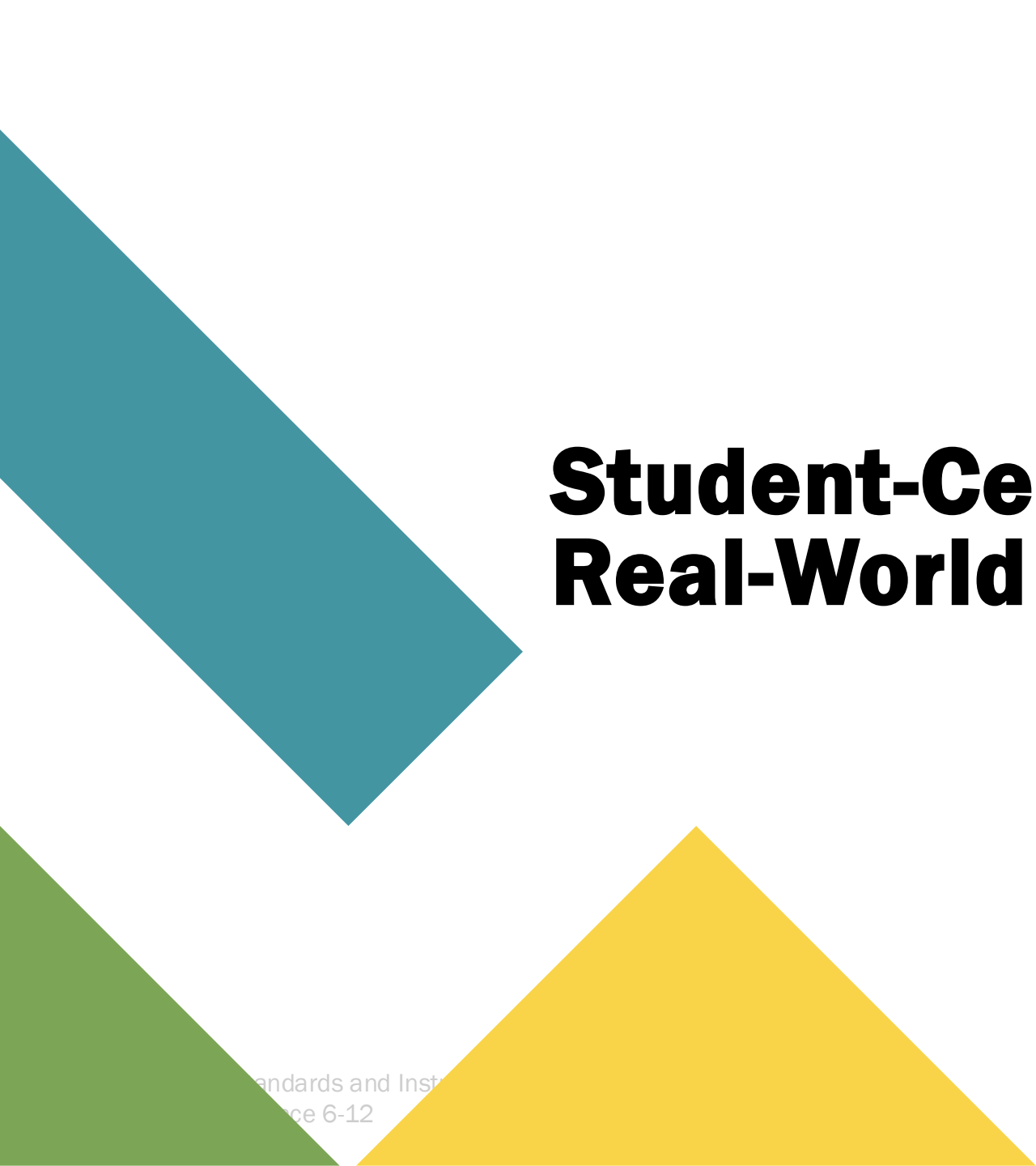


Defining Computer Science is the study of computers and algorithmic processes, including their principles, hardware and software designs, applications, and their impact on society, and includes computer coding and computer programming

Defining Computer Science



- Understanding Florida's Definition for Computer Science
 - Aligns Teaching with Standards
 - Provides a Clear Scope
 - Supports Curriculum Development
 - Prepares Students for the Future
 - Promotes Consistency
- Reflection
 - What misconceptions do students (or adults) have about what Computer Science includes?
 - Why is it important to differentiate between Computer Science and general technology use?



Student-Centered Learning and Real-World Connections



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Student-Centered Learning & Real-World Connections

How they connect:

Interest:

- Student connect to real-world issues they care about.

Meaningful Learning:

- Problem-solving, hands-on projects and working with industry professionals

Future Readiness:

- Skill that directly connect to the job market.

Student-Centered Learning & Real-World Connections

How they connect:

Active Engagement in Problem-Solving:

- Student explore real-world challenges such as cybersecurity threats and AI ethics.
- Encourage critical thinking, creativity and innovations – key skills for workforce readiness.

Authentic, Hands-On Experiences

- Students engage in project-based learning (PBL) that mirrors industry practices.

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Strand Progression of Florida's State Academic Standard for Computer Science





Thank you

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