Introduction to Computational Thinking Assessment

[Music]

Slide 1:
dear teachers and Educators in the following three Minutes video we will provide an overview of a computational thinking assessment which we adapted for the project as you know in our ever evolving world the importance of computational thinking cannot be overstated it transcends mere coding acting as a catalyst for the development of critical thinking and problem solving skills that are indispensable for success as Educators we bear the responsibility of preparing our students to navigate the challenges presented by the digital
age

Slide 2:
recognized as a core cognitive ability crucial for successful adaptation in the workforce computational thinking extends beyond the confines of coding it nurtures a mindset that encourages students to dissect complex problems identify patterns and devise systematic Solutions

Slide 3:

computational thinking
encompasses fundamental concepts like
logic, evaluation, algorithms, patterns,
decomposition, and abstraction
these elements serve as a
Bedrock not only enhancing technical
proficiency but also fostering qualities
such as resilience and collaborative
teamwork it's not just about mastering
programming languages it's about
instilling a mindset that enables
students to approach problems logically
and systematically understanding the
significance of computational thinking
is just the starting point for educators
in today's landscape assessing our
students computational skills has become
imperative assessments play crucial role
in offering insights into students grasp
of these Concepts and their ability
to apply them in real world
scenarios

Slide 4:
the computational thinking
assessment we're introducing is designed
by the Callysto Project in Canada with
the support of the Canadian government and
Canadian research Council and is
tailored for students in grades 5
through 12 this assessment is designed
not only to measure skills but also
attitudes towards computational thinking
and provides comprehensive understanding
of students computational thinking

abilities adapted by the NEWMT research team this tool is one of the valuable assets for the goal of our project

Slide 5:
the assessment which takes approximately 45 minutes to complete covers the spectrum of areas it encompasses demographic questions providing context about students gender, age and grade next the assessment is divided into three parts in the first part it explores experiences and attitudes using likert scale questions in the second part it delves into problem solving skills with multiple choice questions and self assessment questions finally in the third part of the test it encourages students to articulate their thought process through open-ended questions and feedback on the next two slides you will see the examples of the questions in the assessment

Slide 6:
in this typical for the part one question a student is asked to rate on a scale from not at all to very much their perceived ability to solve a complex problem

Slide 7:
this example from part two asks

the student to provide an algorithm for
a set of steps to move a character in a
game by selecting a correct set of steps
from a multiple choice offering the
provided examples give a glimpse into
the diverse nature of the questions in
this assessment as a student engages with
this assessment tool they embark on
a reflective Journey evaluating not only
their skills and attitudes but also
delving into the nuances of their problem
solving approaches
the variety of questions
ensures a comprehensive evaluation and
the open-ended nature invites students to
express their unique perspectives and
solution

Slide 8:
with that and in conclusion
your commitment to shaping the future of
our Learners is commendable by embracing
computational thinking and utilizing
this assessment we collectively Empower
our students to not only Thrive but also
lead in the dynamic landscape of the
digital age thank you for your
dedication to fostering a generation of
forward thinking and problem solving
individuals
[Music]