



Computational Thinking

August 20



@CmichCESE

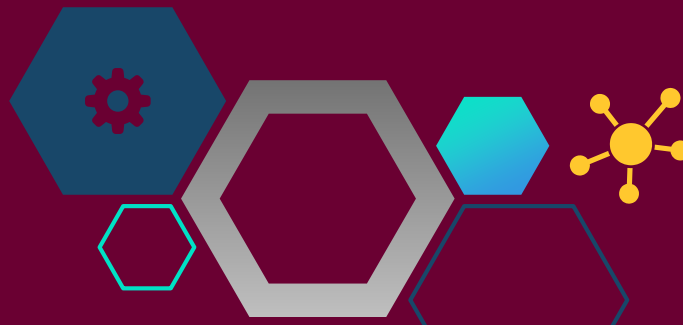


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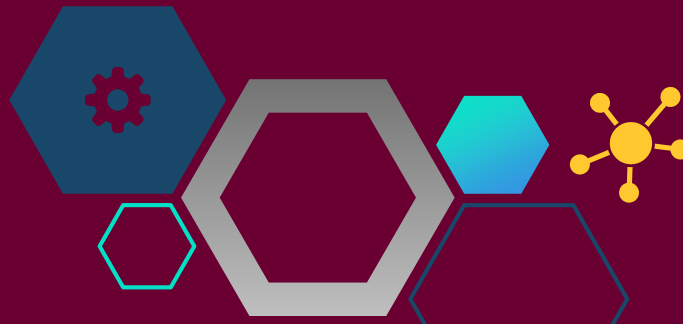


Welcome!





What is Computational Thinking?





Computational Thinking (CT)
is a thought process involved
in problem solving.





PROGRAMMING



Programming tells a computer what
to do and how to do it.

**CT enables you to work out exactly
what to tell the computer to do.**





Computational Thinking in Action

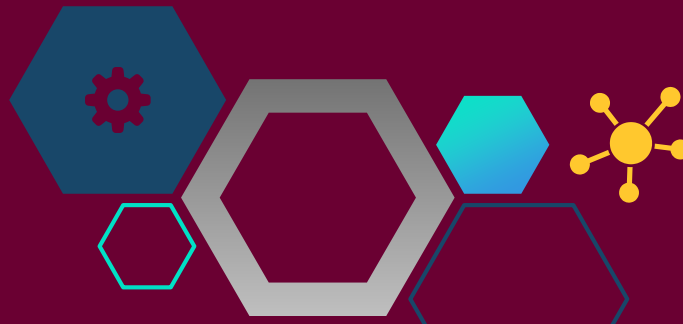


X A T N Y S N P R A B V B A S
T E E H S D A E R P S L Y U G
S O Q G K N S S C O K L P S N
O C H M A C A E C E T E E E I
F Y A S A R N P R R R H F A K
T J E N N G O A S C O S P R R
W J N K I E W T O H U L S C O
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S S R E S C R I P T W P T K U
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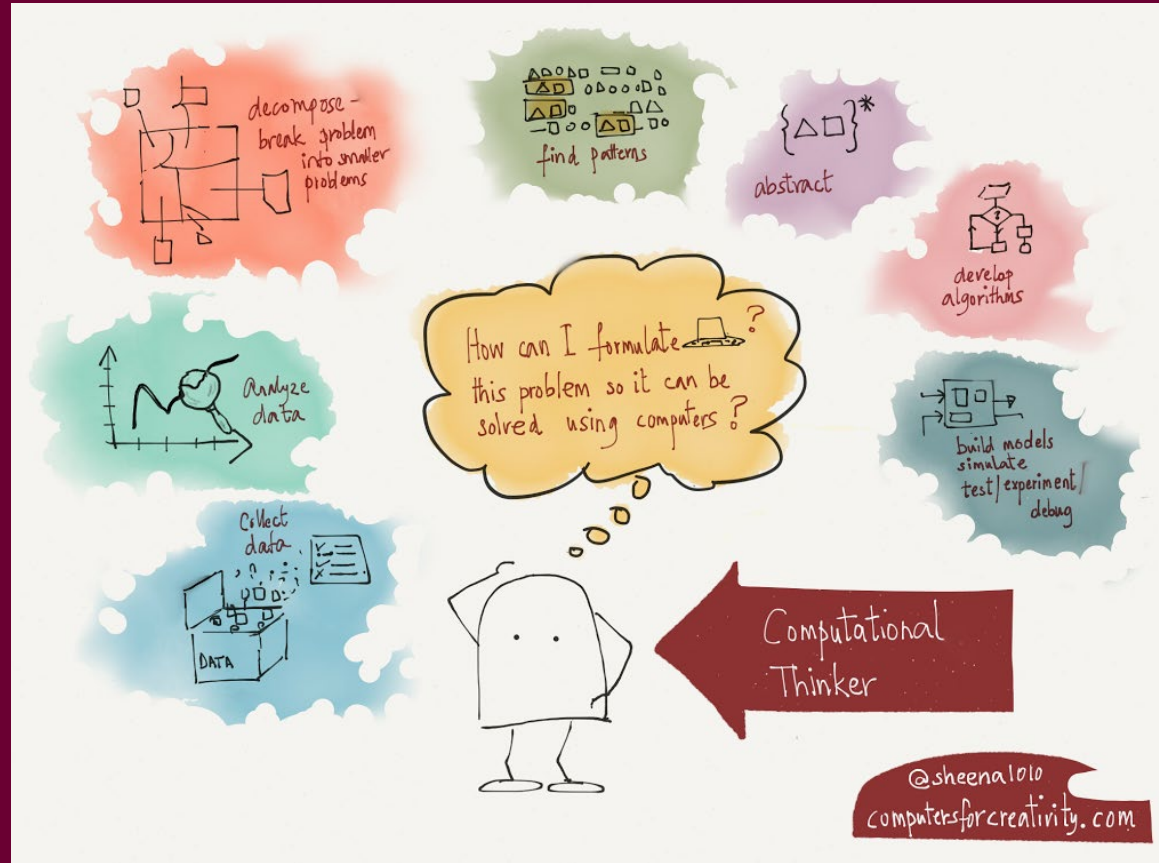


Why is Computational Thinking Important?



“Being able to turn a complex problem into one we can easily understand is a skill that is extremely useful.”

<https://www.bbc.co.uk/bitesize/guides/zp92mp3/revision/2>



Practices for Teaching CT

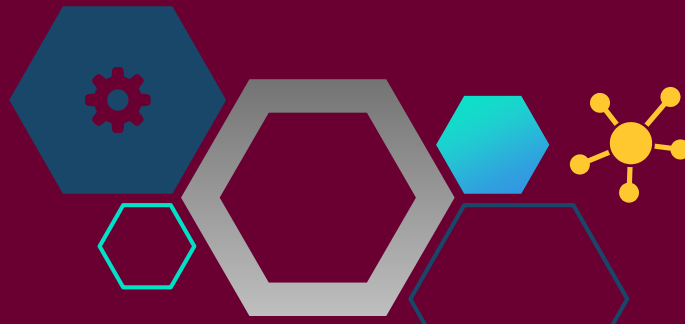
- Modeling
- Integrating
- Releasing Responsibility Gradually
- Encouraging
- Questioning
- Fostering alternative problem -solving
- Using CT vocabulary across the curriculum

<https://k12techintegration.pressbooks.com/chapter/integrating-computational-thinking/>





Computational Thinking in the Classroom and Beyond



Explore

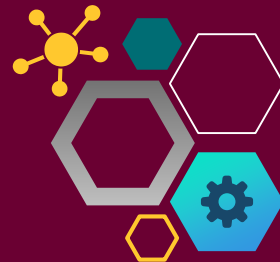


Integrating CT in Class

- Code.org Computational Thinking Lesson 3
- Teaching London Classroom Activities
- Integrating Computational Thinking by Enoch Hunsaker
- Google Courses Exploring Computational Thinking

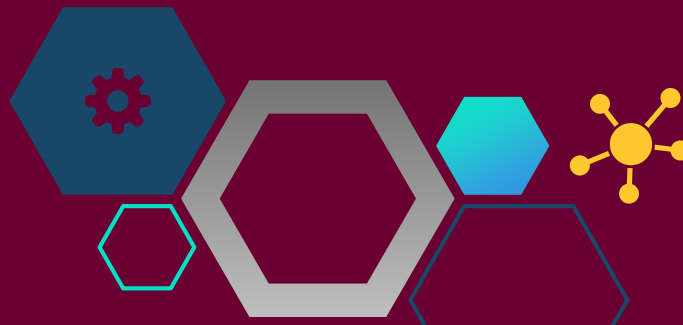
Enrichment Activities with CT

- Clue Master
- On the Brink
- Turning Tumble





Share and Questions



Contact Information

Amanda Cornwell

cornw2a@cmich.edu

www.cmich.edu/stemed



@CmichCESE



@cmich_cese

