Teaching Computational Thinking Survey
74 responses

Which of the following best describes you?
74 responses

![Pie chart showing the distribution of responses]

- Early Childhood Education Student: 41.9%
- Elementary Education Student: 44.6%
- Secondary Education Student: 8.1%
- Professional Early Childhood Educator
- Professional Elementary Educator
- Professional Secondary Educator

Student Status

Which of the following best describes your class standing in your program?
66 responses
Please indicate your status for each of the classes below (skip if you are not a student).

---

**Computational Thinking**

**In your own words, what is Computational Thinking?**

74 responses

- I have no idea. (2)
- I don't know (2)
- How to talk to a computer.
- Being able to understand, use, and create innovative technology
- I actually don't know!
I've actually never heard of this term, but I would guess thinking logically or mathematically, like a computer would to find results.

A way of step by step thinking so that others could follow your thinking to get the same answer or figure something out.

I have no idea - I would probably say it is a way of processing information based numerical evidence.

Being wise about media use and thinking in a way that is positive towards technology.

thinking like a computer haha

Using a computer to help you think about something or work out a problem

Coding--being able to communicate with your computer in computer language.

Computing or figuring out problems using technology

Thinking as a computer might think

Computational thinking is the thinking that helps with using technology. It's how to solve problems.

Thinking that is influenced by the use of computers and how to integrate them in the classroom.

calculating something

problem solving

Thinking in a way that is organized and well thought out.

Your ability to solve problems

Using technology to aid and benefit your thought process

like a plan starting with a problem and step by step till solution

Computational thinking is a process of problem solving that I think a computer can do.

The use of a computer to evaluate and solve problems

I think it means the ability to take information/data from one's surroundings (a.k.a., a computer) in order to draw conclusions that will be used for improvement. (I really don't know, though.)

I don't think I've ever heard of this term.

I think it is a way you think about technology.

Using technology at an appropriate level to encourage thinking and creativity in the classroom.

No idea. Something to do with coding?

In all honesty, by this term, I do not know what it is. However, I hope I do know this term by some other term. I would guess that this involves coding skills and technological navigation skills.

CT is using technology to your advantage.
how you think about solving a problem (using a computer) in a logical way

Uh...something about math?

I really don't know. It sounds like 'computer', so I would assume it has to do with logical thinking.

A way of thinking about problem-solving

Thinking using computers

To me, Computational Thinking is problem solving. You have a problem and you come up with solutions.

I have no clue.

Computational Thinking is being able to efficiently incorporate technology into problem solving.

I have no clue I have never heard of it.

I don't have the best definition but I think it means thinking that requires computing things.

dealing with problems by coming up with various solutions

I'm not sure, but I think it is when you are able to take in information and then put it back out in a creative way.

Thinking like a computer/machine.

Thinking in a step-by-step process.

It is computing/calculating; the plug-and-chug portion of critical thinking problems. In math story problems, you have to use critical thinking to set up the equation, then computational thinking to actually solve for the answer.

Understanding how to use and integrate technology to enhance the classroom experience

competence with technology

I don't know for sure, but my guess is thinking about technology. how to use it effectively, etc.

Computational feeling is the ability to think about things logically and chronologically... that's what I would gather from it. I'm actually not sure what it is.

Think like a computer

Being able to come up with a problem and express it. Both humans and computers can do it.

Approaching a problem trying to use technology as the solution

I'm not sure. Some thought process that has to do with computer?

I'm honestly not sure what it is but from the contexts of the word I would say that it is learning how to use technology in an educational setting and learning how to be proficient in programs (such a Microsoft word or Powerpoint)

Coding

Honestly I don't know. Maybe “tech savviness”?

Using computers and other technology to think faster and more efficiently
Creating solutions to problems

Computer skills

Thinking for the purpose of solving a problem.

Figuring out a problem by dissecting it in regards to each aspect, identifying if there are any patterns or major differences, and using strategies that help solve the problem.

thought process or instructions which make it so anyone could read it and understand

Being tech savy

Thinking critically through technology

It's being able to thoughtfully express a question and it's solution.

Computational thinking is thinking with technology and the premise of technology in mind.

it is a type of thought process?

It is allowing other technological sources to help enhance your thinking.

Involving technological literacy in an analytical way

Some type of quantitative reasoning, it makes me think of numbers and calculations.

---

On a scale of 1-5, how motivated are you to learn more about Computational Thinking and how to integrate it into your (future) classroom?

74 responses

![Bar chart showing responses](chart.png)
Please Rate your Agreement with the following statements.

Imagine your principal asks you to teach a computational thinking, or coding class or communicates to your department that you are now expected to integrate computational thinking into your classes. What are your initial reactions, concerns, or questions?

74 responses

Our kids barely know how to talk to each other, we should work on that before teaching them to talk to a computer.

I would feel more prepared than most but I would also be freaking out to teach it. I’d need to ask close friends who are tech savvy and watch lots of youtube tutorials! But I do think it would be very valuable for this training meeting to take place.

I would love to! But I need some training, resources, and mentors to help me figure it out.

I would be worried at first because I have no idea what it is. But I’m sure after researching it a little bit I would feel much better, but still inadequate in being responsible to teach it to others.

I think I just really wouldn't know where to begin. I know what it is but I feel like I don't have a good understanding of how it looks in a classroom situation.

I would be very concerned because I feel as though I don't have the training nor the resources to teach computational thinking. I would feel more comfortable if there were sample lesson plans on how I can integrate it into my English classroom.
Right now I would be terrified, but after learning I think I would feel confident.

To be honest I would not be excited haha, I would probably be a little annoyed and wish that they could ask someone else to do teach that because it's not something I'm interested in!

I would probably feel a little overwhelmed, but excited to learn about the possibilities are.

Well I wouldn't have any idea how to do this and would be incredibly nervous

I would need to learn something about computational thinking because I am basically ignorant.

I would be excited. I think coding is interesting and a great learning opportunity for kids that are very logical and strategic to thrive.

I would feel very uneasy about doing this. I have rarely discussed computational thinking in my major (if at all) and so this would be very challenging for me.

I would be excited because I think that this is the future for these students so they all need to be competent with those skills. I am not very good at it so that would make me nervous to teach it, but I am very willing to learn. Also, I know that there are a lot of resources available for me to help me and my class.

Feat, I want to know everything, I literally have no idea where to start.

I got this

I do not really know where to start

I would be stressed because I don't think I am comfortable enough with that

I would be apprehensive but willing to do it

Worry! There are already so many things to worry about throughout the day and now another task!

Please remove this submission!

I just would want some training and maybe there is someone better.

What specifically is computational thinking and how do I help my students understand what it is? How do I help my students understand how important computational thinking is for their future lives?

I am not sure how to do that.

I would feel a little concerned because I do not feel extremely qualified in this area. To what extent would I be expected to teach? What resources would be available to me? However, I do feel comfortable teaching different functions of Excel, and I have had limited some experience with programming in MatLab (which is commonly used by scientists and engineers).

I would hesitate because I don't know what it is.

I would be very excited because I am wanting to get my masters in Educational technology. I also do this with my job all the time. My job is to teach others how to use programs. I am the first person to learn it and then it goes out from there.

I think one of my concerns would be what is the appropriate amount of computational thinking to integrate into the classroom?

I'm probably not a happy camper, because I have no idea what it is. Well, only if it is what I think it is (computer coding, etc.)--then I still wouldn't like it. One of my impressions in studying Elementary Education would be that
I didn't have to learn something like coding or be too heavily involved in tech-related activities. I got out of Math Education (twice) to escape things like coding. Not a fan.

Terror. I am in no way prepared to teach on this with my limited and basic knowledge.

I would want to know what resources are recommended and available, and discover with my coworkers the best way to integrate CT into the classroom and put together goals.

I have taken a lot of computer science classes and will likely graduate with a CS minor, so I would feel comfortable teaching those classes.

Well, first I would like to know what it is and if it is necessary for different educational paths.

My only question would really be what exactly is computational thinking. I am willing to try out new tactics, but I would want to know what they are first.

I honestly don't know what computational thinking is so I don't know how I would react.

I wouldn't know where to begin. I would probably search google for a better understanding of what the principal is asking of me.

What program do you want them to learn? What level of expertise?

My initial thought would probably be "help!" I realize that it is important to know and helps our students learn how to think, but I don't know that I would know how to actually teach this.

I don't know anything about that.

I would personally want a training on how to do it and then how to teach it. I'd also want to know if I could team teach this class because I wouldn't trust just my knowledge alone.

I know a little bit of basic coding to create a website. I would be up for the challenge, but I would need to look up a lot of things in order to find the answers.

I would be a little nervous because I would be teaching other teachers and not just students. I also feel like I would be looking up a lot of YouTube tutorials to help me.

What kind of assignments can I give where students can discover solutions to problems?

I would need to learn about it myself, but I would be very happy to teach that to my students!

Um, I don't know how to do that so I would be really stressed.

Ahhh! I am super intimidated!

I am a Dance Education major, we work with our physical bodies rather than with computers in dance classes. I have no idea how I would go about incorporating coding into my classes.

I would immediately wonder what my principal's definition of computational thinking is, and how they expect it to be integrated/taught in classes. And if I were asked to teach a coding class, I would be concerned with my current inability to code, and would wonder where I could go to learn it first.

Technology is not reliable, I do not have the skills to teach that.

how to use it as an aid, not making it become the teacher. Helping students stay focused and use it effectively.

It may be difficult since I am an English Teaching major. Computation doesn't seem very related to what I'm doing.
I would do it, but I would be worried about learning the material myself.

I'd be happy to do it, but I wouldn't see the direct benefits that would come from integrating computational thinking into history.

I would not be interested in doing that at all.

I currently don't know what it is, but I think I'll be able to pick it up quickly and be able to use it in my classroom.

I don't feel qualified to do that.

I think I would be nervous because even though I took some classes throughout my schooling technology is always changing and I would need to learn how to use those resources before I could teach others.

I would need to do a great deal of research. I have never come across this term before.

I'll do it, but I'd have to teach myself first.

Why does he feel this is necessary, and is he prepared to give us as the teachers the resources we need to teach this comfortably?

I would be a little concerned because for FACS, you don't think about using technology as much when it comes to cooking or sewing or teaching preschool students.

That really have no idea what computational thinking is so I am worried about having to teach it to students.

I just need more practice.

Too many questions to ask! I don't even know where to start with that kind of instruction!

I do not feel as if I have had nearly enough practice and instruction regarding it. It is honestly a relatively new term, for me at least, and I would just be concerned with making sure that I fully understand it and feel confident to implement it into my own classroom.

I know it is important but I have no idea how to teach it. I do not ever remember learning how to do this myself.

I am not 100% sure how to do so.

I'm nervous - I can't teach something I don't know and don't understand.

I think that it is a great idea and more students, teacher, and faculty should have to teach in this way.

I would be nervous, but because of my experience with technology in my lifetime, I would be happy to.

I think my initial thought would be that I don't know enough to teach it and that I need to study about it.

I would be really nervous and would run to the internet to find information for this presentation.

I know nothing about coding!

That I wouldn't know where to begin.