

Failure in Coding

2025

Today's Outcomes

- Show confidence in leading open-ended coding lessons
- Have a reflective framework for failure
- Build resilience to work through a failure moment
- Model failing in front of students





If you have to leave early, please fill out our post-seminar survey.

URL: bit.ly/ncawebinar



Thank you to...

FAILURE IN
MAKING



What does Failure look like to you?

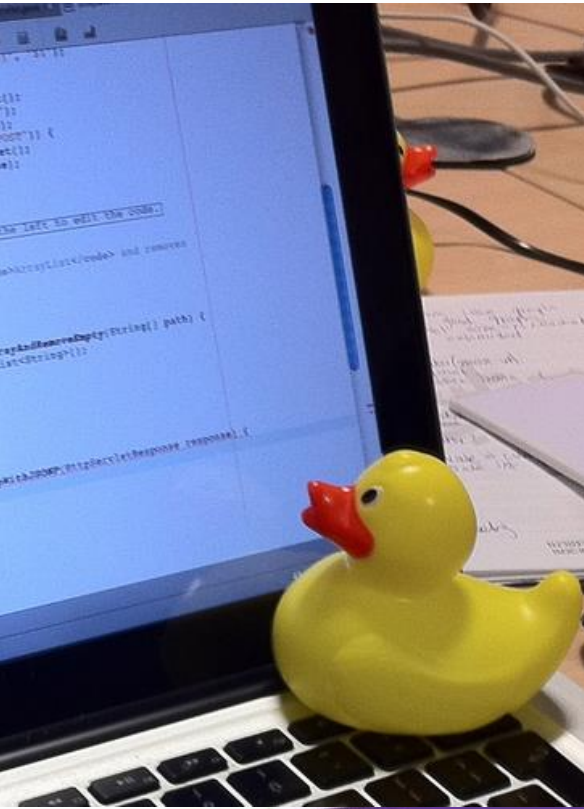
What about your students?



Failure as action

Defining what failure is and is not leads to rigid thinking.

Embrace failures, reflect and learn from them and consider how they connect us to the world and one another.



The Importance of Failure within coding education

Coding is inherently open ended

Debugging a part of computational thinking

Builds resilience and deeper learning

3 Sections

1. Planning for failure
2. Supporting failure
3. Reflection afterwards

1. Planning for Failure

Intentional Moments of struggle

Direct instruction vs. Exploration

Be up front with failure

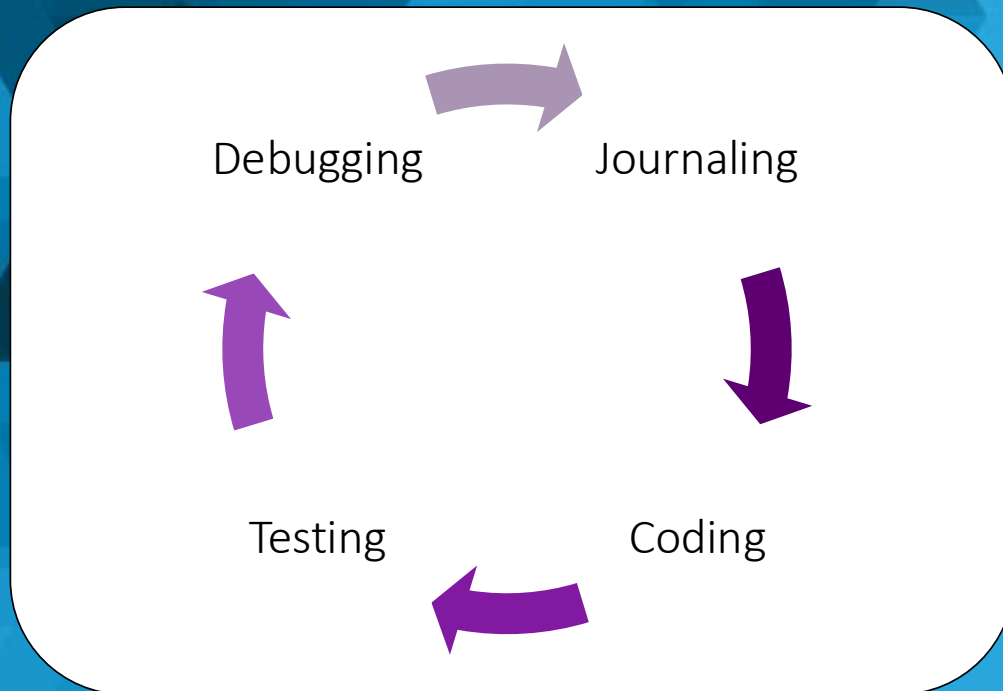


Make a Video Game Summative

1. Where should students experience failure?

2. Where should we avoid failure?

Make a Video Game Summative



2. Supporting Failure

- Focus on failing
- Scaffolding
- Reflection
- Troubleshooting protocol



Debugging Strategies



Reading



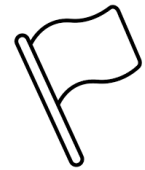
Ruminating



Running



Retreating



Practicing Debugging Skills



[Bit.ly/4q9WKRP](https://bit.ly/4q9WKRP)

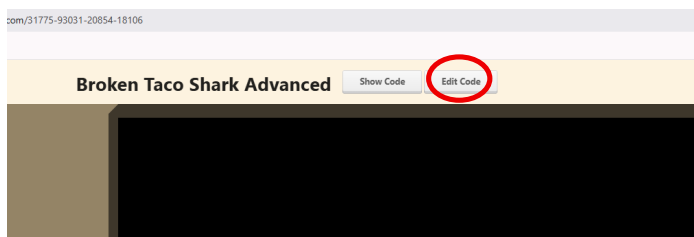


Ready for more? Try out more debugging at bit.ly/brokengames

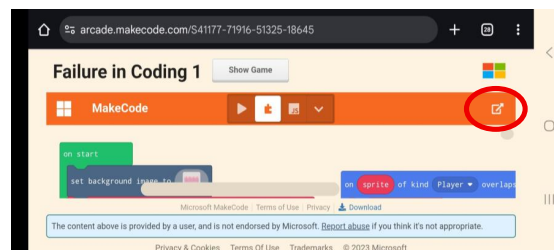
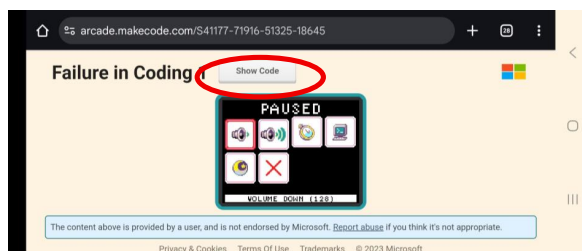


Editing Code on Makecode Arcade

Chromebook /
Laptop



iPad/
phone



Getting Unstuck – Supporting Students in Failure

Change your plans	(how you're making it)
Change your goal	(what you are making)
Learn a new skill	(google, youtube, forums)
Ask for help	(from friends, classmates, teachers)
Take a break	(frustration leads us nowhere)

Supporting students

What do you find effective to help students get “unstuck?”



Model Failures

Both the intentional... and the unintentional



3. Setting up your Reflective Classroom

Remember your ABC's!

Journaling



What about the elephant in the room?

The kids might know more than me.



Teaching philosophy

Coding education as a journey
between you and your students

Failure is a beginning point not an
end point



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Canada 

