

Intel® Teach Elements:
Collaboration in the Digital Classroom
Action Plan: Eva Rios

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Module 1: Collaborative Classrooms

Lesson 1: Collaboration Basics

Activity 3: Collaboration Defined

Estimated Time: 10 minutes

How do you incorporate collaboration in your teaching currently? Think about how you could change your teaching practice to include more collaboration. Establish some goals and record them below.

My collaboration goals:

Learn ways to help students be better collaborators.

Involve students in more group projects.

Incorporate the use of digital tools to support student collaboration

Module 1: Collaborative Classrooms

Lesson 2: Collaboration Planning

Activity 2: Collaboration Framework

Estimated Time: 15 minutes

Use the framework to think about a unit in which your students collaborated. Describe the ways you may have addressed dimensions of the framework. Or, describe how the framework might enhance collaboration in the unit.

Framework Dimension	Description
Purpose	Creating a game to learn about probability was a good collaborative project because games are played in groups. They could design the game and then play it to test it out.
Type	They created a group project of a game. As part of the project, they shared ideas.
Scope	The project took about a week and a half. They worked on it in groups in the classroom. At the end they shared the games with a class of 3 rd graders.
Collaborators	Students collaborate with each other.
Digital Tools	Students used a spreadsheet to calculate probabilities for their games. Creating digital games would be an intriguing idea, however.

How do you think the Collaboration Framework could be useful to you?

Module 1: Collaborative Classrooms

Lesson 4: Collaboration Characteristics

Activity 2: Collaboration Challenges

Estimated Time: 15 minutes

What concerns do you have about adding or improving your collaboration experiences for students at this point? Record any challenges below. Consider how collaboration may benefit your students.

What concerns do you have about collaboration?

My main concerns are that some students won't be doing their share in group projects which will cause problems with more responsible students. I also worry that when students collaborate, they're not always learning what they should because the final project could reflect only the learning of some students.

How might collaboration benefit your students?

I'd like to see them be more skilled at collaboration—to learn the skills of communication, compromise, and problem solving that would help them. Also, I think that most of my students would be more engaged in learning about science if they collaborated more.

Module 1: Collaborative Classrooms

Lesson 5: Module Review

Activity 1: Module Summary

Estimated Time: 10 minutes

Review your goals from [Module 1, Lesson 1, Activity 3](#). Establish long-term and short-term goals for your classroom, and write your goals below. Some examples include:

- Have students work in pairs to give feedback (*short-term goal*)
- Have students work in small groups to research (*short-term goal*)
- Plan a collaborative experience with another class (*long-term goal*)
- Participate in an online collaborative project (*long-term goal*)

My short-term collaboration goals:

Include some small-group discussions in my next unit

Investigate a couple digital tools that will help my students synthesize their research

Have students give each other feedback on their scientist reports

Survey my students to learn about their experience with digital tools

My long-term collaboration goals:

Plan a group project for an upcoming unit

Do some research on historical scientific collaborations to share with students

Module 2: A Framework for Digital Collaboration

Lesson 1: Collaboration Purposes

Activity 5: Differentiation through Collaboration

Estimated Time: 10 minutes

Describe your experiences with the different purposes of collaboration:

- Improved content learning
- Improved teamwork skills
- Global citizenship

Improved content learning

My experiences have been mixed. I've noticed that students can ask each other for help with math when they're working on a project. Sometimes that's a good thing, but sometimes student help sends peers down the wrong path and it's hard to unteach the wrong ideas they got.

Improved teamwork skills

I haven't really noticed that students have improved in this area that much. I think there should be more I can do in this area, but I'm not sure what I should do.

Global citizenship

This is an area where I have seen some success. I've seen students relate better to students that they've collaborated with. I was most gratified to see this happen with my English language learners. The students were good at helping them.

I wish I could do more to help them think critically as they collaborate. They don't seem to consider each other's points of view like I wish they would because they have their minds made up about controversial issues and don't seem to want revise their ideas in the face of good evidence.

Module 2: A Framework for Digital Collaboration

Lesson 2: Design of Collaboration Activities

Activity 1: Selection of Purposes for Collaboration

Estimated Time: 10 minutes

Choose a unit that you would like to make more collaborative. Review the learning objectives for your unit and brainstorm which objectives might be suitable as purposes for collaboration.

Teaching Unit	Objectives Suitable for Collaboration
Unit on climate change	Apply learning about the greenhouse effect and global warming to suggest strategies to reduce global warming in the local community Use accurate scientific data to debate the

	<p>effects of climate change</p> <p>Work effectively with a team to develop a digital product sharing their strategies</p>
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Module 2: A Framework for Digital Collaboration

Lesson 2: Design of Collaboration Activities

Activity 4: Collaborators and Tools

Estimated Time: 20 minutes

Describe your plan for including collaboration in your unit in the table below. (Note: If you have multiple collaborative activities, with unique dimensions, you may want to create separate tables for each by copying and pasting the table for another set.)

Note: You will complete the Digital Tool section of your plan in Module 3.

Purpose	Scope	Type	Collaborators	Digital Tool
<p>Apply learning about the greenhouse effect and climate change to suggest strategies to reduce global warming in the local community</p> <p>Use accurate scientific data to debate the threat of global warming</p>	Short-term and long-term	Sharing Thoughts, Conducting Research, and a Group Project (maybe?)	Peers and an expert	<p>Online spreadsheet</p> <p>Wiki</p> <p>Blog</p> <p>Online survey</p>
<p>Brief Description of Possible Collaborative Activity(ies): I'll probably have small group discussions and data collection.</p>				

Module 2: A Framework for Digital Collaboration

Lesson 3: Assessment in Collaborative Classrooms

Activity 3: Self- and Peer Assessment of Collaboration

Estimated Time: 10 minutes

Describe how you might use the collaboration assessments you saved.

Assessment	How You Will Use It
Collaboration Rubric	I will share this with students before they begin work on the project and ask them to use it to reflect on their collaboration skills periodically throughout the project.

Module 2: A Framework for Digital Collaboration

Lesson 4: Module Review

Activity 1: Module Summary

Estimated Time: 10 minutes

Think about the design of collaborative activities and the assessment of collaboration skills as you reflect on your learning in this module.

In my unit on climate change, I'll include some short-term collaborative activities, such as discussions and peer feedback, and a long-term group project. Students will assess their progress and give feedback to each other on their work throughout the project with rubrics and checklists. I'll use these same instruments to assign grades. I'm going to experiment with finding people in the community to work with my students through videoconferences.

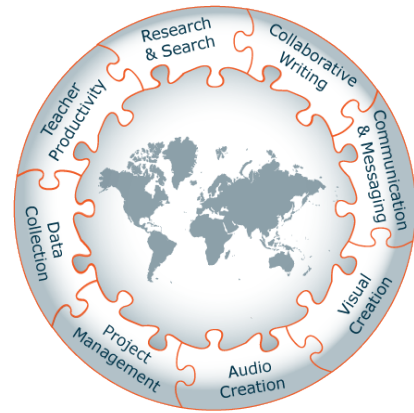
Module 3: Tools of Collaboration

Lesson 1: New Tools for Collaboration

Activity 3: A Collection of Collaborative Tools

Estimated Time: 5 minutes

What categories of tools have you already used?
Which ones would you like to explore further?



Category	Comments
Research & Search	I use bookmarks and often post photos to Flickr.
Collaborative Writing	I regularly read a quilting blog and frequently post comments to the author and other posters.
Communication & Messaging	I use Skype (VOIP) every week to talk to my sister who's living in Guatemala City. I follow a few people on Twitter, but I never tweet myself.
Visual Creation	
Audio Creation	I listen to a few podcasts every week. I've never created one, though.
Project Management	
Data Collection	
Teacher Productivity	

Module 3: Tools of Collaboration

Lesson 2: A Closer Look at Collaborative Tools

Activity 2: Tool Access Check

Estimated Time: 25 minutes

View two or three categories from the Online Collaborative Tools file and try out at least one tool. What did you like about the tool(s)? What was difficult or frustrating? What tool(s) would you consider using with your students to support collaboration?

Category	Collaboration Tool and URL	Comments
Collaborative Writing	Google.sites.com	This is a great wiki site. I like all the different templates and the way it lets you click on things on the page to do more. I can see that this would be a great way for students to combine their research and work on a project together. Now if my students can just access it from school
Collaborative Writing	www.brainstorming.com	This was a fun site. I invited myself at 2 other email addresses to participate. The invitations went straight to my Spam folder on my email, but when I found them, it was pretty easy to sign up. The "brainstorming room" worked pretty well. The main problem is that it looks like you only get one brainstorm for free. I guess you could just use it once, but it's hardly worth the trouble to learn how to do it if you can't use it again.

Module 3: Tools of Collaboration

Lesson 2: A Closer Look at Collaborative Tools

Activity 3: The Best Tool for the Job

Estimated Time: 15 minutes

Choose one or more tools to complete the Digital Tool section of your collaboration plan. In [Module 2, Lesson 2, Activity 4](#), identify the tool(s) and briefly describe how you will use them. Make any other changes as needed.

Module 3: Tools of Collaboration

Lesson 3: Collaborative Tools for Your Future

Activity 2: Discover New Tools

Estimated Time: 5 minutes

How will you learn about new tools and new ways to collaborate online?

I plan on getting ideas about new tools from my colleagues, especially Dave. Our technology teacher always wants us to try new things, too, so she'll be a great source. I think I could also learn from my students! They always know what's the latest thing.

Module 3: Tools of Collaboration

Lesson 4: Module Review

Activity 1: Module Summary

Estimated Time: 10 minutes

Think about the role of online collaborative tools for your classroom as you reflect on the learning from this module.

This module was amazing! I am so excited, and a little overwhelmed, by all the possible tools. I could spend a year just investigating and playing around with all the tools. It's surprisingly easy to think of ways these tools could help my students learn more about science.

Module 4: Collaboration Strategies

Lesson 1: Effective Digital Communication

Activity 3: Peer Mentoring

Estimated Time: 20 minutes

Review and reflect on methods to help students be more effective at sharing ideas, giving and receiving feedback, and mentoring peers. Which strategies might you use with your students in each area?

Type of Collaboration	Strategies	How I Would Use Them
Sharing Ideas	Blog responses	Students will post their ideas about
Giving and Receiving Feedback	Online responses	My students can review each other's climate change wiki pages and post comments in the discussion section of the wiki.
Mentoring Peers	Heterogeneous groups	I'll put students in groups so they can help each other out with content knowledge and with technology skills.

Module 4: Collaboration Strategies

Lesson 2: Confident Digital Collaborators

Activity 3: Collaboration and Digital Literacy

Estimated Time: 10 minutes

Describe the methods you will use to teach your students collaboration and communication skills for your collaborative activities.

	Instructional Strategies	How I Would Use Them
Collaboration	Modeling	I'll model some collaboration skills and ask students to reflect on how well they have done with them using the Collaboration Rubric.
Communication	Role-playing	I'll use a few of the role-playing scenarios to have students practice how they would communicate with group members about problems.

Module 4: Collaboration Strategies

Lesson 3: Ethical Digital Collaboration

Activity 2: Copyright and Fair Use

Estimated Time: 20 minutes

Describe ways in which you can help your students become responsible digital citizens.

I will be more careful about my own use of copyrighted material and explain to students about the decisions I make. I'll also make sure to include a point about ethical use of materials in peer feedback instructions.

As part of their journal assignments, I'll ask students to reflect on their ethics in using online resources and in online communication.

Module 4: Collaboration Strategies

Lesson 4: Module Review

Activity 1: Modules Summary

Estimated Time: 10 minutes

Think about how you will help your students become skilled and ethical online collaborators as you reflect on your learning from Module 4.

In this module, I was interested to learn about ways of teaching the kinds of skills my students need to be effective collaborators. I can see that there are steps I can take that will help them work well together.

Module 5: Supporting a Collaborative Classroom

Lesson 1: Safe Collaboration

Activity 2: A School's Defense

Estimated Time: 15 minutes

If your school has an AUP, do you know its requirements and policies? Review your project and plan for collaborative tools to ensure you are complying with all aspects of the AUP—or with best Internet practices. Describe how you will support the school's AUP and help your students be safe when using the Internet.

I'll have to take these steps before beginning my Beat the Heat unit.

- Find a wiki and a blog that my students can access from school.
- Get permission from students' parents to register for the wiki and blog.

During the unit, I'll review the safety requirements with students, such as limits on posting photos and student information, and monitor students' online interactions.

Module 5: Supporting a Collaborative Classroom

Lesson 2: Collaborator Support

Activity 2: Answer Resources for Collaborators

Estimated Time: 15 minutes

Open the Collaboration Checklist and use the highlight tool to identify the sections of the checklist that apply to your project. How will you communicate the project details to the collaborators? Describe your communication plan.

Communicating Expectations to Your Students and Their Parents

I will share this information in our class newsletter and post due dates and project requirements on the class Web site.

Aligning Expectations with Subject Matter Experts or Community Members

I'll send a letter with the necessary information to the people who will work with my student groups on the project immediately after they agree to participate in the project. I'll set up the times for the videoconferences as soon as possible and confirm a week before the scheduled date.

I'll follow up with e-mail reminders 2 weeks and 1 week before the videoconferences. A few days beforehand, I'll send the student questions and the work they plan to share.

After the videoconference, I'll follow up with a note and have students write thank-you notes.

Module 5: Supporting a Collaborative Classroom

Lesson 3: Technology Management

Activity 2: Technology-Ready Students

Estimated Time: 10 minutes

What activities, procedures, or student support will you create or incorporate into your classroom routines to help your students become self-directed technology users?

I have 3 computers in my classroom. I can also take my students to a computer lab for an hour a week or so.

For group project work, I'll have students do what planning they can away from the computer and select a group member to enter general notes and planning information.

Students will create project plans that include both desk work and computer work and sign up for computer time to work together or individually on research. Students can make decisions about how to synthesize their research and complete a storyboard for their wiki pages away from the computer.

Computer lab time can allow students time for individual blog responses and individual research.

Module 5: Supporting a Collaborative Classroom

Lesson 4: Unexpected Challenges

Activity 2: Collaboration Issues

Estimated Time: 10 minutes

What technology or collaboration issues do you expect to encounter? Brainstorm solutions or prevention plans in case you are faced with these issues.

Technology or Collaboration Issue	Solutions and Prevention Plans
Internet connection problems	I will collect a variety of print resources on climate change for students to use in the event of Internet problems and if computers aren't available for student research.
Absent/irresponsible students	Ask students to be proactive in the case of absent students. If they expect there will be a problem, they need to come up with solutions.
Unreliable adult experts	I'll find online videos or podcasts for students to use for information in case an adult expert fails to attend the videoconference. I'll also have alternative questions and answers available.

Module 5: Supporting a Collaborative Classroom

Lesson 5: Module Review

Activity 1: Module Summary

Estimated Time: 10 minutes

Think about how you will support the collaborators and manage the technology in your projects as you reflect on the learning from this module.

Managing the technology in my classroom is one of the biggest concerns I had with incorporating more digital collaboration. I think it will be a challenge, but I'm seeing that I can foresee many issues that could come up and plan for them. It's all about the preparation.

Course Wrap-Up Summary

Activity 2: Course Reflection

Estimated Time: 15 minutes

Revisit the goals you set for collaboration in your classroom from [Module 1, Lesson 5, Activity 1](#). Write about your progress toward those goals.

In the unit I was teaching while I was taking this course, I did include several short small-group discussions on topics. We did one about every other day. I was very pleased with the results. Often I would have large-group discussions and get very little response, but I noticed that in small groups, students talked pretty readily about the topic. I think that this is a great technique that I will use more and I'm going to expand it to online discussions with a unit later this year.

I've certainly learned about some more tools I could use with my students. I'm going to use a blog, a wiki, an online spreadsheet, and an online survey. All of these tools will really help my students learn the content, I believe.

We haven't done the scientist reports yet, so I haven't actually had them use the reviewing toolbar, but I plan to incorporate that later.

We had an interesting discussion about student use of digital tools. I learned that while they know a lot about some things, other tools were just as new to them as they were to me. We'll learn how to use them together!

I'm well on my way to including digital collaboration in my unit on climate change.

I haven't had a chance to research the scientific collaborations yet, but I still plan to.

What new goals do you have for collaboration in your classroom?

Include some online discussions as part of student activities.

Get involved in an online science teacher community.

Keep learning about more tools and think of ways to use them to meet my standards and objectives.