Growing Student Independence in Projects and Research

Students need modeling and guidance in all areas of the classroom but especially when they are given a project-based learning assignment and / or an assignment that involves collaboration. Students do not intuitively know how to collaborate (neither do adults!), nor do they typically know how to organize their learning. Students need additional guidance in how they approach research and skim and read nonfiction material in order to do research, too.

The following are lesson plans that can be adapted to fit your grade level. Because I have the most experience teaching sixth grade, the lessons are directed with the middle in mind, but the idea is still necessary for higher grades and lower ones. Some are lessons I've made up drawing from things I've found and read. Most are direct links to lessons I really thought were great.

I have linked resources for rubrics, video, and research, if you'd like to continue reading or to help you find keywords for further searching on your own.

Although I have focused on projects and collaboration, think of how you could apply these lessons to your readers' and writers' workshops or student group-work or pairings in a math class. The mini-lessons / discussions are the same.

Think about taking a piece of some of these rubrics to use as a student self-assessment or a formative assessment. All of these activities involve teaching the **processes** behind learning.

1. Active Listening Games
- [Draw What I Draw](#)
- [Concentric Circles](#)

2. Collaborative Group Work
Some skill needs:
- building on some else's ideas
- arriving at a consensus to make decisions
- assigning tasks to team members

- inviting someone to do a task
- getting someone to share tasks

Some strategies for teaching them

- Fishbowl Strategy - p. 96 BIE
- Strategies on p. 94 BIE
- TRIBES - Looks Like, Feels Like, Sounds Like chart
- Script and practicing in pairs
- NSRF - Protocols and Activities
- Socrative Seminar

3. Beginning Your Research - Start with the Library Destiny Resources

End with Google. Our students still need curated resources like ones in the Library Resources or ones you curate using Google Classroom or Edmodo. Two thirds of their resources in their bibliography should be from the LMC Databases.

  - Scholar.google.com
  - Teen Tribune (LMC - Destiny)
  - Culturegrams (LMC - Destiny)
  - Global Issues in Context (LMC - Destiny)
  - Latino American Experience (LMC - Destiny)
  - Opposing Viewpoints in Context (LMC - Destiny)
  - Badgerlink / Ebscohost (LMC - Destiny) - Super Search

And for that other third of their resources, check out this Fighting Fake News infographic to see what general level of bias different news providers belong to.

4. "I can't find anything about _____." Tips for developing Persistence

This article by Norene Weisen is a nice summary of a lot of research about developing stamina in your students. Stamina is a skill that we need to be constantly reinforcing with our students and explicit instruction followed by occasional modeling really can do the trick in teaching kids how to focus.

See these [Stamina Anchor Charts](#) on Pinterest for some ideas.

5. [CARS Model for Determining a Quality Resource Prezi](#) by School Library

You are likely going to curate resources for students in grades 2-8 to use for their research. I think there's a place for directing students to good resources all the way through grade 12, as they usually need some guidance, but we should always be talking about what makes a good web resource. Make this a lesson that you frequently return to and even keep a poster up in the room. As your students get older, they will branch out and find some of their own resources.

Remind your students that Wikipedia can be a good resource for finding resources, and ask.com is not an option.

[Waterloo Technology Integration Digital Literacy Resources](#)

6. Reading Nonfiction

How do I skim to see if this resource will be useful?
Use the THIEVES method in these [lessons from ReadWriteThink](#).

Annotation:
HOW to teach it: What symbols should you use? What skills are you trying to impart to the students? What kind of readings should you use?
http://www.collegewood.org/ourpages/auto/2014/8/17/63598523/Beyond%20the%20Yellow%20Highlighter.pdf

The following article involves annotations when you're teaching History. Read to Learn History is on my new favorite resource: teachinghistory.org.
http://teachinghistory.org/teaching-materials/teaching-guides/23554

What annotations might you use if you are a Science teacher?
https://www.scientificamerican.com/article/reading-techniques-help-students-master-science/

And, most importantly, don't just require random annotations. Students should have a purpose for annotating.

Teach with end in mind. http://www.davestuartjr.com/purposeful-annotation-close-reading/

I know we don't always ALL think of ourselves as reading teachers, but in order for our students to develop independence and reading skills, I believe that we really must. Hopefully, this strategy can be a tool you use to get kids note taking and interacting with the material.

Technology Integration Tip
Assign the annotation using Google Classroom. Students submit their assignment to you by using their phone to take a picture of their annotation work. The same trick works for math or other pencil / paper assignments. There are apps like Diigo and Evernote where you can do electronic annotation, too.

7. Keeping Track of Your Resources

 EasyBib Add-Ons

Coach the kids to copy and paste links to their resources as they go. These can easy be changed into a bibliography when they are done with their project. OR keep track of resources using the Double-Entry Notes strategy linked below.

8. Taking Notes vs. Plagiarizing

Double-Entry Notes - This note-taking strategy can be used in grades 2 on up.

Grammarly - Sign up, and students can copy and paste their work in for proofreading and a plagiarism check.

I Used My Own Words - Paraphrasing lesson for grades 3-5 from ReadWriteThink

Paraphrasing Partner Activity - Rachel Lynette's teacher blog

The Purdue OWL Lessons - for late middle and high school students

9. Checking Work Against the Rubric

A Protocol for Critique and Revision of Project Products p. 107 BIE

10. How Do I Peer Assess?

[Strategy Guide Peer Review](#) - These lessons are for K-5 from ReadWriteThink.

11. Basic Graphic Design Rules

Standards Addressed:

1:1:F Develop innovative products using digital media and print learning tools to build and share new knowledge with others.

(CCR) Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

Student Objectives:

I can identify examples of contrast, alignment, repetition, and proximity in my work and a peer's work.

I can self-assess and offer constructive criticism to others regarding contrast, alignment, repetition, and proximity.

Materials:

[CARP Model PDF](#)

Feedback Worksheet

Teacher Reference:

[CARP Design Principles](#)

1. Put the [before and after](#) examples of posters on the smartboard. As a whole group, share thoughts about positive qualities of the presentations and things that could be improved. Take this opportunity to reword student responses into statements that say how things should be done rather than how they shouldn't look. List or have a student list.

2. Post the CARP Model, and go back to things students noted. Where might each observation students mentioned fit? Write the CARP element after each student observation on the board.

3. Groupwork: Before beginning task, carefully select student pairings or groups of three considering who works well together, who leads well, and who has strong collaborative skills.

4. Hand out posters and Feedback Worksheet. Students should craft responses for each poster and write them in the CARP graphic organizer. A sentence stem might be: The person demonstrates repetition here, because _____.

5. Have students spread their critiques and posters out at their spot. Have them do a silent gallery walk to see how others critiqued the posters.

13.Presentations and Speaking and Listening Skills
BIE Presentation Rubric MInilessons

14. Collaborative Group Contracts and Timing
Older kids develop their own. Younger kids with your help, or you establish roles.

15. Project Assessment for You
What did they like?

16. Feedback and Formative Assessment Strategies During the Project
The glorious thing about having kids do independent work on projects, is that you can meet with them individually to talk about their learning. Here are some ways you can offer ongoing assessment to enable them to learn and to be sure they're learning what you want them to. ***Constant formative assessment on projects means your summative grading job in the end has almost been done for you. You have seen each student's work throughout the process.***
- Exit cards, Google Forms / Socrative quick quizzes, etc. See link.
- Have students share their work. Add comments or voice comments to students that you didn't meet with that day, or set a schedule. Kaizena - Google add-on for voice comments
- Students keep a daily log reflecting on progress and questions. If it's electronic, you can again access it and add comments and answers.
- Student keep a learning goal sheet that you can add comments to as you meet with them.

- Student self-assessments about learning behaviors: ask for help, do our assigned work, take responsibility for successes and struggles, turn in work that is our own, listen to each other's ideas. (BIE - PBL Starter Kit)
- Rubrics out and students highlight what they've done
- Peer assessment where peers use rubrics to comment on project
- See BIE Project Overview

Differentiation Strategies in a Project-Based Classroom
- Provide leveled reading materials from [Newsela](#), [ThinkCerca](#)
- Graphic organizers for key concepts and vocabulary
- Additional videos for understanding from [OpenEd](#)
- Alternative articles from Destiny Library Catalog - Encyclopedia Brittanica High School- Article will read to you, and you can choose reading levels 1, 2, or 3 AND change the language to Spanish

While other students work, work with small groups or individuals on:
- Self-checking against a rubric
- Basic objectives - read a passage together and do a cloze passage
- Vocabulary
- Checking progress, personal / group project calendar
- Mini-lesson on essential pieces
- Word-wall and essential elements posted, referred to, and reflected upon by everyone (Science journal, verbal, recorded?--not just one kid raising their hand so everyone else can check out)

Resources:
[Personalized Learning in Project Based Classroom](#)
[Six Strategies for Differentiated Learning in the Project Based Classroom](#)

17. Getting High-Quality Student Work = Writing a Good Rubric

18. [Fair Use Guidelines](#)

19. Developing a Workflow and Procedures