Scaffolding Student Research Projects

Resources & best practices for students new to research

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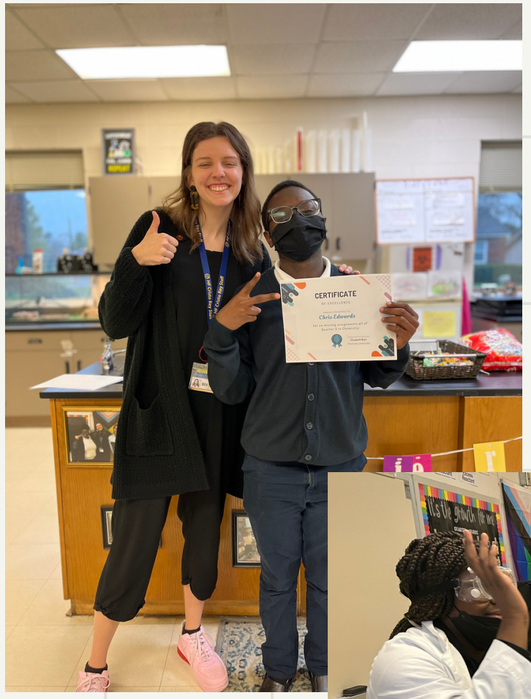
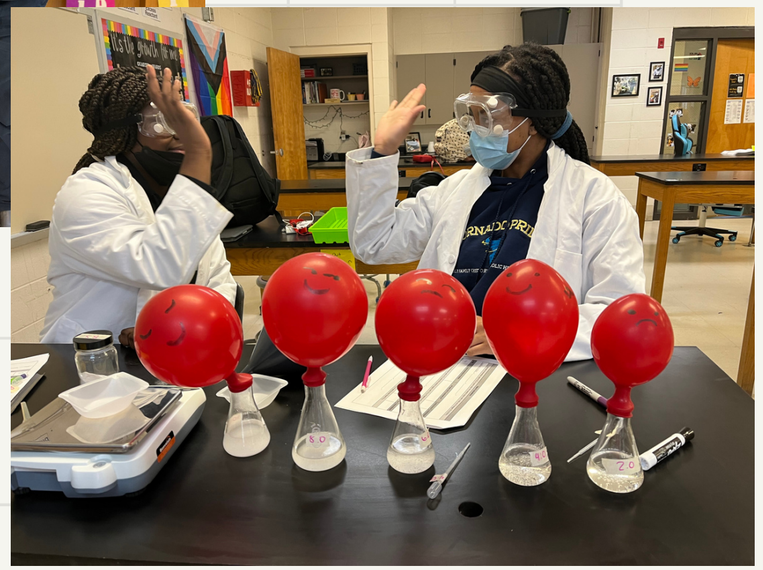
Glad you're here!

Webinar Agenda

- Introduction
- Best Practices
- Resource overview
- Closing





A little about me!

- **Holy Family Cristo Rey Catholic High School**
  - Birmingham, AL
  - Private, Urban, Title I school, ~275 students

-Current Position
  - Chemistry, & Test Prep Instructor
  - 11th Grade level chair

- **Professional Pursuits/Interests:**
  - just finished my M.S. Science Education from JHU
  - Building effective test prep in Title 1 schools
  - Scientific Inquiry, PBL, Creativity in Education

- **Personal Pursuits/Interests:**
  - My dog & boyfriend (In that order :))
  - Crossfit
  -Traveling

Session Objectives

1

Best Practices

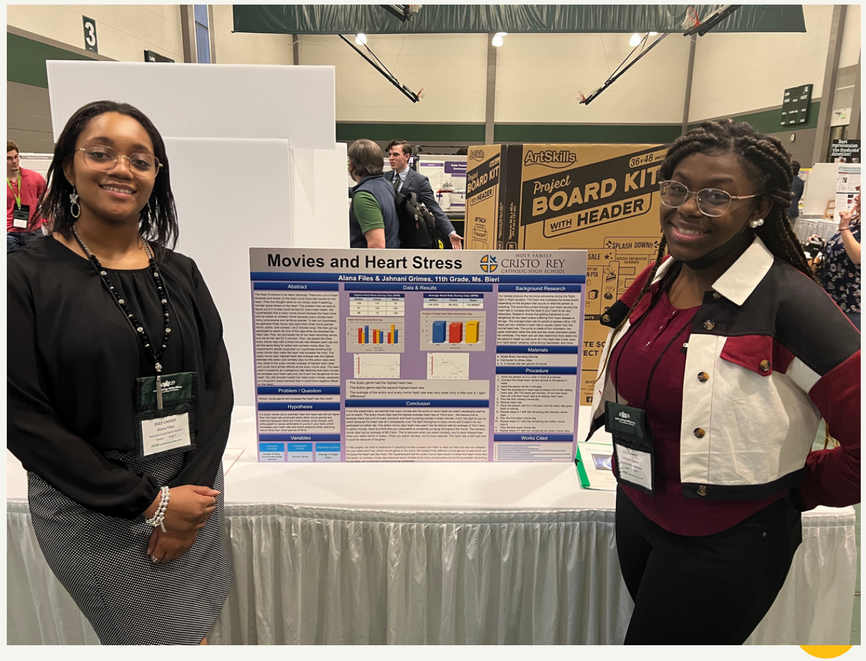
Learn best practices for supprting students new to research.

2

Gain Resources

Gain access to a drive of potential resources to use to support scaffolding of student projects.

Resource Folder

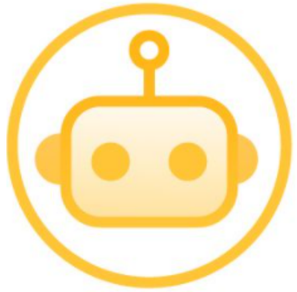


bit.ly/studentresearchfolder

Best Practices

Break down the project into small, frequent deadlines

Use exemplars for each step of the process



Give frequent and specific feedback

Best Practice 1: Break down the project into small, frequent deadlines

Expectations versus Reality...

- Unexpected things will get in the way of deadlines so recruiting & starting earlier than you think you need to is a must
- Giving deadlines to students that are well before the "actual" deadline allows for unexpected adjustments & more time spent on feedback
- MOST students (& adults) need structure & deadlines to succeed on big projects

Resource: Project Schedule

- Google sheets that allows students to organize their deadlines & project components.
- Allows individualization in student deadlines since many projects are different

Best Practice 1: Break down the project into small, frequent deadlines

Keepings students on track

- Students who have never done full research projects before can often be overwhelmed by the process and the many project components.
- Provide step by step scaffolding & give them numerous examples throughout the process

Resource: "Deliverables" Folder

- Google doc for each part of students project
- Students complete their drafts directly on each google document and I give feedback on the documents directly
- Templates provided for final poster/written reports

Best Practice 3: Use exemplars for each step of the process

Importance of Exemplars

- Have students analyze & discuss exemplars in class or in meetings
- Provides "jumping off point" for students when they are stuck
- Helps students understand the feedback you give them throughout

Resource: "Example Student Work" Folder

- Provides students with exemplars to help them visual their final product
- Students often struggle to visual how their digital poster will become "full sized" when printed so I keep past student posters in my room, as well.

Best Practice 3: Give frequent and specific feedback

Feedback & improvements is where the most time and energy should be spent.

Students can get overwhelmed by getting feedback on their entire project at once, which is why it is so important to have more frequent smaller deadlines where you give feedback on each project component.

Tips for more effective feedback

1. Feedback should be specific & action oriented.
2. Have dedicated time for students to make edits based on feedback very soon after giving the feedback.
3. Use checklists & rubrics for students to self-assess BEFORE you give them feedback.
4. Use feedback checklists for general feedback so you can save your time and energy for specific comments for each student.

Best Practice 3: Give frequent feedback

Resource: Student Checklist & Teacher Feedback Checklist Example

- Gives students a specific checklist to go through before turning in a project component for feedback
- Supports students self-assessment skills & executive function skills
- Allows you to streamline your feedback while still giving effective & actionable items for students to work on

"There is no failure. Only feedback."

Resource Sharing Padlet

- Add other best practices/resources to the shared padlet
- Add additional resources to the google drive

bit.ly/stemresourcepadlet

Closing

What is a next step you plan to take in developing your research program?

Contact me:

Feel free to reach out if you have questions about this session or need assistance with any of the provided resources.

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