Engaging Urban Students through Project-based Instruction with Informational Text

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Project-Based Approaches

Many conceptualizations of project-based instruction include the following:

- Projects occur over an extended time period.
- Students work to achieve a purpose that is beyond satisfying a school requirement:
  - to build something
  - to create something
  - to address a question students have
  - to solve a real problem
  - to address a real need.
Project-Based Approaches, cont.

- Often, students connect to contexts outside of school.
- Projects are typically interdisciplinary in nature.
- Students typically have some choice and/or autonomy in the project.

Example Project: Protect Our “Pests” Posters and Leaflets
A Long History


A New Relevance

21st Century Skills  
New Standards  
Informational Text  
New Research  
The Need for Engagement

- Creativity and Innovation
- Critical Thinking and Problem Solving
- Communication and Collaboration
- Flexibility and Adaptability
- Initiative and Self-Direction
- Social and Cross-Cultural Skills
- Productivity and Accountability
- Leadership and Responsibility

New Standards

For example, from the Common Core State Standards Anchor Standards for Writing:

4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.
But in school . . .

The **task** is typically the “assignment.”
The **purpose** is typically to get a grade, to do what they’re told to do
The **audience** is typically the teacher and maybe some of the students

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Distribution of Text Types

The CCSS invoke the National Assessment of Educational Progress (NAEP) distributions. For reading:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Literary</th>
<th>Informational</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>50%</td>
<td>50%</td>
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<tr>
<td>8</td>
<td>45%</td>
<td>55%</td>
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<tr>
<td>12</td>
<td>30%</td>
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</table>

“In K–5, the Standards follow NAEP’s lead in balancing the reading of literature with the reading of informational texts. . .”
The CCSS also invoke the National Assessment of Educational Progress (NAEP) distributions for writing:

<table>
<thead>
<tr>
<th>Grade</th>
<th>To Persuade</th>
<th>To Explain</th>
<th>To Convey Experience</th>
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</thead>
<tbody>
<tr>
<td>4</td>
<td>30%</td>
<td>35%</td>
<td>35%</td>
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<tr>
<td>8</td>
<td>35%</td>
<td>35%</td>
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<tr>
<td>12</td>
<td>40%</td>
<td>40%</td>
<td>20%</td>
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</tbody>
</table>

Research on Project-Based Approaches

Research suggests positive impacts on both achievement and affective dimensions (see, e.g., reviews by Halvorsen, Duke, et al., 2012; Thomas, 2000; and at http://www.edutopia.org/pbl-research-learning-outcomes), although more large-scale, experimental research is needed.

Groups studied include students with learning disabilities and students of low SES.
Project-Based Instruction and Literacy

Project-based instruction can provide a context for a number of research-supported practices, such as:

- Engaging students in reading and writing for a purpose beyond learning to read and write (e.g., Purcell-Gates, Duke, & Martineau, 2007)
- Engaging students in writing for audiences beyond the teacher (e.g., Block, 2013)
- Engaging students through motivation supports (e.g., Turner, 1995)

Project-Based Instruction, Content Knowledge, and Literacy

There is evidence supporting project-based instruction developing science and literacy (e.g., Guthrie, McRae, & Klauda, 2007).

There is evidence supporting project-based instruction developing social studies and literacy (e.g., Halvorsen, Duke, Brugar, Block, Strachan, Berka, & Brown, 2012).
The Need for Engagement

- Motivation and engagement matter for achievement and growth.
- Motivation and engagement for reading and writing tends to decline over schooling and be quite low in the U.S.
- Motivation and engagement may be more important than ever before.
- Motivation and engagement may matter more for some students.

A Structure for Project-Based Units Involving Informational Text

1. **Project Launch** establishes the purpose of and audience for the project.
2. **Reading and Research** mainly involves building necessary background knowledge and gathering information for the project.
3. **Writing and Research** primarily focuses on drafting the product of the project and conducting additional research as needed.
A Structure for Project-Based Units Involving Informational Text

4. **Revision and Editing** involves making improvements to the product.

5. **Presentation and Celebration** involves reaching the intended audience with the product and celebrating that accomplishment.

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A Writing Process for Informational Text

Duke, 2014
Fitness Forever Project
First Grade

Learning to Read then
Reading to Learn

A Three Part Session
Structure

Part 1:

Whole-class lessons (10–15 minutes):
The teacher provides explicit instruction
about one or more teaching points
aligned with the standards and related
to the unit project, often reading aloud a
text or text excerpt as part of this
 teaching.
A Three Part Session Structure

Part 2:
Small-group, partner, and/or individual work (25–30 minutes): The teacher provides instruction and support for needs-based small groups and/or circulates throughout the classroom coaching students as they engage in work related to the unit project.

<table>
<thead>
<tr>
<th>Student</th>
<th>Targets of Instruction</th>
<th>Comprehension Strategy: Rereading</th>
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<tr>
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<td>CCSS: RI.9.1</td>
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<td>Jason</td>
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<td>Sophie</td>
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<td>Dylan</td>
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<td>Gerardo</td>
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A Three Part Session Structure

Part 3: Whole-class wrap-up (about 5 minutes):
The teacher pulls the class back together as a whole, reviews key instructional points from the whole-class lesson, and leads the sharing of student work as it reflects those key points.
• Explicit teaching
• Modeling
• Collaborative composing
• Guided composing

**WRITING AND RESEARCH**

**Lesson 5:** Generating an opinion to include in the pamphlet.
**Lesson 6:** Identifying ways authors use words, pictures, and numbers to persuade.
**Lesson 7:** Writing effective reasons for the body of the pamphlet.
**Lesson 8:** Strengthening opinions with persuasive reasons.
**Lesson 9:** Writing an effective introduction for the pamphlet.
**Lesson 10:** Writing an effective conclusion for the pamphlet.
W.1.1 Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.

W.1.7 Participate in shared research and writing projects (e.g., explore a number of “how-to” books on a given topic and use them to write a sequence of instructions.)

WI.1.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

RI.1.6 Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.

RI.1.8 Identify the reasons an author gives to support points in a text.
REVISION AND EDITING
Lesson 11: Giving and receiving peer feedback on the draft.
Lesson 12: Revising based on feedback from you and peers.
Lesson 13: Using an editing checklist to review the revision.
Lesson 14: Starting to write the final copy of the pamphlet.
Lesson 15: Completing the final copy of the pamphlet.

PRESENTATION AND CELEBRATION

W.1.5 With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed.

L.1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.*

L.1.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.*

### Appendix A

**Project-Based Unit Planning Template**

<table>
<thead>
<tr>
<th>Task</th>
<th>Whole Class Lesson</th>
<th>Small Group Practice and Individual Work</th>
<th>Whole Class Wrap-Up</th>
<th>Standards Addressed</th>
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<td>Project Launch (Session 1)</td>
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<td>Setting a Research Project</td>
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Effective PD (from Revelle & Duke, in press)

• "Is ongoing
• Is focused on a specific pedagogical goal or outcome
• Is consistent with school, district, and state reforms and policies
• Reveals both the why and the how of effective practice
• Provides live or video models of effective practice

• Provides opportunities to attempt new practices and reflect on those attempts, analyze student work, and deliver presentations about new knowledge
• Is supported by coaching, modeling, observation, and feedback
• Fosters collaboration among teachers from the same grade, subject, or school to build interactive learning communities"

Drawing on: Darling-Hammond, 2012; DeSimone, 2011; Marx, Blumenfeld, Krajcik, & Soloway, 1997; Learning Forward, 2011; Roth et al., 2011; Wilson & Berne, 1999
PD for Project-Based Instruction with Informational Text

Ongoing PLC
• Focused on improving informational reading and writing per CCSS
• Reading Inside Information. . . (why and how)
• Video models and colleague observations
• Educative curricula
• Trying, reflecting, analyzing
• Planning, trying, reflecting, analyzing

Summary
• There are a number of reasons to pursue project-based instruction for developing informational reading and writing, not least of which is the opportunity to foster engagement and motivation.
• But we have to be careful: Today’s project-based instruction needs:
  • a clear structure
  • to be standards-aligned
  • to involve explicit teaching
  • to be practical