Creating Active Learning Environments at the High School 2015 - 2016

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CCSD VISION: Active student learning

We want students engaged in experiences that involve meaningful inquiry, action, imagination, invention, interaction, hypothesizing, and personal reflection.

Students and adults are actively engaged in learning by:

- creating
- giving and receiving feedback
- reflecting and revising thinking and work
- hypothesizing, planning, trying and revising
- collaborating to solve problems
- having choice and voice in the learning process

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Active Learning across the Disciplines

Creation: Art, Computer Science, English, Science and Science Research

Feedback and Revision: English Writing Process, Math, Science, Social Studies, Art

Problem-based learning: Art, English, Math, Science and Science Research, Social Studies, Engineering and Design

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Where is the active learning taking place for adults?

Department Chairs - Learning Walks

Inquiry Work

- iFellows / iLab
- Advanced Technology Fellows
- Collaborative Teaching Fellows
- APPR
- TARP

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Where is the active learning taking place for adults?

Curriculum and Cognitive Load - English, Math, Social Studies

Assessments and Outcomes - LIFE school, Science, Social Studies

Rethinking time, Space and Technology - Foreign Language, Space Committee

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Peer to Peer Actionable Feedback: English

Student's Question:

I notice that you say that Arthur cares about what society thinks of him. This goes against his actions of staying in the house. **I wonder if** this is what you meant to do?

Writer's Response:

I feel that although Arthur remains in his home most of the time, rumors about him can't help eventually landing at his doorstep. I do not think that Arthur disregards these rumors or that this goes against his actions of staying in his house. I feel that some of the rumors might interest him and he might be offended by others but in the end he is not avoiding what others might think of him, but rather how society interacts on a whole.

J. Abair

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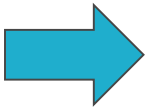
Peer to Peer Actionable Feedback: English

Student's Question:

I notice that you give Arthur a deeper and darker past. This made me rethink what I know about Arthur and what his morals are. I don't see Arthur as an innocent person; **was this your intention?**



Writer's Response:

That is how I wanted to portray Boo. I wanted to examine the side of Boo that leads him to watch the children through the window and care for them from a distance because although Boo is reserved as you said, there is also the side of him that led him to put his life on the line for the children.

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J. Abair

"Can you tell me more about 'safe haven' Boo speaks about?"

Student's Revision:

Sitting next to the window I could see the shouts of differing opinions and I could see the spit fly out of Mr. Ewell's mouth and I could see the men cornering Atticus by the courthouse, but I didn't have to hear "the simple hell people give other people." And, if I wished, I could let the blinds fall and the outside world would disappear beyond the glass. I wished to return to where I was a ghost.

J. ABAITZ

Big Night – June 2015

Use of iLab to Showcase Student Work to a Wide Audience

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Big Night – June 2015

Students have things to say and families and community members who listen.

An Authentic Audience Matters.

Poetry
Reader Response
Essays
Persuasive Pieces
Poetry Anthologies
Favorite Choice Books
Favorite Lines from books
Artwork and Displays
Memories of high school English

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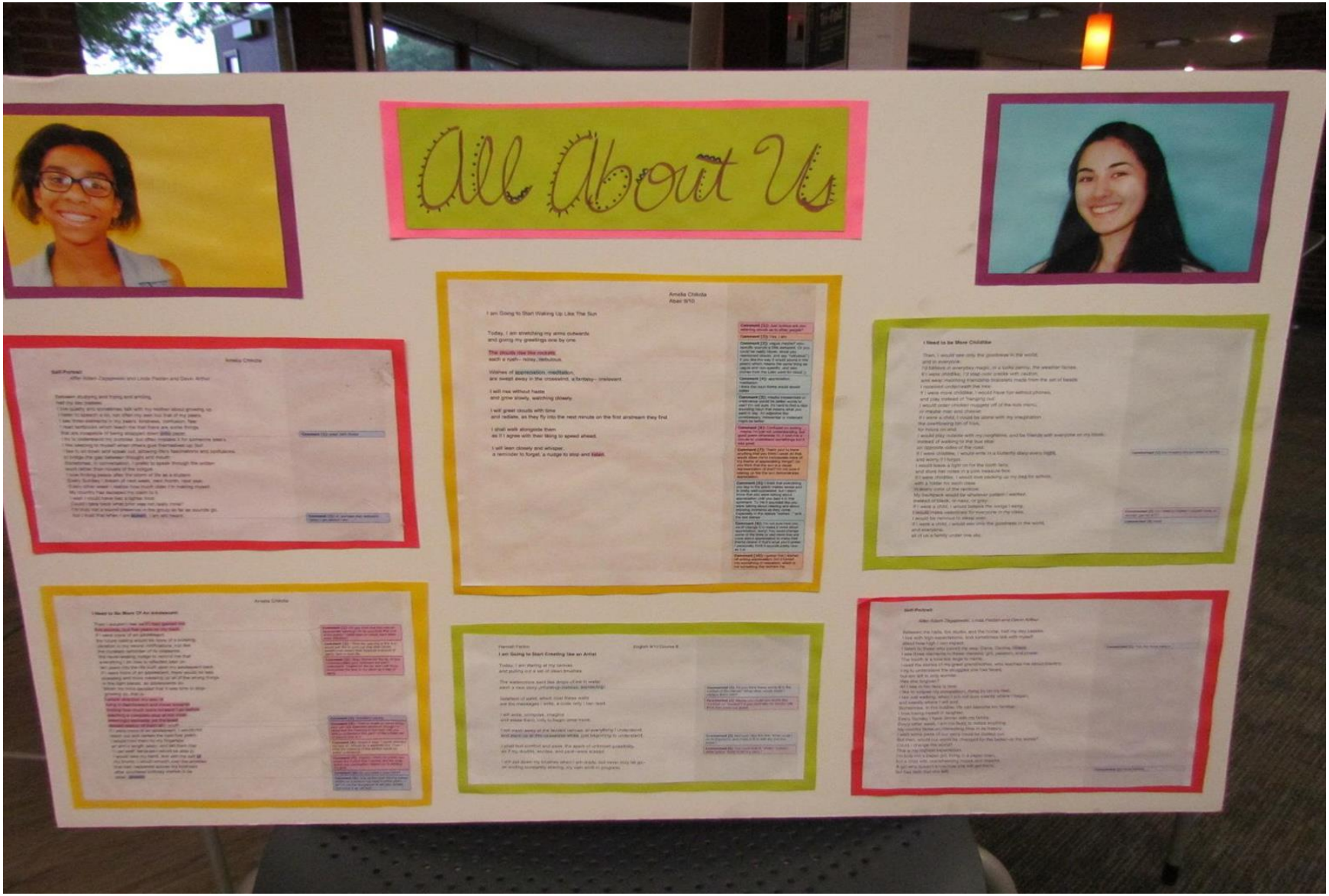
Big Night - 2015

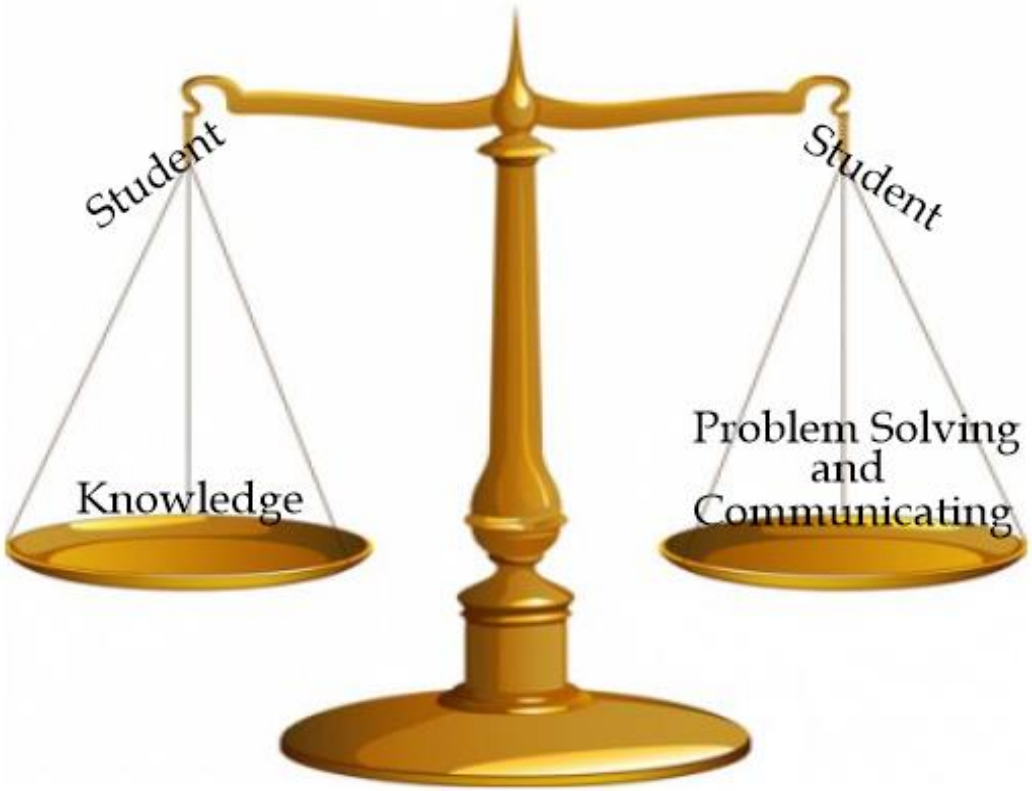
Big Night - 2015



Big Night – June 2015

Big Night – June 2015

Problem based learning – Exeter style



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Problem based learning – Exeter style

Math 10 Honors

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Problem based learning – Exeter style

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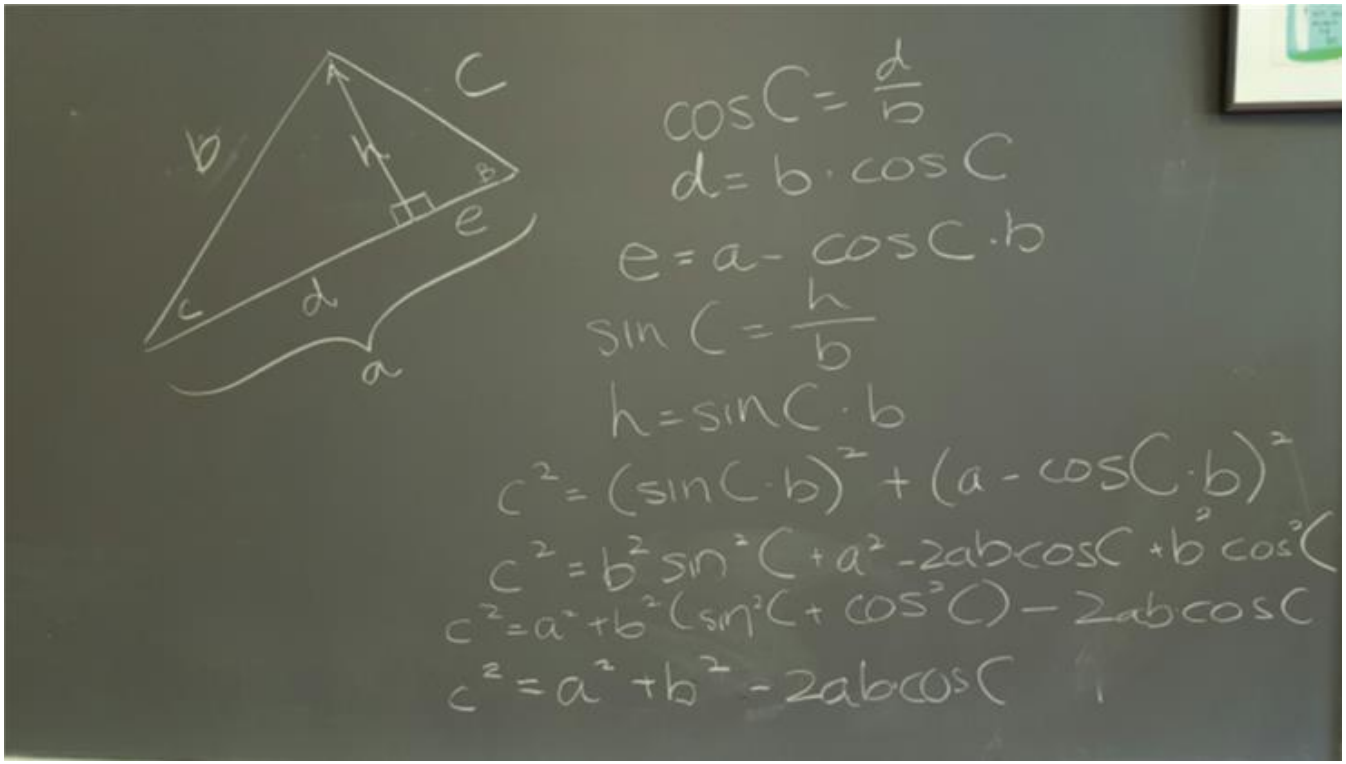
Math 10 Honors

Problem based learning – Exeter style



Video samples – another way to share work

Google Doc (Interactive Summary Sheet)

Participation Expectations

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Personal Active Learning 2015-16

- Learning Walks
- APPR cohort group
- Regular meetings with colleagues teaching the same course
- Meeting with Middle School teachers Summer Workshops (Exeter, Peter Johnston and Tech Forum)
- Planning for visitations to other schools

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Adult Active Learning

I-Fellows

- Collaboration produces more concise work and the growth of ideas.
- Immediate feedback from colleagues informs our craft.

APPR

- Working with our colleagues on larger overarching practices produces more effective learning environments for the students.

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Advanced Topics of Computer Science

Collaboration during the problem solving process.

- Group Work Assignments
- Individual Assignments with Built-In Feedback Sessions

Work with feedback produces more concise and elegant solutions.

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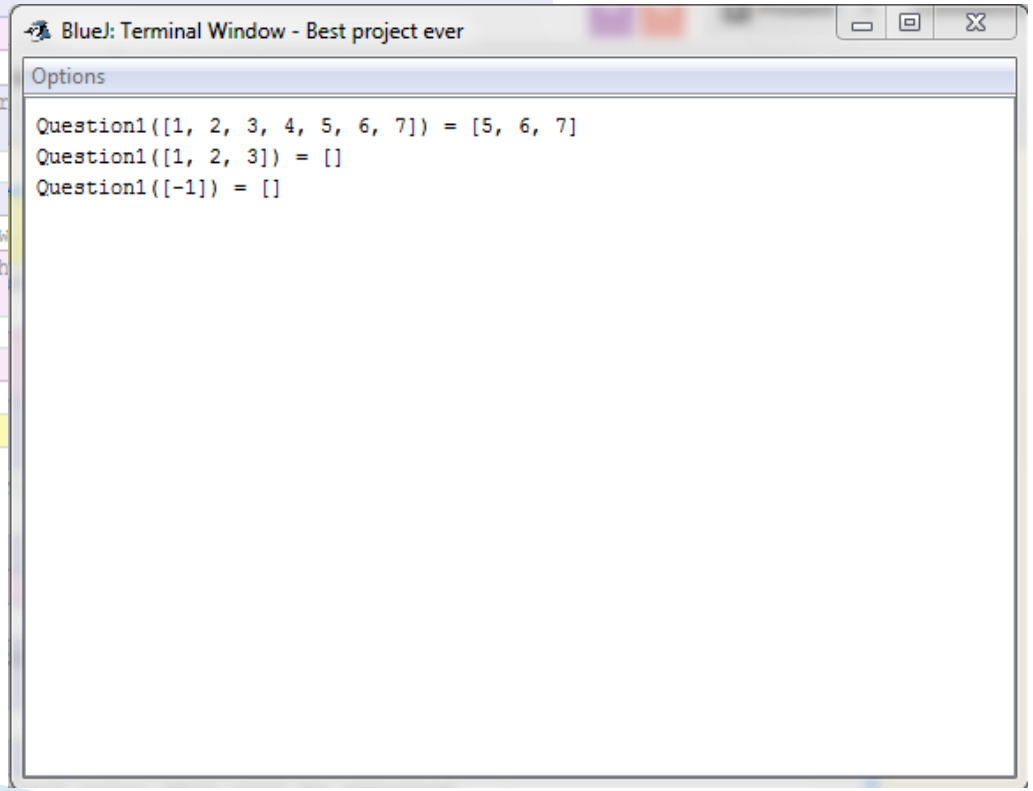
Computer Science

```
public int[ ] Q1(int [] arr1)
 {
    int index = 0;// checks if there is a 4 in the array then takes all numbers from there on
    boolean isFour = false;
    for( int f = 0; f < arr1.length; f++)
    {
        if(arr1[f] == 4)
        {
            index = f+1;//sets the index to whatever position it finds 4 in
            isFour = true;
        }
    }
    int[] noFour = new int[0];
    if(isFour == false)//if it doesn't find a four then the program r
    {
        return noFour;
    }
    int[] arr2 = new int[arr1.length-index];// the final array that w
    for(int j = 0; j<arr2.length; j++)//fills up the other array with
    {
        arr2[j] = arr1[index+j];
    }
    return arr2;
 }
```



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Computational Thinking and Design

- Develop Problem Solving Skills
  - decomposition
  - pattern recognition
  - abstraction
  - algorithm design
  - solution development
- Reflection
- Data Analysis
- Collaboration
- Presentation

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