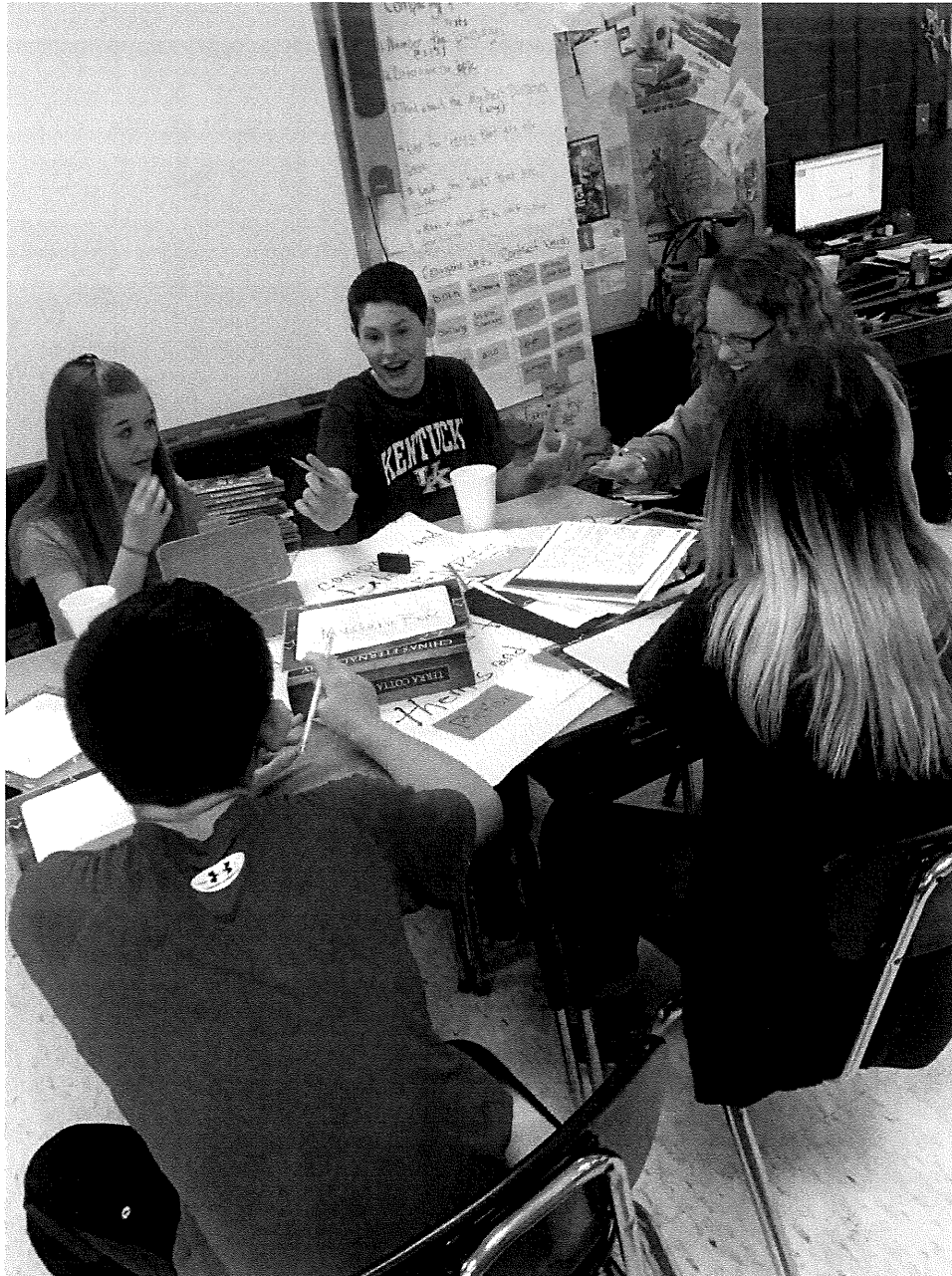


Our Unit began this year with a simple yet powerful week of reflective informal writing during the schoolwide required morning journal sessions to gather background knowledge on the local economy of Eastern Kentucky and to give us direction. For this activity I distributed journal booklets with inserted focus quotes such as the one by Sandra Pianalto from the University of Akron that states, *"One of the best things we can do to become more innovative and adaptable is to improve the level of educational attainment among our citizens. We must do all we can to build an educated workforce for the future. Business leaders and educators should join forces to better understand the role of education in providing the raw material for future innovation."*

This unit became a tool for me to step away from a general curriculum and put our focus and energy on bringing about positive regional growth from a documented classroom of high poverty students through a self-designed centralized curriculum. Using standard based lessons students could begin looking at ways to bring about innovations to help their regional resource of coal regain a distinguished role in the worlds energy usage and divergently create new demands or uses for the resource itself along with uses for local reclaimed land as well as coal industry infrastructure with their inventions and designs. This activity led into the activities below that brought about the over-arching goal of our unit to initiate and publish research based discussions/debates on the importance of resurrecting/infusing our local economy into the global economy with essential activity questions such as what role does the narrative of our coal economy play in the world narrative, while asking our future work force (students) to look at what directions it can take.

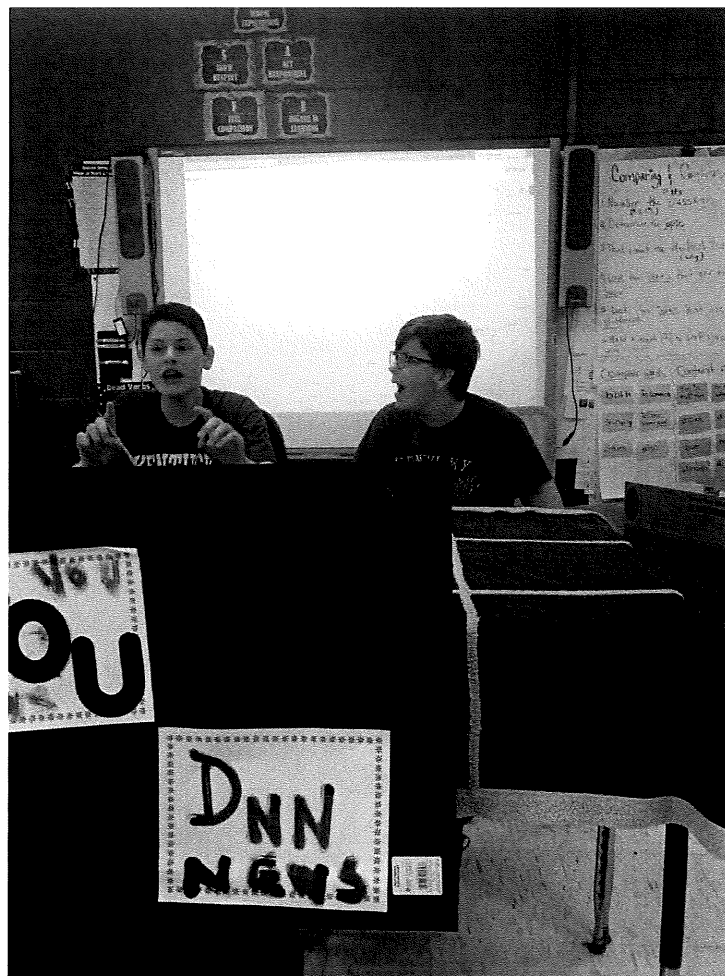
The first activity was a *Mr. Mystery Box* standard based lesson spanning four class periods allowing analysis of the relationship between a primary and secondary source on the same topic and delved into Literacy.RI.5.6 (e.g., analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.) Students divided into Kagan groups in a school conference room setting with Starbucks Coffee, high lighters, articles, and large yellow post-its to examine primary sources such as pictures (e.g., polar ice,

water levels, reclaimed surface areas, etc.), video clips, and environment research numbers as well as statistics from various institutions and locations. The fun part began under our principals' observation when students read multiple interpretations and accounts of the primary source data they had analyzed for themselves. The lesson took an unexpected but amusing turn when my learners were using graphic organizers to track similarities and differences in perspectives. They discussed rather loudly the misrepresentation of the data itself and published fallacies. Students began using their own time outside the classroom to Sherlock Holmes the sources looking for motive and agenda. I received my highest observation this year from my principal as he watched his middleschool students transform into inquiring questioners of data interpretations.

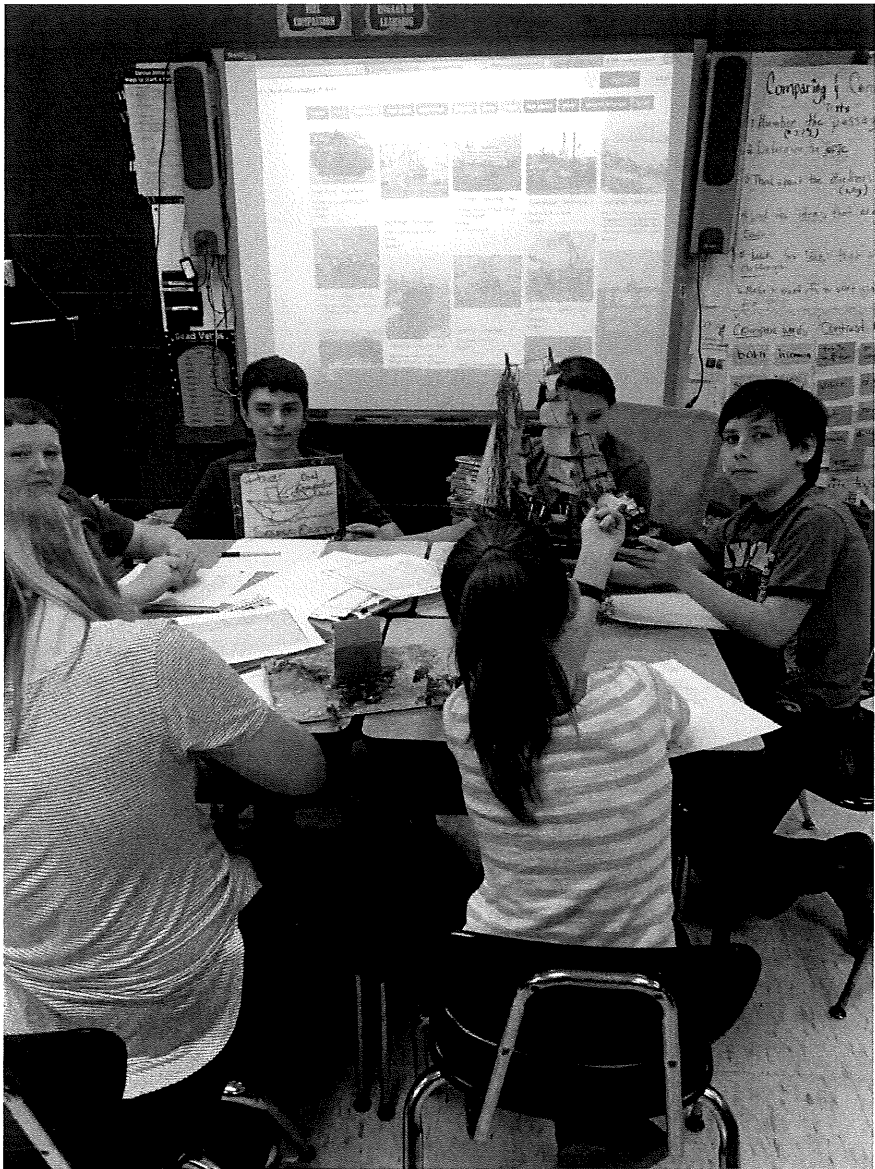


A glimpse into another activity (*Dox and DNN News Channels*) shows the development of students to a higher level of thinking while meeting national standards CCSS.ELA-Literacy.SL.5.1.a (*Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.*) and CCSS.ELA-Literacy.SL.5.1 (*Engage effectively in a range of collaborative discussions with diverse partners building on others' ideas and expressing their*

own clearly.) It seemed to me as if I was in a CNN newsroom as I facilitated the filming and other production nuts and bolts. Students used the news format to discuss and debate environmental laws and regulations on a national as well as international (e.g., United Nations) level, interviewed out of work coal miners and coal related business owners such as the janitor at our school who used to own a coal trucking company. The presidential election, inauguration, as well as new presidential mandates added fuel to the panels and mock debates. During an early news report I had to separate and escort our mock Hillary and Trump guests from the classroom. I am lucky to still have a job but the ability of my Eastern Kentucky learners to articulate and state their perspectives into the international web of human perspectives is a tool for economic realization and change.



Another glimpse into the Unit is *Inventors Club*. Students work hard on designing other uses for the natural resource of coal. Forty Percent of my ESS students worked overtime after school to engage in collaboration and develop ideas. One team researched the old coal powered trains and looked at ways we could use modern technology to harness and filter the steam energy for various transportation. Other groups had ideas ranging from newer carbon filtration devices to medical radiation treatments from coal plant byproducts and waste. Students proposed that radiation treatments from life or carbon (ancient plants) might yield higher success rates than current dangerous radiation procedures.



The Unit overall was a positive experience and facilitated measurable growth. One impressive jump in performance was when students preparing for discussion and presentations unexpectedly showed impressive gains in meeting the standard for reading complex texts. Getting evidence to support perspectives intrinsically motivated students to delve into very complex texts they would otherwise exclude. I also found I didn't have to continually hound students to pull in citations to back up inferences and point of view. In fact the governors' energy plan as well as state, national, and international policies and regulations resources popped up thru out their writings.

Feedback gathered from triangulation of data for my action plan was on average around 90 percent favorable and productive. This included student, community, as well as administrative. One part of the unit that is still in progress is the **Just Dead Trees Blog** a technology based lesson where students promote their coal narrative in blog format for the world to see and react. We had trouble with getting the needed chrome books to fully implement. We have to share the chrome books at this time and I literally see them four or five times a month. Our principal has already worked with me to allocate the funds for a classroom set of chrome books for my classroom only so that we have the needed resources to successfully move forward with this activity.