

Visual Literacy, Creativity and the Teaching of Argument

James Shivers

Hall High School

Cyra Levenson

Yale Center for British Art

Mei Tan

Yale University

A vibrant theory of change capable of fueling critical practice may be an indispensable feature of teaching argument in secondary education. According to the PIE model (Perception, Interpretation, Expression), layers of experience build a cognitive scaffold to support the development of critical skills. In addition, incorporating works of art and visual literacy skills stimulates perception and idea production. Thus, diverse practices may contribute to the development of argument. We respectfully disagree with the common core's limited definition of argumentation in both form and content. Instead of limiting students to one specific medium we broadened our practice to include a range of multimodal discourses.

Keywords: PIE model, Museum Education, Multimodal Discourse, Visual Literacy, Student Centered

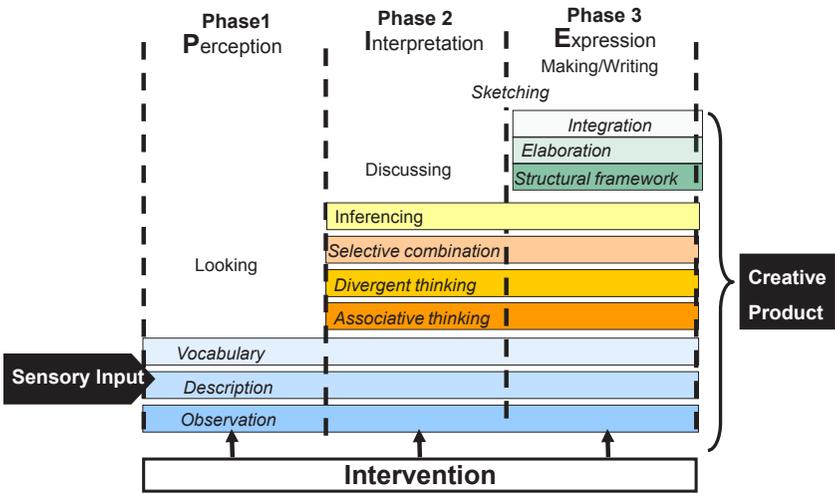
The first section of the Common Core Writing Standards addressing grades 9-12 posits argument as an important form of writing to master in these upper grades. From the Common Core perspective, argument is presented as the ability to make claims (and counterclaims), develop them, and link them to reasons and evidence in a cohesive, clear written format that is essentially formal in tone and ends with a logical conclusion. The apparent formalism, with its prescribed structure and its dependence upon certain kinds of evidence, can make the process of learning the structure of argument seem daunting. For students who have learning difficulties, these skills can be challenging to develop (Deadline-Buchman & Jitendra, 2006; Ferretti, Andrews-Weckerly, & Lewis, 2007). Few would question the importance of being able to make a case for one's ideas and being able to support that case with evidence, but to address this effectively in students of all learning abilities, perhaps a broader definition of argument would be useful. Therefore, while we fully support the Common Core's emphasis on teaching argument, we resist a proscriptive definition of the term or form. We propose instead viewing argument as a larger critical process involving numerous types of argumentation leading to diverse forms of expression (rather than a singular outcome). Moreover, we contend that the process of developing and presenting sound arguments is a highly creative process. We illustrate here approaches to writing that foreground visual literacy, thus engaging students in broader acts of creativity and productivity.

*Please send correspondence to: James Shivers, Hall High School, 975 North Main Street, West Hartford, CT 06117, USA, Phone: 860-232-4561, ext. 1146, Email: james_shivers@whps.org; Cyra Levenson, Yale Center for British Art, 1080 Chapel Street, New Haven, CT 06510, USA, Phone: 203-432-4773, Email: cyra.levenson@yale.edu; Mei Tan, Child Study Center, Yale School of Medicine, 230 South Frontage Road, New Haven, CT 06520, USA, Phone: 203-785-4831, Email: mei.tan@yale.edu.

Specifically, we used pragmatic, multimodal, and literary types of argument in a series of assignments to teach the art of argument in a ninth grade English class. We will here describe a series of writing assignments—based upon students’ reading of Shakespeare’s *A Midsummer Night’s Dream*—designed to develop skills to engage the argument process. Ranging from a typical essay on the definition and components of argument, to a highly interpretive task based on complex visual works of art, these assignments and the resulting student work exemplify creative processes of argumentation based on a model of visual literacy. To preface these multi-modal examples of developing argument, we begin by briefly describing the model of visual literacy—the PIE model—that provides the foundation for this work.

The PIE (Perception, Interpretation, Expression) model reflects a theory of change developed through a collaboration between the EGLab at the Yale Child Study Center and the Education department at the Yale Center for British Art (YCBA; Barbot, Tan, Randi, Santa-Donato, & Grigorenko, 2012; Levenson & Hicks, 2015; Tan et al., 2012). It is the result of discussion amongst a cross-disciplinary team of psychologists, linguists, educators, and museum educators. The conversation had begun with the YCBA’s longstanding visual literacy program, in which museum educators work closely with teachers to connect art to literacy instruction by broadening the definition of literacy to include both visual and written “text” (Molomot, 2014).

Figure 1. The PIE Model of Change here



The model is based on a set of instructional strategies that include close looking, discussion of works of art, sketching to cement and plan ideas generated through the discussion, and writing or artmaking as a way to communicate those ideas and make an argument. Based on classroom and museum gallery observations, collections of writing samples of student work, and interviews with participating

teachers and students, a set of cognitive and creative processes was mapped to reflect students' progressive processing from input (work of art) to output (student drawing and writing).

According to the resulting PIE model, it is hypothesized that layers of experience build upon each other to support the development of several skills. When students first encounter a work of art, they engage in an initial phase, phase 1, of perception and description. They observe details, describe what they see and build a vocabulary to share these observations with their classmates through discussion.

In phase 2, students use their perceptions and descriptions to build an argument for their own interpretation of the image. The skills involved include components of creativity: 1) associative thinking (Have I seen anything like this before? What does this image remind me of?); 2) divergent thinking (What are all of the possible ways I might read this image?); and 3) selective combination (How can I make use of the thoughts and ideas this image connected for me to create something new?).

During phase 3, students must build on skills practiced in phase 1, using the observations and descriptions they developed to support their own unique thesis or argument. In phase 2, this evidence is processed through creative thinking. In phase 3, the thinking and planning are integrated, revised, and structured to create a cohesive creative output in the form of written, or visual, or intertextual personal response. Sketching may be used to bridge phases 2 and 3 to help students further consider the artwork as they develop their own point of view. The resulting sketch may in effect be the beginnings of an argument—a selection or development of visual details that inform the student's interpretation. Explaining and justifying one's selection of details in writing may also be part of the argument. The creativity in this activity is in the development of highly individual and persuasive perspectives, as students connect what they see to personal experience and knowledge, and cite different pieces of "evidence" to support unique interpretations. "Successful" arguments—grounded in clearly reasoned and supported claims—may take many different forms. There is no one correct answer. Yet, different responses may constitute stronger or weaker arguments about the work.

The following set of assignments (developed by the first author, a classroom teacher) exemplify the use of visual literacy and the PIE process to successfully stimulate a varied group of high school students' thinking about and production of argument. Based on students' reading of Shakespeare's play, *A Midsummer Night's Dream*, the assignments were intended to integrate phases 1 and 2 of the PIE model (i.e., the making of visual argument) in order to help students discover, generate, and practice their critical and creative skills as they learned about argumentation.

THE CLASS

The class of students whose work we describe here were 9th graders ranked at a "Standard" (versus an "Honors") level. The high school has only these two levels for English in 9th and 10th grade. Placement is based on reading and writing scores from standardized tests, teacher recommendations, and students' grades. Parents can override the placement. At the beginning of the year the majority of the students were proficient in writing, with a couple ranked exemplary, and several advanced. Nearly twenty percent of the two classes had a 504 plan to address a specific recognized

student need. The reading and writing levels they represented were passing to proficient. The class atmosphere was positive, students consistently completed homework, and by the end of the year, students who began below reading level had improved at least one point. Each student had a hardbound journal without lines in which to draw, write, and design—activities that they engaged in regularly during the school year. Students sat at tables in a horse shoe design. The teacher’s desk was located on one side. Literacy, in this course’s content and design, included both visual and written texts.

Given this context, instead of thinking about specific writing techniques for particular disabilities, we find it more useful to consider the whole class as a group representing a range of writing abilities; in fact, all classrooms have students with mixed writing abilities. Therefore, all teachers need to have a flexible approach to “progress” and achieving standards. In our view, rather than a series of set inputs and outcomes, assignments ought to be designed for students to practice skills; the classroom should be a place to explore reasoning, communicating, and designing. Furthermore, growth takes time. No one assignment can sufficiently demonstrate a student’s growth or ability. Therefore, we suggest multiple measures to track progress and a variety of assignments and argument types to hone different skills. We suggest that this kind of approach benefits all learners and accommodates the range of student abilities in a typical inclusive classroom. In the following section, we describe the assignments we developed and the types of arguments we utilized to foster a deeper understanding and practice of argumentation.

THE ASSIGNMENTS

In our approaches, we respectfully disagree with the Common Core’s limited definition of the form. The assignments we describe here were designed to introduce students to fuller definitions and structures of argument, then give them opportunities to practice the skills involved in argument in creative and flexible ways, so that each student—no matter what their level of writing—could successfully engage with the process of developing argumentation. In arguments, the writer/producer wants to make a claim using reasoning that the audience considers valid (Lindemann, 2001). What argument (or form of argument), for example, will be convincing to a person with deep knowledge of a topic? Would it be the same for a fellow classmate? Or for an online publication? In an oral presentation? Both form and content must be considered. An argument may use narrative structure or visual experience to create and support a claim, provide an analysis of the subject, and create a connection with the reader. Instead of limiting students to only one specific medium or type of argument, we encouraged them to use a range of multimodal discourses as they practice the skills of argument. Arguments as acts of persuasion are as varied as their authors and audiences; they are laboratories of invention and tools for communication. A strong argument invites conversation and further discourse. We illustrate these points in the following assignments on *A Midsummer Night’s Dream* and the resulting student productions.

Each assignment grew out of a type (or tendency) of argumentation we explored. The assignments drew upon three types: the pragmatic, the multimodal, and the literary. The pragmatic argument asked students to explore how language works

in a number of contexts. The first assignment required a written critical analysis of the term “dream” in a more traditional form of argument, utilizing dictionaries and databases. Students here were challenged to understand linguistic flexibility.¹ The second assignment—an argument presented in both pictures and words, explored visual rhetoric as multimodal practice. This argument type and tendency foregrounds the fusion of word, image, graphic design and alphabetic technology to conceive meaning as a plural modality that may be persuasive. Although students work daily in this form of communication, the assignment within a classroom practice challenged student assumptions about texts and annotations.² The literary type of argumentation asked students to create a narrative based upon their linguistic research and the visual analysis of an abstract image. The third assignment was a critical and creative study, designed to produce a convincing narrative.³ Each assignment fostered the recursive practice of the PIE model. All students were given the same assignment, but due to the nature of the tasks each student had room to explore multiple outcomes/expressions. Both content and structure were fairly open. Using our state standards as a guide, we framed the assignments as a process intertwining critical and creative literacy development. Pre-writing, writing, drawing, seeing and designing were embedded in each task.

Assignment I: Linguistic flexibility

Words are part of a larger system of communication we refer to as discourse. Examining one term that has a network of cultural meanings leads to the discovery of various systems at work (Fowler, 1996). Students were asked to use a specific database and search for articles in response to the following questions: *What are dreams? Why are dreams important?* To proceed, they would need to choose a definition for “dream,” justify their choice, and explain why they saw this aspect of dream as the most important. The evidence base for their written response included previous homework, class discussions, dictionary work from the class website, as well as articles discovered in the course of their database searching. Their audience was a high school senior class (more advanced peers). The form was not prescriptively defined, but the intellectual tasks were. No examples were provided. The goals were to see how individuals worked through the PIE model and to show collectively how an entire class could create a fuller picture of language.

1 The argument type is based on the field of linguistics, specifically Pragmatics stemming from Stephen C. Levinson’s foundational study, *Pragmatics* (Cambridge, 1983). Fowler in *Linguistic Criticism* (Oxford, 1996) framed pragmatics this way: “Pragmatics is about relationships and its users...it includes roughly the following topics: the interpersonal and social acts that speakers perform by speaking and writing; thus, the structure not only of conversation but also of all other sorts of linguistic communication as interaction...; the diverse relationships between language use and its different types of context...; particularly the relationships with social contexts and their historical development; and, fundamentally, the systems shared knowledge within communities, and between speakers, which make communication possible...” (15).

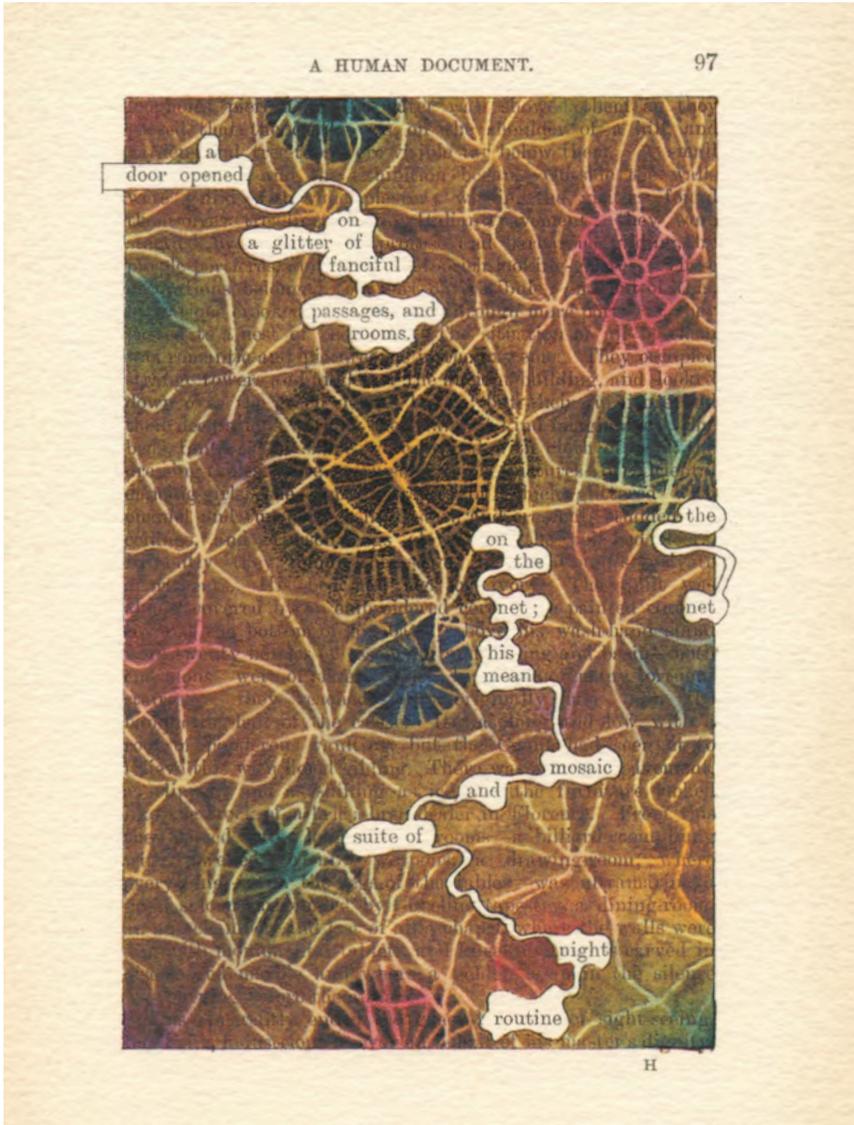
2 The foundational text here is *Multimodal Discourse* by Kress & Leeuwen (2001). For a recent version written for classroom practice, see Callow’s *The Shape of Text to Come: How image and Text work* (2013). For a specific analysis of the aesthetics of visual rhetoric, see Shivers’ ‘Visual Strategies’ in *The Salt Companion to Charles Bernstein* (2012).

3 Of the numerous examples, two influential texts were: *The Mechanism of Meaning* by Arakawa and Gins (1979); Swenson’s *The Guess & Spell Coloring Book* (1976); and Jenny’s *The Artist’s Eye* (2012).

Assignment II: Visual rhetoric

In the current world of technology, image, sound, and text frame students' day-to-day communication. To uncover how similar multimodal discourse may work through the PIE model, we used the work of artist Tom Phillips. In his piece, *A Humument* (see Figure 2 below), Phillips added his own imagery and mark-making to the pages of a Victorian novel in order to create another story using each page as a canvas.

Figure 2. *A Humument*, p.97: On The Net, ©Tom Phillips 1996, *A Humument* is published by Thames & Hudson



In a sense, his method is another form of reading annotation. Since the beginning of the year, students had annotated written and visual texts, practices stemming from all three phases of the PIE model. Once understood as a visual reading practice, a visual mark of the reading experience, students could apply this knowledge in a new direction. Using the works of Phillips as a starting point, the students now had an opportunity to go beyond annotative reporting to annotative expression. After viewing and discussing both *A Humument* as well as ancient and modern illuminated and annotated manuscripts, students were each given their own photocopy of the play, *A Midsummer Nights' Dream*. The assignment was to choose a portion of the play as a basis for a "visual" argument and build off of Phillips inventive multimodal strategy to highlight and illustrate key themes of the play. They were to use the classroom practice of annotation as their starting point.

In this assignment, students had an opportunity to create a visual interpretation on the page itself. They were encouraged to re-make the text into an image that tells a story about the story, giving the reading another "viewpoint." Each reading is thus visualized authentically regardless of skill level. The visual then functions as a vital aspect of the argument and becomes its own rhetoric. Visual rhetoric is an essential aspect of multimodal discourse (Kress & Van Leeuwen, 2001) and in many students' lives multimodal discourse is dominant. The assignment gave them an opportunity to produce their own multimodal discourse.

Annotative practice is often critical in nature, e.g., as notes in the margin, underlining a key word, highlighting a confusing section, circling an interesting idea, outlining a sequence of argument. Defining annotation as a visual record of the reading experience promotes authentic student responses. Since no one method of annotation is perfect for all reading situations we used several different methods throughout the year. Students were thus able to develop their own method of annotating a text without fear of getting it wrong.

Assignment III: Creative abstraction

During the time of reading *A Midsummer Night's Dream*, a colleague from the art department invited Canadian artist, Adrian Göllner, to give a workshop at school. He shared his work on 'marking'. In one drawing, the artist attached a pen to the spring of a wound clock that had stopped running. As the spring unwound, the pen created a "drawing" capturing the energy bound up in the spring on paper. Göllner encouraged the art students to bring in an object that created movement and attach a marking device to the object to see what would happen. The art students followed his lead to create "accidental" beauty. Afterwards, this colleague came to class and discussed what his students had made with Göllner. More than once, he emphasized that the end product of such a project is not just the object, but also the process. Just looking at the markings only gives one perspective. Knowing the fuller story shows the concept in action.

Based on the student artwork, a new assignment was conceived for the class using the PIE model to integrate critical analysis and creative idea finding. Students were asked to select one drawing to interpret, then argue for their point of view or interpretation. To connect the assignment to the text we were studying, *A Midsummer Night's Dream*, they were asked to view the drawings as images of the object's

dream. The assignment would be in two parts: part one, the dream (here the prose could be open); part two the dream interpretation, offering an argument with supporting evidence using observation and research. In this assignment they practiced the act of imagining while simultaneously interpreting an abstract piece of art. To avoid influencing the direction of the assignment, the teacher said very little, offered no examples, and only discussed the actual assignment: imagine that this is an object's dream (the abstract drawing shown in class) and interpret the dream using your knowledge of dreams.

RESULTS AND DISCUSSION

The framework for the classroom relies on the understanding that all students have a range of writing and reading capacities and that limiting the act of argumentation to only one specific domain reduces the opportunity for the growth and development of critical skills. The three argument types— pragmatic, multimodal, and literary—provide a fuller environment for students to expand their creative, critical language and discourse skills. These argument types and tendencies ask students to practice communication as they experience it. Furthermore, the results show how students can become more effective in their persuasive skills.

The literacy based (written and visual) and conceptually demanding assignments revealed students' wide ranging capacities to communicate, create, and persuade. The difficult nature of the assignments was not reduced for any student because each task offered challenges as well as opportunities, depending on the proclivities of the individual learner. The first assignment (the pragmatic) was the most familiar to students; however, as a pragmatic type of argument, the analysis focused on their ability to see how words function in a non-linear fashion. What would they do with a term that had a variety of meanings? Several students simply could not function with the linguistic flexibility. The second assignment (the multimodal) was the most unfamiliar to students; however, as a multimodal type of argument, the analysis called upon visual strengths and lived experience. Some had difficulty seeing the text as a canvas waiting for another story. For many of the students, the third assignment (the literary) recalled creative writing prompts from fifth grade. Yet those early-level prompts had not been evidence based or linked to critical analysis as these were. The challenge for each writer was to adopt a perspective from an image that did not present any one clear perspective in its composition. Given the specific challenges within each assignment, as well as the unique and novel perspectives required, we reviewed the student work for their practice of various skills in argumentation. We summarize the resulting student work below.

Assignment I: Linguistic flexibility

The responses generated by the students were diverse. No one essay resembled another, yet the basic activity was generally followed: define the term "dream" using the database, and make an argument. Not every student engaged with the tasks of the assignment. Some were sidetracked by an idea; others could not work with the complexity of the term. Others could not conceive of "dream" in any other way than the first definition found in the dictionary. Some students didn't use the research sources provided and instead used whatever came up in their browser. Several stu-

dents simply did not make a choice or defend their selection. Some essays included too many topics without purpose. Many essays had grammatical, syntactical, and technical mistakes. However, each paper displayed the student's process of observing, choosing, writing, analyzing, and designing. Each paper showed how the student managed the tasks (define and argue) in both form and content; the assignment design revealed their methodology.

The complexity of the term "dream" proved to be most difficult aspect of the assignment in two ways. First the database had a very large range of articles on the topic and second, the term itself has multiple meanings. Two students addressed the complexity by seeing the concept in terms of perception and the world: "I believe the two main purposes of dreaming are self-awareness and fantasy or separation from reality" (P1 017). "Dreams and fantasy, to me, are an escape or break from reality, which all high-schoolers need once in a while" (P1 017). Another student saw the complexity of the term as a contextual process linked to experience of the world: "So many people have different meanings of the word. For example a first grader might see dream as something that makes me happy. A sixth grader might see a dream as a figment of your imagination. Mine is a notion of escape. These two words, dream and escape are completely different if thought of individually. So how do dreams and escape relate in any way" (P2, 017)? These students sensed that the term was unwieldy, but also wanted to understand the term in relation to their lived experience. They honored the complexity of the situation with complex responses.

Typically, when an assignment has one basic task, resulting essays present similar structure and content. Assignments like these are easy to plagiarize, and reduce student diversity of reasoning, yet some of the reasoning applied in this multi-layered task was quite sophisticated: "my definition is better because it is more open to interpretation which would make the definition apply to more circumstances and have more flexibility" (P1 016). Others linked their argument to experience, their own or the intended audience. Some students went beyond the class resources and did further research to support their claims. They explored additional databases containing more detailed research. The *New York Times* database provided a rich environment for the students due to its real life connections, the high quality of writing, the wide-ranging subject covering many disciplines, and the intended audience. Each paper revealed a process for formulating an argument.

Assignment II: Visual rhetoric

This assignment had two parts, each of which asked students to make an argument about how to see the play. The first task asked students to use visual rhetoric/graphic design to create an interpretation. Required to use the physical page, students designed interpretations to persuade the reader to see their reading of the drama. Through the examples of Tom Phillips, illuminated and annotated manuscripts, children's pop-up/interactive books, and various principles of graphic design, students were given the task of recreating their own visual-text. Each response provided a visual record of the PIE model as well as a physical artifact of multimodal discourse. The design and content was unique to each. No two students' pages were the same.

Students had the freedom to choose their own page (each had their own copy of the play) to design and interpret. In the second part of the assignment stu-

dents had to explain in writing their working process and the significance of their work. The assignment design put them in the role of both artist and critic; it required critical and creative reasoning skills and asked them to practice these skills in a direction of their own choosing. The following examples show how students approached the assignment with an intention to communicate and convince in a way uniquely his or her own.

According to previous research, H (P1, 013) argued, dreams help your body, mind, and spirit. In her multimodal argument, she chose to illustrate a character dreaming with music playing in the background.

Figure 3. Student work: 'your soul may concern'

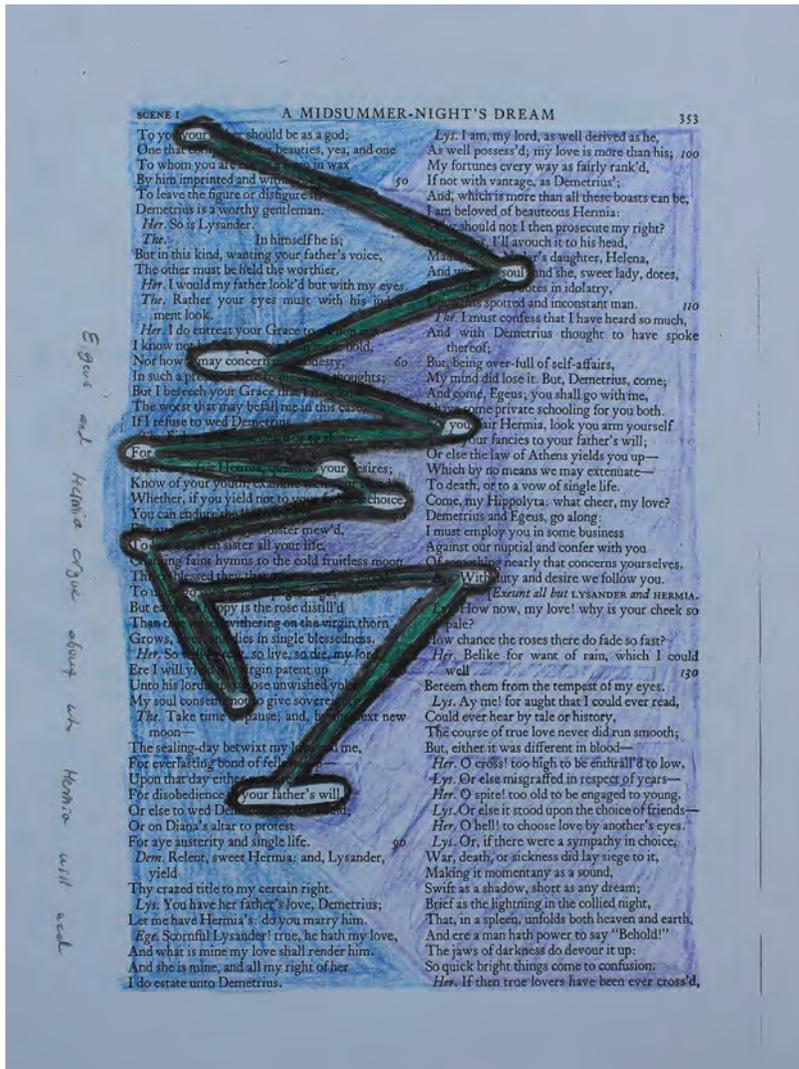


Figure 4. Student work: 'musk rose'

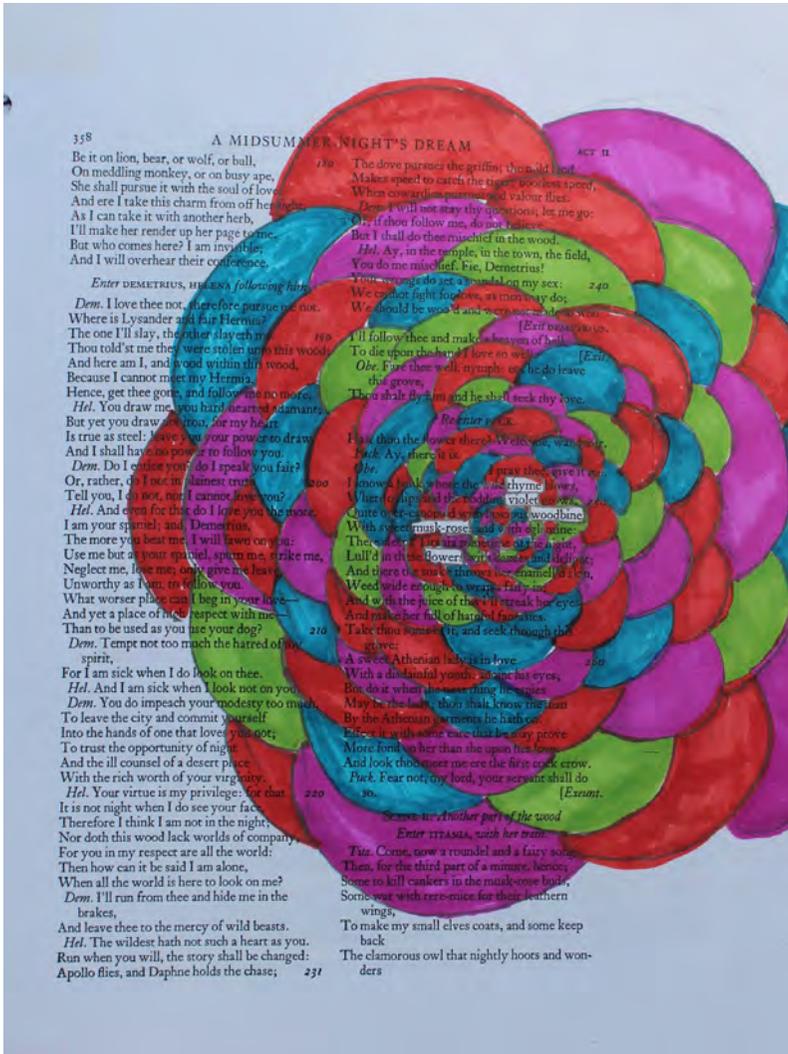
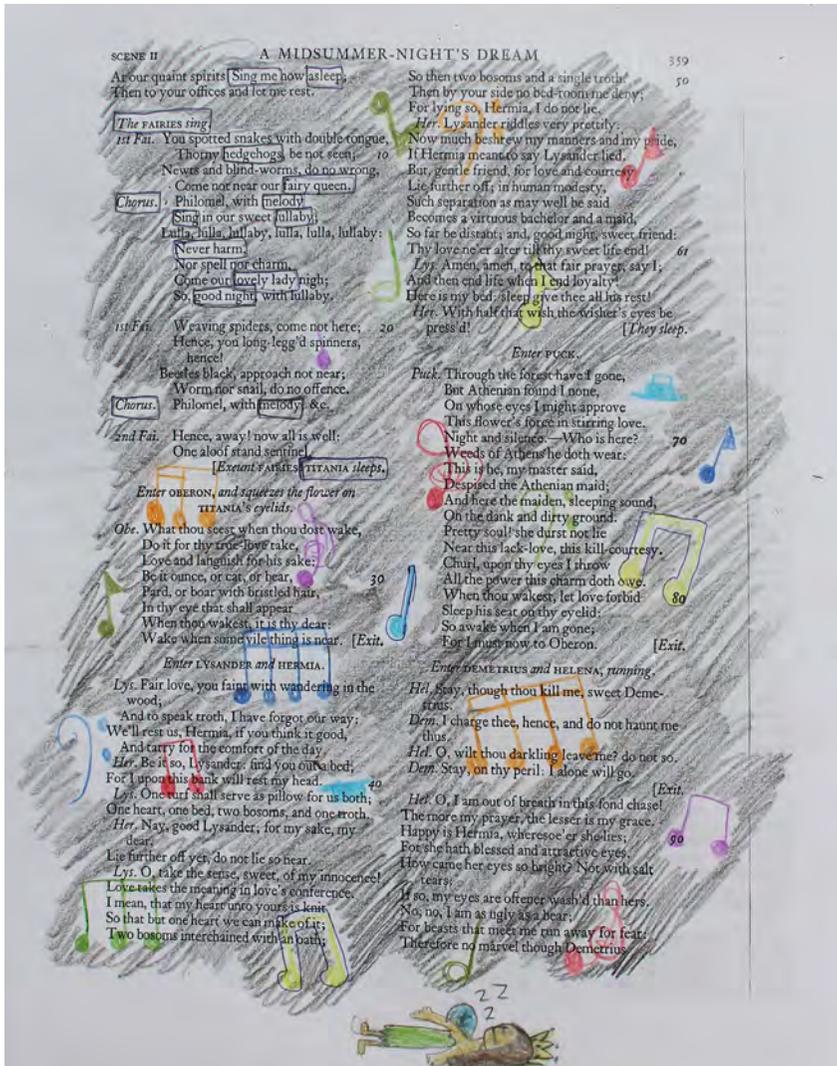


Figure 5. Student work: 'sing me asleep'



She brought the music alive by placing a number of musical notes floating above the character.

Another student, energetically adopting the role of artist, seemed determined to creatively exceed his peers, full of newly found positive motivation. He wrote in his supporting material: “my goal for the project is to make it the most creative and unique out of every project. You might have noticed my cardboard was split in half in the front. You might say, ‘yea that’s a mistake right?’ No it’s not a mistake because I did that on purpose...when you first pick up my book you see a moon, which represents bad in the book but if you look up you see the title as dream which represents good. This makes you get confused. Why would their [sic] be bad in a good

book which makes you want to read the book” (P2 09). By presenting what he felt to be a key conflict in the book, he created a visual design meant to persuade his readers to continue turning the pages and reading.

Another student used visual rhetoric as metaphor, using physical flaps to represent the layers of plot and the important theme of being hidden. This student argued: “I made an interactive drawing on this page to symbolizing what was happening in the story. I drew the forest with an interactive flip up. You pull the first layer up and you see Lysander and Hermia hidden in the woods, meeting together preparing to elope. I think their adventure represents a powerful drawing because Shakespeare uses the woods a lot throughout the play, usually as an escape or a hideout” (P2 08). As Iser (1993) has argued, the literary figure is the half-way point between the text and the reader. The student uses a visual interactive device that both reveals and does not reveal. If the reader does not open the flip, then she will see no further. Here, visual rhetoric is meant to convince by stimulating perception as well as engaging the physical participation of the reader. By using visual rhetoric the student constructs a form of persuasion that encompasses all aspects of the PIE model.

The process of producing visual rhetoric by working with the physical pages of the play opens up new ways to create arguments, and in the process, new understandings of the play and of the self. More than one student stated how much they enjoyed this critical and creative act: “I had fun drawing these because it took a bit of creativity.... Another fun part of it was that I got to express how I felt about the story and the terms I used to represent it. My artistic vision shows my true self, beyond what I’m allowed to show in public” (P2 013). His struggle to solve the problem of the assignment revealed not only something to himself, but also revealed something for others to see. His perception, moving through interpretation tasks, led to a public expression beyond the realm of one kind of discourse.

As we can see from the above images and their responses, students were creatively and critically engaged in making meaning of the text by using multimodal discourse. Throughout the year we discussed the nature of their media environments where word and image are constantly fused. This assignment gave them the opportunity to separate and to use the very same grammar: framing, page design, text, and color in order to create an effect and experience for the viewer. The assignment pushed students in a very concrete way to become active makers instead of passive consumers of multimodal discourse. The teacher’s strategy was to ask open-ended questions about their work: How is this a story of the reading process? How is the specific page an example of an argument? The assignment uses the PIE model in a way that authenticates each student’s process of perception, interpretation and expression.

Assignment III: Creative abstraction

The Object’s Dream assignment revealed how visual literacy methods can be applied innovatively when opportunities arise and can lead to successful outcomes. The essays generated by this assignment were generally well written and conceived. The language, syntax, and diction were of a higher quality. Mechanical errors were minimal. In comparison with the first dream assignment, these responses were more precise, more in depth, and more creative. Numerous responses displayed a strong

critical understanding of their previous research. Some students found that the dream research did not fit what they wanted to do for this third assignment so did not attempt to connect the two. Others were able to modify their plans to bring the research and this more creative analytic task together. As a whole, imagining a narrative or dream for an inanimate object was a huge task that entailed a certain amount of risk for the students. Also, the students were challenged to find language to describe and interpret an abstract non-realistic ink drawing. This required them to study the drawings closely, be perceptive, try to interpret what they saw, build on it imaginatively, and then express their ideas in writing. The students used the same critical and creative skills they had exercised in the previous assignments, yet this time, they were “free” to write in their own way. This openness allowed them to stretch themselves and explore a complex task in a beautiful way.

One effect we noted in many students’ work was growth in their diction. One student saw the image as a toy lifting off into space. “I launched back into my seat. As I looked down all I could see was the smoke that had made a (most likely) sempiternal stain on the cement ground.” Further, when she describes space, she moved beyond her usual range: “It was so quiet and it was something I would have never imagined this to look like. It was chimerical, all the planets were aligned, as if someone must have placed them there. The stars were clinquant and it was all dark” (P2 06). Throughout the year we work on diction and it’s very difficult for students to add to their discourse. In this response, the text limps along in some places but shines in others— a perfect example of critical and creative development and the fluid nature of the PIE model. Without careful attention to the student’s development a teacher could easily mark what is wrong instead of what is critically invented.

Students transferred complex, detailed, nuanced meanings from an abstract drawing to written discourse. As readers we see their imagination at work creating a narrative through visual stimulus and experience. The following student used the abstract drawing to tell a story. “The toy’s dream is very musical. I could tell because the painting had big blots that either got lighter or darker as the music played. In the dream she had was about become a very famous and confident singer. She was sleeping on the shelf when all of the sudden she started singing in her sleep, she saw there was an audience there, even though she was by herself. Before she had fallen asleep, she was very shy and quiet and was afraid to sing her music. However, when she woke up, she was very confident in her singing and could sing any song” (P1 013). She found a pattern of renewal and confidence in the image. In the second part of the assignment, where students had to test their definition of dream, she used her research to make her argument. “As I said before, the toy felt shy at first, but in the end she felt confident after she sang. Well, as you know, dreams are a series of thoughts and images going through the mind during sleep. What happens in the dream is usually related to the events during the day. So when the speaker couldn’t play her music for her owner and other people, she ended up dreaming about it” (P2 013). This student’s imaginative writing and critical reading are fused. She abstracted a story to create a world informed by research, previous writing and designing (see Figure 5). She was able to clearly transfer one kind of intellectual work into another kind of intellectual work. The assignment design created an opportunity to practice seeing and knowing, listening and speaking, reading and writing.

In the two classes, this critical and creative interplay was evident. Students confidently wrote about an abstract drawing (which we called *A Toy's Dream*) and deftly connected their observations to their critical analysis of the term 'dream'. No two essays were the same, but all the students practiced creative and critical skills. Once we finished, we had a class reading and discussion. Several students had a difficult time imagining the abstract drawing as a toy's dream. To assist their creative and critical growth, the teacher introduced them to Matthew Arnold's notion of 'the willing suspense of disbelief' as a critical tool. Afterwards, students had a tool to imagine the abstract piece was a toy's dream. The difficulty generated a whole class discussion on the nature of fiction.

DISCUSSION

The PIE model prompts teachers to attend to the multifaceted process of seeing and knowing, marking and writing the world. Assignments designed to explore the model give students and teachers an opportunity to develop creative and critical skills as well as self-awareness and growth. The types of arguments we used (pragmatic, multimodal, literary) are ways to explore areas of perception, interpretation, and expression that connect explicitly to the Common Core Curriculum and beyond. We should resist assignments that negate or leave out the generative phases of the PIE model. Furthermore, as has been shown above, we must look carefully at how we define argument. Each assignment in the series using *Midsummer Night's Dream* offered students a unique way of creating and persuading. For example by using evidence gathered in objective research on dreams, evidence drawn from the play itself and expressed visually, and then a combination of the first with the interpretation of visual evidence provided by the student-created works of art, students were able to exercise different aspects of persuasive argumentation. Because the end results were not over-prescribed, each paper could be an authentic mirror of the student's capacity to create and to reason. Student choices in such assignments reflect both students' strengths and areas of needed growth, enabling the teacher to better assess their learning.

The key here was that students were not simply reporting using any rote practice. Several wrote poems, another a short story about being late to work due to being overwhelmed with unfinished chores, another used his background knowledge of a famous Roman battle as an explanation, another offered at the end of her analysis a toll free number spelling out t-o-y-d-r-e-a-m. One student ended his piece with a moral to always think twice about your judgments. The created toy also took various forms - students saw the toy as a lion cub, robot, dog, astronaut, truck, sphere, monster, and teddy bear. Scenes for the toys included outer space, a Hansel and Gretel type location, a school, a home, woods and even a desert. Students sought, explored, and asked questions. For example: "A DREAM/can we touch our own?/Can we touch other peoples dreams?/ can toys have dreams?/ what happens when we leave them alone?/ dream of/ dream of/ is a dream an empty void/is this one controllable or not.../" (P2 04). Towards the end of the response this student brings in his research on lucid dreams but does so indirectly. Poetry has its own logic: "Dark rain falls from the sky/the small wound up toy traveled along the maze of black/ each step the toy took would be another step closer to his destination./ The buttermilk clouds turned

into a dull fog” (P2 02). These lines fuse creativity and critical awareness. Where else can one discover buttermilk clouds and dull fog? And in the same class several feet away a peer, hooked on science, muses over black holes: “So what I think is that the toy’s ‘dream’ is that it is lost in space (aka the trashcan), about to get sucked into a black hole and ripped into tiny shreds (just what every toy wants) and then, due to dreams are highly illogical and unpredictable, had the image inverted to color, to create a more frightening effect” (P2 01).

Our students live in a world of multimodal discourse fostered by technology; however, much of this discourse comes prepackaged and places the student in a passive role. By engaging in assignments that require their perception, interpretation, and expression, students are able to become makers and participants of discourse through unique avenues. Too often assignments for argument negate student awareness, experience and expression in the name of producing a more rational argument. All of the assignments described here generated critical and creative growth. Notably, the final assignment, “A Toy’s Dream,” which incorporated visual art into an assignment embracing the features of the PIE model, produced significant language growth. As Wittgenstein noted, “*the limits of my language mean the limits of my world*”⁴ As students’ language grew, their worlds expanded. No two responses were the same and, as is the case for all arguments, some responses were more persuasive than others. These assignments allowed all three aspects of the PIE model to work together and, by doing so, produced fuller responses and provided a more inclusive starting point where all students could participate, create, and argue. Instead of being passive receivers of multimodal discourse they became active producers of meaning.

CONCLUSION

In the series of writing assignments described above, we attempted to expand notions of argument and explore methods of teaching the skills of argument using visual literacy. We summarize and extend our main points here.

First, the student work highlighted in this paper suggests that argument might usefully be redefined to represent a much broader genre of writing and thinking, incorporating any mode that supports and develops the skills needed for argument. This may benefit students at all writing levels, as was shown in the improvement of students’ writing skills across our diverse classroom. Broader concepts of argumentation could be taught by not focusing solely on the formal structure of argument.

Second, through the assignments, we found that the practice of visual literacy lends itself to the development of skills related to argument by requiring students to gather details for interpretation and explanation and present them in a persuasive and compelling way. Works of art are a good place to start because they are complex representations meant to stimulate perception and idea production. Close looking and close reading are important skills in many fields. By teaching students how to

4 “Die Grenzen meiner Sprache bedeuten die Grenzen meiner Welt (Tractatus Logico-Philosophicus 5.6). Tractatus Logico-Philosophicus/Logisch-philosophische Abhandlung. Ludwig Wittgenstein. First published by Kegan Paul (London), 1992. SIDE-BY-SIDE-BY-SIDE EDITION, VERSION 0.42 (JANUARY 5, 2015), containing the original German, alongside both the Ogden/Ramsey, and Pears/McGuinness English translations. (Available at: <http://people.umass.edu/klement/tlp/>)

take an initial stimulus (in this case both text and works of art), to perceive it fully, to analyze and discuss it with peers, to compare to previous experiences, to select an interpretation and fully develop it as an argument they developed skills that go far beyond learning to write an essay. They are transferrable to scientific inquiry, historical analysis, multimodal discourse, and artistic production.

Third, open-ended assignments that emphasize the possibility and validity of many points of view are essential in the teaching of argument. In addition, consideration of the audience for that point of view matters, thus learning multiple forms of argumentation and developing skills to select the most appropriate form for a given context are important. These closely mirror creative skills, a much-needed set of skills for the future. In terms of teacher preparation, we must not only study rhetoric, but also visual rhetoric. Teachers need firsthand knowledge of linguistics, multimodal discourse, and narratives in order to create open-ended tasks to foster language and communication growth. Assignments should be designed from a view of literacy that includes visual and written texts as well as a view that each student's perception, interpretation, and expression is an essential aspect of the process. When teachers explore these realities themselves they bring flexibility and dignity to assignments allowing them to address the needs of all learners.⁵

Finally, students of various writing capabilities benefit from opportunities to build their multi-modal skills, particularly benefitting from more open-ended activities that focus on processes rather than products. Understanding the ways that image and text interact to produce meaning and interpretation are essential critical skills for the future. Notions of argument expands in our world as communication channels expand. We should prepare students to participate in this process, to become both producers and informed consumers of visual rhetoric. We must acknowledge that students in the classroom have more expertise in ever changing and developing world of communication than the generation of their teachers who are there to guide them. We must listen, help them make sense, seek to understand their point of view/experience, and provide critical tools. We must be careful not to over-determine content or pre-assume inflexible goals. We must help them to shape the questions and practices rather than give students the answers or over designed forms. We must show them how to communicate their own answers as successfully and in as many diverse ways as we can. Each student has a vision and a voice and we must make sure our classroom space is a site of exploration for all.

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⁵ Museums should play a vital role in teacher preparation. For example, the Summer Institute at the Yale Center for British Art provides teachers with firsthand direct experience of an expanded understanding and practice of literacy. Furthermore, direct contact with visual composition provides a unique atmosphere for critical exploration and growth.

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