

# Letter from the Chair

I'd like to thank everyone here at Wright especially everyone and on the Assessment Committee for the support and the welcome I have received this semester. Not only have these past four months been my first as Chair, we have also embarked on the first year of a fiveyear plan established under the Committee and my predecessor, Noah Marshall. I admit I was intimidated and unsure about taking on this responsibility. Fortunately, the conversations I've had with you, my colleagues, have allowed me to enjoy the tasks of this Committee and understand how we are serving our mission of improving teaching and learning.

Over the summer, Noah and I spent a long afternoon at a favorite German restaurant of ours talking about the 5 year plan and



Fall 2014 can always be remembered as the semester the pyramid's roof underwent renovation.

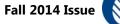
Besides the pleasure of the schnitzel and does Wright define critical thinking?" beer, I enjoyed this conversation because Well, I gulped, now I know what we he shared his understanding of what the should do at our first meeting. plan entails-each year, we will be examining one of our five general education outcomes and assessing it comprehensively at a discipline and/or program level. Still, even after more than second helpings of food and drink, I did not quite grasp on how to start working with the Committee.

The idea for how to begin our first Assessment Committee meeting originated in a phone conference Sara Schupack and I held with Dr. Paul Heilker, definition of critical thinking, we do not a composition specialist at Virginia Tech. think it is the only possible language for Sara and I were talking with him about his getting at what happens in our minds as visit to Wright for a one day retreat in we perform our analyses in our disciplines. March 2015 that is a follow-up on our It does collect common concepts, English Department's retreat in the Spring however, that were useful in developing of this year. discussing that Spring retreat and our on this semester's assessment projects: College-wide assessment activities, Paul caught me by surprise when he asked,

how we thought it could be executed. "So, since it's your focus for this year, how

From the first time we convened in August, I have thoroughly enjoyed hearing about the different and exciting approaches we have to our disciplines and to student learning in general. Clearly, there are more than several ways to peel an orange, and we have been sharing our insights on critical thinking together in ways that make me better understand and re-think my own tendencies. So, while we did meet Paul's challenge and construct a During the course of the templates for our department reports

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of Critical thinking is a process identifying patterns or ideas within a set of ideas, texts, and/or points of view; interpreting or explaining that that pattern; and justifying as interpretation explanation or meaningful.

This wording focuses on the broad and the assessable. The goal for it was to be sure it applied to all disciplines and programs, and that it could offer language that we could use to discuss each other's and department assessment plans activities at our meetings. I look forward in future semesters to seeing exactly how well this definition can work into our conversations, especially in early March when Paul will be visiting us for a one day retreat. Still, I understand that no one facilitating class conversations, and asking definition serves all of us. Matthew Greif for reflective pieces from students, all to noted that it would be ironic if we activate student agency and bring out the constructed a definition for critical non-cognitive factors that impact student thinking and then did not allow other success. Growth mindset describes an ideas to critique that definition. So, it is in approach to learning that recognizes that light that many this Committee members have composed a overcome and are learning opportunities, set of personal comments of critical and that no one is born good at math or thinking elsewhere in this newsletter. bad at writing, to name two common yet Their comments demonstrate highly often debilitating assumptions. We will be specific and useful definitions they have collecting gualitative and guantitative found for their disciplines. appreciate their contributions, as well as impacted student success and student self Beverly's, Merry's, and Kevin and Sara's -concept. insights on specific projects. If our ways of assessing can direct our initiatives on student learning, we need to communicate our practices so we all can lead Wright's improvements.

I appreciate the many faculty and administrators who have taken time to help build this magazine. Finally, a big THANKS to Larry Buonaguidi for designing this issue.

Submitted by Vincent Bruckert

# Wright's Mindset Intervention Project, Fall 2014 Update

Psycho-social skills and non-cognitive abilities have become shared vocabulary and topics of discussions at Wright College.

In addition to the work associated with SuccessNavigator, faculty are engaging in Mindset Interventions Student this semester to cultivate а positive psychology of students so that they think of themselves and college in certain ways in order to learn successfully.

Sixteen to twenty faculty members from a range of disciplines have offered growth mindset interventions in their classrooms. These included offering reading materials, Assessment the brain grows, that obstacles can be And I data on if and how these interventions

> Through this work, we hope to strengthen students' academic tenacity mindsets and skills that allow students to look beyond short-term concerns to longer-term or higher-order goals, and withstand challenges and setbacks to persevere toward these goals.

One faculty member offers this input, "Although I do not have any objective measures, I strongly believe that this method of introducing the concepts significantly increased classroom interest understanding a valuable life formed and participation. In fact, on several occasions, I had to tell students that 'it's accomplishments, and it expresses six key

#### **Assessment Committee Members**

Beverly Bennett—Social Sciences Jeanette Bruno - Library Jean Burt - Nursing Susan Colon - VPA Paul Croitoru—Business Helen Doss - English Adrian Guiu - Humanities Matthew Grief - Biology Fred Hernandez - CIS Andrew Kruger - Physical Sciences Adrienne Leyva - OTA Merry Mayer - Social Sciences Jane McNiven - Paralegal, Business Julius Nadas - Math Krzysztof Ochwat—Physicl Sciences Sandy Shawgo - Radiography Andrew Spiropolous - Physical Ed Vincent Bruckert , English (Chair)

time to move on to the next topic, yet I greatly appreciate the interest...wish there was more time.' I have been teaching since the spring of 2002 and I could truly say that the level of participation was much higher than in previous semesters".

Submitted by Kevin Li and Sara Schupack

# On the New Gallup-Purdue University Index Report "Great Jobs, Great Lives"

In the AQIP Steering Committee emails and meetings this semester, Kevin Li has brought to our attention the new index report from Gallup/Purdue University titled "Great Jobs, Great Lives." When Kevin emailed us the Higher Ed link on this report, Alicia Anzaldo responded and expanded on Kevin's email by recognizing how much this report details the ways we need to understand assessment and assess the meaning of our data-driven findings in education and beyond. The report offers five metrics for through higher educational

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activities colleges and universities offer students in order to reach these five value statements about an enriching life-long college experience.

The report argues that engagement understand a person's overall well-being. In this focus, five metrics help measure a our assessing ourselves, will be to find journals and student self-evaluations. At person's well-being within his or her ways to document and track these kinds Wright, all service learning courses working life: a purposeful well-being of interactions so that we can improve our automatically include both a pre-service describes a person who likes what she ability to offer these experiences more student survey and a post-service student does and is motivated at work; a social well-being describes a person who has strong relationships that support him; a financial well-being describes someone who feels secure and safe in her economic opportunities; a community well-being describes the connectedness a person has to her neighborhood, both local and farreaching; and a physical well-being describes a person who is healthy and feels energized to act on his goals. Gallup/Purdue measured these five wellbeings through alumni interviews administered to over 30,000 college and university graduates. Their report finds that there is a definite relation between our college experience and how we achieve these five well-beings.

College alums have higher odds of perceiving themselves to possess two or more of the 5 well-beings, according the data in the Gallup/Purdue Index, if they can identify any these six statements to be true of their college experience:

1. I had at least one teacher who made learning exciting.

My professors displayed personal concern for my dreams and goals.

3. I found a mentor on their campus.

4. I worked on a long-term project for at least one semester.

My college offered opportunities to put classroom learning into practice through internships or jobs.

6. My campus offered many meaningful

extracurricular activities.

Thanks to Kevin and Alicia, we are talking about this report in the AQIP Steering Committee. It would not surprise me that, To ensure that your project is meeting when we think about our semester and intended goals, Steinke recommends our interactions with students, these six using multiple measures to get the fullest workplace factors ring true to many of our own is a crucial term to contributions as stakeholders of Wright commonly used assessment tools for College. Our next challenge, in terms of service learning are reflection papers or effectively to more students.

> Here is a link to the entire survey: www.wsac.wa.gov/ sites/default/files/2014.ptw.(60).pdf

> > Submitted by Vincent Bruckert

# Assessing Service Learning

If you have considered adding a service learning component to one of your courses, there is substantial research in support for doing so. Service learning is strongly correlated with increased student persistence in meeting education goals, enhanced social connections between students, and improved retention of course material. I have implemented service learning into one of my course for three semesters and have seen impressive results: my service learning classes regularly had a higher percentage of students passing than those without.

But assessing a service learning project's efficacy can be a little different than assessing more traditional assignments. According to Pam Steinke, Assessment Coordinator at the University of St. Francis in Joliet. possible service learning outcomes to be assessed include improvements in: civic engagement, cultural competence, goal setting, leadership skills and ethical reasoning. Others have also suggested increased selfefficacy, career knowledge, and teamwork

skills. With such possible outcomes, service learning can have incredible impact on students' lives.

assessment picture. Two of the most survey that are then turned in to the Dean of Instruction's Office. In addition to these tools, she suggests focus groups, student interviews and peer evaluations.

In my case, my community partner also provided a student survey, which added a further dimension to my assessment picture. Their survey asked students if they would consider volunteering with the organization again and, if so, would they provide their contact information. To my surprise, 61% of my students not only said yes, but gave their contact information.

I highly recommend adding a service learning component, but as you plan remember to include a couple methods of assessment.

Submitted by Merry Mayer

# Testing Make Easier for Yourself!

Using Blackboard for testing can save time in test creation and also make grading faster and easier, as well as providing ready data for assessment.

Blackboard allows for a variety of types of questions. I use mainly multiple choice, true/false, and essay questions.

If you have an existing exam you'd like to transfer to Blackboard, there are guiz

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generators that help you reformat the questions. I use one from the College of Southern Idaho. Instructions are at http://www.csi.edu/blackboard/bbguiz/ and the questions can be entered at http://www.csi.edu/blackboard/bbquiz/ Basically all I need to do for a multiple choice question, for instance, is list the possible answers with each in the form of a letter followed by a closing parenthesis a) - and then attach an asterisk to the correct one.

Objective questions such as multiple choice and true/false are graded automatically by the system. This makes results available to students immediately, and it is also now possible to let students see their answers along with the correct answers right after they finish the test.

Essay questions on Blackboard also present clear advantage а over handwritten responses, since typed answers can be so much easier to read.

Once you have created an exam on Blackboard, it becomes even simpler the next time. You can readily export an exam from one section of a course to another. It is also a straightforward task to import a previous exam to a current class to serve as the basis for creating a new version. Over time, you can also establish pools of questions based on a number of tests and then search for items on a particular topic.

In order to view the results on a test, Blackboard provides statistics for the test overall and also specific results for each individual question. On a multiple choice question, for instance, you'll see how many people selected each of the possible answers. In addition to giving a clear picture of student responses on a particular test, this allows for comparison across sections. If you use the same question in different semesters, you will also be able to see any changes in student

success rates. Such results help identify paradise recovered in Milton's Paradise and may indicate aspects that need further emphasis in the future.

Admittedly, there can be occasional computer difficulties with this. But these have become quite rare now. I encourage you to give it a try!

For more information, you can consult the Blackboard Help site at http://bit.lv/10vf9gU e-mail the IT helpdesk Or at cohelpdesk@ccc.edu, Maureen Mulcrone, or me

Submitted by Beverly Bennett

#### Critical Thinking Α **Party: Wright Faculty** Their Influences on and Personal Insights As a kid, I always loved reading. Reading

#### Helen Doss, PhD.

making reasoned judgments about that wanted us to write about what we were which I read, see and experience has been reading that I started to feel writing could part of my personal and intellectual life, be difficult. She didn't want a summary, always. Thinking critically (and writing she wanted something more along the analytically) is the way in which I made lines of a reflection. She wanted us to sense of the means by which disparate think about what we were reading and phenomena were connected to each make connections between what was on other and revealed important truths the page and our real life. It was a hard about the world in which I lived, e.g., from concept for me to grasp, and I spent about early readings of L'Engle's A Wrinkle in three reports talking about how Anne of Time and asking questions about the Green Gables was rude for not liking the tesseract and its potential connection to spelling of Anne as Ann, without the "e." I Einstein's general and special theories of took offense because my middle name is relativity to exploring Dostoevsky's The Ann, spelled without the "e." I knew I Brothers Karamazov (or, The Idiot, too) wasn't quite hitting the mark with this and Ellison's Invisible Man (or, Baldwin's response, but it was a decent start for me Giovanni's Room, too) through the lenses of Kierkegaardian and existentialism.

This same awareness of the necessity of seeing (making) connections, a by-product of thinking critically, enabled an important line of questioning in my graduate research, regarding the nature of the

areas where students have had difficulty Regain'd and the existence of human free will within the context of divine providence in Paradise Lost. Answering these questions led me on an important intellectual journey through Milton's texts and the emergence of empirical science in Europe. In my teaching, I emphasize the importance of curiosity, which I define as a species of informed questioning and contextual awareness; it is the foundation for meaning-making in the humanities and composition. For my students and me, asking questions and making connections are the routes to critical thinking; these tasks are essential to the intellectual revolution in which we are engaged daily within our classrooms.

#### Jeannette Bruno

books and writing book reports was easy for me because reading was easy for me. Asking questions, finding connections and It wasn't until 7th grade when my teacher to think about what it meant for me to Sartrean read the book. What was Ann telling me as a reader? What was the story telling me about life? My 7th grade teacher made me start asking questions about what I was reading, and that was my the first step thinking critically.

#### Adrian Guiu

The best description of critical thinking is the saying of the inventor of critical thinking, Socrates: "the unexamined life is not worth living." (Plato, The Apology) According to Socrates, examining your life is a process of lifelong self searching and self cultivation which allows an individual to escape from the cave of prejudice, misunderstanding and false happiness.

The other idea that describes critical thinking is Kant's great motto of the Enlightenment: "Sapere aude!" ("Dare to know.") He further describes Enlightenment as "Man's release from his self-incurred tutelage." For Kant, critical thinking amounts to freeing oneself from any kind of self-imposed and foreign tutelage. But this can only happen if one dares to examine one's ideas, circumstances and views.

practice in the exercise of examining oneself and one's only that, we can even train ourselves in this skill through fulfilled, open and engaged life.

#### Matthew Greif

Critical thinking is an integral part of how we conduct biological research. A question leads to a hypothesis from which we devise an experiment. After conducting the experiment, we analyze our results, and, if faced with new or contradictory information, we can change our original hypothesis rather than remain bound in our old way of thinking.

But how do we interpret these results? How apparent is it that our results challenge pre-conceived ideas? As in other disciplines, there is no magic instruction manual to consult to see what should have happened. Often, hours of painstaking, repetitive, observations must be taken and then carefully thought about. Linking together seemingly unconnected pieces without relying on old biases is where critical thinking becomes important.

When thinking about this article, I remembered an episode from my grad student days. One of my research projects involved studying if insects dispersed fungi in the Onygenales and Myxotrichaceae. The fungi in question had fruiting bodies that resembled brambles with hook-like appendages. The accepted mode of dispersal was that the hook-like appendages latched onto the bodies of insects. However, while this idea was popular at the time, this mode of attachment had never been tested. A simple experiment revealed that rather than hooking onto the insect, the fungal fruiting body became impaled by insect hairs. By thinking critically about the morphology of the fruiting body and challenging an old but popular hypothesis, I was able to

change the way people thought about how these fungi were dispersed.

Since I was encouraged to develop my critical thinking skills in graduate school, I try to encourage my own students to connect the dots and challenge what they are learning. By developing their critical thinking skills, I hope to create not only competent biologists, but also students who can succeed throughout their academic career.

#### Ted Jankowski

#### **Using Critical Thinking in Mathematics**

In my view, critical thinking is a self-guided thought process used to make rational decisions concerning the topic at hand. It involves using careful evaluation, not making assumptions, and putting into practice things you may already know. In the fields In light of these two ideas, critical thinking is not just about of math and science, skills involving critical thinking and comprehension of texts, facts or data; rather it is a life-long reasoning are vital parts of the problem solving process. Not immediate and remote surroundings in order to live a more practice and reflective thought. What comes to my mind is Polya's four step problem solving method. George Polya (1887-1985), by the way, was a renowned mathematician especially credited and known for his work in heuristics and problem solving methodology. His four steps follow:

#### Step One: Understand the Problem.

Here we define our problem, specify what is given, and what is required of us. We might re-phrase or re-write the problem in our own words. Or we may draw diagrams, as long as we are clear about what is to be solved.

Step Two: Devise a Plan. Based on our experience, we decide on the appropriate method to use. Methods might include using formulas, searching for patterns, trial and error, or working backwards, for example. Whichever one we use, it must solve the problem.

Step Three: Carry Out the Plan. We employ our method and obtain a result.

Step Four: Review/ Extend. Here we reflect on what we did. Was the problem solved? Was our method sound? Does the answer make sense? Can we check it? Finally, what have we learned by solving this problem? Here's where we can make the biggest gains. With careful thought, we might be able to extend what we learned into solving similar problems in the future.

So, thinking as a mathematician or scientist is a process that evolves whenever we solve problems. As shown in Polya's method, our skills can be improved through practice and reflection. Following the last step has the greatest rewards because we have an opportunity to develop our abilities in rational thought and critical thinking.

#### Andrew Kruger

In graduate school, my advisor would ask me to answer difficult \*Health Costs- smoking is the most preventable cause of death questions. When I first started working with him, I was overwhelmed by the questions he asked because of their difficulty. However, he would sit and go through the reasoning when I was lost, and I found that many problems didn't have exact calculations that could be used to answer them. It was more about understanding the relationships between concepts. Many problems we face can be answered by breaking them down into a series of easier steps. We can build on these relationships between concepts to derive newer, more complicated ideas when they are organized and used correctly. In my classes, I take complicated physical concepts and I break them down into a series of questions, each with a simple relationship. Then each new question builds on the previous answer. This serves to demonstrate to the students how they can derive complicated information starting even from very little information. The students figure out what's important in which steps, how everything relates to each

#### Jane McNiven

When I think back to the one book which has really influenced me, it is "The Tragedy of the Commons" by Garrett Hardin (1963). It describes the situation of a jointly used resource being over-used and destroyed, how one's actions affects the world.

Thinking critically, how does this affect society as a whole? When you look at a subject as complex as the Law, specifically, environmental law, and you try to tackle something such as pollution, because we all need to breath clean air and not walk amongst filth, then you can see how complex this can be and how the actions of the few affect society as a whole. Here at Wright College, there's a no smoking policy. The school wants a clean air environment on campus. This may seem to be a simple rule, yet it's very complex, as it pits the nonsmokers against the smokers, but it also involves the a whole host of other factors;

\*air quality standards- walking through the cloud of second hand smoke- we all know the high cancer risks of secondhand smoke

\*littering- improper disposal of the cigarette butts- various sources have stated that cigarette filters take 18 month to 10 years to biodegrade, plus the fact that it make the campus dirty and makes extra work for the grounds crew and cleaning crews.

\*socioeconomic factors- Smoking was associated with structural, material as well as perceived dimensions of socioeconomic disadvantage (Data derive from Helsinki Health Study baseline

surveys conducted among the employees of the City of Helsinki in 2000 and 2001)

in the USA

Critically thinking, you can see how complex this tragedy of the commons really can be when it comes to making a simple rule prohibiting smoking on campus. We see rule breakers every day huddled against the cold on the side of the parking garage, dying with every inhale of roof tar laced nicotine, yet the tragedy of the commons is that one simple law, made to help the greater good, isn't going to solve the issue as a whole. Does this mean that I personally think we should do away with this rule, NO!, but what I want the reader to see is that passing a law isn't just a simple thing that once it passes, everyone will blindly follow. It's more complex and even though it is a good law, since it looks out for the well being of all citizens, such as this non-smoking rule here on campus, that doesn't mean that it is an easy solution to the problem as a whole. I will continue to point out to those students who are smoking while standing right underneath one of the "no smoking on campus" signs, the irony of their actions-while they inhale the very smoke which kills them, hopefully they will think about their singular action and how it affects society as a whole.

### **Krzysztof Ochwat**

## The Physical Science Department faculty approach to critical thinking skills teaching and assessment.

In a science course like Chemistry or Physical Science, the idea of critical thinking is pretty focused and data driven. There is little or no room for freedom of interpretation. The answer to a question is most often definite, can be proved mathematically or empirically, and there is no doubt about it in the end. Critical thinking skills are required for correct decision-making in the process of determining the answer to many science course guiz and exam questions. These questions most often are either numerical or conceptual. The given for analysis information is very brief compared to a non-science subject. Logic and elimination of obvious impossibilities plays the key role.

Chemistry professor Maria Valentino uses among others the following technique. She tries to cover the course content in an understanding manner using examples to facilitate critical reading of the question. She asks the class questions during these example problems such as:

"What data is needed to solve the problem?"

"What data is not needed to solve the problem?"

"How do I setup the problem?"

"What steps are needed to obtain the answer?"

"How should I report my answer?"

"Is the answer reasonable?"

Then she gives them similar questions in the form of group work, homework and quizzes so that the students can gain confidence in solving problems and using their critical thinking skills on guizzes and tests.

Physical Science professor John Tandarich teaches more of a conceptual and descriptive kind of a science course. In his class, he often uses videos pertaining to the subject. Students are specifically asked to review the material in a critical manner. They are to refrain from describing the very content of the movie, but are asked to focus on correctness and validity of the presented arguments.

Chemistry professor Warren Menezes divides critical thinking into qualitative and quantitative skills. Therefore, he consistently assigns both multiple-choice and free-writing questions during class He believes that quantitative exams. critical thinking skills are best evaluated using the free-writing question format, where students clearly show the steps leading to the solution. He uses multiplechoice to assess if students understand scientific concepts precisely.

Critical thinking plays particular and essential role in the study of Astronomy. A vast majority of the knowledge of astronomy comes from telescopic and other various remote viewing tool observations. Due to the inaccessible distances naturally related to the field of astronomy the conclusions about the observations cannot be ultimately verified. One of the best techniques used in astronomy is a comparison of such remote observations to the physical phenomena known from our nearest

experiments. The skill of critical thinking is or 12 years of public school had engaged instrumental and the only way in drawing this part of my brain. It took practical reasonable conclusions from observations. In the process of studying to develop the necessary critical thinking the astronomy students are most often skills I needed to be successful. To this presented with both, the observations and known physical evidence. The understanding of the distant universe, My point for sharing this is to emphasize which is the ultimate goal of astronomy, that though I understood the concept of relies on the ability to logically and critical thinking and the definition of it, critically connecting the two.

#### Sandy Shawgo

Though I have explored research-based critical thinking from an academic perspective when pursuing my graduate degree, I would like to propose that my practical experiences have provided me with the most insight into the level of critical thinking to which I hope to lead my radiography students.

The genesis of what I feel I "own" about critical thinking comes from working for 2 new family practice doctors fresh out of residency. In the clinic that I worked, we provided a fairly large spectrum of services including full diagnostic x-ray, full lab to include microscopic work on urine and blood, EKG, as well as some minor surgery capabilities. It was common practice for one of the physicians to order a chest and abdomen x-ray, a urinalysis, blood draw, strep test and an EKG on one patient. As I became embroiled in completing those tests, the physician would order the same tests on the next patient as well. If both physicians were working, they would both be ordering these tests. It was not uncommon for me to have 4 patients waiting for one or all of these tests. Factor in that many patients are not physically able to stand or walk, complicating the process and causing this new x-ray tech to find ways to expedite all of these processes. When I began that job, I was overwhelmed as nothing in x-ray

environment of the planet and laboratory school, pursuance of a Bachelor's degree such application, trial-and-error and experience day, I use this experience, especially when in I'm teaching in the classroom.

until I was forced to use it on a daily basis, it was not natural to me. Guiding my students to the necessary information to pass the radiography registry is only half I come from a medical background. the battle to becoming a health care professional. The other half, the more important half, is giving them ample practice in the real-life situations.

#### Vincent Bruckert

When I first started teaching college English (at Marquette in 1988--I'm old), I was trained by Ann Berthoff, a major voice in composition studies at that time. Her field within composition studies is called "social construction" and the idea behind this term is simply that, while we write by discovering our own voice, the emphasis of the polar opposite field of rhetoric called "Expressionism," we also build our ideas off the ideas of others and that we form our ways of writing by understanding how others have written. Her direct and concise definition of writing that really made sense to me is that "writing is very much matter of а seeing relationships." Her approach to teaching writing is to create a process, a sequence of activities, that helps a writer discover what she wants to say and what she sees as meaningful. For instance, instead of seeing Socratic inquiry as an act based on asking questions, Berthoff taught me to see Socratic inquiry as a act of constructing a deliberate sequence of questions. Such a teaching practice is essentially a highly creative act--the teacher must create a classroom set of activities that encourage students to read and engage the ideas After each writing prompt, we share our answers for about 5 of others, and from that starting point, form ideas, think about minutes. These kind of prompted activities allow three exciting those ideas, and then WRITE their own insights. And students, things to happen in 120 minutes; 1. we have eliminated the well, they get to discover what they really think about the need for lectures in the composition classroom; 2. we have topic. For instance, if the topic is education, here's a classroom created a first draft of our essay BEFORE we have even left the activity I have modeled after my other big mentor, Frank class period in which it was assigned, and this essay already Hubbard:

FORM: For 15 minutes, please describe a time you learned outside a classroom.

**THINK**: For 5 minutes, from your example, define learning.

FORM: (We repeat this kind of inquiry to help develop our essay's body of examples): For 15 minutes, please describe a time you learned inside a classroom.

WRITE: For 20 minutes, please describe what education means. To do so, I encourage you to examine how a textbook for another class, such as Chemistry or History, is constructed. How does this textbook reflect your definition of learning? How does it compare and contrast with your examples of learning?

deals in depth with a complex reading material; 3. we have heard a bit on how our classmates are interested in the assignment and can look forward to hearing their fuller papers in the next class period, so we can compare our own ways of thinking and writing to other students'.

This assignment and others I use in the composition classroom are built on the notion that writers must undergo a process of revision to arrive at meaningful statements and expressions. The English poet W.H. Auden once captured the spirit of Berthoff's approach to teaching writing by asking, "How can I know what I think until I see what I say?" Once students know what they think, Berthoff taught me, they can know what they want to say, and once they know what they want to say, they can learn to teach themselves how to say it. In this sense, critical thinking is, for me, ReVision: re-forming, re-seeing, rethinking, rewriting, revising.



