THE UNIVERSITY OF ARIZONA.

The Assessment Coordinating Council (ACC)

Critical Thinking Assessment Project
Fall 2009 – Spring 2010

I. Description of Project

The purpose of the Critical Thinking Assessment Project (CTAP) is to develop a process for assessing critical thinking on the campus. The process is designed to collect baseline information about students' critical thinking skills at the lower and upper division. The project was developed during 2008-09 with Phase I being launched in fall 2009. Five sections of first-year composition (FYC F2009) in English 101 and two large Tier Two classes were selected for participation. A critical thinking assignment (See Appendix A) that was developed by participating faculty was administered to the students in the seven classes. Students in the FYC classes were given the assignment during the first few weeks of school while the students in the Tier Two classes were given the assignment toward the end of the semester. The assignment, which included a common reading (See Appendix B), was embedded in each course, submitted electronically, and subsequently scored independently using a rubric (See Appendix C) that was developed for the project. As far as students were concerned, the assignment was a 'regular' part of the course. The grading for the assignment for course requirement purposes was left up to the instructors.

Phase II of the CTAP was implemented in spring 2010 and was developed to look at improvement in critical thinking over the course of the two semester Foundations English Composition course sequence. During the first week of May, students were given an essay and a prompt and asked to evaluate the effectiveness of an argument and to identify and analyze particular rhetorical strategies used by the writer to make their own argument.

Six sections of first-year composition (FYC S2010) in English 102 were selected for participation. A critical thinking assignment (see Appendix E) was developed by faculty in the Writing Program that assessed the skills taught in English 102. Students in the six sections representing three different instructors were given this assignment in the final two weeks of the semester and asked to read the essay, write an essay in response to the reading, and submit their essays electronically. The assignment includes a reading (see Appendix F) of the type that students would be expected to analyze as part of the course goals and objectives. All of the instructors required this assignment and graded it as part of the course.

The majority (94%) of students in the FYC classes were first-time college students while 90% of students in the Tier Two classes were continuing students who were beyond the first year. The following table displays other characteristics of the two student groups.

Table 1. Characteristics of the three student groups

	Mean High School GPA	Mean SAT Equivalent	UA Cumulative GPA
FYC F2009	3.3	1157	-

Continuing F2009	3.2	1102	2.8
FYC S2010	3.3	1034	2.8

II.   Explanation of Scoring

Phase I

On February 27, 2010, 10 instructors in the English Department's Writing Program participated in a norming and grading session. All 10 instructors had received an anchor set of 10 papers representing the full range of the rubric (1 to 5), a copy of the assignment and associated reading, and the rubric. The instructors were asked to read and take notes in preparation for the session. The norming session was conducted by Dr. Anne-Marie Hall, Director of the Writing Program, and Dr. Gwendolyn Johnson, Director of Assessment. The readers discussed 6 papers for one hour, coming to agreement about the representative scores, clarifying concerns about the rubric and assignment.

All papers were read twice and composite scores were created by summing the two scores; scores ranged from 2 (lowest) to 10 (highest). Any papers with a disagreement (two or more points apart on the rubric) were read a third time and a final composite score assigned. Additionally, all papers receiving an initial composite score of 5 [3 (Satisfactory) and a 2 (Unsatisfactory)] were considered borderline and read a third time by Dr. Johnson and Dr. Hall in order to move the paper to Satisfactory or Unsatisfactory. Thus, no final composite scores of 5 were assigned.

The final score distributions (see Appendix D for a scatterplot of raw scores) were grouped into three rating categories: Excellent, Satisfactory, or Unsatisfactory. The range of scores possible were 2 (lowest – meaning the paper received two scores of 1 by two different readers) to 10 (two scores of 5 by two different readers).

Scores of 9-10   Excellent
Scores of 6-8   Satisfactory
Scores of 2-4   Unsatisfactory

Phase II
On June 23, 2010, 7 instructors in the English Department's Writing Program participated in another norming and grading session conducted by Drs. Hall and Johnson. All seven instructors received an anchor set of 11 papers representing the full range of the rubric (1 to 5), a copy of the assignment and associated reading, and the rubric (see Appendix G - a revision from the rubric used in Phase I). The instructors were asked to read and take notes in preparation for the session. The readers discussed all 11 papers for one hour, coming to agreement about the representative scores. All papers were read twice. A total of 119 papers were collected. Any paper receiving a score more than one number apart was read a third time; additionally, all papers receiving a 2 and a 3 were read a third time since a 2 represents below competent and a 3 represents competent; thus there are no scores of 5 in the total. As in Phase I, the final scores were group into the three ratings categories (See Appendix G for a scatterplot of raw scores).

III.   Analysis of Scores

Phase I

A total of 280 papers were collected and scored: 172 from Tier Two and 108 from First-Year Composition (FYC). Table 2 displays the number and percent of papers that fell within the three rating categories. Table 3 shows the number and percent of paper that were read a third time in order to move them into either the Satisfactory of Unsatisfactory category.

Table 2. Number of papers and percent receiving ratings of Unsatisfactory, Satisfactory, and Excellent

	Unsatisfactory (2-4)		Satisfactory (6-8)		Excellent (9-10)	
	# of papers	Percent	# of papers	Percent	# of papers	Percent
FYC 2009	47	43%	58	54%	3	3%
TIER TWO	33	19%	109	63%	30	17%
TOTAL	80	29%	167	60%	33	11%

Table 3. Resolution of Papers with Initial Composite Scores of 5 – number of papers and percentage

	Papers with Scores of 5		Resolved to Satisfactory		Resolved to Unsatisfactory	
	# of papers	Percent	# of papers	Percent	# of papers	Percent
FYC 2009	37	34%	12	32%	25	68%
TIER TWO	26	15%	11	42%	15	58%
TOTAL	63	23%	23	37%	40	63%

The extent to which the readers agreed in their scoring of the papers was calculated. Table 4 displays the number of scores that were in agreement and the percentage of agreement among the readers.

Table 4. Inter-rater Agreement for Fall 2009

	Number of Scores in Agreement	Percentage of Agreement
FYC 2009	101 of 108	93%
TIER TWO	146 of 172	85%
TOTAL	247 of 280	82%

Phase II
A total of 119 papers from were collected and scored. Table 5 displays a comparison of the the number and percent of papers that fall in the rating categories for the FYC students that participated in fall 2009 and the FYC students that participated in spring 2010.

Table 5. Number of papers and percent receiving ratings of Unsatisfactory, Satisfactory, and Excellent

	Unsatisfactory (2-4)		Satisfactory (6-8)		Excellent (9-10)	
	# of papers	Percent	# of papers	Percent	# of papers	Percent
FYCF2009	47	43%	58	54%	3	3%
FYCS2010	45	38%	69	58%	5	5%

Table 6. Resolution of Papers with Initial Composite Scores of 5

	Papers with Scores of 5		Resolved to Satisfactory		Resolved to unsatisfactory	
	# of papers	Percent	# of papers	Percent	# of papers	Percent
FYC F2009	37	34%	12	32%	25	68%
FYC S2010	29	24%	14	48%	15	52%

Table 7. Inter-rater Agreement for Spring 2010

	Number of Scores in Agreement	Percentage of Agreement
FYC F2009	101 of 108	93%
FYC S2010	115 of 119	97%

IV. Discussion of Results and Summary

Phase I

The results of Phase I of the CTAP were encouraging. The majority of students received Satisfactory or Excellent scores (71%). In addition, only 19% of Tier Two students received Unsatisfactory while 43% of FYC students received Unsatisfactory scores, suggesting that students are improving in critical thinking and writing abilities between the time they enter the UA and the time they have enrolled in 45-60 units. Another promising result was the increase in numbers of Excellent scores between FYC and Tier Two students: only 3% of FYC papers received an Excellent score while 17% of Tier Two students received a score of Excellent.

Twenty-three percent of the papers received a composite score of 5 and were considered borderline, with one reader scoring the paper Unsatisfactory (2) and one scoring the paper Satisfactory (3). In FYC, 34% of the total papers received a borderline score of 5 while only 15% of the Tier Two papers received a borderline score of 5; 63% of borderline scores were resolved to Unsatisfactory. In general, the Tier Two papers received higher scores and were less likely to fall into the 3/2 scoring dilemma.

Results showed high agreement among the readers about scoring the papers. Interestingly, 26 of 172 Tier Two papers were in disagreement (15%) while only 7 of the 108 FYC papers were similarly in dispute (7%). The readers were all instructors of FYC, which could have led them to read that level of writing more accurately; also, there tended to be more disagreement in the norming session as well about the higher end papers – another possible explanation for less agreement on the Tier Two papers. Overall, the agreement was high with 82% inter-rater agreement.

General Comments about Papers

In a closing discussion with the 10 readers, many offered general statements about the FYC papers as distinguished from the Tier Two papers. In sum

FYC papers tended to
  ➢ Summarize more
  ➢ Rely on simple paragraph structures (point, illustrate, explain)
  ➢ Not grasp globalization aspect of the article
  ➢ Focus on personal lives to make a point
  ➢ Avoid the 'big picture"
  ➢ Argue in polemics
  ➢ Indulge in "broad racialized stereotypes"
  ➢ Not appreciate nuance – i.e., argue that all products should only be produced in the U.S.
  ➢ Rely more on the authority of the author to make their own points

Tier Two papers tended to
  ➢ Rely on background knowledge (content) to pull into their responses
  ➢ Individualize voices and see nuanced ways to make a point
  ➢ Understood the point of the article and the assignment
  ➢ Had problem-solving capabilities
  ➢ Saw consequences, cause-effect in reasoning
  ➢ Saw grey areas, not just black and white, digital thinking about topics
  ➢ Recognized flaws in the article (i.e., Chinese did not give any information so they did not infer a problem from that whereas in FYC, students made inferences from observations that were not substantiated)
  ➢ Demonstrated meta-cognitive skills (able to know how and why they know what they know)

Phase II

Results of Phase II of the CTAP suggested improvement between FYC students in the first two weeks of class in Fall 2009 and in the final week of classes in Spring 2010 in their critical thinking ability. While the majority of the students received Satisfactory or Excellent scores in both semesters, there was an increase of 6% more students receiving Satisfactory or Excellent at the end of the two-semester sequence. Additionally, 5% fewer students received Unsatisfactory scores.

The borderline scores (composite of 5) decreased by 10% in spring 2010; more significantly, 16% more students in Spring 2010 had resolutions up to competent by a third reader (compared to Fall 2009). In addition, 16% fewer students had resolutions down to below competent by a third reader.

In both sets of readings, there was extremely high inter-rater agreement – 93% in Fall2009 and 97% in Spring 2010.

General Comments about Papers
In a closing discussion at the end of the holistic scoring session, the 7 readers offered the following general statements about the rubric, the prompt, the reading, and the students' essays:

● Rubric was significantly improved and was especially helpful in determining the difference between a 2 (below competent) and a 3 (competent) as well as between a 4 and a 5. Some instructors felt the word "problem" was difficult and preferred "thesis" or "issue" or "argument."

- Reading "Race Over" was difficult but did lead students into immediately critical thinking. There was a certain amount of irony in the essay which almost all students did not notice. Reasons for this vary but most instructors felt texts used to teach critical analysis skills tend to be serious and that few instructors talk about "satire" or "irony." Thus almost all the students read the essay "straight up."
- Prompt – probably not very portable. This prompt talks about rhetorical effectiveness and strategies, a skill set very specific to English 102 at The University of Arizona. A better prompt might have asked students to read a **researched** essay and analyze the effectiveness of the argument. Also, the rhetorical analysis essay taught in English 102 is a five page essay and this prompt asked students to do a rhetorical analysis in about 2 pages.
- Readers felt the prompt encouraged students to "write an essay" rather than "answer a prompt."
- Three instructors read the Phase I papers as well as the Phase II papers. All three felt the writing itself was improved for the FYC cohort; in addition, all the readers believed that the overall writing was improved.
- All the readers were impressed with "decently structured essays" which they felt students in August could not do.
- The subject matter of the reading ("Race Over") suggested a very serious topic and students did address the subject matter in mostly serious ways (almost no students noted the irony in the reading).

Rubric
During Phase I of the Project, the readers discussed several problems with the rubric (Appendix C). Generally, the readers found the descriptors under the 4 rating (above average) problematic: competent, adequate, satisfactory, reasonable. These are terms better suited to a 3 rating. In general, terminology was inconsistent and sometimes too vague. All 10 raters submitted their notes on the rubrics to Dr. Hall and Dr. Johnson.

Based on input from the readers, faculty, and ACC members, the rubric (Appendix G) was revised for Phase II of the CTAP. Three of the readers who had participated in Phase I of the CTAP indicated that the revised rubric was much clearer than the earlier version and commented on its usefulness in assessing papers.

Next Phase
During fall 2010, revised assignments will be given to students in several Tier Two classes. More long-term plans include developing assignments/models for assessing CT in senior capstone courses and designing a longitudinal study in which a cohort of first-year students are tracked across several years to assess their critical thinking abilities.

The results of the CTAP will, hopefully, be used to inform discussions about institutional goals and standards for critical thinking on the campus.

VII. **Appendices**
    A: Critical Thinking Assignment – Fall 2009
    B: Reading – Fall 2009
    C: Critical Thinking/Problem Solving Rubric – Fall 2009
    D: Score Distributions by Student Group – Fall 2009
    E: Critical Thinking Assignment – Spring 2010
    F: Reading – Spring 2010
    G: Critical Thinking/Problem Solving Rubric – Spring 2010

H. Score Distribution – Spring 2010

Appendix A: Critical Thinking Assignment – Fall 2009

Directions: Read *Style Showdown: $1,000 sweater Faces $100 Rival,* then answer the following questions. The assignment should take about one hour to complete and should be at least two pages in length

1. In your own words, describe two similarities and two differences between the two sweaters and then discuss what is significant about the similarities and/or differences between the two sweaters.

2. Create a classification for the sweaters according to the similarities/differences you have identified (for example, relatively inexpensive and expensive, etc.)   You may want to consider an outline or diagram several relationships in order to determine possible categories for classification.

3. How would you design and manufacture a sweater given what you have learned from the reading? Feel free to combine features of both or to suggest new ideas.

4. What criteria should consumers use when purchasing goods of this type?

November 29, 2007
ON STYLE
By CHRISTINA BINKLEY

Style Showdown:
$1,000 Sweater Faces $100 Rival
November 29, 2007

It's one of the abiding mysteries of fashion: Is it really worth paying $1,100 for a white cotton blouse or $750 for one of the turtleneck sweaters we see in high-end stores and magazines?

If the labels fell off, would these basic items still feel like they're worth so much? The question arises more often these days, as stores like Zara and H&M thrive on selling inexpensive fashions that resemble those of high-end designers like Chanel and Dior.

With the holiday gift-giving season upon us, I decided to put a couple of standard sweaters to the test. While I anticipated differences in style and quality, I was unprepared for the political issues that arose from my study of these two sweaters. What started out as a look at fashion choices turned into a lesson on globalization.

For this test, we chose two cashmere sweaters from clothiers with excellent reputations for quality and service, one at each end of the price spectrum. One came from Lands' End and cost $99.50 before tax and shipping. The other, from Italian luxury cashmere maker Brunello Cucinelli, cost $950 before tax and the valet parking fee at Saks Fifth Avenue in Beverly Hills.

The sweaters are outwardly similar: long-sleeved black mock turtlenecks, knitted with two-ply yarn, which means each string is made of two strands that have been twisted together. Both sweaters are made of cashmere combed from Mongolian goats, which are said to grow fine, long hairs to survive the tough winters. The long hair leads to less pilling, which is a real sweater killer.

And both garments arrived with deficiencies. My Lands' End sweater felt stiff and glossy. After wearing it twice, I tossed it in the delicate cycle of my washing machine, and it emerged soft and supple.

I chose a style called a "cashmere tee" that is trimmer and more feminine than the company's core big and snuggly cashmeres. New this fall, the mock turtle is cut to layer under a jacket. Despite the fresh styling, it lacks sophistication, and the fabric tends to wrinkle, particularly at the crook of the arm. Still, it's an attractive, basic sweater -- soft, comfy and, hey, the price was right. According to Michele Casper, a spokeswoman for Lands' End, it should last for many years. If not, she noted, I can exchange the item or geta refund. "Everything we sell at Lands' End is guaranteed. Period."

The Cucinelli sweater has a springier weave that drapes gracefully and hasn't wrinkled or bagged at stretch points. It was a little more uniformly soft than the Lands' End fabric. While all Mongolian goat hair isprized, prices vary according to quality, and some Italian manufacturers pride themselves on buying the best grades of cashmere at auction -- one reason for some sweaters' higher prices. The sweater also has subtly stylish details -- such as small buttons at the back of the neck that make it easy to pull the sweater over a hairdo and makeup.

That's a nice feature, but when I got it home, I discovered the sweater had unraveled at the teardrop opening at the nape of the neck. This required a tiresome trip back to Saks, where they repaired the tear, telling me that if it happens again, I should bring it right back. At that price, they can count on it. But Cucinelli should probably incorporate some sort of reinforcement at that pressure point. A spokesman for the designer called the flaw a "fluke" and said Cucinelli has a damage-return rate of just 0.005%.

The standout facets of the Cucinelli sweater are sleeves that taper at the forearm and then flare at the wrist, and layers of silk chiffon that have been hand-sewn at the neck and wrists. My friend Roberta tried it on. "It does feel really nice on my neck," she said, noodling her head around. These style details drew attention as I wore the sweater (the Lands' End sweater garnered no compliments). But people looked stunned if I told them the price.

So there were style differences between the luxurious designer sweater and its counterpart, however solidly made. Another sort of distinction emerged as I learned how each sweater was manufactured. The goat hairs took very different paths after being bundled into bales and taken to auction in Mongolia.

The label of the Lands' End sweater says "Made in China." Lands' End gave me an extensive primer on its Mongolian yarns. But it turned out that the company isn't involved in that part of the process. It purchases the finished sweaters from a factory in China -- and it's the factory that buys cashmere at auction. Ms. Casper said the Chinese factory spins, cards, combs, and dyes the yarn and weaves it into garments according to Lands' End's specifications. Lands' End, she said, tests the results and requires the factory to meet "all compliances" from **Sears Holding** Corp., which owns Lands' End. She declined to elaborate or to divulge the name of the factory or even the region of China where it's located. She did say: "The cashmere factories are very clean and feature all state-of-the art, updated equipment. The employees feel honored to be employed there."

I was troubled by the company's reticence about the factory that made my sweater. This came against a backdrop of news stories out of China's industrial sector that included recalls of toys, toothpaste and other consumer products. Many people have seen film and photos of Chinese factory workers living in sparse dormitories far from home and working long hours. Concerns about Chinese labor and manufacturing standards have led to the recent increase in "Made in the USA" labels on products made here.
All this contrasts sharply with Brunello Cucinelli, a company founded in 1978 by 54-year-old designer Brunello Cucinelli. Both the Saks saleswoman and Massimo Caronna, Cucinelli's U.S. spokesman and owner of Italian fashion distributor IMC Group, eagerly elaborated on the manufacturing. Mr. Caronna even invited me to visit the factory where my sweater was made, in the tiny Italian village of Solomeo in Umbria, though I didn't make the trip.

According to him, the goat hairs in my sweater traveled in bales from Mongolia to one of several factories in Italy where it was made into yarn. Cucinelli buys about 70% of its yarn from the Italian luxury thread purveyor Cariaggi.

The yarn was then shipped to the Cucinelli factory, which is in a 17th-century castle. Each of its 1,500 employees has a key, says Mr. Caronna. They work each day from 8 a.m. until 1 p.m., breaking for a 90-minute lunch. Many go home for lunch, but Mr. Caronna says that those who stay are served a free three-course meal cooked up by three local women who shop for fresh groceries every morning. Employees return to work from 2:30 until 6 p.m. and then head home.

Mr. Cucinelli wanted to improve on the conditions he saw his father endure as a farm laborer, Mr. Caronna says. The designer has donated some company profits to improvements in Solomeo, such as

restoring the town square, building a local school and, most recently, constructing a town theater. The company, which competes with Loro Piana and also owns the Gunex and Riva Monti fashion lines, expects revenue of $163 million in 2007, Mr. Caronna said.

The Italian manufacturing process also explains a little more about the cost of my $950 sweater. Hand work allows sophisticated design details, like the chiffon, that would be impossible in a garment made entirely by machine. And 25% of the factory employees are devoted to quality control. Before leaving the factory, every item is washed by hand -- one reason the Cucinelli sweater arrived softer than the Lands' End.

Lands' End won't tell us details such as whether its Chinese factory has paid for local schools or serves its workers free three-course meals. But it's safe to say that the Cucinelli is the superior sweater when it comes to style, quality and global social awareness.

Whether it's worth nearly 10 times the price, though, is a matter for you and your wallet.

Appendix C: Critical Thinking/Problem Solving Rubric – Fall 2009

This rubric derives from speculation on what the assignment requires: many papers/assignments incorporate only some of the requirements listed here. The score you assign should reflect your sense of the predominant effect of the paper. In some instances, a second reader will also rate the assignment.

5	4	3	2	1
• **The assignment demonstrates mastery of the dimensions associated with critical thinking ability.**	• **The assignment exceeds mere competence in demonstrating critical thinking ability.**	• **The assignment demonstrates competency to the demands of critical thinking ability.**	• **The assignment demonstrates minimal competence in critical thinking ability.**	• **The assignment fails to demonstrate competency to the demands of critical thinking ability.**
• Thoroughly, defines the problem and breaks it down into components and identifies which are central or critical to the problem, organizes components in a logical manner, and places the problem in proper context.	• Provides competent problem definition	• Simplistic problem definition	• Lacks adequate problem definition	• No problem definition
• Clearly, distinguishes reliable from unreliable information, recognizes bias, and identifies relevant information in relation the problem.	• Adequate distinction between reliable and unreliable information, adequate recognition of bias and identification of relevant information	• Limited distinction between reliable and unreliable information, limited recognition of bias and identification of relevant information	• Weak distinction between reliable and unreliable information, weak recognition of bias and identification of relevant information	• No distinction between reliable and unreliable information, no recognition of bias, and no identification of relevant information in relations to the problem
• Recognizes unstated, unsupported, and irrelevant assumptions.	• Satisfactory recognition of unstated, unsupported and irrelevant assumptions	• Limited recognition of unstated, unsupported, and irrelevant assumptions.	• Unsatisfactory recognition of unstated, unsupported, and irrelevant assumptions.	• No recognition of unstated, unsupported, and irrelevant assumptions
• Strong formulation of various hypotheses using relevant information and assumptions, selecting the more promising hypotheses for first consideration.	• Competent formulation of hypotheses	• Simplistic formulation of hypotheses	• Lacks adequate formulation of hypotheses	• No formulation of hypotheses and assumptions
• Draws valid conclusions from assumptions, hypotheses and relevant information. Distinguishes a necessary from a probable inference.	• Draws reasonable conclusions	• Draws weak conclusions and	• Invalid conclusions are drawn	• No conclusions are drawn and no distinction between a necessary and a probable inference

|				
• Strong evaluation of a conclusion in terms of its applicability, recognizes conditions necessary to verify a conclusion and those which make a conclusion inapplicable.	• Adequate evaluation of a conclusion	• Weak evaluation of a conclusion	• Inadequate evaluation of a conclusion	• No evaluation of a conclusion

Appendix D: Score Distributions by Student Group

First Year Composition – 2009
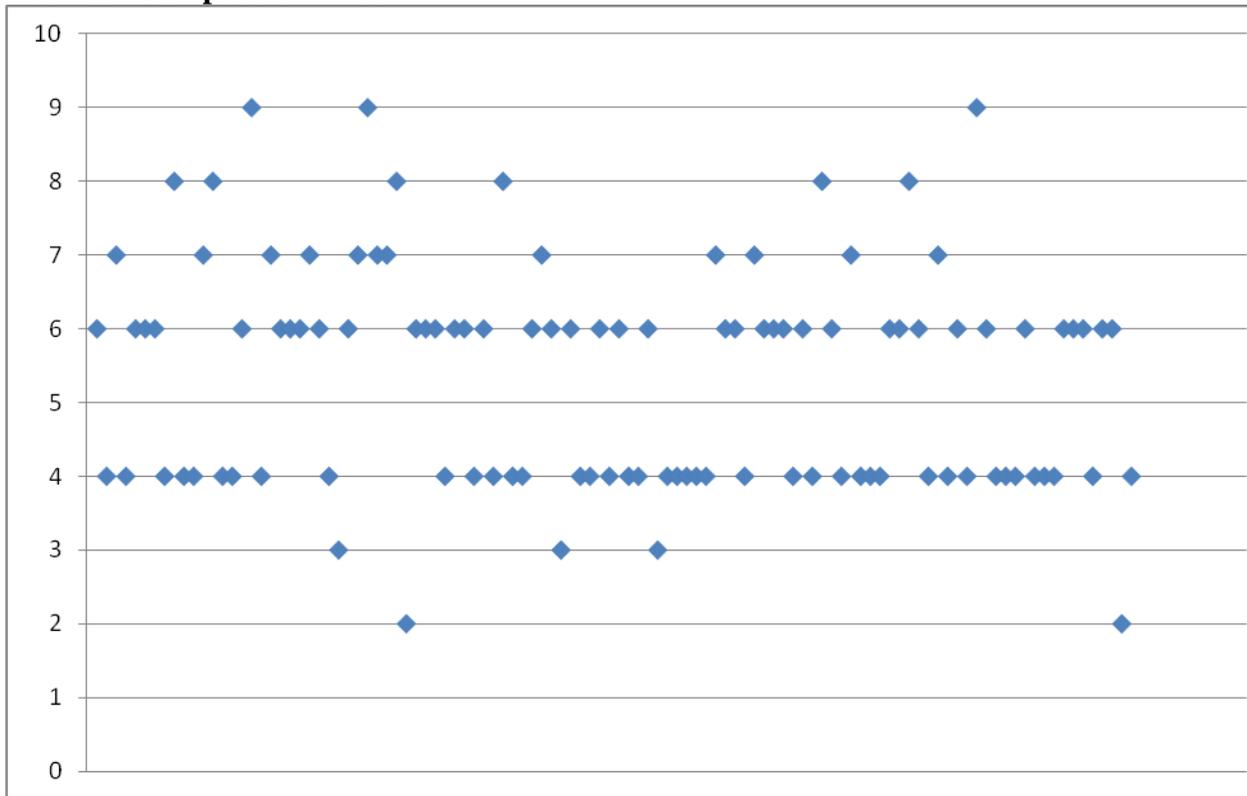
Tier Two - 2009
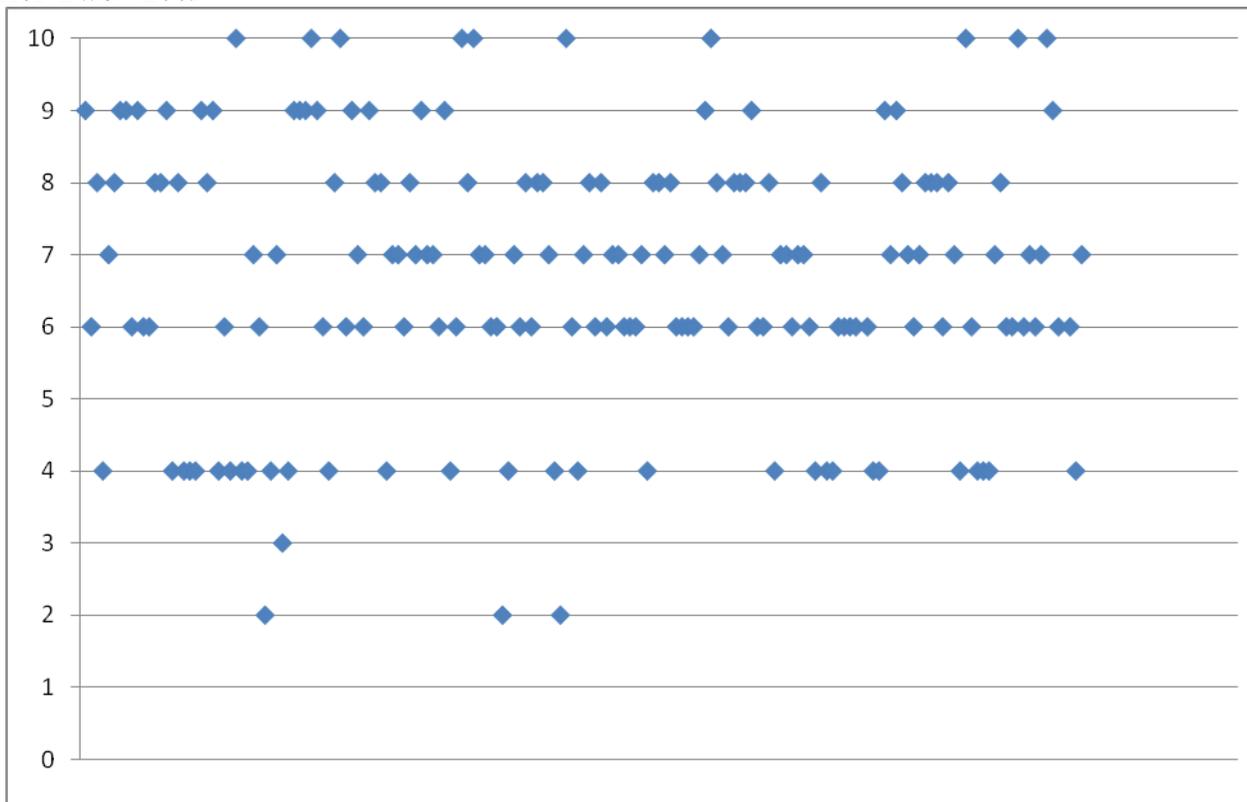
First Year Composition 2010
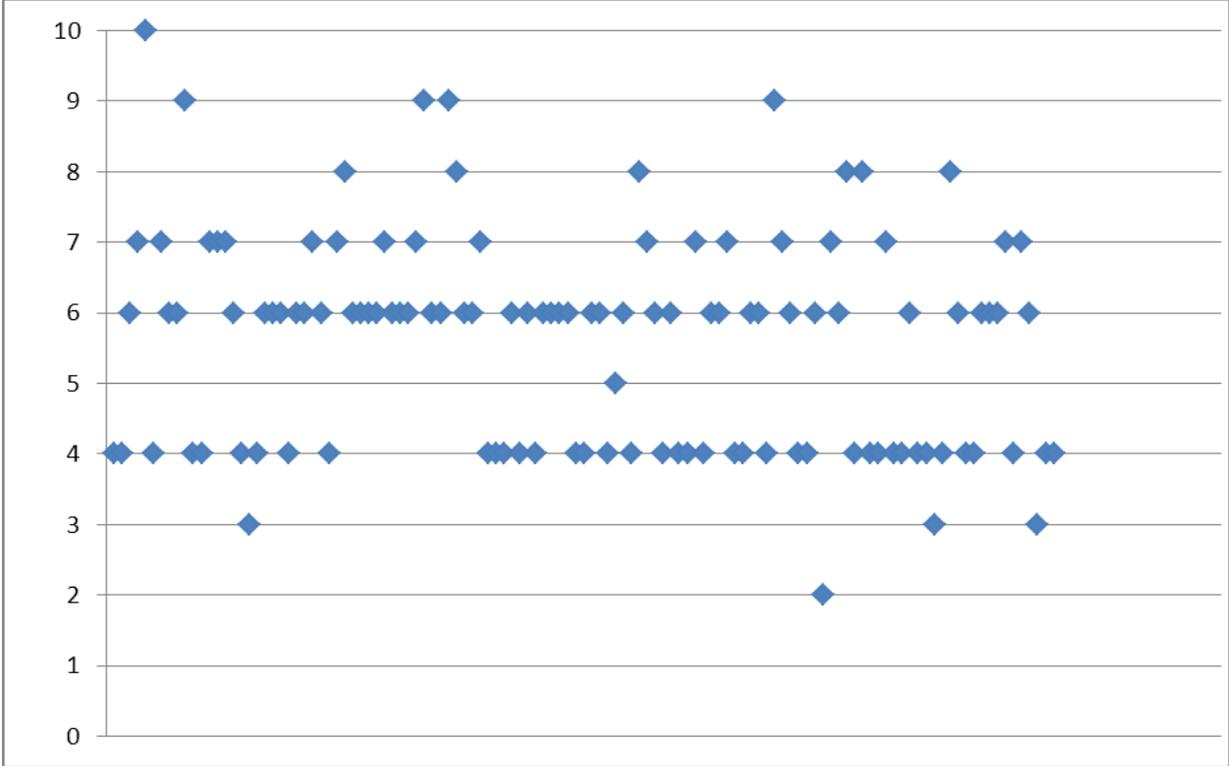
Appendix E: Critical Thinking Assignment – Spring 2010

ENGLISH 102

Directions: Read "Race Over" by Orlando Patterson, and then craft an essay in response to the following prompt. This rhetorical analysis essay should take about one to two hours to complete and should be at least two pages in length.

Prompt: What is Patterson's purpose? What rhetorical strategies does he use? What makes each strategy effective or not? You may make use of your own experiences with race if they are pertinent as critical illustrations of your points.

Appendix F: Reading – Spring 2010

JANUARY 10, 2000

Race Over

BYLINE: Orlando Patterson Orlando Patterson is professor of sociology at Harvard University and author of Rituals of Blood: Consequences of Slavery in Two American Centuries.(Copyright 1999, The New Republic)

SECTION: TRB From Washington; Pg. 6

LENGTH: 1180 words

One can quibble with W.E.B. Du Bois's famous prediction for the twentieth century. This has been not simply the century of the color line but a century of Jim Crow and myriad other persecutions--many within color boundaries. But, if Du Bois's epigraph was only half right, his modern-day disciples, who insist the color line will define the next 100 years as well, are altogether wrong. The racial divide that has plagued America since its founding is fading fast--made obsolete by migratory, sociological, and biotechnological developments that are already under way. By the middle of the twenty-first century, America will have problems aplenty. But no racial problem whatsoever.

For this we can thank four social patterns, each indigenous to a particular region of the country but which together will reshape the nation as a whole. The strongest and clearest might be called the California system. Cultural and somatic mixture will be its hallmark. A hybrid population, mainly Eurasian--but with a growing Latin element--will come to dominate the middle and upper classes and will grow exponentially, especially after the 2020s. Lower-class Caucasians, middle-class racial purists, and most African Americans, under pressure from an endless stream of unskilled Mexican workers, will move away. Those African Americans who remain will be rapidly absorbed into the emerging mixed population. The California system will come to dominate the American and Canadian Pacific Rim.

The second major pattern might be called the Caribbean-American system. Increasingly, the countries of the Caribbean basin will be socially and economically integrated with the United States. As their fragile and already declining economies collapse (most dramatically in post-Castro Cuba), they will swarm the mainland by legal and illegal means. Florida will be the metropolitan center of this system, although Caribbean colonies will sprout all over the Northeast. Caribbean peoples will bring their distinctive concept of race and color to America, one in which people marry lighter and " white" as they move up the social ladder. This system will differ from the California one in that the dominant element will be Afro-Latin rather than Eurasian. Since the Caribbean is much closer than Asia, this system will also create a distinctive social type: genuinely transnational and post-national communities in which people feel equally at home in their native and American locations. Increasingly, people will spend their childhoods and retirements in the Caribbean and their productive years in America. The Caribbean-American system will compete with the African American community not only in the lower reaches of the labor force but as the nation's major source of popular culture, especially in music and sports. But, despite these differences, the Caribbean-American system, like the California one, will render the "one drop" rule obsolete.

The third and most problematic system will be the one now emerging in the Northeast and urban Midwest. Here, the economic situation for all classes of African Americans and native-born Latinos is likely to deteriorate--with the ending of affirmative action, a shrinking public sector, and competition from skilled and unskilled (mainly Caribbean

basin) immigrant labor. The rise of workfare without compensating provision for child care, combined with the growing pattern of paternal abandonment of children, will further undermine traditional family norms among African American, Latino, and, increasingly, the European American lower classes. Reversing the pattern that emerged after World War II, African Americans, Latinos, and the poorest Caucasians will move into the inner and secondary rings of what are now mainly European American middle-class suburbs. The middle classes will move to either gated exurbs or gentrified central cities--leaving a European American underclass that resembles other ethnic underclasses more and more.

But, although these developments will at first exacerbate racial conflict, they will ultimately transform racial frustrations into class ones. Indeed, for the first time in the nation's history, young, poor, and alienated Caucasians, African Americans, and Latinos will find common ground--based on social resentment and a common lumpen-proletarian, hip-hop culture. Even as these young people periodically engage in murderous racial gang fights, intermarriage and miscegenation will escalate as the young poor of all races break away from present gender and racial taboos. In contrast to the California and Florida systems, the growing hybrid population in the Northeast and industrial Midwest will be lower-class, alienated, and out of control. But it will be hybrid nonetheless.

The exception will be in the Southeast, in what may be called the Atlanta pattern. African Americans and European Americans will cling to notions of racial purity and will remain highly (and voluntarily) segregated from each other. Affirmative action will be the bulwark of this system, the price the European American elite willingly pays for "racial" stability and the reassuring presence of a culturally familiar but socially distant African American group and a pliant working class. The old Confederacy will remain a place where everyone knows who is white and who is black and need reckon with no in-between. But, as opposed to the nineteenth and twentieth centuries, when the South defined the terms of racial engagement on which the entire nation interacted (more or less brutally), in the twenty-first century the Southern model will become an increasingly odd and decreasingly relevant anachronism.

For the decline of race as a factor in American life will result not only from immigration, which can perhaps be halted, but also from biotechnology. More and more in the coming decades, Americans will gain the means to genetically manipulate human appearance. The foundations of genetic engineering are already in place. Given the interest of the affluent population in male-pattern baldness, the restoration of hair loss after cancer treatment, and cancer-free tanning, science is likely to create dramatic new methods of changing hair texture and skin color. Indeed, last November, scientists at Columbia University transplanted scalp cells from one person to another. I don't expect many African Americans to chose straight-haired whiteness for themselves or their progeny, but many will opt for varying degrees of hybridity. In a world dominated by mass culture, many will embrace changes that enhance their individuality. Once dramatically manipulable by human action, "race" will lose its social significance, and the myth of racial purity will be laid to rest.

By the middle of the next century, the social virus of race will have gone the way of smallpox. The twenty-first century, relieved of the obscuring blinkers of race, will be a century of class and class consciousness, forcing the nation to finally take seriously its creed that all are created equal. It should be interesting.

LOAD-DATE: January 5, 2000

LANGUAGE: English

Critical Thinking/Problem Solving Rubric
Revised Spring 2010

This rubric derives from speculation on what the assignment requires: many papers/assignments incorporate only some of the requirements listed here. The score you assign should reflect your sense of the predominant effect of the paper. In some instances, a second reader will also rate the assignment.

5	4	3	2	1
• **The assignment demonstrates mastery of the dimensions associated with critical thinking ability.**	• **The assignment exceeds mere competence in demonstrating critical thinking ability.**	• **The assignment demonstrates competency to the demands of critical thinking ability.**	• **The assignment demonstrates minimal competence in critical thinking ability.**	• **The assignment fails to demonstrate competency to the demands of critical thinking ability.**
• Thoroughly and effectively defines the problem and breaks it down into components and identifies which are central or critical to the problem, organizes components in a logical manner, and places the problem in proper context.	• Provides clear problem definition with supporting argument	• Competent problem definition even if not fully sufficient	• Simplistic or less than adequate problem definition	• No problem definition
• Clearly and effectively distinguishes reliable from unreliable information, recognizes bias, and identifies relevant information in relation the problem.	• Clearly distinguishes between reliable and unreliable information, adequate recognition of bias and identification of relevant information	• Makes some distinctions between reliable and unreliable information, limited recognition of bias and identification of relevant information	• Limited or weak distinction between reliable and unreliable information, weak recognition of bias and identification of relevant information	• No distinction between reliable and unreliable information, no recognition of bias, and no identification of relevant information in relations to the problem
• Identifies unstated, unsupported, and irrelevant assumptions with effective analysis that is sophisticated and fresh.	• Identifies and analyzes effects of assumptions	• Identifies assumptions	• Limited or unsatisfactory identification of assumptions	• No identification of assumptions
• Strong formulation of various hypotheses using relevant information and assumptions, selecting the more promising hypotheses for first consideration.	• Effective formulation of hypotheses developed with consistent detail and explanations	• Formulation of hypotheses though may lack in sufficient analysis	• Lacks adequate formulation of hypotheses	• No formulation of hypotheses and assumptions

• Draws significant and valid conclusions from assumptions, hypotheses and relevant information. Distinguishes a necessary from a probable inference.	• Draws reasonable conclusion that is generally effective	• Draws adequate conclusions with reasoning that is generally coherent	• Invalid conclusions are drawn and reasoning is hard to follow	• No conclusions are drawn and no distinction between a necessary and a probable inference
• Strong evaluation of a conclusion in terms of its applicability, recognizes conditions necessary to verify a conclusion and those which make a conclusion inapplicable.	• Effective evaluation of a conclusion	• Competent if overly general evaluation of a conclusion	• Weak evaluation of a conclusion	• No evaluation of a conclusion

Appendix D: Score Distributions FYC 2010