



**Center for Teaching and Learning of Hostos Community College
GraduateNYC! College Readiness and Success Project**

**Developing Scientific Literacy and Critical Thinking Skills in
College Introductory Courses by Integrating High School Trends**

**Final Report
Academic Year 2013-2014**

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1- Objectives

- To improve college faculty understanding of Common Core Standards related to critical thinking, scientific literacy and student engagement in high school
- To improve high school teacher knowledge of strategies used to develop critical thinking and scientific literacy as well as student engagement and curiosity to learn and discovery at the college level
- To improve high school teacher and college faculty knowledge about assessment strategies and curriculum design used in both the high school and college arenas
- To improve mutual understanding between high school teachers and college faculty about the progression of skill development from high school to college introductory courses to high level college courses

2- Project Summary

This project intended to develop college faculty understanding of high school culture related to the development of critical thinking and scientific literacy in the High School graduate/incoming college freshman transition period. A year-long program brought together Hostos faculty and Bronx high school teachers to foster a mutual understanding of High School Common Core Standards and CUNY pathway curriculum reforms, and its effects on above mentioned skill development. Both faculty cohorts worked together on concrete design, dissecting assignment and assessment tools reconciling college faculty expectations and high school student preparedness. Overall, the project aimed to establish a longstanding dialogue that would keep integrating college freshmen expectations into the curriculum beyond the project period.

3- Project Description

- This project developed a one-year seminar that brought together Hostos Community College and High school faculty from the Bronx to foster discussion and critically examine the development of scientific literacy and critical thinking in our students. We initially focused on students enrolled in Psychology (PSY101), an introductory course at Hostos community college. This course has no math, reading or writing pre-requisite; therefore, its curriculum design requires that faculty calibrate pedagogy based on the remedial level, or high school preparedness level, students bring to the class. The course is *necessarily* designed to address student high school preparedness in reading and writing instead of assuming adequate basic skills. Students pursuing different majors such as Allied Health, Liberal Arts, Education, Social Work, Criminal Justice and Sciences take PSY101 courses. Some of these students then take advanced Psychology course that have PSY101 as pre requirement. Seminar participants explored the development of skill progression as addressed in these courses. The participants discussed different classroom management tools helping to dissect both student initial student level and their progress along the course.

4- Participants

NAME	INSTITUTION
AziziSeixas	Hostos Community College
Bethany Antonelli	Fredrick Douglass Academy III
Christine Cortez	KIPP High School
Ernest Ialongo	Hostos Community College
Jacqueline DiSanto	Hostos Community College
John Heneghan	Fredrick Douglass Academy III
Kate Wolfe	Hostos Community College
Kristina Miceli	Fredrick Douglass Academy III
Mary Carmen Irizarry- Santos	International High School, Walton Campus
Nelson Nunez- Rodriguez	Hostos Community College
Sarah Brennan	Hostos Community College
Tony Varelas	Hostos Community College
Julissa Soriano	Fredrick Douglass Academy III
SuleikaDotel	World View High School, Clinton Campus
Marc Newman	World View High School, Clinton Campus

5- Project Implementation

Seven monthly meetings took place during the academic year 2013-2014. Project organization began immediately after award notification. All participants filled out a pre-survey during the first seminar and a post seminar survey during the last seminar session. A final presentation open to all Hostos faculty and High school representatives was held at Hostos Community College on May 1, 2014. Two instructors facilitated each seminar meeting: one high school teacher paired with one Hostos faculty member. Meetings took place on Thursdays from 4:15pm to 5:45pm at Hostos Community College.

Assessment Tools:

- All participants filled out a survey before beginning the seminar and during the last seminar. This assessment artifact was common to the three campuses developing the initiative.

- All participants shared their thoughts at the end of each session by writing a journal. All journal entries were scanned and shared with the presenters of the subsequent session. Consequently, they could prepare it based on previous session ideas.

- Journal entries and pre- and post-survey results have been analyzed to produce final recommendations. See below.

Meeting Date	Topic	Facilitators
November 7, 2013 B-465 (10 Participants)	Assumptions, Interpretations, and Questions. Seminar Planning and Expectations. Aligning SLOs, Content, and Skills Development	- Nelson Nunez-Rodriguez, Hostos Community College - Tony Varelas, Hostos Community College -Sarah Brennan, Hostos Community College
November 14, 2013 B-465 (13 Participants)	Working with and Aligning Course / Learning Objectives	- Tony Varelas, Hostos Community College - John Heneghan, Fredrick Douglass Academy III - Nelson Nunez-Rodriguez, Hostos Community College Jacqueline DiSanto Hostos Community College
December 12, 2013 B-465 (13 Participants)	Managing Learning Environments and Expectations	- Mary Carmen Irizarry-Santos, International High School, Walton Campus - Kate Wolfe, Hostos Community College
January 16, 2014 B-465 (13 Participants)	Non-academic Factors Impacting Student Learning and Skills Development	- Kristina Miceli, Fredrick Douglass Academy III - AziziSeixas, Hostos Community College
February 27, 2014-Faculty Dining Room (11 participants)	Class expectations; Student expectations; What they hope to get?	- Marc Newman, World View High School, Clinton Campus - SuleikaDotel, World View High School, Clinton Campus - Nelson Nunez-Rodriguez, Hostos Community College,

		CUNY
April 3, 2014 @ 4:15pm Faculty Dining Room (12 participants)	Creating independent learners; Connecting skills needed to be successful in high school with skills needed to be successful in college -Post-Survey & Seminar Feedback/Assessment	- Ernest Ialongo, Hostos Community College - Christine Cortez KIPP High School
May 1, 2014 Final Presentation (B311)	Final Presentation (Open to College Community and High School teachers)	All Participants

6- BUDGET

<u>Category</u>	<u>Amount</u>	<u>Agency</u>
Project leader compensation (5 leaders).	\$111.4/1.5 hour meeting/ 6 meeting. This amount also includes time devoted to project preparation=\$3342	Graduate NYC! (\$7,500)
Participants compensation (3 college professors and 8 high school teachers)	\$63/1.5 hour-meeting/6 meetings/11 people = \$4158 No compensation for two open last meetings which included widespread recognition)	
- Meeting/Support (Refreshments and learning materials)	\$2,000 (\$200/6 meetings and \$500/2 meetings)	
	Total Graduate NYC!	\$7,500
	Total Hostos CC	\$2,200
	Grand Total	\$9,700

7- Output/Outcomes

Based on Participants Journal entries:

- **Scheduling/Attendance:** We scheduled sessions at 4:15pm to allow teachers for nearby schools to reach our campus. We have more than 70% attendance in all meetings even with one participant on maternal leave during spring 2014.

- **Seminar structure:** Having a different pair of faculty as facilitators for each session worked out. All participants took ownership of the project nurturing a safe atmosphere among us.

- **Seminar atmosphere:** All participants shared challenges and opportunities during all meetings. Seminars were developed based on short presentations and extensive conversations among participants.

- **Syllabus vs Lesson Plan:** College faculty members referred to pay more attention to syllabus. On the contrary, high school teachers are more focused on lesson plans. College faculty members understand the syllabus as living document but variations along the term should be discussed with students; therefore, they would trust the syllabus information.

- Freshman students undergo a shock when transitioning from a structured class setting based on lesson plans to college classroom settings.

- **Class Expectations:** Freshman students usually do not assimilate excessive syllabus information during the first day of classes. Weekly updates regarding class pace and expectations are recommended.

- **Deadline Policies:** College faculty working with freshman students have recognized the need to reinforce syllabus policies and deadline due dates as freshman students bring little understanding about this college preparedness skill. Pedagogy is based on assumptions. It triggers a lot of misunderstandings as instructors assume students bring habits related to deadline observation and syllabus policy. Both cohorts struggle with student class preparation and learning attitudes.

- **Non-academic factors:** Both faculty college and the high school teacher cohort recognize the need to decrease social distance between students and instructors as a way to embody their social needs, backgrounds, and challenges. For college faculty, it is a constant challenge to find a balance among class rigor, engagement and establishing rapport with students. Other insights related to this point:

- How can we reconcile the social and cooperative learning environment habit that High School students are bringing to college? Is this factor influencing freshman experience?

- We should recognize student fear and lack of confidence by building environments that increase academic and social proximity between student and instructor and help them to develop a sense of belonging to higher education institutions.

- Converting problematic situations into teachable moments: We should validate the role of mistakes in the learning process

- **The role of student feedback:** It is critical to build a safe atmosphere based on mutual trust and respect as a way to retrieve honest student feedback and discuss class expectations based on it.

- **Assumptions and unclear expectations as sources of misunderstanding and disruptive classroom management:** Systematic and clear communication with students

about class expectations should be considered. Otherwise, class management can be disrupted as students constantly misunderstand instructor expectation. In this regard, did anyone discuss with students the role of note taking in learning? When? How? Is this skill lost? What is its usefulness during this digital learning era as many students prefer taking pictures from board or recording instructor voice? Indeed, many instructors post recorded lectures in different digital platforms. Other students, as auditory learners, need to listen before writing in order to understand. They can't be taking notes simultaneously. A High school instructor referred that she systematically clarifies what board notes must be written by students. She shared her strategy.

The same applies for appropriate behavior in academic setting. Positive reinforcement and positive framing appear as strategies to foster self-motivation and self-advocacy. It is also important to be consistent with guidelines and syllabus expectations. What classroom behavior is appropriate in academic setting? Was it explicitly explained to students somewhere?

- College Faculty take-away messages:

- To better clarify deadline policy. High school students bring the idea deadlines are always flexible;
- Weekly updates regarding class pace and expectations are recommended;
- The use of concept map, weekly syllabus reminder to keep the class pace;
- College faculty question themselves to what extent they have to be motivating students all times.

High School Teachers take-away message:

- To develop strategies to allow students to create their own assignments;
- To develop strategies emphasizing college expectations regarding class behavior and assignment mechanics.

Both cohort take away messages:

- To increase the use of conceptual map in the class (developing it in the class with students), and weekly syllabus reminder to keep the class pace;
- To foster intellectual environment developing students as free thinkers and their capacity to take risks;
- To systematically clarify class expectations as instructor assumptions usually lead to class disruptions. It means discussing with students the meaning of specific guidelines and instructions in order to verify they understood its meaning.

Based on Pre- and Post-survey Analysis (see attached post-survey results)

The majority of seminar members reported having a better understanding of high school expectations regarding graduating students. Both high school and college groups overwhelmingly support the need for continuing this type of dialogue. Seminar participants showed a willingness to implement some of the above-discussed ideas in their curriculum as their syllabi and lesson plans would most likely allow it. No attendee had participated in an exchange between high school and college culture previously. All of them expressed desire to participate in future similar experiences. It is recommended

that we reunite one year later and discuss as a focus group how this experience positively impacted our pedagogy and ultimately our student success.

8-Dissemination Plan

- Campus wide: An open final presentation based on seminar findings was held at Hostos Community College on May 1, 2014. All Hostos faculty and High school teachers from participant schools were invited.

- CUNY wide: An hour presentation was given at 2014 CUNY CUE conference at La Guardia Community College May 2, 2014.

- A Final report document and a booklet summarizing program structure and outcomes have been produced. The booklet was distributed to all attendees to the campus wide final presentation. The final report is available at Hostos Center for Teaching and Learning website.

9- Final Recommendations

- This seminar structure, considering high school teacher schedule, should be considered for similar professional development in the future;

- To reinforce the importance of deadline and syllabus structure in courses and seminars designed for freshman students;

- Humanizing college syllabus: A weekly update of class expectations and paper due appear to work in many class setting. Technology tools such as Blackboard and email reminders are recommended as ways to keep engaged students with this follow up information;

- Freshman courses and seminars should consider how students adapt from structured lesson plan-based classes to different college classroom settings;

- To reunite this high school/college instructor cohort in one year to discuss how this experience positively impacted pedagogy and ultimately our student success;

- To bring learners (the students) to the conversation. They have a lot to contribute to this type of discussions.

Final thoughts: This seminar made all of us realize how much dialogue and understanding are needed among high school and college cultures. Both cohorts' members were eager to know other groups' environmental challenges and opportunities. Future professional development initiatives for high school and college instructors should consider the dynamic changes of both systems and how it constantly affects freshmen college students.

GRADUATE NYC! POST-PROJECT SURVEY FOR COLLEAGUES FROM CUNY CAMPUSES

n = 12

1. I have a better understanding of the expectations that high school instructors have of graduating seniors.

[7]Strongly Agree **[4]** Agree **[1]** Neutral **[0]** Disagree **[0]** Strongly Disagree

1. And they are surprising!
2. The high school instructors have the same issues as we do but what I didn't know was what they expected. That is much clearer now.
3. Already a teacher in high school, but I see some ideas here that are only more in-depth explained.

2. I have a better understanding of the New York State Common Core Learning Standards for English Language Arts & Literacy.

[3]Strongly Agree **[2]**Agree **[4]**Neutral **[1]**Disagree **[2]**Strongly Disagree

1. One instructor share materials with me.
2. I think I can have more and more explicit discussions about this.
3. This topic was not really discussed. Looking into the intro.
4. Didn't cover it.

3. There is value in cross-institutional conversations that explore teaching practices at the high school and college levels.

[12]Strongly Agree **[0]**Agree **[0]**Neutral **[0]**Disagree **[0]**Strongly Disagree

1. Learned a lot here.
2. We have a lot of common challenges. Great conversations.
3. This is a great experience!
4. Can't say enough. Every college should participate in this with community high schools.
5. As the above question implies (CCCS), may have the same expectations.
6. Lots of misconceptions become realized and realities of how much students in this population are behind.

4. To what degree is there flexibility to change curriculum based on the ideas generated by this collaboration?

[6]A great deal of flexibility **[5]**Some flexibility **[1]**Neutral **[0]**Little flexibility
[0]No flexibility

1. Particularly for high school – as far as changing lessons to fit in these ideas.

2. I think we are doing a lot of these things/ideas. I'd like to implant these strategies – most are not something that can be documented on the evolution sense. They are classroom strategies.
3. College faculty members have more latitude to do so with their courses.
4. More ideas about motivation, working class expectation has seen a common topic.

5. To what degree would you be willing to change your teaching practices based on the ideas generated by this collaboration?

[8]Very willing **[4]**Willing **[0]**Neutral **[0]**Somewhat willing **[0]**Not willing

1. Many great ideas have been generated.
2. I leaned techniques, tips and theories.
3. Lot of good discussion on behavior and expectation/effort.
4. Some of the best ideas that I have had have been from these sessions.
5. Many great ideas have been generated.

6. I have, prior to this project, participated in cross-institutional conversations that explored teaching practices at the high school and college levels.

[2]True **[10]**False

1. Focused on English and Math skills.
2. We do need this type of dialogue.
3. I would love to continue these conversations as they are very valuable.
4. This is my first cross-institutional conversation seminar.

7. Why did you agree to participate in this project? What do you see as the most important outcome of this project?

1. As an introduction to my 11th graders who will soon be entering the college lifestyle. I am concerned with their preparedness from the experience and the skills they need before graduation.
2. Because of my background in Teacher Ed I couldn't do it.
3. I was wondering about school climate.
4. Talk about a high school/college how valuable this was and it was.
5. I agreed to participate in order to gain a better understanding of college expectations and take them back to my school.
6. I see the value in understanding what skills college freshman bring to the community college and how we work together to foster student success.
7. To improve my teaching.
8. I wanted to better understand what students experienced in high school see that I will better calibrate the delivery of my expectations.
9. This project is extremely necessary now that we need to collaborate in order to prepare students for college and career readiness.

10. I wanted to listen and share experiences and expectations for high school and college teachers in hopes that I can find ways to help students bridge the transition from high school to college.
11. I am eager to learn new ways to help my students become college ready.
12. Believe in power of discussion and/open dialogue.

8. Did the project meet your expectations? Please explain

1. Yes very much. It was valuable to learn about the “other side” and I now feel better prepared to approach the difficulties students enter college with.
2. Exceeded them – open atmosphere was thrilling.
3. Yes, lot of great conversations and ideas expressed to help generate new ideas.
4. The project did give me an insight about what is expected once they get to college.
5. Above expectations.
6. Yes, I have a better understanding of my students and what I need to revise in my pedagogy.
7. Yes, I learned a lot about the pedagogies of college and high school.
8. It exceeded them!
9. Yes, the journal document
10. This project was great. I really enjoyed the cross-cultural conversations.
11. Yes, we built understanding.
12. Yes, exceeded them!
13. Yes, the journal documented my ideas.

9. Would you like to participate in similar collaborations in the future?

1. Yes [8]
2. Absolutely [2]
3. I would love to participate in future sessions.
4. Absolutely, I hope this particular continuous.

10. Any final thoughts that can help to further develop future and similar initiatives?

1. Visit classrooms of the participants.
2. Great workshop I am happy with the seminar. Keep it up, the facilitators, the venue and everything was excellent.
3. Turning this into a CUNY wide event is the next step. I believe we achieved much at Hostos.
4. Great program. Include other schools that send students to Hostos. Get more time to write in journals. We should update group members when we incorporate the things we learned.
5. More discussions about collaboration and teacher practices as well as common Core and pathways.
6. It would be interesting for high school and college professors to plan a curriculum or syllabus that can be used with high school seniors.
7. Great idea.
8. This was valuable I need time to digest it.

9. More high schools and colleges – participation is key.