Esther Isabelle Wilder
QR Assessment Results
Sociology 240: Death, Dying and Bereavement

To refresh everyone's memory, my QR learning goals are as follows:

(1) **Knowledge and Conceptual Understanding**: I want students to be able to distinguish between an absolute number and a rate, and be able to calculate and express a rate (e.g., as a percentage or in some other analogous forms, such as the number of deaths per 100,000 people).

(2) **Thinking and Other Skills:** I want students to be able to apply their understanding of the distinction between absolute numbers and rates to make arguments and understand societal trends. For example, I want students to be able to understand that even though China has one of the largest absolute numbers of cremations in the world, the actual rate of cremation is higher in Japan. And ultimately, I want students to be able to apply their knowledge from the course to better understand and explain this distinction.

(3) **Attitudes, Values, Dispositions and Habits of Mind**: Analyze newspaper articles or statements about absolute numbers and (habitually) define the relative context that allows the numbers to be placed in an appropriate comparative context. (As I mentioned earlier, I want student to internalize the distinction between absolute numbers and rates so that they are constantly questioning data that plays on these distinctions -- but this is not easy to measure. For example, if someone says, "There are more homeless white people than homeless black people in the United States," they can turn around and say, "Well, that may be technically true, but to get a sense of homelessness you really need to look at rates." In short, I would say I want students to demonstrate an appreciation of the applicability and importance of the distinction between absolute numbers and rates, and to feel comfortable with their ability to apply it in everyday life.)

My QR assessment, attached to this document, included both a pre-test as well as a post-test. Altogether, I had 17 students (out of 25) complete both the pretest as well as the posttest in my Sociology 240 course in the Fall of 2013 (of course, some students were absent the day I administered the assessment). I have also attached the results from these students (i.e., frequencies and data analysis)![1] I am still planning to do more detailed statistical analyses (e.g., examining variation in students' performance by variables such as transfer status, primary language, etc.), but for now these data provide some interesting results.

Overall, the results showed that students did significantly better on the posttest vs. the pretest. The most notable finding was a significant improvement in students' ability to set up an equation/calculation for a death rate. Only18% of students got that correct on the pretest,

whereas 50% received all or partial credit on the posttest. Although the other individual questions did not yield statistically significant findings, each of them was also associated with an improvement in student performance and collectively the mean scores on the pretest and posttest were 2.09 and 3.47 respectively. (As illustrated in my scoring rubric, students can score up to 7 points on this assessment instrument.) While these scores may seem low, the change in performance represents a 66% increase in students' average scores. But of course, there is also room for improvement.

In spite of the assignment, and other associated instructional activities, students continue to have many problems with interpreting rates and understanding what can (or cannot) be interpreted from absolute numbers vs. rates. These are areas that will need continued attention in my future teaching and I plan to spend more time having students doing hands-on activities that will help them to develop these skills. In short, they have done a much better job with the mechanics of quantitative reasoning operations, but they continue to have a lot of difficulty with interpreting quantitative information (a higher-level skill).

The assessment instrument also had some questions about students' attitudes towards QR and mathematics. Overall, these results did not yield significant results, though ideally we would like to see students expressing more appreciation for the importance of these and other QR skills for their everyday lives.

I certainly will be undertaking QR assessment in my courses in the future, as I believe assessing student learning is critical to understanding whether or not I am succeeding in achieving my QR learning goals. I may also devise some simpler instruments that are easier to score, but I think this one gets at some important QR skills in a way that really assessing the 'reasoning' aspect of quantitative reasoning!

Note:

1. I used McNemar's test and the Wilcoxon signed-rank test to assess statistical significance. McNemar's test is appropriate for nominal data and is applied to a 2 x 2 contingency tables with a dichotomous trait (e.g., correct vs. incorrect), with matched pairs of subjects. The Wilcoxon signed-rank test is the appropriate non-parametric test for comparing repeated measurements on a single sample to assess whether the mean ranks of two populations differ.) I am especially grateful to Rebecca West who carried out the statistical analysis of the data.

Name _____

Date _____

Quantitative Reasoning/Quantitative Literacy
Assessment Instrument

Directions: The Quantitative Literacy (QL)/Quantitative Reasoning (QR) Project at the City University of New York (CUNY) is currently in the process of implementing new teaching strategies to strengthen students' quantitative reasoning skills. As part of this effort, we are trying to measure students' attitudes and QL/QR skills. The questions in this assessment instrument are part of this effort. This exercise will not be used in grading your performance in this class and you may refuse participation or skip any questions that you do not wish to answer. At the same time, we ask that you please try your best to respond to all the questions since your responses are very important to this research and will be treated with great respect and confidentiality. Thank you very much for your participation in this exercise!

Quantitative Reasoning or Quantitative Literacy may be thought of as "a 'habit of mind,' competency, and comfort in working with numerical data. Individuals with strong QL skills possess the ability to reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations. They understand and can create sophisticated arguments supported by quantitative evidence, and they can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate)" (Association of American Colleges and Universities 2010).

1. What is the name of the course (or code) where you are filling out this questionnaire?

_____

2. What is the section (or meeting time) of the course?

_____

3. How many college courses are you currently taking this summer?

a. ○ 1-2 classes
b. ○ 3-4 classes
c. ○ 5 or more classes

4. What is your sex?

a. ○ Male
b. ○ Female

5. What is your current age?

_____

6. Did you transfer to Lehman?

a. ○ No
b. ○ Yes, from a community college
c. ○ Yes, from another college (but not a community college)

7. Please indicate the <u>single</u> race or ethnicity that you most closely identify with:

a. ○ White/Caucasian
b. ○ Black/African American
c. ○ Indian/Native American
d. ○ Asian or Pacific Islander
e. ○ Hispanic/Latino/Latina

8. Were you born in the United States?

a. ○ Yes (please go to Q #9)
b. ○ No (please answer Q #8a)

8a. What country were your born in?

_____

9. Is English your first language?

a. ○ Yes (please go to Q #10)
b. ○ No (please go to Q #9a)

9a. What is your first language?

_____

10. What is your current status at Lehman?

a. ○ Freshman (30 or fewer credits)
b. ○ Sophomore (31 to 60 credits
c. ○ Junior (61 to 90 credits)
d. ○ Senior (91 to 120 credits)
e. ○ Graduate Student
f. ○ Other

11. What is (are) your majors(s)? If undecided, please indicate below.

_____

_____

12. What is (are) your minor(s)? If undecided or none, please indicate below.

_____

_____

13. Where did you attend high school? (Please check all that apply.)

a. ○ Public high school in NYC, Yonkers or Mount Vernon
b. ○ Specialized public high school in NYC (Bronx Science, Brooklyn Poly, etc.)
c. ○ Public high school outside NYC/Yonkers/ Mount Vernon
d. ○ Private or parochial high school in US
e. ○ High school outside of US
f. ○ Earned a GED

14. What was your average grade in high school? (If you don't know, please provide an estimate.)

_____

15. What was your average grade in high school mathematics classes? (If you don't know, please provide an estimate.)

_____

16. What is your current Grade Point Average (GPA)? If you don't know, please provide an estimate. If this is your first semester at Lehman, please write "No GPA".)

_____

17. Are you currentlyworking at a job for pay?

a. ○ No
b. ○ Yes, less than 5 hours/week
c. ○ Yes, 5-10 hours per week
d. ○ Yes, more than 10 hours/week

18. Are you currently caring for one or more children &/or adults for more than 10 hours per week (not including paid work)?

a. ○ No
a. ○ Yes

19. What is the total number of math courses or other courses you have taken with a very heavy quantitative focus? (If you don't know, please provide an estimate.)

_____

Instructions: For each of the following questions, please fill in one circle indicating your extent of agreement or disagreement ranging from 1 (disagree strongly) to 5 (agree strongly). If you are not in a position to comment on a particular question, please indicate "Don't Know or Not Applicable (DK or N/A)." Please refer to the cover page of this survey for a definition of "quantitative reasoning."

		Disagree Strongly		Neutral		Agree Strongly	Don't Know or Not Applicable
a.	I enjoy mathematics and quantitative reasoning.	○ 1	○ 2	○ 3	○ 4	○ 5	○ DK or N/A
b.	I am good at mathematics and quantitative reasoning.	○ 1	○ 2	○ 3	○ 4	○ 5	○ DK or N/A
c.	I prefer classes that do not have any mathematics or quantitative elements.	○ 1	○ 2	○ 3	○ 4	○ 5	○ DK or N/A
d.	Mathematics and quantitative reasoning are important for my career goals.	○ 1	○ 2	○ 3	○ 4	○ 5	○ DK or N/A
e.	Mathematical and quantitative skills help me make intelligent decisions about my life.	○ 1	○ 2	○ 3	○ 4	○ 5	○ DK or N/A
f.	I like exploring problems using real data and computers.	○ 1	○ 2	○ 3	○ 4	○ 5	○ DK or N/A
g.	Mathematics and quantitative skills help me understand the world around me.	○ 1	○ 2	○ 3	○ 4	○ 5	○ DK or N/A
h.	I want to study more mathematics or statistics.	○ 1	○ 2	○ 3	○ 4	○ 5	○ DK or N/A
i.	I rarely encounter situations that require mathematical or quantitative skills outside of school.	○ 1	○ 2	○ 3	○ 4	○ 5	○ DK or N/A
j.	I am nervous about learning mathematics and quantitative skills.	○ 1	○ 2	○ 3	○ 4	○ 5	○ DK or N/A
k.	Strong mathematics and quantitative skills help students to do well in other classes.	○ 1	○ 2	○ 3	○ 4	○ 5	○ DK or N/A
l.	There is nothing creative about mathematics or statistics; it's just about memorizing facts, rules and formulas.	○ 1	○ 2	○ 3	○ 4	○ 5	○ DK or N/A
m.	Writing about mathematics and statistics makes it easier to learn.	○ 1	○ 2	○ 3	○ 4	○ 5	○ DK or N/A
n.	Mathematics and quantitative skills are important in everyday life.	○ 1	○ 2	○ 3	○ 4	○ 5	○ DK or N/A
o.	Mathematics and quantitative analysis are solitary activities, done by people in isolation.	○ 1	○ 2	○ 3	○ 4	○ 5	○ DK or N/A
p.	For me, mathematics and quantitative analysis rarely involve exploration, investigation or experimentation.	○ 1	○ 2	○ 3	○ 4	○ 5	○ DK or N/A
q.	Working in groups helps me learn mathematics and quantitative skills.	○ 1	○ 2	○ 3	○ 4	○ 5	○ DK or N/A
r.	I have had sufficient coursework in mathematics and quantitative reasoning to enable me to succeed in my career goals.	○ 1	○ 2	○ 3	○ 4	○ 5	○ DK or N/A
s.	I have had sufficient coursework in mathematics and quantitative reasoning to enable me to succeed in my personal goals.	○ 1	○ 2	○ 3	○ 4	○ 5	○ DK or N/A
t.	I have the mathematical and quantitative skills needed to critically evaluate the media and current events.	○ 1	○ 2	○ 3	○ 4	○ 5	○ DK or N/A

Note: Some of these questions have been adapted from the Dartmouth Mathematics Across the Curriculum Survey.

Quantitative Reasoning (Pretest) Assessment Instrument

Instructions: This assessment instrument is designed to evaluate your ability to interpret quantitative data, including numbers and rates. This assignment will NOT be graded but you are required to hand it in. Please try your best!

Based on the data in Table 1 (attached page), please answer the following 2 questions.

(1) Based on Table 1, please show how the traffic accident fatality rate was calculated for any single year (please set up the equation/calculation).

(2) Based on the data in Table 1, in what year were people most likely to die from traffic accident fatalities? What year were they least likely to die? Please both (a) identify the numbers that support your answer and (b) interpret the data (explain the numbers) to support your answer.

(3) A newspaper article that is reporting on regional differences in accident fatalities notes the following:

> Of all US states, Texas contributed the largest share of traffic accident fatalities in 2011.

Based on this statement, would you feel confident arguing that people in Texas were more likely to die from traffic accident fatalities compared to individuals in other states in 2011? Why or why not?

Table 1
Traffic Accident Fatalities in the United States, 2001 to 2010

Year	Accident Fatalities	Rate per 100,000	Population (approx.)
2001	42,196	14.8	284,969,000
2002	43,005	15.0	287,625,000
2003	42,884	14.8	290,108,000
2004	42,836	14.6	292,805,000
2005	43,510	14.7	295,517,000
2006	42,708	14.3	298,380,000
2007	41,259	13.7	301,231,000
2008	37,423	12.3	304,094,000
2009	33,883	11.1	306,772,000
2010	32,885	10.7	309,350,000

Source: United States Department of Transportation National Highway Traffic Safety Administration 2012 (http://www-nrd.nhtsa.dot.gov/Pubs/811630.pdf)

Name _____

Date _____

Quantitative Reasoning (Posttest) Assessment Instrument

Instructions: This assessment instrument is designed to evaluate your ability to interpret quantitative data, including numbers and rates. This assignment will NOT be graded but you are required to hand it in. Please try your best!

Drawing on the data in Table 1 (attached page), please answer the following 2 questions.

(1) Based on Table 1, please show how the suicide rate was calculated among any single racial/ethnic group of your choice (please set up the equation/calculation).

(2) Among adults ages 35-64, what ethnic/racial group exhibited the highest and what ethnic/racial group exhibited the lowest likelihood of committing suicide in 2011? Please both (a) identify the numbers that support your answer and (b) interpret the data (explain the numbers) to support your answer.

(3) A newspaper article that is reporting on regional differences in suicide notes the following:

> In comparing US regions (Northeast, Midwest, South, and West), the data show that the South contributed the highest proportion of suicides in 2011.

Based on this statement, would you feel confident arguing that people in the south were more likely to commit suicide than those in other regions of the US in 2011? Why or why not?

Table 1
Suicide among Adults Ages 35-64 in the United States, 2011

Race/Ethnicity	Suicides, 2011	Suicide Rate (per 100,000)	Population, 2011
White	18,848	22.3	84,520,179
Black	970	6.8	14,264,706
Hispanic	1,180	7.4	15,945,946
Asian/Pacific Islander	509	7.8	6,525,641
American Indian/Alaskan Native	171	18.5	924,324

Sources: CDC 2013 (http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6217a1.htm).

SCORING RUBRIC

Scoring Rubric for Question #1

(a) Did the student correctly set up the numerator/denominator correctly?

No.	Yes.
0 points.	1 point.

(b) Did the student correctly multiple by 100,000?

No.	Yes.
0 points.	1 point.

TOTAL (up to 2 points) _____

Scoring Rubric for Question #2

(a) Did the student correctly identify the highest rate and lower rate?

No.	Yes.
0 points.	1 point.

(b) Did the student correctly refer to the appropriate numbers?

No.	Yes.
0 points.	1 point.

(c) Did the student correctly interpret the rate?

No.	Yes.
0 points.	1 point.

TOTAL (up to 3 points) _____

Scoring Rubric for Question #3

(a) Did the student correctly indicate that s/he could not reach the conclusion based on the data?

No.	Yes.
0 points.	1 point.

(b) Did the student correctly indicate they would need a rate (however stated) in order to make this conclusion?

No.	Yes.
0 points.	1 point.

TOTAL (up to 2 points) _____

TOTAL POINTS (up to 7 points total) _____

```
***all students*****
***descriptives***
```

Frequencies
All students- QR questionnaire

	Pre-test mean(sd)	Post-test mean(sd)	Wilcoxon z (p)
A	3.0 (1.3)	3.1 (1.7)	-.65 (.52)
B	3.0 (1.0)	3.0 (0.9)	0 (1.0)
C	3.5 (1.5)	3.5 (1.3)	-.173 (.86)
D	4.2 (1.0)	3.9 (1.4)	-.89 (.37)
E	4.0 (1.1)	3.8 (0.8)	-.66 (.51)
F	3.4 (1.2)	3.6 (1.1)	-.63 (.53)
G	3.4 (1.1)	3.7 (0.7)	- .78 (.44)
H	2.7 (1.4)	2.6 (1.5)	- .14 (.89)
I	2.5 (1.0)	2.7 (1.0)	-.79 (.43)
J	2.5 (1.5)	2.6 (1.2)	- .36 (.72)
K	3.8 (1.1)	4.2 (0.8)	- 1.7 (.09)
L	2.4 (1.0)	2.3 (1.2)	-.12 (.90)
M	3.2 (1.2)	3.4 (0.8)	- .15 (.88)
N	3.7 (1.0)	3.8 (1.1)	- .79 (.43)
O	2.1 (0.9)	1.8 (0.9)	- .65 (.52)
P	2.4 (1.3)	2.4 (1.2)	- .37 (.71)
Q	3.9 (1.1)	3.2 (1.0)	- 1.86 (.06)
R	3.2 (1.1)	3.4 (0.9)	- 1.1 (.27)
S	3.2 (1.0)	3.1 (0.9)	- .31 (.76)
T	2.8 (1.1)	3.3 (0.9)	-1.6 (.10)

All students- QR assessment

	Pre-test correct/incorrect				Post-test correct/incorrect			Z (p)
	0	**.5**	**1**		**0**	**.5**	**1**	
1a	19		3		7	2	8	-2.5 (.014)
1b	19	1	2		10	1	6	-1.9 (.052)
2a	6	9	7		0	9	8	-1.6 (.11)
2b	9	9	4		5	4	8	-1.3 (.19)
2c	15	4	3		10	2	5	-.93 (.35)
3a	11	3	8		7		10	-1.58 (.114)
3b	15	6	1		10	4	3	-1.13 (.257)
total	M= 2.0 (sd=1.4)				M=2.7 (2.4)			T=-1.57 (.13)

Descriptives – all students

Consent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	1	4.5	4.5	4.5
	yes	20	90.9	90.9	95.5
	Yes	1	4.5	4.5	100.0
	Total	22	100.0	100.0	

Q1Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	19	86.4	86.4	86.4
	2.0	3	13.6	13.6	100.0
	Total	22	100.0	100.0	

Q2Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20.0	1	4.5	4.5	4.5
	21.0	1	4.5	4.5	9.1
	22.0	3	13.6	13.6	22.7
	23.0	2	9.1	9.1	31.8
	24.0	2	9.1	9.1	40.9
	26.0	1	4.5	4.5	45.5
	27.0	1	4.5	4.5	50.0
	28.0	2	9.1	9.1	59.1
	31.0	2	9.1	9.1	68.2
	35.0	1	4.5	4.5	72.7
	36.0	1	4.5	4.5	77.3
	38.0	1	4.5	4.5	81.8
	40.0	1	4.5	4.5	86.4
	42.0	1	4.5	4.5	90.9
	47.0	1	4.5	4.5	95.5
	62.0	1	4.5	4.5	100.0
	Total	22	100.0	100.0	

Q3English

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	9	40.9	42.9	42.9
	2.0	12	54.5	57.1	100.0
	Total	21	95.5	100.0	
Missing	System	1	4.5		
Total		22	100.0		

Q4Fluency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.0	11	50.0	50.0	50.0
	4.0	11	50.0	50.0	100.0
	Total	22	100.0	100.0	

Q5Credits

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.0	1	4.5	4.5	4.5
	3.0	7	31.8	31.8	36.4
	4.0	11	50.0	50.0	86.4
	5.0	2	9.1	9.1	95.5
	6.0	1	4.5	4.5	100.0
	Total	22	100.0	100.0	

Q6Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	4.5	4.5	4.5
	2	8	36.4	36.4	40.9
	4and5	1	4.5	4.5	45.5
	5	12	54.5	54.5	100.0
	Total	22	100.0	100.0	

Q7CollegeGrade

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	7	31.8	31.8	31.8
	2.0	10	45.5	45.5	77.3
	3.0	4	18.2	18.2	95.5
	6.0	1	4.5	4.5	100.0
	Total	22	100.0	100.0	

Q8SATVerbal

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	600.0	1	4.5	100.0	100.0
Missing	System	21	95.5		
Total		22	100.0		

Q8SATMath

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	500.0	1	4.5	50.0	50.0
	760.0	1	4.5	50.0	100.0
	Total	2	9.1	100.0	
Missing	System	20	90.9		
Total		22	100.0		

Q8ACT

		Frequency	Percent
Missing	System	22	100.0

Q9Transfer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	?	1	4.5	4.5	4.5
	1	1	4.5	4.5	9.1
	2	20	90.9	90.9	100.0
	Total	22	100.0	100.0	

Q10Transfercollege

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	9.1	9.1	9.1
	BMCC	3	13.6	13.6	22.7
	BronxCC	8	36.4	36.4	59.1
	HostosCC	5	22.7	22.7	81.8
	LaguardiaCC	2	9.1	9.1	90.9
	NYU	1	4.5	4.5	95.5
	WestchesterCC	1	4.5	4.5	100.0
	Total	22	100.0	100.0	

Q11Major

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	4.5	4.5	4.5
	Health Service Administration	1	4.5	4.5	9.1
	Nutrition	1	4.5	4.5	13.6
	Psychology	4	18.2	18.2	31.8
	Social Work	2	9.1	9.1	40.9
	Sociology	10	45.5	45.5	86.4
	Sociology/ Gen Ed	1	4.5	4.5	90.9
	Sociology/Education	2	9.1	9.1	100.0
	Total	22	100.0	100.0	

Demographic questionnaire- all students

Q3#ofcourses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	4	18.2	18.2	18.2
	2.0	12	54.5	54.5	72.7
	3.0	6	27.3	27.3	100.0
	Total	22	100.0	100.0	

Q4Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	3	13.6	13.6	13.6
	2.0	19	86.4	86.4	100.0
	Total	22	100.0	100.0	

Q5Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20.0	1	4.5	5.0	5.0
	21.0	1	4.5	5.0	10.0
	22.0	3	13.6	15.0	25.0
	23.0	2	9.1	10.0	35.0
	24.0	1	4.5	5.0	40.0
	26.0	1	4.5	5.0	45.0
	27.0	1	4.5	5.0	50.0
	28.0	2	9.1	10.0	60.0
	31.0	1	4.5	5.0	65.0
	35.0	1	4.5	5.0	70.0
	36.0	1	4.5	5.0	75.0
	38.0	1	4.5	5.0	80.0
	40.0	1	4.5	5.0	85.0
	42.0	1	4.5	5.0	90.0
	47.0	1	4.5	5.0	95.0
	62.0	1	4.5	5.0	100.0
	Total	20	90.9	100.0	
Missing	System	2	9.1		
Total		22	100.0		

Q6Transfer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	1	4.5	4.8	4.8
	2.0	19	86.4	90.5	95.2
	3.0	1	4.5	4.8	100.0
	Total	21	95.5	100.0	
Missing	System	1	4.5		
Total		22	100.0		

Q7Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	4.5	4.5	4.5
	1	1	4.5	4.5	9.1
	2	8	36.4	36.4	45.5
	4and5	1	4.5	4.5	50.0
	5	11	50.0	50.0	100.0
	Total	22	100.0	100.0	

Q8USBorn

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	14	63.6	63.6	63.6
	2.0	8	36.4	36.4	100.0
	Total	22	100.0	100.0	

Q8aCountry

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		15	68.2	68.2	68.2
	Belize	1	4.5	4.5	72.7
	Dominica West Indies	1	4.5	4.5	77.3
	Dominican Republic	2	9.1	9.1	86.4
	Ghana	1	4.5	4.5	90.9
	Puerto Rico	1	4.5	4.5	95.5
	Senegal	1	4.5	4.5	100.0
	Total	22	100.0	100.0	

Q9EnglishFL

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	12	54.5	57.1	57.1
	2.0	9	40.9	42.9	100.0
	Total	21	95.5	100.0	
Missing	System	1	4.5		
Total		22	100.0		

Q9aFirstlanguage

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		13	59.1	59.1	59.1
	Asante Twi	1	4.5	4.5	63.6
	Portuguese	1	4.5	4.5	68.2
	Spanish	6	27.3	27.3	95.5
	Wolof	1	4.5	4.5	100.0
	Total	22	100.0	100.0	

Q10

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	1	4.5	4.5	4.5
	3.0	6	27.3	27.3	31.8
	4.0	13	59.1	59.1	90.9
	5.0	1	4.5	4.5	95.5
	6.0	1	4.5	4.5	100.0
	Total	22	100.0	100.0	

Q11_1Major

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Health Service Administration	1	4.5	4.5	4.5
	Nutrition	1	4.5	4.5	9.1
	Psychology	4	18.2	18.2	27.3
	Social Work	2	9.1	9.1	36.4
	Sociology	14	63.6	63.6	100.0
	Total	22	100.0	100.0	

Q11_2Major

		Frequency	Percent
Missing	System	22	100.0

Q12_1Minor

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	9.1	9.1	9.1
	Anthropology	1	4.5	4.5	13.6
	Business	1	4.5	4.5	18.2
	Childhood education	1	4.5	4.5	22.7
	Early Intervention	1	4.5	4.5	27.3
	ECE	8	36.4	36.4	63.6
	Education	1	4.5	4.5	68.2
	Psychology	1	4.5	4.5	72.7
	Public Health	1	4.5	4.5	77.3
	Sociology	3	13.6	13.6	90.9
	Undecided	1	4.5	4.5	95.5
	Youth service	1	4.5	4.5	100.0
	Total	22	100.0	100.0	

Q12_2Minor

		Frequency	Percent
Missing	System	22	100.0

Q13Highschool

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	12	54.5	54.5	54.5
	2	1	4.5	4.5	59.1
	3	2	9.1	9.1	68.2
	4	2	9.1	9.1	77.3
	5	1	4.5	4.5	81.8
	5 and 6	1	4.5	4.5	86.4
	6	3	13.6	13.6	100.0
	Total	22	100.0	100.0	

Q14Highschoolgrade

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	4.5	4.5	4.5
	60-70	1	4.5	4.5	9.1
	68	1	4.5	4.5	13.6
	70	1	4.5	4.5	18.2
	78	1	4.5	4.5	22.7
	79	1	4.5	4.5	27.3
	80	3	13.6	13.6	40.9
	85-90	1	4.5	4.5	45.5
	88	1	4.5	4.5	50.0
	90	1	4.5	4.5	54.5
	A	1	4.5	4.5	59.1
	A-B	1	4.5	4.5	63.6
	B	5	22.7	22.7	86.4
	B+	1	4.5	4.5	90.9
	C	2	9.1	9.1	100.0
	Total	22	100.0	100.0	

Q15HighSmathgrade

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	4.5	4.5	4.5
	60-70	1	4.5	4.5	9.1
	70	2	9.1	9.1	18.2
	75	1	4.5	4.5	22.7
	80	1	4.5	4.5	27.3
	80-85	1	4.5	4.5	31.8
	85	3	13.6	13.6	45.5
	90	1	4.5	4.5	50.0
	95	1	4.5	4.5	54.5
	A	1	4.5	4.5	59.1
	B	3	13.6	13.6	72.7

	C	4	18.2	18.2	90.9
	C+	1	4.5	4.5	95.5
	D	1	4.5	4.5	100.0
	Total	22	100.0	100.0	

Q16CurrentGPA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.000	1	4.5	4.8	4.8
	2.400	1	4.5	4.8	9.5
	2.500	2	9.1	9.5	19.0
	2.600	1	4.5	4.8	23.8
	2.700	1	4.5	4.8	28.6
	2.800	1	4.5	4.8	33.3
	3.000	3	13.6	14.3	47.6
	3.010	1	4.5	4.8	52.4
	3.100	1	4.5	4.8	57.1
	3.200	1	4.5	4.8	61.9
	3.247	1	4.5	4.8	66.7
	3.300	1	4.5	4.8	71.4
	3.500	1	4.5	4.8	76.2
	3.600	1	4.5	4.8	81.0
	3.800	1	4.5	4.8	85.7
	3.920	1	4.5	4.8	90.5
	3.925	1	4.5	4.8	95.2
	4.000	1	4.5	4.8	100.0
	Total	21	95.5	100.0	
Missing	System	1	4.5		
Total		22	100.0		

\\\\

Q17Job

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	18.2	18.2	18.2
	3	4	18.2	18.2	36.4
	4	13	59.1	59.1	95.5
	C	1	4.5	4.5	100.0
	Total	22	100.0	100.0	

Q18Care

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	10	45.5	45.5	45.5
	2.0	12	54.5	54.5	100.0
	Total	22	100.0	100.0	

Q19TotalMath

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	9.1	9.1	9.1
	0	1	4.5	4.5	13.6
	1	2	9.1	9.1	22.7
	10	1	4.5	4.5	27.3
	2	5	22.7	22.7	50.0
	3	6	27.3	27.3	77.3
	4	2	9.1	9.1	86.4
	5+	1	4.5	4.5	90.9
	6	2	9.1	9.1	100.0
	Total	22	100.0	100.0	

STUDENTS WITH PRE AND POST TESTS

QR questionnaire

	Pre-test mean(sd)	Post-test mean(sd)	Wilcoxon z (p)
A	3.1 (1.3)	3.1 (1.2)	-.65 (.52)
B	3.0 (.8)	3.0 (0.9)	0 (1.0)
C	3.4 (1.4)	3.5 (1.3)	-.173 (.86)
D	4.2 (0.9)	3.9 (1.1)	-.89 (.37)
E	4.0 (1.1)	3.8 (0.8)	-.66 (.51)
F	3.5 (1.1)	3.6 (1.1)	-.63 (.53)
G	3.4 (1.0)	3.7 (0.7)	- .78 (.44)
H	2.6 (1.4)	2.6 (1.5)	- .14 (.89)
I	2.5 (0.9)	2.7 (1.0)	-.79 (.43)
J	2.7 (1.5)	2.6 (1.2)	- .36 (.72)
K	3.8 (1.0)	4.2 (0.8)	- 1.7 (.09)
L	2.3 (0.9)	2.3 (1.2)	-.12 (.90)
M	3.3 (1.0)	3.4 (0.8)	- .15 (.88)
N	3.7 (1.0)	3.8 (1.1)	- .79 (.43)
O	2.0 (0.9)	1.8 (0.9)	- .65 (.52)
P	2.6 (1.4)	2.4 (1.2)	- .37 (.71)
Q	3.8 (1.2)	3.2 (1.0)	- 1.86 (.06)
R	3.0 (1.0)	3.4 (0.9)	- 1.1 (.27)
S	3.1 (1.1)	3.1 (0.9)	- .31 (.76)
T	2.6 (1.1)	3.3 (0.9)	-1.6 (.10)

QR assessment

	Pre-test correct/incorrect				Post-test correct/incorrect			Z (p)
score	**0**	**.5**	**1**		**0**	**.5**	**1**	
1a	14		3		7	2	5	-2.46 (.014)
1b	14	1	2		10	1	6	-1.95 (.052)
2a	4	7	6		0	9	8	-1.61 (.107)
2b	6	8	3		5	4	8	-1.30 (.193)
2c	11	4	2		10	2	5	-.933 (.351)
3a	10	2	5		7	0	10	-1.58 (.114)
3b	11	5	1		10	4	3	-1.13 (.257)
total	M=2.09 (1.56)				M=3.47 (2.16)			T= -3.282, P=.005

DEMOGRAPHICS FREQUENCIES- students with pre and post tests

Consent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	1	5.9	5.9	5.9
	yes	15	88.2	88.2	94.1
	Yes	1	5.9	5.9	100.0
	Total	17	100.0	100.0	

Q1Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	15	88.2	88.2	88.2
	2.0	2	11.8	11.8	100.0
	Total	17	100.0	100.0	

Q2Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21.0	1	5.9	5.9	5.9
	22.0	2	11.8	11.8	17.6
	23.0	1	5.9	5.9	23.5
	24.0	2	11.8	11.8	35.3
	26.0	1	5.9	5.9	41.2
	27.0	1	5.9	5.9	47.1
	28.0	1	5.9	5.9	52.9
	31.0	2	11.8	11.8	64.7
	35.0	1	5.9	5.9	70.6
	36.0	1	5.9	5.9	76.5
	38.0	1	5.9	5.9	82.4
	42.0	1	5.9	5.9	88.2
	47.0	1	5.9	5.9	94.1
	62.0	1	5.9	5.9	100.0
	Total	17	100.0	100.0	

Q3English

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	7	41.2	43.8	43.8
	2.0	9	52.9	56.3	100.0
	Total	16	94.1	100.0	
Missing	System	1	5.9		
Total		17	100.0		

Q4Fluency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.0	9	52.9	52.9	52.9
	4.0	8	47.1	47.1	100.0
	Total	17	100.0	100.0	

Q5Credits

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.0	5	29.4	29.4	29.4
	4.0	9	52.9	52.9	82.4
	5.0	2	11.8	11.8	94.1
	6.0	1	5.9	5.9	100.0
	Total	17	100.0	100.0	

Q6Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	5.9	5.9	5.9
	2	6	35.3	35.3	41.2
	4and5	1	5.9	5.9	47.1
	5	9	52.9	52.9	100.0
	Total	17	100.0	100.0	

\

Q7CollegeGrade

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	6	35.3	35.3	35.3
	2.0	7	41.2	41.2	76.5
	3.0	4	23.5	23.5	100.0
	Total	17	100.0	100.0	

Q8SATVerbal

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	600.0	1	5.9	100.0	100.0
Missing	System	16	94.1		
Total		17	100.0		

Q8SATMath

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	500.0	1	5.9	50.0	50.0
	760.0	1	5.9	50.0	100.0
	Total	2	11.8	100.0	
Missing	System	15	88.2		
Total		17	100.0		

Q8ACT

		Frequency	Percent
Missing	System	17	100.0

Q9Transfer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	?	1	5.9	5.9	5.9
	1	1	5.9	5.9	11.8
	2	15	88.2	88.2	100.0
	Total	17	100.0	100.0	

Q10Transfercollege

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	11.8	11.8	11.8
	BMCC	2	11.8	11.8	23.5
	BronxCC	5	29.4	29.4	52.9
	HostosCC	5	29.4	29.4	82.4
	LaguardiaCC	1	5.9	5.9	88.2
	NYU	1	5.9	5.9	94.1
	WestchesterCC	1	5.9	5.9	100.0
	Total	17	100.0	100.0	

Q11Major

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	5.9	5.9	5.9
	Health Service Administration	1	5.9	5.9	11.8
	Nutrition	1	5.9	5.9	17.6
	Psychology	3	17.6	17.6	35.3
	Social Work	2	11.8	11.8	47.1
	Sociology	9	52.9	52.9	100.0
	Total	17	100.0	100.0	

Demographic questionnaire- students with pre and post tests

Q3#ofcourses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	4	23.5	23.5	23.5
	2.0	9	52.9	52.9	76.5
	3.0	4	23.5	23.5	100.0
	Total	17	100.0	100.0	

Q4Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	2	11.8	11.8	11.8
	2.0	15	88.2	88.2	100.0
	Total	17	100.0	100.0	

Q5Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21.0	1	5.9	6.7	6.7
	22.0	2	11.8	13.3	20.0
	23.0	1	5.9	6.7	26.7
	24.0	1	5.9	6.7	33.3
	26.0	1	5.9	6.7	40.0
	27.0	1	5.9	6.7	46.7
	28.0	1	5.9	6.7	53.3
	31.0	1	5.9	6.7	60.0
	35.0	1	5.9	6.7	66.7
	36.0	1	5.9	6.7	73.3
	38.0	1	5.9	6.7	80.0
	42.0	1	5.9	6.7	86.7
	47.0	1	5.9	6.7	93.3
	62.0	1	5.9	6.7	100.0
	Total	15	88.2	100.0	
Missing	System	2	11.8		
Total		17	100.0		

Q6Transfer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	1	5.9	6.3	6.3
	2.0	14	82.4	87.5	93.8
	3.0	1	5.9	6.3	100.0
	Total	16	94.1	100.0	
Missing	System	1	5.9		
Total		17	100.0		

Q7Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	5.9	5.9	5.9
	1	1	5.9	5.9	11.8
	2	6	35.3	35.3	47.1
	4and5	1	5.9	5.9	52.9
	5	8	47.1	47.1	100.0
	Total	17	100.0	100.0	

Q8USBorn

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	10	58.8	58.8	58.8
	2.0	7	41.2	41.2	100.0
	Total	17	100.0	100.0	

Q8aCountry

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		10	58.8	58.8	58.8
	Belize	1	5.9	5.9	64.7
	Dominica West Indies	1	5.9	5.9	70.6
	Dominican Republic	2	11.8	11.8	82.4
	Ghana	1	5.9	5.9	88.2
	Puerto Rico	1	5.9	5.9	94.1
	Senegal	1	5.9	5.9	100.0
	Total	17	100.0	100.0	

Q9EnglishFL

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	9	52.9	56.3	56.3
	2.0	7	41.2	43.8	100.0
	Total	16	94.1	100.0	
Missing	System	1	5.9		
Total		17	100.0		

Q9aFirstlanguage

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		10	58.8	58.8	58.8
	Asante Twi	1	5.9	5.9	64.7
	Portuguese	1	5.9	5.9	70.6
	Spanish	4	23.5	23.5	94.1
	Wolof	1	5.9	5.9	100.0
	Total	17	100.0	100.0	

V33

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.0	4	23.5	23.5	23.5
	4.0	11	64.7	64.7	88.2
	5.0	1	5.9	5.9	94.1
	6.0	1	5.9	5.9	100.0
	Total	17	100.0	100.0	

Q11_1Major

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Health Service Administration	1	5.9	5.9	5.9
	Nutrition	1	5.9	5.9	11.8
	Psychology	3	17.6	17.6	29.4
	Social Work	2	11.8	11.8	41.2
	Sociology	10	58.8	58.8	100.0
	Total	17	100.0	100.0	

Q11_2Major

		Frequency	Percent
Missing	System	17	100.0

Q12_1Minor

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	11.8	11.8	11.8
	Anthropology	1	5.9	5.9	17.6
	Business	1	5.9	5.9	23.5
	Early Intervention	1	5.9	5.9	29.4
	ECE	6	35.3	35.3	64.7
	Psychology	1	5.9	5.9	70.6
	Public Health	1	5.9	5.9	76.5
	Sociology	2	11.8	11.8	88.2
	Undecided	1	5.9	5.9	94.1
	Youth service	1	5.9	5.9	100.0
	Total	17	100.0	100.0	

Q12_2Minor

		Frequency	Percent
Missing	System	17	100.0

Q13Highschool

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	8	47.1	47.1	47.1
	3	2	11.8	11.8	58.8
	4	2	11.8	11.8	70.6
	5	1	5.9	5.9	76.5
	5 and 6	1	5.9	5.9	82.4
	6	3	17.6	17.6	100.0
	Total	17	100.0	100.0	

Q14Highschoolgrade

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	5.9	5.9	5.9
	60-70	1	5.9	5.9	11.8
	78	1	5.9	5.9	17.6
	79	1	5.9	5.9	23.5
	80	2	11.8	11.8	35.3
	85-90	1	5.9	5.9	41.2
	88	1	5.9	5.9	47.1
	90	1	5.9	5.9	52.9
	A	1	5.9	5.9	58.8
	B	5	29.4	29.4	88.2
	B+	1	5.9	5.9	94.1
	C	1	5.9	5.9	100.0
	Total	17	100.0	100.0	

Q15HighSmathgrade

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	5.9	5.9	5.9
	60-70	1	5.9	5.9	11.8
	70	1	5.9	5.9	17.6
	75	1	5.9	5.9	23.5
	80	1	5.9	5.9	29.4
	80-85	1	5.9	5.9	35.3
	85	2	11.8	11.8	47.1
	90	1	5.9	5.9	52.9
	A	1	5.9	5.9	58.8
	B	2	11.8	11.8	70.6
	C	4	23.5	23.5	94.1
	C+	1	5.9	5.9	100.0
	Total	17	100.0	100.0	

Q16CurrentGPA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.000	1	5.9	5.9	5.9
	2.400	1	5.9	5.9	11.8
	2.500	2	11.8	11.8	23.5
	2.600	1	5.9	5.9	29.4
	2.700	1	5.9	5.9	35.3
	2.800	1	5.9	5.9	41.2
	3.000	2	11.8	11.8	52.9
	3.100	1	5.9	5.9	58.8
	3.200	1	5.9	5.9	64.7
	3.247	1	5.9	5.9	70.6
	3.300	1	5.9	5.9	76.5
	3.600	1	5.9	5.9	82.4
	3.920	1	5.9	5.9	88.2
	3.925	1	5.9	5.9	94.1
	4.000	1	5.9	5.9	100.0
	Total	17	100.0	100.0	

Q17Job

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	23.5	23.5	23.5
	3	3	17.6	17.6	41.2
	4	9	52.9	52.9	94.1
	C	1	5.9	5.9	100.0
	Total	17	100.0	100.0	

Q18Care

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	8	47.1	47.1	47.1
	2.0	9	52.9	52.9	100.0
	Total	17	100.0	100.0	

Q19TotalMath

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	5.9	5.9	5.9
	0	1	5.9	5.9	11.8
	1	2	11.8	11.8	23.5
	10	1	5.9	5.9	29.4
	2	2	11.8	11.8	41.2
	3	5	29.4	29.4	70.6
	4	2	11.8	11.8	82.4
	5+	1	5.9	5.9	88.2
	6	2	11.8	11.8	100.0
	Total	17	100.0	100.0	

STUDENTS WITH PRE AND POST TESTS, AND CONSENTS

QR questionnaire

	Pre-test mean(sd)	Post-test mean(sd)	Wilcoxon z (p)
A	3.1 (1.3)	3.1 (1.2)	-.65 (.52)
B	3.1 (0.8)	3.0 (0.9)	-.45 (.66)
C	3.4 (1.5)	3.4 (1.3)	0 (1.0)
D	4.1 (0.9)	4.0 (1.2)	-.49 (.62)
E	4.1 (1.0)	3.8 (0.8)	-.86 (.39)
F	3.5 (1.2)	3.6 (1.1)	-.63 (.53)
G	3.5 (1.1)	3.7 (0.7)	- .78 (.44)
H	2.8 (1.3)	2.7 (1.5)	- .14 (.89)
I	2.4 (0.9)	2.7 (1.0)	-.79 (.43)
J	2.7 (1.5)	2.6 (1.2)	- .36 (.72)
K	3.9 (1.0)	4.3 (0.8)	- 1.5 (.13)
L	2.3 (0.9)	2.1 (0.9)	-.55 (.58)
M	3.4 (1.0)	3.4 (0.8)	- .033 (.97)
N	3.8 (0.9)	3.8 (1.1)	- .58 (.55)
O	2.0 (0.9)	1.8 (0.9)	- .65 (.52)
P	2.5 (1.4)	2.4 (1.2)	- .18 (.85)
Q	3.7 (1.2)	3.2 (1.0)	- 1.56 (.12)
R	3.1 (1.0)	3.4 (1.0)	- .92 (.36)
S	3.1 (1.1)	3.1 (0.9)	- .07 (.94)
T	2.6 (1.1)	3.4 (0.8)	-1.6 (.11)

QR ASSESSMENT

	Pre-test correct/incorrect				Post-test correct/incorrect			Z (p)
Score	**0**	**.5**	**1**		**0**	**.5**	**1**	
1a	13		3		6	2	8	-2.46 (.014)
1b	13	1	2		10	0	6	-1.84 (.066)
2a	4	7	5		0	8	8	-1.93 (.053)
2b	6	8	2		4	4	8	-1.999 (.046)
2c	11	3	2		9	2	6	-1.13 (.260)
3a	9	2	5		6	0	10	-1.58 (.114)
3b	10	5	1		9	4	3	-1.13 (.257)
total	M=2.06 (1.61)				M=3.63 (2.13)			T= -3.855 (.002)

FREQUENCIES/DESCRIPTIVES- STUDENTS WITH PRE AND POST TEST AND CONSENT DOCUMENT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	15	93.8	93.8	93.8
	Yes	1	6.3	6.3	100.0
	Total	16	100.0	100.0	

Q1Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	14	87.5	87.5	87.5
	2.0	2	12.5	12.5	100.0
	Total	16	100.0	100.0	

Q2Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21.0	1	6.3	6.3	6.3
	22.0	2	12.5	12.5	18.8
	23.0	1	6.3	6.3	25.0
	24.0	2	12.5	12.5	37.5
	26.0	1	6.3	6.3	43.8
	27.0	1	6.3	6.3	50.0
	31.0	2	12.5	12.5	62.5
	35.0	1	6.3	6.3	68.8
	36.0	1	6.3	6.3	75.0
	38.0	1	6.3	6.3	81.3
	42.0	1	6.3	6.3	87.5
	47.0	1	6.3	6.3	93.8
	62.0	1	6.3	6.3	100.0
	Total	16	100.0	100.0	

Q3English

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	6	37.5	40.0	40.0
	2.0	9	56.3	60.0	100.0
	Total	15	93.8	100.0	
Missing	System	1	6.3		
Total		16	100.0		

Q4Fluency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.0	8	50.0	50.0	50.0
	4.0	8	50.0	50.0	100.0
	Total	16	100.0	100.0	

Q5Credits

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.0	4	25.0	25.0	25.0
	4.0	9	56.3	56.3	81.3
	5.0	2	12.5	12.5	93.8
	6.0	1	6.3	6.3	100.0
	Total	16	100.0	100.0	

Q6Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	6.3	6.3	6.3
	2	6	37.5	37.5	43.8
	4and5	1	6.3	6.3	50.0
	5	8	50.0	50.0	100.0
	Total	16	100.0	100.0	

\

Q7CollegeGrade

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	6	37.5	37.5	37.5
	2.0	6	37.5	37.5	75.0
	3.0	4	25.0	25.0	100.0
	Total	16	100.0	100.0	

Q8SATVerbal

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	600.0	1	6.3	100.0	100.0
Missing	System	15	93.8		
Total		16	100.0		

Q8SATMath

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	500.0	1	6.3	50.0	50.0
	760.0	1	6.3	50.0	100.0
	Total	2	12.5	100.0	
Missing	System	14	87.5		
Total		16	100.0		

Q8ACT

		Frequency	Percent
Missing	System	16	100.0

Q9Transfer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	?	1	6.3	6.3	6.3
	1	1	6.3	6.3	12.5
	2	14	87.5	87.5	100.0
	Total	16	100.0	100.0	

Q10Transfercollege

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	12.5	12.5	12.5
	BMCC	2	12.5	12.5	25.0
	BronxCC	5	31.3	31.3	56.3
	HostosCC	4	25.0	25.0	81.3
	LaguardiaCC	1	6.3	6.3	87.5
	NYU	1	6.3	6.3	93.8
	WestchesterCC	1	6.3	6.3	100.0
	Total	16	100.0	100.0	

Q11Major

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	6.3	6.3	6.3
	Health Service Administration	1	6.3	6.3	12.5
	Nutrition	1	6.3	6.3	18.8
	Psychology	3	18.8	18.8	37.5
	Social Work	2	12.5	12.5	50.0
	Sociology	8	50.0	50.0	100.0
	Total	16	100.0	100.0	

Demographic questionnaire- students with pre and post tests and consents

Q3#ofcourses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	4	25.0	25.0	25.0
	2.0	8	50.0	50.0	75.0
	3.0	4	25.0	25.0	100.0
	Total	16	100.0	100.0	

Q4Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	2	12.5	12.5	12.5
	2.0	14	87.5	87.5	100.0
	Total	16	100.0	100.0	

Q5Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21.0	1	6.3	7.1	7.1
	22.0	2	12.5	14.3	21.4
	23.0	1	6.3	7.1	28.6
	24.0	1	6.3	7.1	35.7
	26.0	1	6.3	7.1	42.9
	27.0	1	6.3	7.1	50.0
	31.0	1	6.3	7.1	57.1
	35.0	1	6.3	7.1	64.3
	36.0	1	6.3	7.1	71.4
	38.0	1	6.3	7.1	78.6
	42.0	1	6.3	7.1	85.7
	47.0	1	6.3	7.1	92.9
	62.0	1	6.3	7.1	100.0
	Total	14	87.5	100.0	
Missing	System	2	12.5		
Total		16	100.0		

Q6Transfer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	1	6.3	6.7	6.7
	2.0	13	81.3	86.7	93.3
	3.0	1	6.3	6.7	100.0
	Total	15	93.8	100.0	
Missing	System	1	6.3		
Total		16	100.0		

Q7Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	6.3	6.3	6.3
	1	1	6.3	6.3	12.5
	2	6	37.5	37.5	50.0
	4and5	1	6.3	6.3	56.3
	5	7	43.8	43.8	100.0
	Total	16	100.0	100.0	

Q8USBorn

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	10	62.5	62.5	62.5
	2.0	6	37.5	37.5	100.0
	Total	16	100.0	100.0	

Q8aCountry

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		10	62.5	62.5	62.5
	Belize	1	6.3	6.3	68.8
	Dominica West Indies	1	6.3	6.3	75.0
	Dominican Republic	1	6.3	6.3	81.3
	Ghana	1	6.3	6.3	87.5
	Puerto Rico	1	6.3	6.3	93.8
	Senegal	1	6.3	6.3	100.0
	Total	16	100.0	100.0	

Q9EnglishFL

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	9	56.3	60.0	60.0
	2.0	6	37.5	40.0	100.0
	Total	15	93.8	100.0	
Missing	System	1	6.3		
Total		16	100.0		

Q9aFirstlanguage

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		10	62.5	62.5	62.5
	Asante Twi	1	6.3	6.3	68.8
	Portuguese	1	6.3	6.3	75.0
	Spanish	3	18.8	18.8	93.8
	Wolof	1	6.3	6.3	100.0
	Total	16	100.0	100.0	

V33

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.0	3	18.8	18.8	18.8
	4.0	11	68.8	68.8	87.5
	5.0	1	6.3	6.3	93.8
	6.0	1	6.3	6.3	100.0
	Total	16	100.0	100.0	

Q11_1Major

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Health Service Administration	1	6.3	6.3	6.3
	Nutrition	1	6.3	6.3	12.5
	Psychology	3	18.8	18.8	31.3
	Social Work	2	12.5	12.5	43.8
	Sociology	9	56.3	56.3	100.0
	Total	16	100.0	100.0	

Q11_2Major

		Frequency	Percent
Missing	System	16	100.0

Q12_1Minor

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	12.5	12.5	12.5
	Anthropology	1	6.3	6.3	18.8
	Business	1	6.3	6.3	25.0
	Early Intervention	1	6.3	6.3	31.3
	ECE	5	31.3	31.3	62.5
	Psychology	1	6.3	6.3	68.8
	Public Health	1	6.3	6.3	75.0
	Sociology	2	12.5	12.5	87.5
	Undecided	1	6.3	6.3	93.8
	Youth service	1	6.3	6.3	100.0
	Total	16	100.0	100.0	

Q12_2Minor

		Frequency	Percent
Missing	System	16	100.0

Q13Highschool

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	8	50.0	50.0	50.0
	3	2	12.5	12.5	62.5
	4	2	12.5	12.5	75.0
	5 and 6	1	6.3	6.3	81.3
	6	3	18.8	18.8	100.0
	Total	16	100.0	100.0	

Q14Highschoolgrade

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	6.3	6.3	6.3
	60-70	1	6.3	6.3	12.5
	78	1	6.3	6.3	18.8
	79	1	6.3	6.3	25.0
	80	2	12.5	12.5	37.5
	88	1	6.3	6.3	43.8
	90	1	6.3	6.3	50.0
	A	1	6.3	6.3	56.3
	B	5	31.3	31.3	87.5
	B+	1	6.3	6.3	93.8
	C	1	6.3	6.3	100.0
	Total	16	100.0	100.0	

Q15HighSmathgrade

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	6.3	6.3	6.3
	60-70	1	6.3	6.3	12.5
	70	1	6.3	6.3	18.8
	75	1	6.3	6.3	25.0
	80	1	6.3	6.3	31.3
	85	2	12.5	12.5	43.8
	90	1	6.3	6.3	50.0
	A	1	6.3	6.3	56.3
	B	2	12.5	12.5	68.8
	C	4	25.0	25.0	93.8
	C+	1	6.3	6.3	100.0
	Total	16	100.0	100.0	

Q16CurrentGPA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.000	1	6.3	6.3	6.3
	2.400	1	6.3	6.3	12.5
	2.500	2	12.5	12.5	25.0
	2.700	1	6.3	6.3	31.3
	2.800	1	6.3	6.3	37.5
	3.000	2	12.5	12.5	50.0
	3.100	1	6.3	6.3	56.3
	3.200	1	6.3	6.3	62.5
	3.247	1	6.3	6.3	68.8
	3.300	1	6.3	6.3	75.0
	3.600	1	6.3	6.3	81.3
	3.920	1	6.3	6.3	87.5
	3.925	1	6.3	6.3	93.8
	4.000	1	6.3	6.3	100.0
	Total	16	100.0	100.0	

Q17Job

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	25.0	25.0	25.0
	3	3	18.8	18.8	43.8
	4	9	56.3	56.3	100.0
	Total	16	100.0	100.0	

Q18Care

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	7	43.8	43.8	43.8
	2.0	9	56.3	56.3	100.0
	Total	16	100.0	100.0	

Q19TotalMath

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	6.3	6.3	6.3
	0	1	6.3	6.3	12.5
	1	2	12.5	12.5	25.0
	10	1	6.3	6.3	31.3
	2	2	12.5	12.5	43.8
	3	5	31.3	31.3	75.0
	4	1	6.3	6.3	81.3
	5+	1	6.3	6.3	87.5
	6	2	12.5	12.5	100.0
	Total	16	100.0	100.0	