Student ethnicity and teacher expectations

Daisy Mercado
Rowan College of New Jersey

Follow this and additional works at: https://rdw.rowan.edu/etd

Part of the Elementary Education and Teaching Commons

Let us know how access to this document benefits you - share your thoughts on our feedback form.

Recommended Citation

This Thesis is brought to you for free and open access by Rowan Digital Works. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Rowan Digital Works. For more information, please contact LibraryTheses@rowan.edu.
STUDENT ETHNICITY AND TEACHER EXPECTATIONS

by
Daisy Mercado

A Thesis

Submitted in partial fulfillment of the requirements of the
Masters of Science in Teaching in the Graduate Division
of Rowan College
June 1996

Approved by

Professor

Date Approved
JUNE 25, 1996
ABSTRACT

Daisy Mercado
Student Ethnicity and Teacher Expectations
1996
Dr. Randall Robinson
Master of Science in Teaching

This study investigated the relationship between student ethnicity and teacher expectations and how these expectations were communicated to students through the types of questions they were asked. The subjects for this study were twenty-two second grade students. The first phase of the study consisted of observations in which the questions asked by the teacher and the ethnicity of the student were recorded. They were later categorized as low order and high order questions. Finally, a Chi square test was used to determine if there was a significant relationship between ethnicity and teacher expectations. The study revealed that no significant relationship existed between White, Black, and Latino students and the types of questions they were asked by their teacher ($X^2=5.047$). Furthermore, no statistically significant relationship was found between Black and Latino students ($X^2=3.412$) and between White and Black students ($X^2=.0360$). The study, however, revealed a significant relationship between White and Latino students and the types of questions each ethnic group was asked by the teacher ($X^2=4.541$, $p<.05$).
MINI-ABSTRACT

Daisy Mercado
Student Ethnicity and Teacher Expectations
1996
Dr. Randall Robinson
Master of Science in Teaching

The relationship between student ethnicity and teacher expectations was investigated. No significant relationship was found between White, Black, and Latino students and the types of questions they were asked. No significant relationship was found between Black and Latino students or between White and Black students. A significant relationship exists between White and Latino students and the types of questions they were asked.
ACKNOWLEDGMENTS

The opportunity to thank those who have had such a powerful effect upon my life and educational career fills me with excitement, gratification, and sheer joy. I want to thank the following people as a result of their constant encouragement, concern, and interest.

Dr. Randall Robinson, field advisor, professor, and thesis advisor who extended himself beyond the call of duty in his effort to assist me with my thesis.

Dr. David Kapel, Dean of Education and professor whose invaluable assistance with my statistics made the completion of this thesis possible.

Mrs. Carolyn Abbott, my clinical teacher who made this study possible and whose concern for children is incomparable.

Ms. Shari Lonker, my study partner; Together we struggled through graduate school and together we have enjoyed the glory.

Ms. Brenda Rojas, who encouraged me, and reminded me of my achievements whenever a moment of sadness caused me to forget them.

Mr. Jaime D. Mercado Sr., my father, for playing an extensive role in encouraging and guiding me through graduate school.
Mrs. Maria M. Mercado, my loving mother who guided me through the emotional maze of life and continues to advise me wisely and listen to my petty complaints.

Most importantly, God, for ameliorating my life by sending comforting and caring individuals to me.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
</tr>
</tbody>
</table>

## CHAPTER

1. **SCOPE OF THE STUDY**
   - Introduction .................................. 1
   - Importance of the Study ..................... 1
   - Statement of the Problem .................... 2
   - Hypothesis .................................. 2
   - Limitations of the Study .................... 2
   - Definition of Terms .......................... 3

2. **REVIEW OF LITERATURE**
   - Introduction ................................ 5
   - Teachers' Preparedness ...................... 5
   - Ethnicity as a Predictor .................... 6
   - Affect of Expectations on Performance ...... 8

3. **PROCEDURE AND DESIGN OF THE STUDY**
   - Introduction ................................ 10
   - Population/Subjects .......................... 10
   - Description of the Instrument ............... 11
   - Research Design and Procedure ............. 11

4. **ANALYSIS OF FINDINGS**
   - Introduction ................................ 14
   - Tabulation of Chi Square .................... 14
   - Analysis Related to Particular Purpose of Hypothesis .......... 16

5. **Summary, Conclusions, and Recommendations**
   - Introduction ................................ 17
   - Summary of the Problem ..................... 17
   - Summary of the Hypothesis .................. 18
   - Summary of the Procedure ................... 18
   - Summary of Findings ....................... 18
   - Conclusions .................................. 20
   - Recommendations ............................ 21
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implications</td>
<td>22</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>24</td>
</tr>
<tr>
<td>APPENDIX A</td>
<td>26</td>
</tr>
<tr>
<td>APPENDIX B</td>
<td>28</td>
</tr>
<tr>
<td>APPENDIX C</td>
<td>29</td>
</tr>
<tr>
<td>APPENDIX D</td>
<td>30</td>
</tr>
<tr>
<td>VITA</td>
<td>31</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Chi Square Findings</td>
<td>15</td>
</tr>
<tr>
<td>2. Summary of Significance</td>
<td>19</td>
</tr>
</tbody>
</table>
Chapter 1
Scope of the Study

Introduction

According to Di Lella, Tran, and Young, demographics trends illustrate that minority groups are becoming the largest population in the United States (1994). The concern of whether or not teachers are prepared to teach diverse student populations has been raised. Although school teachers are aware that all children are to be treated equally despite their ethnicity this is not always the case (Clifton, Hryniuk, Parsonson, and Perry, 1986). A teacher's limited knowledge of other cultures results in low expectations for minority children due to preconceived stereotypes. Evidence from past studies indicates that children are treated indifferently by educators due to certain characteristics such as ethnicity (Avery and Walker, 1993).

Importance of the Study

Children come from different backgrounds and bring to the classroom a diversity in language, culture, and
individual needs. These differences do present a challenge to educators but they must be addressed within the classroom. All children must be given the opportunity to become critical thinkers and not be limited to acquiring and reciting skills. Educators may be unaware of the limitations they are setting for their students (Tran, Young, and Di Lella, 1994). Therefore, the results of this study will demonstrate whether or not teaching advocates the active participation by every learner despite their ascribed characteristics such as ethnicity.

Statement of the Problem

Is there a relationship between teacher expectations and a student's ethnicity? To further expand on past research, the study investigated the relationship between student ethnicity and teacher expectations. The research focused on how these expectations were communicated to students through the types of questions they were asked.

Hypothesis

The following hypothesis was tested: There is a significant relationship between student ethnicity and teacher expectations of academic behavior.

Limitations of Study
Several limitations are to be taken into account for this study:

First and foremost, the location for the study was assigned to the researcher. The external validity was limited due to the use of a population and not a sample. Also, the population was comprised of only three ethnic groups (12 White, 4 Black, and 6 Latinos). This resulted in underrepresentation of ethnic groups. Hence, the results may not be used to infer to a larger population.

The ethnicity of the teacher was also be taken into consideration when observing their expectations of the students. Minority teachers may be aware of existing stereotypes and therefore, not place expectations on their students based on their ethnicity. Limiting observations to one teacher does not allow the author to make generalizations.

The researcher may have also affected the study when rating the questions asked by the teacher. A generosity error may have occurred when the rater was making judgments upon the observed teacher's questions. This may have affected the recorded observations which in turn may have affected the reliability of this study.

Definition of Terms

For the purpose of this study, the following terms
were defined as followed:

Cognitive Expectations: Refers to the "academic performance teachers expect from students" (Clifton, Hryniuk, Parsonson, and Perry, 1986, p. 59).

Low Order Questions: Pertains to the type of question the student is asked by the teacher; refers to those questions in the categories of knowledge, comprehension, and application according to Bloom's Taxonomy (see appendix A).

High Order Questions: Pertains to the type of question the student is asked by the teacher; refers to those questions in the categories of analysis, synthesis, and evaluation according to Bloom's Taxonomy (see appendix A).
Chapter Two

Review of Literature

Introduction

The research studies used in this review were gathered at Rowan College of New Jersey at Glassboro and the Educational Information Resource Center in Sewell, New Jersey. Articles related to teacher expectations, ethnicity, and student performance were attained for the purpose of this study. Those articles that stated a relationship between student ethnicity and teacher expectations as well as articles regarding student performance and teacher expectations are included in this review of literature. The articles examined the relationship between student ethnicity and teacher expectations of academic behaviors.

Teachers' Preparedness

Studies have shown that teachers do not receive the proper preparation to teach ethnically diverse students (Avery and Walker, 1993). The need for a multicultural curriculum has not been a priority for schools even though there is a growing number of diverse students entering
the educational system (Grant and Koskela, 1986). Education programs are not recruiting minority teachers or providing proper training for White teachers (Avery and Walker, 1993). As cited by Avery and Walker, Grant and Koskela stated that teachers are aware of cultural diversity within the schools however, "[they] often do not provide specific attention to the impact of race... on learning within the context of American schools" (1993, p. 27). For example, Alvin Y. So states that [Latino] teachers have higher expectations for Hispanic students than do White teachers (1987). Therefore, "The recruitment of [Latino] teachers will help to raise the educational achievement of [Latino] students" (So, 1987, p. 6). "It is also important to recognize that student characteristics may influence teacher perceptions and expectations" (Garcia, Wilkinson, Ortiz, 1995, p. 446). Weinstein, Madison, and Kuklinski suggest that such behavior from teachers must be prevented (1995). As a result, teacher training programs need to revamp their curriculum in order to deal with issues of race (Grant and Koskela, 1986). Such programs should provide teachers with the necessary "knowledge and skills needed to educate multicultural populations" (Garcia, Wilkinson, and Ortiz, 1995, p. 447).

Ethnicity as a Predictor
According to Di Lella, Tran, and Young (1994), some teachers form negative expectations for ethnically diverse students due to pre-existing stereotypes. Weinstein, Madison, and Kuklinek cite Cummins and Oakes as stating that "ethnic minority children have been documented to be overrepresented as targets of low expectations" (1995, p. 122). Such evidence supports the idea that teachers use characteristics such as ethnicity to make judgments about their students (Clifton, Hryniuk, Parsonson, and Perry, 1986). "Interestingly student teachers (38%) believed that poor academic performance of culturally diverse children was due to either a cultural deficit or cultural differences" (Di Lella, Tran, Young, 1994, p. 168). Investigations have found a relationship between a student's ethnicity and a teacher's expectations (Clifton, Hryniuk, Parsonson, and Perry, 1986). Due to such findings, Avery and Walker cite Olstad, Foster, and Wymann as stating that teachers will expect minority students to be low achieving students (1993). Expectations based on ascribed characteristics such as ethnicity "violates the norm of universalism, which states that all students should be treated equal... except as they differ in ability" (Clifton, Perry, Parsonson, Hryniuk, 1986, p. 66). In order to eliminate ethnicity as predictor within the classroom, "changes are needed to develop higher expectations, greater

Affect of Expectations on Performance

"Behavioral scientists have long suggested that merely expecting an event to occur can sometimes lead to an increased likelihood that the event will in fact happen" (Feldman and Theiss, 1982, p. 217). Braun has been cited by Feldman and Theiss as stating that the publication of Rosenthal and Jacobson's *Pygmalion in the Classroom* has resulted in the increasing number of research concerning teacher expectations and their effects on student performance (1982). "This labeling theory has significantly contributed to our understanding of teacher-student relationships, but there are still unresolved issues" (So, 1987, p. 5). "This differential treatment has been found to both directly (through exposure) and indirectly (through student awareness) impact student motivation and achievement" (Weinstein, Madison, and Kuklinski, 1995, p. 122). Some students "may not be reaching their potential because their teachers do not expect much from them" (Good and Brophy, 1984, p. 97). According to Di Lella, Tran, and Young, Nieto suggests "teachers tend to internalize and perpetuate negative societal attitudes toward ethnic groups" (1994, p. 184). These teacher formed expectations
are communicated both verbally and non-verbally Feldman and Theiss, 1982). As cited by Clifton, Hyrıniuk, Parsonson, and Perry, Brophy argues that these communicated expectations affect a student's performance in such a way that they become true (1986). "Acknowledgment that the performance outcomes of students are determined by the interactions between an ethnic group and the educational system implies that all components may have to be altered for change to occur" (Avery and Walker, 1993, p. 35).

Garcia, Wilkinson, and Ortiz suggest that in order to foster academic success of minority students, teachers need to "hold consistently high expectations and provide each learner with academically rich and challenging material" (1995, 446). According to Avery and Walker, Contreras believes that "teachers can make a difference by expecting high academic performance and also believe that teachers must be aware of and include elements of diverse cultures (1993)."
Chapter Three

Procedure and Design of the Study

Introduction

"Universalism implies that children should not be treated differently on the basis of ascribed characteristics, such as ethnicity" (Clifton, Perry, Parsonson, and Hryniuk, 1986, p. 58). Past research by Clifton, Perry, Parsonson, and Hryniuk (1986) indicates that a student's ethnicity "had an effect on their teachers' expectations". The purpose of this study was to examine whether a student's ethnicity affects the types of questions they are asked.

Population/Subjects

The population for this study was a second grade intact classroom. The school was located in the South Jersey region. The classroom was comprised of twenty-two children from three ethnic groups; White, Black, and Latino. The subjects were 12 White, 4 Black, and 6 Latino students. The classroom teacher observed was white.
Description of the Instrument

Observations were recorded using an instrument developed by the researcher (see appendix B). The columns represent the ethnicity of the students and the rows represent the types of questions asked by the teacher. The observer rated these questions as low order and higher order questions.

An open-ended question designed by Avery and Walker (1993) (see appendix C) was answered by the teacher. The question examined the teacher's perceptions of ethnicity and academic achievement of their students (Avery and Walker, 1993).

Research Design and Procedure

Due to ethical considerations, permission to observe general classroom activities was requested and granted before beginning the study. However, the teacher was not aware that her existing expectations for the students were being observed.

To benefit the researcher, the study was conducted in three cycles. The first phase consisted of observations conducted within the classroom. One observation per day took place over a one hour time period. It was then followed by an open-ended question which was answered by the classroom teacher. Finally, a statistical analysis
of the data collected was conducted.

Before beginning the research, the observer compiled demographic information about the classroom (see appendix D). The first phase of this study consisted of observations done by the researcher over a 3 week period. The questions asked by the teacher were documented and the ethnicity of the student was also recorded. The questions were later categorized as low order or high order questions. They were finally recorded on the constructed chart.

After the observer completed the series of observations, the classroom teacher was asked to answer an open-ended question (see appendix C) designed by Avery and Walker (1993). The question examined the teacher's perceptions of ethnicity and academic achievement. In order to avoid the halo effect, the teacher was asked to respond to the question after the observations were completed. The teacher may have realized that the existence of expectations for the students were being observed and may have altered classroom behavior accordingly. This question allowed the researcher to better understand if ethnicity is a characteristic that the teacher admits to using when forming expectations for the students.

The final phase of the procedure involved a statistical analysis of the collected data. In order to find if there was a significant difference between ethnicity and teacher
expectations, the researcher used a Chi square test to analyze the nominal data. The statistical procedure was used to compare what was observed to what was expected to be observed.
Chapter Four
Analysis of Findings

Introduction

It has been noted that student ethnicity affects teacher expectations. This in turn affects the student's performance (Tran, Young, Di Lella, 1994). The purpose of this study was to examine if a significant relationship exists between student ethnicity and teacher expectations. In order to determine if such a relationship could be found in the research population, a Chi square test was performed on the collected data using SPSS MS Windows 6.1 (1996).

Tabulation of Chi Square

The correlations for this study are presented in table 1. The table indicates the effect student ethnicity had on teacher expectations. To determine these correlations, the researcher used a Chi square test. The researcher first conducted the data analysis to determine the significance between White, Black, and Latino students and the types of questions that they were asked by the
teacher. Finally, the researcher conducted a two by two analysis to indicate the significance between two of the ethnic groups and the types of questions they were asked by the teacher.

Table 1

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Chi Square</th>
<th>p-level</th>
</tr>
</thead>
<tbody>
<tr>
<td>WxL</td>
<td>5.047</td>
<td>ns</td>
</tr>
<tr>
<td>BxL</td>
<td>3.142</td>
<td>ns</td>
</tr>
<tr>
<td>WxB</td>
<td>.0360</td>
<td>ns</td>
</tr>
<tr>
<td>WxL</td>
<td>4.541</td>
<td>p&lt;.05</td>
</tr>
</tbody>
</table>

As the data analysis indicates, there was no significant difference between White, Black, and Latino students (X=5.047) and the types of questions the teacher asked each ethnic group. The two by two analysis further illustrates that no significant relationships were found between Black and Latino students (X=3.142), nor was there a relationship found between White and Black students (X=.0360). However, when comparing White and Latino students, a significant relationship was found (X=4.541, p<.05).
Analysis Related to Particular Purpose of Hypothesis

The purpose of this study was to test the following hypothesis: There is a significant relationship between student ethnicity and teacher expectations of academic behavior. The study however, revealed that no significant relationship existed between White, Black, and Latino students and the types of questions they were asked (X=5.047) by their teacher. Furthermore, no statistically significant relationship was found between Black and Latino students (X=3.412) and between White and Black students (X=.0360). Although the hypothesis was rejected, the study revealed a significant relationship between White and Latino students and the types of questions each ethnic group was asked (X=4.541, p<.05) by the teacher.
Chapter Five
Summary, Conclusions, and Recommendations

Introduction

Educators no matter what their ethnicity should be aware of existing stereotypes when forming expectations for their students. This study has examined the issue of diversity within the classroom. That is, it investigated the relationship between student ethnicity and teacher expectations. Teachers should not base expectations on ascribed characteristics such as ethnicity due to the diverse student population that now exists in the schools.

Summary of the Problem

To further expand on past research, the researcher posed and investigated the following question: Is there a relationship between teacher expectations and a student's ethnicity? The researcher focused on how these expectations were communicated to students through the types of questions that they were asked.
Summary of the Hypothesis

The following hypothesis was tested and rejected:
There is a significant relationship between student ethnicity and teacher expectations of academic behavior.

Summary of the Procedure

The study was conducted in three phases. Before conducting any research, the researcher compiled demographic information about the classroom. The first phase consisted of observations conducted within the classroom over a three week period. The researcher conducted one observation per day over a one hour time period. All questions asked by the teacher were documented and the ethnicity of the student was also recorded. The questions were further categorized as low order or high order questions and recorded on the constructed chart. The classroom teacher was then asked to answer an open ended question (Avery and Walker, 1993). The question was used to examine the teacher's perceptions of ethnicity and academic achievement. The final phase of the procedure involved a statistical analysis of the collected data. A Chi square test was used to determine if significant relationships existed.

Summary of Findings

A Chi square test was used to determine the statistical
significance of this study. After performing a Chi square test on the collected data, the study revealed that there is no significant difference between White, Black, and Latino students and the types of questions that they were asked ($X=5.047$). It can however, be said to be approaching significance.

The researcher then conducted a two by two analysis to examine other relationships in the study. The findings can be summarized as follows: (1) No significant relationship was found between Black and Latino students and the types of questions that they were asked ($X=3.142$). It however, can be said to be reaching significance. (2) No statistically significant relationship was found between White and Black students and the types of questions that they were asked ($X=.0360$). (3) There however, was a significant difference between White and Latino students and the types of questions that they were asked ($X=4.541$, $p<.05$). Table 2 summarizes the degree of significance of the relationships.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Degree of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>WxBxL</td>
<td>approaching significance</td>
</tr>
</tbody>
</table>
Conclusions

The purpose of this study was to examine the affect that ethnicity has on teacher expectations. The results reveal that White, Black and Latino students were not treated indifferently by their teacher. That is to say there was no significant difference between the types of questions that they were asked ($X=5.047$). In turn, it can be said that the data implies that the observed teacher formed no academic expectations based on student ethnicity. Similar findings were found between Black and Latino students ($X=3.142$) and White and Black students ($X=.0360$) and the types of questions that they were asked. It indicates that the students' ethnicity did not affect the teacher's academic expectations for the students. However, when considering the findings, it is important to remember that a generosity error may have occurred when the rater was making judgments upon the observed teacher's questions. This may have affected the collected data which in turn may have skewed the findings.

Finally, a significant relationship was found between
White and Latino students and the types of questions that they were asked (X=4.541). The findings imply that the teacher did set academic expectations for Latino students based on their ethnicity. It is also interesting to note that the teacher stated that low achievement for Latino students is a result of a language barrier. This belief may have affected the types of questions the teacher asked these students.

Recommendations

Although this study indicated that ethnicity may or may not serve as a predictor for teacher expectations, there are several limitations that must be taken into consideration if future research is to be done. First and foremost, the setting for the study was assigned to the researcher. Therefore, the subjects were not part of a random stratified sample. Using such a sample, would increase the external validity of the study. Random stratified sampling would also allow for each ethnic group to be equally represented.

The present study conducted was limited to a second grade classroom. Therefore, the researcher does not know whether or not grade level is a factor that affects teacher expectations. The study would have been enhanced if the researcher would have observed several grade levels. The
results could than have been inferred to a larger population.

This study was also limited to one classroom teacher. The ethnicity of the teacher observed was White. Future studies should also include minority teachers. By doing such, the affects of teacher ethnicity could also be examined. It is possible that a teacher's background could have an effect on student expectations. As a result of such a limitation, the author is limited when making generalizations.

Finally, interscorer reliability should of been used. Two individuals should have rated the questions that were recorded. Such a task involves subjectivity and error could of been eliminated if more than one rater was included in the study. The researcher may have caused a generosity error when rating the questions which in turn may have affected the reliability of this study.

Implications

The present study opens avenues for future studies. The results point to educational issues that must be addressed. For example, with the ever changing population, ethnic diversity should be a priority within the classroom. If all students are to receive an equal opportunity at education, stereotypes must be eliminated within the
classroom. A student should not be treated indifferently due to an ascribed status such as ethnicity.

Although the hypothesis was rejected, the study revealed that academic expectations are formed for Latino students. Further research should be conducted in this area. Teachers should be more aware of the needs of Latino students and not set low expectations for them. It would be interesting to investigate how much multicultural training teachers have received. Teachers should be better prepared to teach and meet the needs of ethnically diverse populations. It is possible for teachers to make a difference if they are aware of the needs of minority students and set high academic expectations for them.
References


REFERENCES


Appendix A
Bloom's Taxonomy

Descriptions of the Major Categories in the Cognitive Domain

1. **Knowledge**  
   Knowledge is defined as the remembering of previously learned material. This may involve the recall of a wide range of material, from specific facts to complete theories, but all that is required is the bringing to mind of the appropriate information. Knowledge represents the lowest level of learning outcomes in the cognitive domain.

2. **Comprehension**  
   Comprehension is defined as the ability to grasp the meaning of material. This may be shown by translating material from one form to another (words or numbers), by interpreting material (explaining or summarizing), and by estimating future trends (predicting consequences or effects). These learning outcomes go one step beyond the simple remembering of material and represent the lowest level of understanding.

3. **Application**  
   Application refers to the ability to use learned material in new and concrete situations. This may include the application of such things as rules, methods, concepts, principles, laws, and theories. Learning outcomes in this area require a higher level of understanding than those under comprehension.

4. **Analysis**  
   Analysis refers to the ability to break down material into its component parts, analysis of the relationships between parts, and recognition of the organizational principles involved. Learning outcomes here represent a higher intellectual level than comprehension and application because they require an understanding of both the content and the structural form of the material.

5. **Synthesis**  
   Synthesis refers to the ability to put parts together to form a new whole. This may involve the production of a unique communication (theme or speech), a plan of operations (research proposal), or a set
of abstract relations (scheme for classifying information). Learning outcomes in this area stress creative behaviors, with major emphasis on the formulation of new patterns or structures.

6. Evaluation Evaluation is concerned with the ability to judge the value of material (statement, novel, poem, research report) for a given purpose. The judgments are to be based on definite criteria. These may be internal criteria (organization) or external criteria (relevance to the purpose) and the student may determine the criteria or be given them. Learning outcomes in this area are highest in the cognitive hierarchy because they contain elements of all of the other categories plus value judgments based on clearly defined criteria.
Appendix B
Observations Day 1

<table>
<thead>
<tr>
<th>Low Order Questions</th>
<th>High Order Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td></td>
</tr>
<tr>
<td>Latino</td>
<td></td>
</tr>
</tbody>
</table>
Avery and Walker Opened Question

In 1988, the percentages of Blacks, Hispanics, and Whites between the ages of 18 and 24 with less than a high school education were 29%, 42%, and 20% respectively (World Almanac, 1990). How do you explain these differences?
Appendix D
Demographics

<table>
<thead>
<tr>
<th>Student</th>
<th>Gender</th>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRB</td>
<td>Male</td>
<td>White</td>
</tr>
<tr>
<td>JB</td>
<td>Male</td>
<td>White</td>
</tr>
<tr>
<td>MB</td>
<td>Female</td>
<td>White</td>
</tr>
<tr>
<td>DB</td>
<td>Male</td>
<td>Black</td>
</tr>
<tr>
<td>TC</td>
<td>Female</td>
<td>Latina</td>
</tr>
<tr>
<td>HC</td>
<td>Female</td>
<td>Latina</td>
</tr>
<tr>
<td>RD</td>
<td>Male</td>
<td>Latino</td>
</tr>
<tr>
<td>MD</td>
<td>Male</td>
<td>White</td>
</tr>
<tr>
<td>BD</td>
<td>Female</td>
<td>White</td>
</tr>
<tr>
<td>BF</td>
<td>Female</td>
<td>White</td>
</tr>
<tr>
<td>AF</td>
<td>Male</td>
<td>Latino</td>
</tr>
<tr>
<td>KF</td>
<td>Female</td>
<td>White</td>
</tr>
<tr>
<td>BG</td>
<td>Female</td>
<td>Black</td>
</tr>
<tr>
<td>TH</td>
<td>Female</td>
<td>Black</td>
</tr>
<tr>
<td>CI</td>
<td>Male</td>
<td>White</td>
</tr>
<tr>
<td>EK</td>
<td>Male</td>
<td>White</td>
</tr>
<tr>
<td>HM</td>
<td>Male</td>
<td>Black</td>
</tr>
<tr>
<td>JO</td>
<td>Female</td>
<td>Latina</td>
</tr>
<tr>
<td>JP</td>
<td>Female</td>
<td>Latina</td>
</tr>
<tr>
<td>KT</td>
<td>Female</td>
<td>White</td>
</tr>
<tr>
<td>SW</td>
<td>Female</td>
<td>White</td>
</tr>
<tr>
<td>JZ</td>
<td>Male</td>
<td>White</td>
</tr>
</tbody>
</table>
Name: Daisy Mercado

Date and Place of Birth: August 17, 1972
Vineland, New Jersey

Elementary School: D'Tppolito School
Vineland, New Jersey

High School: Vineland High School
Vineland, New Jersey

College: Rutgers the State University of New Jersey
Douglass College
New Brunswick, New Jersey
B.A. Spanish 1995

Graduate: Rowan College of New Jersey
Glassboro, New Jersey
MST Elementary, 1996