

2008

# A Qualitative Investigation of Interdisciplinary Mixed Ability Co-Operative Classes in an Inner-Ring Suburban High School

John Llewellyn Morris  
*Cleveland State University*

**How does access to this work benefit you? Let us know!**

Follow this and additional works at: <http://engagedscholarship.csuohio.edu/etdarchive>

 Part of the [Education Commons](#)

---

## Recommended Citation

Morris, John Llewellyn, "A Qualitative Investigation of Interdisciplinary Mixed Ability Co-Operative Classes in an Inner-Ring Suburban High School" (2008). *ETD Archive*. Paper 209.

This Dissertation is brought to you for free and open access by EngagedScholarship@CSU. It has been accepted for inclusion in ETD Archive by an authorized administrator of EngagedScholarship@CSU. For more information, please contact [library.es@csuohio.edu](mailto:library.es@csuohio.edu).

A QUALITATIVE INVESTIGATION OF INTERDISCIPLINARY MIXED ABILITY  
CO-OPERATIVE CLASSES IN AN INNER-RING SUBURBAN HIGH SCHOOL

JOHN LLEWELLYN MORRIS

Bachelor of Arts

Hiram College, Hiram, Ohio

May 1996

Master of Education

Cleveland State University

May 2001

Submitted in partial fulfillment of requirement for the degree

DOCTOR OF PHILOSOPHY IN URBAN EDUCATION

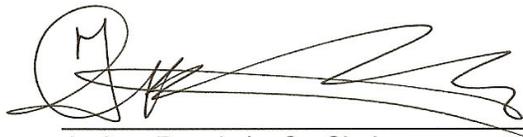
LEARNING AND DEVELOPMENT

At the

CLEVELAND STATE UNIVERSITY

December 2008

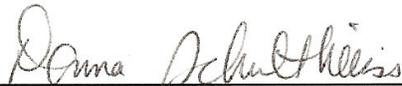
This dissertation has been approved for  
the Office of Doctoral Studies,  
College of Education  
and the College of Graduate Studies by



Joshua Bagaka's, Co-Chairperson

10/29/2008

Curriculum and Foundations



Donna Schultheiss, Co-Chair and Methodologist

10/29/2008

Counseling, Administration, Supervision, and Adult Learning



Rosemary Sutton, Member

10/29/2008

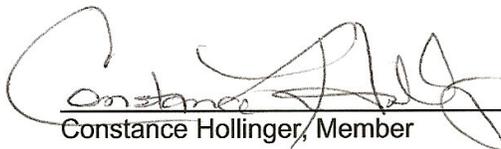
Curriculum and Foundations



Annie Galletta, Member

10/29/2008

Curriculum and Foundations



Constance Hollinger, Member

10/29/2008

Psychology

## DEDICATION

I dedicate this dissertation to my wife, Maryann, and my son, Sam,  
who have supported me throughout this work

## ACKNOWLEDGEMENTS

I would like to acknowledge several people for the invaluable assistance, guidance and support they have provided for me in completing this dissertation. I would first like to thank Dr. Donna Schultheiss for her constant encouragement and guidance in completing my research and navigating the dissertation process, Dr. Joshua Bagaka's for guiding me through the Urban Education program, Dr. Rosemary Sutton for her high standards and inspiration to take on challenging research, Dr. Anne Galletta for providing thought-provoking questions and her own influential research, and Dr. Connie Hollinger for her probing questions and willingness to put in time and effort as a committee member. I would like to thank my family: my wife, Maryann for his constant support and patience, my son, Sam, for his energy and inspiration. I want to thank my teaching partners, Andi Glickman and Tim Mitchell, for experiencing these classes with me and encouraging me to do this research. I would also like to thank all of my friends, family, and colleagues who have offered encouragement and support throughout this process. Finally, I would like to acknowledge the students who lent their voices to this research and for whom my work is focused on representing.

A QUALITATIVE INVESTIGATION OF INTERDISCIPLINARY MIXED ABILITY CO-  
OPERATIVE CLASSES IN AN INNER-RING SUBURBAN HIGH SCHOOL

JOHN LLEWELLYN MORRIS

ABSTRACT

Combining students with different ability levels in the same classes, termed mixed ability grouping, is a controversial educational issue. Advocates of mixed ability grouping see this approach as a solution to meeting the demands of the NCLB Act as well as ameliorating the achievement gap between black and white students. Opponents view the approach as denying gifted students specialized education. The purpose of this study was to understand students' perceptions of their learning environment, their peers, and themselves within an interdisciplinary mixed ability co-operative educational setting and the social justice implications. Research indicates reasons for (Kulik, 1993; Shields, 2002) and reasons against (Slavin, 1988; Burris, Heubert, & Levin, 2006) a mixed ability approach.

A qualitative analysis of interviews with twelve diverse high school students in mixed ability classrooms within an inner-ring suburban high school in Northeast Ohio were conducted to inform educational practice and policy. These students were all part of interdisciplinary mixed ability co-operative English and history classes taught at both the College Preparatory and Honors level that emphasized social justice (Hackman, 2005). Utilizing grounded theory qualitative research methodology (Strauss & Corbin, 1998), analysis revealed an

emphasis on the domains of academic environment, social environment, self-perceptions, and reflection.

Students reported that their mixed ability classes provided a challenging and rewarding learning environment. The peer environment helped foster cross-level, cross-race friendships, a positive classroom climate and an understanding of both personal and academic relationships. Participants' personal self-perceptions were positive, validated and challenged by their experiences. They also strongly recommended these classes to peers. This investigation suggests the adoption of an interdisciplinary mixed ability co-operative learning approach in high schools and the re-examination of the purpose of separate tracks or ability level grouping. Implications on the issues of educational equity, No Child Left Behind, and social justice are also discussed.

## TABLE OF CONTENTS

ABSTRACT.....	v
CHAPTER I.....	1
INTRODUCTION.....	1
Purpose of Study.....	8
Research Questions.....	8
Significance of Study.....	9
Delimitations.....	11
Limitations.....	11
Definitions.....	12
Assumptions.....	17
CHAPTER II.....	19
LITERATURE REVIEW.....	19
Con Mixed Ability Grouping.....	19
Pro Mixed Ability Grouping.....	26
Detracked Environments.....	34
Social Identity Theory and Cross-Cutting Categorization.....	36
Conclusions and Research Questions.....	37
CHAPTER III.....	39
METHODS.....	39
Research Perspective.....	40
Research Approach.....	40

Site of Data Collection.....	41
Participants.....	43
Method of Data Collection.....	45
Interview.....	45
Procedure.....	47
Recruiting participants.....	47
Interview method.....	47
Transcription of interviews.....	48
Data analysis.....	48
Summary.....	50
School Profile.....	51
Research Questions.....	51
The High School.....	52
CHAPTER IV.....	54
RESULTS.....	54
Academic Environment.....	56
Projects.....	56
Academic similarity to other classes.....	59
Connections.....	61
Between subjects.....	62
Between classes.....	63
Exposure to both CP/H.....	66

Content and activities.....	69
Effort resulted in academic rewards.....	72
Social Environment.....	74
Changes in peer relationships.....	75
Development of new and diverse friends.....	76
Connection with peers.....	77
Good friends.....	80
Classroom climate.....	82
Climate similar to other classes.....	82
Fun personal interactions.....	84
Choice of group partners.....	86
Similar work ethic.....	86
Random selection.....	87
Self-Perceptions.....	89
Good/Comfortable.....	90
Social.....	90
Personal.....	91
Academic.....	93
Validated.....	94
Academic.....	95
Personal.....	96
Challenged.....	98

Academic.....	98
Social.....	100
Reflection.....	103
Would/have taken another CP/H class.....	103
Reasons for taking another CP/H class.....	103
Like combination of CP/H.....	104
Availability.....	105
No difference between other non CP/H classes.....	108
Good class/recommended.....	109
CHAPTER V.....	113
DISCUSSION.....	113
Summary.....	113
Research Questions.....	114
How do students in interdisciplinary mixed ability co-operative classes perceive their learning environment?.....	114
How do students in interdisciplinary mixed ability co-operative classes perceive their peers?.....	116
How do students in interdisciplinary mixed ability co-operative classes perceive themselves?.....	119
Reflection.....	121
Recommendations for Further Research.....	122
Implications for Theory.....	125

Implications for Practice.....	126
Limitations.....	128
Conclusions.....	129
REFERENCES.....	130
APPENDICES.....	137
APPENDIX A Interview questions.....	138
APPENDIX B Introduction and informed parental consent.....	142
APPENDIX C Introduction and informed minor consent.....	145
APPENDIX D Demographic information sheet.....	147

## CHAPTER I

### INTRODUCTION

Contemporary tracking or “streaming” students has been a part of the American educational landscape since the beginning of the twentieth century (Wheelock, 1992). Educational historians have traced the practice back to the great waves of immigration at the turn-of-the-century when the objective was to differentiate the instruction of immigrant children from native-born children (Wheelock, 1992). To facilitate the naturalization and job training of new immigrants, tracks were seen as a necessity to serve the widest variety of students. As the twentieth century progressed, these tracks endured and began to represent different curriculums that reflected the likely social and work-related fields that students would enter (Wheelock, 1992). Eventually, ability grouping became a standard practice across the nation, especially in high schools. Just as the immigrant population became most stable, during the late 1950’s, the space race and subsequent push towards encouraging our best and brightest learners emerged to reaffirm the necessity of tracking (Oakes, 1985). Tracking soon became an established norm in American education. However, many educators

and researchers now question this established norm by advocating for a grouping arrangement that will detrack America's schools in the form of mixed ability grouping or, as one of interviewed students phrased it, create classrooms that consist of "smart kids with smart kids" instead of students who are divided by the artificial divisions of ability grouping.

Ford Foundation findings indicated that very few high schools, as recently as 1985, even considered detracking (Wheelock, 1992). For many Americans, tracking simply seems to be the way school curriculum should be organized. The question is why do current proponents of tracking and ability grouping continue to advocate this method while others want to see our schools detracked through mixed ability grouping?

The detracking and mixed ability grouping debate can be divided between the pro and the con camps. On the pro side are those who advocate for detracking through mixed ability grouping and consider themselves advocates of minority and underprivileged students at the bottom of the tracking scheme who they believe are excluded from the resources at the top (i.e. Oakes, 1985; Wheelock, 1992). On the con side are supporters of tracking and ability grouping who advocate for gifted and talented students, whose advancement they consider jeopardized by the slower pace and less advanced materials they believe are necessitated by a mixed ability group (i.e. Kulik & Kulik, 1982; Kulik, 1993). To better understand this issue, it is necessary to analyze the

development of the tracking and subsequent detracking debate, as well as the perspectives from both the pro and con sides of the issue.

The argument that many proponents of tracking use is the categorization of the gifted and talented learner. On educational surveys spanning the past 45 years, the majority of Americans have advocated more spending and attention given to gifted children (Hochschild & Scovronick, 2003). Yet the same authors also noted that nearly half of those surveyed believed they had a gifted child (Hochschild & Scovronick, 2003). However, it would be short sighted to assert that advocates of tracking are merely self-serving. Many proponents see tracking as the only way to create an environment in which high functioning students can thrive. The National Association for Gifted Children (NAGC) stated that grouping encourages instruction that is more appropriate to the learning pace and high-level skills of gifted students (NAGC, 2003). In even stronger language, echoing back to the Sputnik era concern for global competitiveness, the National Association for Gifted Children (NAGC) posited that abandoning ability grouping could damage our competitive position in the world and jeopardizes our commitment to adequate education for all children (NAGC, 2003). One researcher considered rejecting ability grouping to be the same as denying gifted children their special educational needs (VanTasell-Baska, 1992). However, the same researcher also noted that while accelerating gifted learners is supported by research, the research supporting grouping gifted learners is less clear (VanTasell-Baska, 1992). Hochschild & Scovronick (2003) concurred that

methodological differences often make empirical studies on the effects of ability grouping unclear (Hochschild & Scovronick, 2003). One researcher noted that, without conclusive data, the tracking controversy is emotionally driven but lacks empirical support (Scott, 2001).

A series of meta-analyses conducted on ability grouping have reported significant findings (Kulik & Kulik, 1982; Kulik, 1993). In a meta-analysis of the research on ability grouping, Kulik & Kulik (1982) found that ability grouping had little effect on the achievement of average and below-average students. In another meta-analysis of the research on ability grouping, Kulik (1993) found that higher aptitude students usually benefit academically from ability grouping (Kulik, 1993). Likewise, the same study found that the non-cognitive outcomes of ability grouping, such as socialization and peer group attitudes, did not create higher aptitude students who are condescending and insensitive, nor did they create lowered self-esteem in lower aptitude students (Kulik, 1993).

Another study conducted with 5<sup>th</sup> and 8<sup>th</sup> grade students in homogeneous gifted classes and heterogeneous mixed ability classes similarly found that the removal of gifted students from heterogeneous classes did not negatively affect the non-gifted students in the class (Shields, 2002). Yet the same lack of benefit to lower aptitude students is exactly what motivates proponents of mixed ability grouping to call for detracking.

The proponents of detracking through mixed ability grouping, while sharing the same inconclusive empirical data, have experienced an increasing

amount of support as opposed to their tracking counterparts. Groups that have taken a public position in support of mixed ability grouping include the National Governors' Association, the ACLU, the Children's Defense Fund, the Carnegie Corporation, the College Board, the NAACP Legal Defense Fund, and the National Council for the Social Studies, among others (Hochschild & Scovronick, 2003; AMS Position Paper, 2005). The question that then arises is, why have so many groups come out to publicly support this controversial change in school practice? The answer may be that the literature that has steadily emerged throughout the last two decades, questioning the fairness and effectiveness of tracking, has had an impact. One of the earliest and most vocal detractors of tracking is Jeanie Oakes. In her 1985 book *Keeping track*, Oakes examined data from 25 tracked schools and concluded that,

...tracking is not in the best interests of most students. It does not appear to be related to either increasing academic achievement or promoting positive attitudes and behaviors. Poor and minority students seem to have suffered most from tracking-and these are whom so many educational hopes are pinned. If schooling is intended to provide access to economic, political, and social opportunity to those who are so often denied such success, school tracking appears to interfere seriously with this goal. (Oakes, 1985, p. 189)

In arguing against tracking as a force that holds poor and minority children back from realizing their academic potential, Oakes became a catalyst for significant research concerning ability grouping and the minority and underprivileged students particularly vulnerable to its effects.

It is arguable that Oakes' book started what has now developed into the serious debate over mixed ability classrooms. In the twenty years since Oakes

first stated her argument, there has been empirical research conducted to explore the effects of mixed ability and ability grouping. However, as one researcher reiterated, comparing classrooms with different students, teaching methods, materials, curriculum content, and teacher attitudes towards mixed ability grouping is a very difficult task (Harlen, 1999). Nonetheless, the research on this significant issue continues.

One of the issues that may have prompted the debate over the adoption of mixed ability grouping is the achievement gap that has existed in our nation's schools for quite some time. Essentially, groups that have been historically "left behind" in America's schools, namely minorities and the impoverished, have not experienced the same success as their European-descended, more economically successful counterparts. While some see the gap as a manifestation of environmental circumstances, still others see this differential as a result of the unequal distribution of educational resources within schools themselves (Hallinan, 1994b). Essentially, those students who are perceived to be the brightest, or in the upper track, are thought to receive the best of the school's resources. These resources include the most experienced teachers, the most current materials, and the most enriching experiences (i.e. field trips, guest speakers). In an effort to eliminate the resource gap, many educators feel that eliminating "tracks" and combining students of all abilities in the same classroom will create an educational environment in which all resources are distributed evenly. This, in turn, will help bridge the achievement gap.

The research on the effects of tracking on minority and impoverished students is perhaps the most contentious of the many issues touched upon in the ability grouping debate. Some researchers have found evidence to support the basic premise that grouping policies have the potential to increase racial segregation (Khmelkov & Hallinan, 1999). Other research has found that often times students' social backgrounds are connected to their academic track placement and achievement (Hallinan, 1994b). Another researcher concluded that tracking sustained through the mid-twentieth century due to desegregating schools in the 1950's and the subsequent new segregation created by higher proportions of whites in advanced classes and lower proportions of minorities in those same classes (Scott, 2001). However, the same author suggested that detracking can be specifically detrimental to high-risk students and may lead to low achievement among high-potential students (Scott, 2001). The author concluded that not allowing academically advanced minority students to study with equally advanced peers would actually limit their potential (Scott, 2001). In the same vein, although with a different conclusion, another group of researchers observed that academic tracking and ability grouping have continued to limit the potential of African American students, despite the legal boundaries removed by *Brown vs. Board of Education* (Donelan et. al, 1994). A cross-cultural analysis of tracking policies in the United States and Great Britain found that tracking may widen the achievement gap, separate students according to race and class, and restrict the learning opportunities of underprivileged students

(Ansalone, 2003). It becomes apparent that the issues of race and class must be considered when investigating the ability grouping debate. Thus, arguments are being made that at many levels tracking can have detrimental effects.

#### Purpose of Study

The purpose of this study was to understand students' perceptions of their learning environment, their peers, and themselves within an interdisciplinary mixed ability co-operative educational setting and the social justice implications. This is important because many educators are looking towards mixed ability grouping as an approach to improving student achievement and bridging the academic and social divisions among students of different racial, ethnic and socio-economic backgrounds. Students' perceptions should be studied because mixed ability grouping will affect them the most and, since they will likely shape the future of education as tomorrow's leaders, their experiences can help inform best practices regarding tracking and de-tracking. The impact of the interdisciplinary mixed ability co-operative classroom environment must be seen through the eyes of the students within it. This study sought to reveal this essential perspective.

#### Research questions

1. How do students in interdisciplinary mixed ability co-operative classes perceive their learning environment?
2. How do students in interdisciplinary mixed ability co-operative classes perceive their peers?

3. How do students in interdisciplinary mixed ability co-operative classes perceive themselves?

#### Significance of the Study

The political significance of the problem that manifests itself in the mixed ability debate is that our nation is presently actively trying to eliminate the achievement gap between European-descended and African-descended students through the No Child Left Behind (NCLB) Act as well as establish a competitive educational edge within the international community of business and technology. These two objectives have lent urgency to the problem of the achievement gap that has been largely absent up to this point. As the NCLB Act continues to unfold, many school districts are being threatened with the loss of federal operating funds and restructuring of their schools if they cannot bring closure to the achievement gap ("A guide to education and *No Child Left Behind*", 2004). Likewise, as we face an ever increasing competitive global marketplace, the desire for an American workforce that can produce the most cutting edge technology and develop the most effective business practices manifests itself as a growing demand on education. Mixed ability grouping has come to the fore as one of the methods with which to both eliminate the achievement gap and produce the kind of high quality thinkers that our country needs to keep us among the world's economic powers. The central counter-argument against mixed ability grouping is that tracking is the traditional and therefore most effective way to educate our students and reach these goals.

As we venture into another year dominated by No Child Left Behind and its demands for equity in education, the importance of the mixed ability debate becomes clear. The stakes are becoming higher as school funding at the federal level is becoming increasingly dependent upon achievement test score passage and Adequate Yearly Progress (AYP) for minority students. Thus, it becomes even riskier for districts to attempt experiments, however successful they might be, with detracking through mixed ability grouping. This concern is valid when millions of federal educational dollars are at stake. Whether we stick to the notion of separate tracks or we group all learners together are the two sides of this significant debate and could, in large part, determine the future direction of American education. Both sides believe that their perspective offers the greatest hope for our nation's children. Yet they differ in where this hope lies. One group seeks to foster the advancement of our best and brightest learners. The others see strength in raising expectations and ensuring equity for learners in the larger population. This is a complex debate that has yet to produce any clear victors. Ultimately, those who have the most at stake are our students. For this reason alone, more work needs to be done to analyze the relationship and impact these perspectives have on the academic, social, and personal lives of our learners. This study sought to conduct this analysis with students, an approach that is vital to uncovering the real impacts that a new learning environment, such as the mixed ability classroom, can have on their lives. The interviews and analysis conducted as part of this study took a step closer to the lived

experiences of the students. This study was necessary for furthering a genuine understanding of the impacts of the mixed ability learning environment.

#### Delimitations

This study was delimited to high school students in one suburban school district in a Mid-western state. For this study I interviewed twelve 11<sup>th</sup> and 12<sup>th</sup> grade students who were formerly students in my interdisciplinary mixed ability co-operative classes in a relatively affluent, racially diverse inner-ring suburb of a major American city in the Midwest. My participating students varied by gender, academic level (college preparatory or honors), age, experience and race.

#### Limitations

Despite the fact that this study sought to reveal students' experiences of their learning environment, peers and themselves in interdisciplinary mixed ability co-operative classrooms, there were recognizable limitations. The student participants were not randomly selected but due to their previous class level (college preparatory or honors), their availability for interviewing, their demographic diversity (gender and race) and the fact that they attended the district in which I teach. Because of these dynamics, the level of generalization that could be realized was limited. A further limitation is the number of participants, which could limit generalizability. However, my goal was to take an in depth look at the experience that students have in mixed ability classrooms. Limiting the number of participants gave me the opportunity to focus more on each individual participant.

## Definitions

*Mixed ability grouping:* Mixed ability grouping, sometimes referred to as heterogeneous grouping, is the approach utilized in the CP/H classrooms at the high school where this study took place. The idea is simply to mix students of different ability levels in the same classroom (Venkatakrisnan & William, 2003). In this model, students are often identified as being on different academic levels. However, the instruction is still aimed at unifying the class and challenging all students at their own levels.

*Interdisciplinary:* Interdisciplinary teaching is a key feature of the instruction in the mixed ability CP/H American Experience classes investigated in this study. Since American literature and American History are the two classes taught in the American Experience course, the subject matter is consciously linked chronologically and thematically. An interdisciplinary approach blends two disciplines, in this case English and History, to create a hybridized subject matter that encourages creativity and stimulates new thinking on the subject matter being examined (Collin, in press). Examples of the interdisciplinary approach are evident in the quarterly projects that encourage students to look at literature and History together as they explore the topics of American Immigration, America at the turn-of-the 20<sup>th</sup> century, American Art, and Decades of the 20<sup>th</sup> century in America. This interdisciplinary perspective is reflected in the fact that most American Experience students conceive of the course as one class instead of two.

*Co-operative learning:* Co-operative learning is another facet of the American Experience approach towards mixed ability instruction. A central feature of our everyday class work and quarter-long assignments are co-operative activities and projects. Co-operative learning is best described as the idea that students can learn more when they are in groups than as single individuals (Whitehouse, 2008). Likewise co-operative learning emphasizes positive interdependence, individual accountability as learners and group members, positive face-to face interactions, development of interpersonal skill, and processing interactions to retain cohesiveness (Whitehouse, 2008). These co-operative elements are observable in classroom activities where students are given a group assignment and group roles as recorder, spokesperson, researcher and scribe. Similarly, in quarter long projects, students have to distribute roles as researchers, art supervisors, directors, and performers. These co-operative methods are a regular facet of the American Experience classes.

*Differentiated instruction:* Differentiated instruction is an approach that is often couched within mixed ability grouping but can also be applied to single ability classrooms. While mixed ability grouping may identify two or three specific ability groups in the classroom, differentiated instruction aims to reach each individual student where they are (Anderson, 2007). Teachers may differentiate by varying the level of difficulty of materials in the class, aligning materials to students differing interests and learning preferences, their preference for group or individual work, or providing different work spaces for

students with different learning styles (Anderson, 2007). Mixed ability grouping and differentiated instruction often come hand in hand. However, differentiation optimally is what happens within the mixed ability groups and may be utilized in homogeneously grouped classes as well.

*College Preparatory:* At the high school in which I teach and the study is centered, College Preparatory classes are focused on the average student heading to college. English classes, specifically, focus on learning literary techniques through the study of novels, writing essays, basic research and vocabulary. Classes are challenging but not difficult for most students. An important detail of note concerning College Preparatory classes is that the ability range of students in these classes vary from those students who have low reading levels and require remedial help to those students who have high reading levels and standardized test scores but who do not want to take the more challenging workload that Honors classes feature. College Preparatory classes are graded on a traditional four-point scale.

*Honors:* Honors classes at the high school are centered on encouraging academically motivated students with higher-level readings, enhanced writing assignments, more extensive research and enriched vocabulary. Honors English classes often feature more challenging novels than their College Preparatory counterparts and move at a faster pace. Students may opt to take an Honors level class, as they may opt to take a College Preparatory class. School

counselors may recommend Honors, but the choice is the student's to make. Honors classes are graded on a five-point scale.

*CP/H:* At the high school, the approach to mixed ability grouping is actually a mixture of College Preparatory and Honors students in the same classroom, instead of a truly differentiated environment where such distinctions are non-existent. This approach allows students to choose at what level they will take a course without having to be separated from their peers in different levels. While separate College Preparatory and Honors classes are still offered at the high school, some classes such as my own are offered at the CP/H mixed level. Students opt for more challenging assessments and extended assignments related to readings, writing, research, and vocabulary when they have chosen the Honors designation. For example, when an essay question is given on a test, the Honors students must respond in five paragraphs while College Preparatory students can respond in three. Likewise, the same test is scored on two different scales, one for Honors students and the other for College Preparatory students. However, for the sake of everyday instruction, there are no visible or apparent distinctions between the instruction of Honors and College Preparatory students. The readings, vocabulary, writing and research assignments are all essentially at the Honors level. The differentiation between College Preparatory and Honors students takes place when it comes to assessment and extended individual assignments.

*American Experience CP/H:* The American Experience is an interdisciplinary English and History course that has been taught in the school district that this study takes place in for over twenty-five years. I have taught the course for the past eight years. A model that has been embraced by school districts around the country, the concept is that since American literature and History are taught the same year, the two subjects logically should be taught together in an interdisciplinary environment. The course that is taught at the school studied emphasizes this connection through side-by-side classes, separated by a collapsible wall and the scheduled block of two fifty-minute periods. The course in this study is organized chronologically and traces American literature and History from post-Civil War Reconstruction through the Vietnam War. Besides the chronology that binds the two classes together, students also complete four quarterly projects that treat the subject matter in-depth through research assignments (two of which are co-operative group projects and three that include group presentations) that focus on immigration, History, the arts and performance and combine both literary and historical perspectives. Originally taught at the eleventh grade level, three years ago, with the implementation of a tenth grade state graduation test, the American Experience was moved to the tenth grade to cover the test content. At the same time the decision was made to change the course from College Preparatory to College Preparatory/Honors due to the fact that the course had the reputation of being both challenging and content rich. The mixed ability College Preparatory

and Honors element of the course has evolved during the past three years and has developed from added readings, vocabulary and assignments for Honors students to differentiation primarily on assessments and requirements for quarterly projects for College Preparatory and Honors students. These classes emphasize a community atmosphere and an interdisciplinary, co-operative approach to learning.

Three years later there are three sections and two teacher teams of American Experience that serve over one hundred students at the high school. Due to the collaborative, co-operative and interdisciplinary nature of the course, many students conceptualize the course as one course instead of two separate English and History classes. Thus their responses to interview questions often blended observations that included content on History and English as well as a reference to both classes as their American Experience class.

#### Assumptions

The following assumptions are based largely upon the past four years of my teaching experience in a mixed ability classroom as well as the findings of my previous qualitative study (Morris, 2004):

1. Interdisciplinary mixed ability co-operative grouping would help create a stimulating learning environment for both College Preparatory and Honors students.

2. Interdisciplinary mixed ability co-operative grouping would help create a peer environment in which students are exposed to College Preparatory and Honors peers they may not have met in separate classes.
3. Interdisciplinary mixed ability co-operative grouping would help students make personal realizations that the level they choose to take is more an indication of their motivation than their ability.
4. Interdisciplinary mixed ability co-operative grouping would inspire College Preparatory students to try taking Honors classes.
5. Interdisciplinary mixed ability co-operative grouping would help Honors students improve their academic performance through helping their College Preparatory peers.

## CHAPTER II

### LITERATURE REVIEW

The issue of combining students with differing ability levels in the same classroom is very controversial. While some may see mixed ability grouping as an egalitarian solution to the growing achievement gap, others see this approach as denying gifted students the specialized education they deserve. The literature on this subject illuminates the issues even further as demonstrated by the studies that reject mixed ability grouping and those studies that support mixed ability grouping, including studies that demonstrate how a mixed ability environment can function successfully.

#### Con Mixed Ability Grouping

The first groups of studies to challenge the idea of mixed ability grouping were the meta-analyses conducted by the Kuliks (Kulik & Kulik, 1982; Kulik, 1993). The meta-analytic technique consists of a reviewer locating studies of an

issue through replicatable and objective searches, the coding of searches for their salient features, and the description of studies on a common scale (Allan, 1991). For the studies to be included in a meta-analytic review, the results have to be reported in quantitative form, result from a conventional control and experimental group design, take place in an actual classroom, and report effect size (Allan, 1991). In the 1982 study, Kulik & Kulik examined 52 objective, comparative studies of grouping through computer searches of educational literature (Kulik & Kulik, 1982). The studies described educational outcomes in learning, attitudes and self-concept (Kulik & Kulik, 1982). The learning outcomes indicated that students grouped in classes according to academic ability only slightly outperformed nongrouped students (Kulik & Kulik, 1982). Students in gifted and talented programs seemed to perform better than in heterogeneous classes, while students in classes for the academically deficient or multi-track classes performed neither better or worse than in a mixed ability class (Kulik & Kulik, 1982). The meta-analytic findings of the 52 studies related to attitude were that students who were ability grouped for specific subjects such as mathematics or English had a better attitude toward the subject, while there was little difference between grouped and ungrouped students' attitudes toward school (Kulik & Kulik, 1982). The findings related to the effects of grouping on self-concept indicated that self-concept was nearly equal in both grouped and ungrouped classes (Kulik & Kulik, 1982).

The 1991 meta-analytic study conducted by Kulik, examined the types of grouping programs uncovered through analyses conducted by himself, his research partner, and their primary detractor Robert Slavin. The five types of grouping arrangements discussed were XYZ classes in which school personnel assign students by aptitude to classes (high, middle, low) where 1) similar or identical materials are used in all classes at the same grade level, 2) cross-grade grouping where students from several grades who are at the same achievement level in a subject are taught the subject without regard to their regular grade placement, 3) within-class grouping where teachers form ability groups within a single classroom and provide instruction appropriate to the level of group aptitude using different rates of instruction and materials for the different groups, 4) accelerated classes where students with unusually high academic aptitude are in classes that allow them to proceed through their schooling more rapidly with content that is clearly adapted to a higher aptitude level , and 5) enriched classes where students with unusually high aptitude receive richer and more varied educational experiences tailored to students with higher aptitude levels (Kulik, 1993). Kulik's meta-analytic findings included the observations that higher aptitude students usually benefited from ability grouping, with positive but usually small benefits when grouping was done as a part of a broader program for students of all abilities (Kulik, 1993). Specifically, Kulik found that XYZ grouping raised the test scores of higher ability students by approximately 0.1 standard deviations, or 1-month on grade-equivalent scales, and within-class and

cross-grade programs raised test scores of 0.2 to 0.3 standard deviations, or 2 to 3 months on a grade equivalent scale (Kulik, 1993). The most dramatic benefits were in accelerated classes where achievement scores were raised by one year and in enriched classes where the average gain was approximately 4 months (Kulik, 1993). As previously noted, the non-cognitive outcomes of grouping programs also appeared to have only a small effect on self-esteem, where high ability students did not become self-satisfied and smug and lower-aptitude students did not experience a drop in their self-esteem (Kulik, 1993). Kulik goes on to note that XYZ grouping may have actually caused effects in the opposite direction with quick learners losing some of their self-assurance and slower learners gaining self-confidence (Kulik, 1993). These meta-analytic findings are illuminating. However as one author noted, informed decisions about ability grouping must also be informed by the original research (Allan, 1991).

Shields (2002) examined two Canadian school districts that were determined to have equivalent demographic characteristics, including socio-economic status, and their fifth and eighth grade programs (Shields, 2002). One school district had a homogeneous gifted program for 5<sup>th</sup> and 8<sup>th</sup> graders, while the other featured heterogeneous or mixed ability grouping. Using student achievement data from the standardized Canadian Test of Basic Skills, a modified Educational Process Questionnaire that focused on student attitudes towards themselves and their school experiences and students' perceptions of teachers' attitudes and behaviors towards them, and two measures of socioeconomic

status, the study focused on a total of 51 fifth grade and 54 eighth grade students. Data were then analyzed using descriptive statistics and analysis of variance, with the ANOVA used to confirm the SES similarity of the homogeneous and heterogeneous groups, descriptive statistics and a one-way ANOVA used to analyze standardized achievement test data, and ANCOVA used to analyze all dimensions of the Educational Process Questionnaire. Findings indicated that statistically significant differences in favor of the homogeneously grouped fifth and eighth grade students were evident in every standardized test at both grade levels. However, there was considerable overlap (from 46% to 88%) in the scores of the two groups, indicating that many students were actually performing well academically in both classes.

Considering the issue of student self perceptions, at the fifth grade level, one study found students in homogeneously grouped classes indicated greater development of career interests while students in the heterogeneous class demonstrated greater academic self-confidence (Shields, 2002). For the eighth grade, the homogeneously grouped students indicated a significantly greater interest in the development of career interests, with no significant differences in academic self-confidence, autonomy, enjoyment of school, independent development, involvement in school activities, or peer relations. Findings concerning students' perceptions of teachers and schooling indicated only one significant difference at the fifth grade level, which was that students in the homogeneous gifted class reported that their teachers expected more of them

than students in the regular class. At the eighth grade level, homogeneously grouped students demonstrated significant differences in their perceptions of teachers' behaviors and attitudes including more teacher reinforcement of self-concept, higher teacher expectations, more teacher feedback, more academic learning time, and more homework. The researcher concluded from these findings that, since students in the heterogeneously grouped 5<sup>th</sup> grade classes demonstrated more academic self-confidence than students in the homogeneously grouped classes, removing academically talented and gifted students from the heterogeneous classes did not have any detrimental effect on how the remaining students perceived themselves as learners (Shields, 2002). Thus the argument was made that ability grouping does not have negative affects on the self-perception of students, especially those of average and lower ability who are not grouped with their higher ability peers.

Several studies, both rejecting and supporting mixed ability grouping, have explored the ability grouping issue from a longitudinal perspective. One group of researchers (Liu, Wang, & Parkins, 2005) examined a group of higher ability grouped and lower ability grouped students in Singapore schools over a three-year span. After the first year, lower ability grouped students reported lower academic self-concept than their higher ability grouped peers. Yet, by the second year, both groups appeared to have equally high levels of academic self-concept. By the third year, lower ability grouped students actually reported higher academic self-concepts than their higher ability grouped peers, suggesting

that between-group comparisons dissipated over time and within-group comparisons became dominant. Thus, the researchers argue, the detrimental effects on academic self-concept reported in lower ability grouped students were ameliorated over time (Liu, Wang, & Parkins, 2005).

Another longitudinal study defending the positive attributes of tracking looked at a program that supported lower ability grouped at-risk students over a three-year period of time (Schweiker-Marra & Pula, 2005). The participants in the study were 40 to 50 at-risk seventh graders from a large middle school located in a mid-Atlantic state, identified by the principal and guidance counselor using the previous year's state Comprehensive Test of Basic Skill (CTSB) test scores. The researchers tracked students' progress for three years and collected both quantitative and qualitative data including test scores from the Stanford Achievement Test (SAT 9), teacher interviews, observations, and lesson plans. The researchers found that when at-risk students were supported by experienced teachers utilizing a variety of teaching methods, disciplinary programs, and strategies, lower ability grouped students experienced academic improvement and success, measured by increasing standardized test scores (Schweiker-Marra & Pula, 2005). The researchers recommend that lower ability grouping can work when experienced teachers with diverse methods are assigned to these classes, instead of the least experienced, least trained teachers, which is more often than not the case (Schweiker-Marra & Pula, 2005).

## Pro Mixed Ability Grouping

As previously discussed, to enter into the contemporary discussion of tracking, and ability grouping it is necessary to consider the work of Jeanie Oakes, author of *Keeping track: How schools structure inequality* (1985). In her examination of 25 schools that utilized tracking, Oakes concluded that the practice not only had no relationship to increasing academic achievement or positive attitudes, but also held back minority and impoverished students from economic, social, and political opportunity (Oakes, 1985). Oakes became one of the most controversial figures in education. So it becomes necessary to look more closely at her methodology and findings. The twenty-five secondary schools that were studied in depth and systematically by Oakes were part of a sample of schools closely examined in a major study in 1977 conducted by the Graduate School of Education at the University of California at Los Angeles (Oakes, 1985). This study conducted by John Goodlad, dean of the Graduate School of Education, and his associates was called "A Study of Schooling" and looked in depth at a thirty-eight schools of various types (i.e., large high schools, small elementaries) and in different areas of the country (i.e., rural South, middle America, Southwest) (Oakes, 1985).

Oakes focused on the 25 secondary schools (high schools and junior highs) in the study and the results of the data collected through interviews, internal documents, observations, curriculum materials, and questionnaires (Oakes, 1985). This data was collected by over 150 researchers and data collectors

during the six weeks the team spent in each school community and revealed that nearly all of the secondary schools in the Goodlad study, with one exception, used some form of formal or informal tracking. Using this data, Oakes analyzed what different kinds of classes were like for students and how students felt about being in them including what occurred in classes at different class levels, how they were similar or different from one another, what students were being taught, how teachers carried out their instruction, what classroom relationships were like, how involved students seemed to be in classroom learning, and what kind of attitudes students had toward themselves, their classrooms, and their schools.

In order to analyze how tracks were alike and different, Oakes (1985) and her colleagues had to narrow the data even further. They chose to study a representative group of classes at each level by filtering the diverse descriptors of various class levels such as "advanced placement" and "honors" into "high", "average" and "low" while at the same time focusing exclusively on math and English classes resulting in their study of 75 high-track classes, 85 average track classes, and 64 low-track classes that were nearly evenly divided between math and English subject areas. Using qualitative interview data and descriptive statistics, Oakes and her colleagues set about analyzing the differences in these differently tracked classes and the students that inhabited them.

The findings of Oakes (1985) and her colleagues in *Keeping track* presented a direct affront to tracking and its proponents. Oakes found qualitative

differences in what students at each level were taught, how teachers interacted with students at each level, how these differences manifested themselves in students' attitudes about their classes, themselves and their schools, all with the advantages and satisfaction residing with students at the upper levels of the tracking system. Among her strongest findings, Oakes observed that minority and impoverished students represented the largest presence in lower ability classes, while European-descended and affluent students were in the top levels, questioning the equity and legality of the practice of tracking (1985). Oakes also noted that in the few heterogeneous classes that were analyzed, the presence of lower ability students did not lower the academic achievement of high ability students as compared to their peers in homogeneous classes (1985). Oakes used the descriptive statistics from her data, the voices of students in the different ability tracks, and her own observations for a compelling rationale for the discontinuation of the practice of tracking. By the end of the book, she presents an argument against the constitutionality of the practice and its implication as violating the due process and equal protection principles of the Fourteenth Amendment (Oakes, 1985). *Keeping track* is one of the foundational pieces of literature arguing against the practice of tracking in public schools and arguing for mixed ability grouping.

The counter-argument to the meta-analytic support for ability grouping (Kulik & Kulik, 1982; Kulik, 1993) is presented through the pro mixed ability best-evidence research synthesis of Robert Slavin (Slavin, 1988). Best-evidence

research synthesis is a combination of meta-analysis and literature review, which includes effect size (ES) and the clear specification of inclusion criteria, with the difference that studies are deemed positive, negative or zero effect size rather than excluded when effect size cannot be computed (Allan, 1991). Additionally, individual studies and methodological issues are discussed like narrative reviews. Slavin found, through his best evidence synthesis, that ability grouped class assignment, special classes for the gifted, and self-contained special education classes did not generally affect student achievement, with the exception of accelerated programs which may have benefited gifted students (Slavin, 1988). Specifically, Slavin found no achievement effects of ability grouped class assignments compared to heterogeneous grouping in 14 methodologically adequate studies at the elementary level, with studies at the junior high and secondary levels displaying the same lack of benefits from tracking as opposed to heterogeneous grouping (1988). Slavin also noted that the research on cooperative learning methods, with students working in small heterogeneous groups, did consistently increase student achievement in elementary grades (1988). Ultimately, Slavin concluded that assigning students to ability classes may result in low expectations for lower achievers, stigmatizing effects, and educational elites that may produce psychological drawbacks but do not reap real educational benefits or advantages for any of the learners in the ability groups (1988). Slavin's best-evidence research synthesis on ability grouping was the primary response to the meta-analyses performed by the Kuliks. However,

as previously noted, it is important to look at the original research conducted on these essential issues in ability grouping.

A longitudinal study questioned the fairness of ability grouping through an examination of the different ability grouping methods utilized by school districts and their impact on academic achievement. The study (Hallinan, 1994a) examined two cohorts of more than 4,000 seventh grade students in public and private elementary and middle schools and the school track structure, assignment criteria, flexibility of track membership, and scheduling priorities their schools utilized. Using inferential analyses, the researchers found that most schools utilize the same track structure of basic, regular, honors and advanced tracks with the exception of two schools that had added a "very basic" track (Hallinan, 1994a). The research found that most schools rely heavily on test scores and prior placement to determine student placement. However, some schools took into account student's backgrounds and social origins, while other schools did not. Likewise, schools differed on the flexibility of tracking assignments with movement between tracks being more fluid or permanent based on the school attended (Hallinan, 1994a). Schools in the study also seemed to vary on the scheduling conflicts they resolved relating to student placement based on academic versus extracurricular concerns (Hallinan, 1994a). In some schools the academic concerns were prioritized, while in others the extracurricular choices dominated. Schools in the study also varied in the quantity and quality of courses offered within tracks, the quality of instruction,

and the impact of these courses on student achievement (Hallinan, 1994a). Ultimately, the researcher concluded that, based upon which school a student attended, their experience with a tracking system could be considerably different, calling into question the issues of equity and consistency of the tracking system in general (Hallinan, 1994a).

A longitudinal study conducted in the United Kingdom examined the way that students' attitudes and achievement in mathematics were influenced by ability grouping in six different schools as they transitioned from mixed ability grouping to tracking or "setting" (Boaler, William, & Brown, 1999). The research represented the first two years of a four-year study of this transition. The data was collected through 120 hours of observations, the administration of 1000 questionnaires at the end of year 8 and 9, and 72 interviews with pairs of students toward the end of year 9. The interview data was coded using open coding and emergent themes were discussed. From the questionnaire, lesson observations and interviews it became apparent that the change from mixed ability to tracked or "setted" teaching had negative repercussions for students (Boaler, William, & Brown, 1999). In the new setted classrooms, high ability students reportedly faced work that was at a more rigorous pace than they could handle while lower ability students were faced with too much low-level work. In other words, the setted classes left the middle range students either bored or overwhelmed depending on their placement. Some students reported that one of the biggest advantages of their formerly mixed ability classes was that their

instruction was more carefully matched to their individual learning needs, while the setting system treated them as all the same (Boaler, William, & Brown, 1999).

Another longitudinal study supported mixed ability grouping, especially as it related to the teaching of mathematics. In this study (Burris, Heubert, & Levin, 2006), the researchers analyzed a Long Island school district's math program for six years as a new heterogeneous grouping method was being introduced. For three of these years homogeneous grouping was used to teach mathematics and for three years a new heterogeneous method was introduced in which the accelerated program was taught to all math students. The researchers discovered that the three years during which the accelerated program was introduced, students who had previously not taken or passed advanced mathematics from lower ability, lower socio-economic, and racially diverse backgrounds now took higher level math courses and passed them with a much higher rate of success (Burris, Heubert, & Levin, 2006). The study compared the two 3-year cohorts and also found that higher ability students also took and passed math achievement tests ranging from the New York regent's exam to the Advanced Placement Calculus test at higher rates after the accelerated heterogeneous model was adopted. The researchers ultimately recommended that similar programs of heterogeneous grouping can work when support is provided for struggling learners and the curriculum is "leveled up" to challenge all students at every level (Burris, Heubert, & Levin, 2006).

Two studies that advocated for mixed ability grouping looked at the issue through a qualitative methodology and a mixed methodology. In the qualitative study, 24 of 48 year 5 students in a UK school participated in a study of mixed ability grouping and its relationship to the development of literacy (Lyle, 1999). The students involved in the study were from one high ability and one lower ability group who were both working together on a literacy unit in a mixed ability context. The participants were observed and then interviewed after ten weeks. Both groups of students reported that they valued working together in literacy tasks and both groups reported that they benefited from exposure to their classmates. The researcher drew from the interview data that motivation, self-concept and emotional intelligence is fostered through mixed ability grouping as opposed to tracking and accounted for the students' high level of satisfaction (Lyle, 1999).

The mixed method study (Venkatakrishan & Wiliam, 2003) retrospectively analyzed a mathematics department in a co-educational comprehensive high school in London and its transition from mixed ability grouping to tracking. The study combined qualitative interviews with teachers in the school as well as quantitative analysis of the data on academic progress of students aged 14 to 16. Teachers in the study reported that tracking impacted different students in different ways, as was supported by the quantitative data. Using analysis of covariance (ANCOVA), the researchers found that high ability, or "fast track", students were not significantly advantaged by being placed in these tracks

(Venkatakrisnan & Wiliam, 2003). While students in the mixed ability group showed a significant interaction between their progress and prior academic success, mixed ability placement gave more academic advantage to lower ability students and little disadvantage to higher ability students. Using these findings, the authors recommended that mixed ability grouping should be the norm in educational environments instead of tracking (Venkatakrisnan & Wiliam, 2003).

As previously noted, the untold variables present in any comparison between a homogeneous and heterogeneous ability classroom continues to make a viable quantitative analysis somewhat elusive. The looming issue, as one researcher found, is that neither mixed ability nor homogeneous classes may be the solution to helping all students (Saleh, Ard, & De Jong, 2005). The question that still emerges among both proponents and opponents of detracking is what exactly would a detracked academic environment look like? In the next section, detracked high school programs are discussed.

#### Detracked Environments

There are various approaches to making detracking work in a public school environment as shown by the research (e.g., Ascher, 1994; Drake & Mucci, 1993). One research study asserts that with a clear plan, timeline, community buy-in and teacher training, a school can become successfully detracked (Drake & Mucci, 1993). The same study goes on to note that, in order for detracking to be successful, co-operative learning must be utilized through structuring groups that work collaboratively for individual achievement,

improvement and team awards and include high, middle, and low achieving students with a representative balance of gender and race (Drake & Mucci, 1993). Another analysis of successful detracking in middle and senior high schools highlighted 6 factors as necessary for successful detracking including a shared community investment in detracking, parental involvement, professional development, phased-in change, and reconsidering previous routines ranging from avoiding pull-out programs to providing in-class support for struggling learners (Ascher, 1994).

The same study also went on to reinforce the primacy of co-operative learning techniques including complex instruction, peer and cross-age tutoring and the rethinking of the role of standardized tests (Ascher, 1994). A still more exhaustive study of another successfully detracked high school on Long Island found that by offering students instructional support and carefully monitoring struggling students' progress, heterogeneously grouped classes fostered student success (Burriss & Welner, 2005). Moreover, the high school's new mixed ability approach dramatically decreased the achievement gap between European-descended and minority students (Burriss & Welner, 2005). The authors noted that when the high-track curriculum was taught to all students (majority, minority, special education, low-SES, and high-SES); all groups experienced increased achievement (Burriss & Welner, 2005). These examples provide a thought-provoking glimpse into the way that a successfully detracked school might function.

## Social Identity Theory and Cross-Cutting Categorization

Two theoretical perspectives that may have relevance to this study are Social Identity Theory (SIT) and Cross-Cutting Categorization. Social Identity Theory suggests that race, social class and attachment to school affect student engagement through the mechanisms of group membership and peer group interaction (Kelly, 2008). According to Social Identity Theory, individuals are motivated by a need to establish a positive social identity (Tajfel & Turner, 1979, 1986 cited in Alexandre, Monteiro & Waldzus, 2007). Specifically, in order to maintain a positive social identity, lower status groups may withdraw from school and adopt behavior that emphasizes anti-school norms (Kelly, 2008). The relevance to this study is that College Preparatory students are often seen as having lower academic status and the fact that College Preparatory classes are often comprised of African-descended students may confer this status on this racial group as well, in part accounting for lower achievement and attitudes toward school. This alternate perspective, sometimes referred to as *social creativity*, may account for a social identity that affirms underachievement (Kelly, 2008). A mixed ability classroom may negate some of the negative affects of this social identity by cross-cutting these lower status identities through creating a new category of student, one who is in a CP/H class. While students may individually be registered as College Preparatory or Honors in these individual classes, they share the group identity of being in a CP/H class.

Cross-cutting categorization is a theory that posits that multiple categories may decrease the importance of original categorization and reduces inequalities when individuals can choose another social identity by which to define themselves (Deschamps & Doise, 1978). In a meta-analysis of cross-cutting studies, Urban and Miller (1998) found that increasing participants' personal experiences through personal interactions, learning names and working cooperatively weaken the effects of social categorization. A mixed ability class often emphasizes these interactions and may, in part, account for the experiences of their environment, their peers and themselves that mixed ability students report.

### Conclusions and Research Questions

Since quantitative studies of ability grouping have been contradictory, and the social justice facet of the debate seems relatively unexplored, this study sought an understanding of mixed ability grouping through a qualitative examination of mixed ability students' perceptions through semi-structured interviews and field observations. Rooted in grounded theory, a qualitative analysis of the interviews and observation was conducted to elicit key concepts and experiences in an interdisciplinary mixed ability co-operative classroom. As a teacher in a mixed ability classroom, I also saw this study as an opportunity to delve more deeply into the experiences of students in my own class.

In order to get to the issues most pertinent to the social justice facets of the mixed ability classroom, I chose a qualitative method as well as research

questions that structured my study. These questions represented the central avenues of inquiry that I wanted to pursue. The students' perceptions of their learning interdisciplinary mixed ability co-operative environment, their peers, and their perceptions of themselves were the core elements integral to the pursuit of social justice impacts of the mixed ability classroom. The No Child Left Behind Act and international competitiveness aside, these questions were at the heart of the most important impact of the mixed ability classroom, the impact on the students' themselves. The research questions were as follows:

1. How do students in interdisciplinary mixed ability co-operative classes perceive their learning environment?
2. How do students in interdisciplinary mixed ability co-operative classes perceive their peers?
3. How do students in interdisciplinary mixed ability co-operative classes perceive themselves?

## CHAPTER III

### METHODS

In chapter one, I stated my purpose as trying to understand how students in an interdisciplinary mixed ability co-operative classroom come to understand their experience. In order to begin to uncover this understanding, I discussed my topic with my advisors, Dr. Joshua Bagaka's and Dr. Donna Schultheiss. In order to develop this topic further I met extensively with Dr. Schultheiss and formulated both primary research questions and related interview questions.

The research questions I addressed were:

1. How do students in interdisciplinary mixed ability co-operative classes perceive their learning environment?
2. How do students in interdisciplinary mixed ability co-operative classes perceive their peers?
3. How do students in interdisciplinary mixed ability co-operative classes perceive themselves?

Through interviews with my former students I hoped to contribute to the body of research on student experiences in mixed ability classrooms. Research on the lived experiences of students in this new environment was vital to understanding the true impact of this approach.

In this chapter, I discuss my stance as a researcher including my existing biases. I then discuss the site, participants, and method of data collection used in this study. My methodology, credibility and trustworthiness of the data are also discussed.

#### Research Perspective

The primary investigator in this study was a male European-descended graduate student and English instructor at the large inner-ring suburban high school in which the study was conducted. The investigator had taken coursework in qualitative research and had conducted a smaller, yet similar, study in the same educational institution (Morris, 2004). The investigator had the bias, as a teacher of an interdisciplinary mixed ability co-operative class, that students would report positive perceptions of themselves, their classmates and their learning environment. This bias came from work in these classes, as well as findings from the study conducted previously (Morris, 2004).

#### Research Approach

I approached this research through the lens of social justice education (SJE). Social justice education is an approach that "encourages students to take an active role in their own education and supports teachers in creating

empowering, democratic, and critical educational environments” (Hackman, 2005, p. 103). Specifically, this study emphasized that social justice aspect of “creating empowering, democratic, and critical educational environments.” By mixing Honors students and College Preparatory students, black and European-descended, male and female, and students of all socio-economic levels, the mixed ability classroom was an ideal setting for social justice education.

One of the most commonly explored and celebrated dimensions of an education at the high school in this study is its multicultural diversity. However, much has also been discussed concerning the racial divide between students who take College Preparatory classes and those that take Honors classes. In fact, homogeneously grouped College Preparatory classes have received the acronym “CP” not to indicate “College Preparatory”, but instead “Colored People” (Ogbu, 2003; Clemetson, 1999). This gap was one of the major motivations for the creation of the mixed College Preparatory and Honors classes. Thus, mixed ability classes like the ones I teach became the perfect laboratory environment for exploring the social justice dimension of mixed ability grouping. The mixed ability classroom helped rethink the social arrangement in school thought to be most equitable, specifically the separation of students based on perceived ability (Gale, 2000).

#### Site of Data Collection

The site of data collection is a high school within a relatively affluent inner-ring suburban school district, adjacent to a large metropolitan area in the

Midwest. The high school houses over 1,500 students. The student population is nearly evenly divided between European-descended and minority students. The district has high state ratings and is celebrated for its academic achievement and diversity. The high school has also been the subject of studies on minority achievement by the late anthropologist John Ogbu (Ogbu, 2003) due to the achievement gap between African-descended and European-descended students at the high school.

The approach to mixed ability grouping at this high school is a mixture of College Preparatory and Honors students in the same classroom. Students can choose at what level they will take a course without having to be separated from their peers in different levels. Honors (H) classes are advanced level classes that seek to prepare students for advanced placement or other honors classes with enriched content and a faster pace of covering learning materials. College preparatory (CP) classes seek to prepare students for entry into college but feature less advanced course work and a slower pace than Honors classes. The differentiation between College Preparatory and Honors students only relates to assessment and extended individual assignments.

The American Experience is an interdisciplinary and co-operative English and History course that the study participants have all taken. The course emphasizes this interdisciplinary connection through side-by-side classes, separated by a collapsible wall and the scheduled block of two fifty-minute periods. The course in this study is organized chronologically and traces

American literature and History from post-Civil War Reconstruction through the Vietnam War. Besides a shared chronology, students complete four quarterly projects that investigate the subject matter in-depth through research assignments (two of which are co-operative group projects and three that include group presentations) that focus on immigration, History, the arts and performance and combine both literary and historical perspectives. Regular instruction is also interdisciplinary and focuses on the many connections between American literature and history. The co-operative nature of the class is emphasized by the projects, group discussions, student-led activities and community atmosphere of the classes. The American Experience classes provide the site of data collection within the high school and emphasize an interdisciplinary mixed ability co-operative approach to learning.

### Participants

There were twelve students who participated in this study. All of the participants were students who participated as 10<sup>th</sup> graders in interdisciplinary mixed ability co-operative English and History classrooms in an inner-ring suburban school district adjacent to a major American city in the Northeast. All of the participants had attended these mixed ability classes in the tenth grade, since this is the first year that mixed ability grouping is introduced in the targeted high school. The participants were 11<sup>th</sup> and 12<sup>th</sup> grade European-descended and African-descended, males and females, who took the courses at either the honors (H) or college preparatory (CP) level.

Volunteers were solicited from former students of the mixed ability high school interdisciplinary English and History classes that I teach. Interviews were conducted with former students in order to ensure that their participation, or lack thereof, would not have any impact on their grade or standing in the class. To obtain the most information rich data possible (Morrow, 2005), I solicited participants who had selected to take the course at the mixed ability College Preparatory and Honors level (CP/H). The participants were seven females and five males. Four of the females were of African descent while three of the females were of European descent. Four of the males were of European descent, while one was of African descent. Six of the students had taken their mixed ability classes at the College Preparatory level and six had taken their classes at the Honors level. Nine of the participants were 11<sup>th</sup> graders and three were 12<sup>th</sup> graders. Eleven of the participants had taken the same level of course (College Preparatory or Honors) the year before 10<sup>th</sup> grade when this mixed ability course was offered, with only one participant taking a different level the previous year. Four of the students at the time of the interviews were Advanced Placement (AP) students, four were Honors (H) students, and four were College Preparatory (CP) students. Six of the students had moved up a level to Honors or Advanced Placement after taking the mixed ability class and six remained in the same course level. Table 1 displays the demographic characteristics of the participants.

Table 1

*Participant Demographics*

GENDER	AGE	RACE	PRESENT GRADE	PRESENT GRADE LEVEL	GRADE 10 LEVEL	GRADE 9 LEVEL
Female	16	European descent	11	AP	H	H
Female	16	African descent	11	H	H	H
Female	17	African descent	11	CP	CP	CP
Female	17	European descent	12	CP	CP	CP
Female	16	African descent	11	H	CP	CP
Female	16	African descent	11	AP	H	H
Female	16	European descent	11	AP	H	H
Male	17	European descent	11	CP	CP	CP
Male	17	European descent	11	AP	H	H
Male	18	European descent	12	CP	CP	CP
Male	17	African descent	11	H	H	CP
Male	18	European descent	12	H	CP	CP

Method of Data Collection

*Interview*

The purpose of these semi-structured interviews was to examine participants' perceptions of their learning environment, their peers, and themselves in an interdisciplinary mixed ability co-operative setting. The first group of questions focused on how the participants perceived their learning environment. The interview began with questions about what the participant liked and disliked about the class, how it was similar or different from the classes they were taking, and what they expected when they chose to take the class. Participants were asked how being in an interdisciplinary mixed ability co-operative class was different or the same as they expected, whether there were

benefits or challenges of being in this type of class, and whether there was a time that their interdisciplinary mixed ability co-operative class gave them the opportunity to learn or experience something that their previously separated classes had not given them the opportunity to learn or experience.

The next set of questions focused on how participants perceived their peers in their interdisciplinary mixed ability co-operative classes. The set began with questions about an experience with their classmates that stood out in their mind, whether or not they socialized with students in the class, and the nature of those relationships. Participants were asked what kind of partners they chose to work with in groups and why, the way being in an interdisciplinary mixed ability co-operative class changed the way they viewed or related with students who took the class at a different level than themselves, and about a time that their peers helped them learn or experience something in a way that they had not learned or experienced in their previously separated classes.

The final group of questions focused on how participants perceived themselves in their interdisciplinary mixed ability co-operative classes. Participants were asked if the class had influenced how they thought about themselves academically, socially and personally. They were then asked if they could recall a time when their interdisciplinary mixed ability co-operative class gave them the opportunity to learn something about themselves that their previously separated classes had not and whether or not they would or had taken another mixed ability class. Participants were then asked if they had

anything to add that was not covered by our discussion. Appendix A displays these questions, minus demographic information.

### *Procedure*

*Recruiting participants.* Sampling within the population was achieved by soliciting volunteers from the previous two years of interdisciplinary mixed ability co-operative classes taught by the primary investigator. Volunteers were asked to participate in one thirty to fifty minute interview. Parental informed consent (see Appendix B) and minor assent (see Appendix C) was obtained. Participants were asked to fill out a demographic questionnaire (see Appendix D). Each of the participants was interviewed using this same group of questions. Interviews lasted between 30 and 50 minutes. Interviews were recorded on audiocassette and transcribed with the permission of the participant as well as the participant's parents. Transcripts were checked for accuracy by reading the transcript while listening to the audiotape. Transcripts were also given back to the interviewed students for approval. Identification numbers were assigned to each participant so information from participants would remain anonymous. This list was kept separate to ensure anonymity.

*Interview method.* Each of the participants was interviewed using the same group of questions. The interviews lasted from 30 to 50 minutes. Each of the interviews was recorded on audiocassette with the permission of the participant as well as the participant's parents. The interview questions themselves centered upon the research questions that guided this study.

*Transcription of interviews.* Each of the interviews was recorded on audiocassette and transcribed. Transcripts were checked for accuracy by reading the transcript while listening to the audiotape. Transcripts were also given back to the interviewed students for approval.

*Data analysis.* The paradigm used in this investigation was grounded theory, a qualitative approach that uses the data obtained through interviews and observation to generate categories and ultimately constructs with which to interpret the data. Grounded theory is derived from data, systematically gathered and analyzed through the research process (Strauss & Corbin, 1998). Grounded theory is also an inductive approach to qualitative research (Denzin & Lincoln, 2000) where the researcher is the central instrument of collecting and analyzing data (Merriam et al., 2002). The substantive theory that emerges from this form of research is therefore grounded in the data (Merriam et al., 2002). The method used to analyze the data is called the constant comparative method in which the interview and observation data is broken down into units in order to generate categories in which to place similar units of information. Through this process of comparing and then reducing data into conceptual categories, a larger framework or theory develops (Merriam et al., 2002). This process is aided through coding in which memos are continually written that record insights that develop as the data is analyzed, particularly those concerning connections between categories (Merriam et al., 2002). Coding is the building rather than testing of a theory that provides researchers with analytic tools for handling

masses of raw data. It helps analysts to consider alternative meanings of phenomena, to be systematic and creative simultaneously, and to help identify, develop and relate concepts that are the building blocks of theory (Strauss & Corbin, 1988). The linking of categories is then continued through hypotheses and propositions that are suggested through the development of a grounded theory (Merriam et al., 2002). This method appealed to me because it allowed me as the teacher involved in the classroom setting to, in some sense, experience distance from the data by breaking it down into smaller components. I could then reconstruct these smaller pieces of information into a conceptualization that I might not have otherwise anticipated, or that would contradict my assumptions. Statements from the interviews were coded by grouping them with other similar statements (Bogden & Biklen, 1998). As new ways of organizing the data began to surface, the coding system continued to change. However, the key concepts from the interviews ultimately began to emerge and helped provide answers to the research questions.

Several methods were used to establish trustworthiness in the data. I gave copies of the transcripts back to each of the participants in order to check for accuracy and learn from the participants how well my interpretations reflected their meanings (Morrow, 2005). I consulted with my two teaching partners in the course and asked them to review my interpretations of my interviews in order to serve as a mirror reflecting my responses to the research process (Morrow, 2005).

## *Summary*

My hope was to be able to understand the effects that interdisciplinary mixed ability co-operative grouping had on the students' perceptions of their relationships to one another as college preparatory or honors students, as well as their relationship to the school and educational system within which they were learning. I intended to uncover how their understanding of one another's racial, gendered, socio-economic and educational identities and experiences were affected by being exposed to groups of students they may not have previously encountered in classroom settings. I intended to reveal if students from interdisciplinary mixed ability co-operative environments had a clearer understanding of what it meant to be in a different ability level class and how to negotiate the passage from one level to the next, if they choose to do so. Ultimately, my goal was to help uncover the lived experience of students in the interdisciplinary mixed ability co-operative settings in which I teach, and to analyze the personal and institutional discoveries that arose when previously separated students interact together in a homogenous environment. Furthermore, I hoped to uncover what impact this new environment had on students' sense of social justice, empathy, and empowerment in their educational environment.

## School Profile

### *Research Questions*

The student interviews I conducted have provided me with rich data on students' experience of the learning environment, their peers and themselves in the interdisciplinary mixed ability co-operative classroom. These topics came out of my three research questions:

1. How do students in interdisciplinary mixed ability co-operative classes perceive their learning environment?
2. How do students in interdisciplinary mixed ability co-operative classes perceive their peers?
3. How do students in interdisciplinary mixed ability co-operative classes perceive themselves?

From these research questions I developed 21 interview questions. These questions lent structure to my semi-structured interview and consistency to the process.

Once the tapes were transcribed, I studied the data in order to identify common themes connected to my questions. I used legal pads to write down common statements and then categorized these statements according to their over-arching categories and relationship to the research questions. I conducted this process multiple times in order to reveal the most pertinent categories and sub-categories. This organizational effort helped me to identify the themes that emerged from the student interviews.

### *The High School*

The high school in which this study took place is a relatively affluent inner-ring suburban school district adjacent to a large metropolitan area in the Midwest. The enrollment is 1,791 students. Fifty-two percent of the student body is composed of minorities. The district is currently rated as effective by state testing standards. The mission statement of the school district is to “nurture, educate and graduate students who are civic-minded and prepared to make ethical decisions; who are confident, competent communicators, skillful in problem solving, capable of creative thinking; who have a career motivation and a knowledge of our global and multicultural society.”

The high school and district prides itself on both its cultural diversity and academic achievement. With its high percentage of minority students, the high school has introduced several successful programs for minority males and females to help them achieve academically. Likewise, it has a nationally renowned diversity education program that utilizes high school students to teach elementary students about multiculturalism. Due to its history of diversity and high academic achievement, the high school has also been the subject of studies conducted on minority achievement by the late anthropologist John Ogbu (Ogbu, 2003). Academically, the high school is ranked as one of the state’s finest schools and each school in the district has been cited by the U.S. Department of Education as National Blue Ribbon Schools. The high school offers 23 advanced placement classes and is consistently ranked as one of the state’s top schools in

the number of National Merit, National Achievement and Advanced Placement Scholars. Recently, the high school was also listed as one of the top 65 feeder schools for the nation's elite colleges by the Wall Street Journal. This mixture of diversity and high academic achievement made the social justice dynamic sought through a mixed ability classroom that much more significant.

As with many American high schools, there still exists an achievement gap between African-descended and European-descended students at the high school. Part of the commonly held beliefs about this gap at the high school is that it is due to the fact that less African-descended students take Honors and Advanced Placement classes than their European-descended counterparts. This is another reason why mixed ability grouping was first considered at the high school four years ago. I was one of the voices that called for the approach and that is one of the personal motivations I have for this research. I would like to see if this approach is having the positive impact on the academic environment and student dynamics it was intended to have. Whether or not mixed ability grouping can help bridge the achievement gap remains to be seen, and is possibly the subject of another study. This study focused on the students in mixed ability classrooms and their experience of the academic environment, their peers and themselves.

## CHAPTER IV

### RESULTS

The data was organized into four primary domains based on the review of the literature (e.g. Khmelkov & Hallinan, 1999; Hallinan, 1994b; Ansalone, 2003; Ascher, 1994; Drake & Mucci, 1993; Lyle, 1999), research questions and interview responses. The four domains were academic environment, social environment, self-perceptions and reflection. Within the four domains, categories and sub-categories were developed that represented the responses to the interview questions. Utilizing Hill, Thompson & Williams (1997) method of categorizing the representativeness of results, I described the category as *general* if it applied to all 12 cases, *typical* if it applied to 6 to 11 (at least 50% of the cases), and *variant* (a few) if it applied to 3-5 cases. The domains, categories, sub-categories, number of cases, and representativeness are displayed in Table 2.

Table 2.

*Research Results Summary*

Domains, categories, sub-categories	Number of cases	Representativeness
	Academic Environment	
Projects	12	General
Academic similarity to other classes	6	Typical
Connections		
Between subjects	7	Typical
Between classes	6	Typical
Exposure to both CP/H	10	Typical
Content and activities	10	Typical
Effort resulted in academic rewards	4	Variant
	Social Environment	
Changes in Peer Relationships		
Development of new and diverse friendships	10	Typical
Connection with peers	10	Typical
Good friends	5	Variant
Classroom Climate		
Climate similar to other classes	12	General
Fun personal interactions	11	Typical
Choice of Group Partners		
Similar work ethic	8	Typical
Random selection	3	Variant
	Self-Perceptions	
Good/comfortable		
Social	9	Typical
Personal	9	Typical
Academic	4	Variant
Validated		
Academic	5	Variant
Personal	3	Variant
Challenged		
Academic	3	Variant
Social	3	Variant
	Reflection	
Would/have taken another	12	General

CP/H class		
Reason for taking another CP/H class		
Like combination of CP/H Availability	6	Typical
No difference between other non CP/H classes	3	Variant
	3	Variant
Good class/recommended	7	Typical
<hr/>		
<i>Note. CP = College Preparatory, H = Honors, N = 12</i>		

### Academic Environment

Academic environment included those responses that concerned students' perceptions of their learning environment and dealt directly with the content and outcome-based (e.g. assignments, assessments, grades) elements of the class. Within the domain of academic environment there were six categories: projects (*general*), academic similarity to other classes (*typical*), connections – divided into subcategories between subjects (*typical*) and between classes(*typical*), exposure to both CP/H (*typical*), content and activities (*typical*), and effort resulted in academic rewards (*variant*).

#### *Projects*

The first category, projects (*general*), illustrated the idea that the quarterly projects students completed as part of their classes had an impact on their learning experience by exposing them to new ideas, encouraging them to seek help from the teacher as a group, and taking a leadership role within the academic setting. These projects included a partnered project and presentation in which students analyzed the impact of an immigrant group that came to the

United States, an individual research paper in which students analyzed a turn-of-the-century historical topic and wrote a formal paper, an individual portfolio and presentation where students researched an American visual artist, and a group project and presentation that analyzed and dramatized a decade of the twentieth century. The partnered and group projects, especially Decades, were orchestrated to mix students of both ability levels, races and genders to create truly mixed groups in order to expose students to both ability levels and different points of view.

One European-descended female 11<sup>th</sup> grade student who took the classes at the Honors level reflected on the positive impact of the projects, specifically the decades group project, when asked about an experience that her previous separate College Preparatory classes did not give her the opportunity to have but her mixed ability classes did.

Well, yeah, working with decades was good 'cause you've got a pretty wide variety of people that you could work with and see different presentations, and kind of different ideas were brought to the table from that. (Participant 3)

In this student's statement, it was apparent that having both College Preparatory and Honors students involved in each project group added a breadth of ideas to the decades project.

When asked about acquaintances made in his mixed ability classes, a European-descended male 11<sup>th</sup> grade student who took the classes at the College Preparatory level, and who was new to the high school at the time of the classes, commented on the impact of the partnered immigration project and

seeking help with his project partner, an African-descended female who was taking the classes at the Honors level.

I talk to (my partner) almost every day, and...we just, that project we clicked...Since I had just moved here, it was, it was a good way to meet people because the projects, of course, you have to spend a lot of time with people ... It – j(ust) – at times it felt like, yeah, we all have one common interest in this class and...let's all go get help on our project... (Participant 6)

In this student's comments, it was apparent that the immigration project provided a meeting place for this young man taking the classes at the College Preparatory level and young woman taking the classes at the Honors level where they could bond both academically and socially (to be discussed later). Likewise, the project gave the student the opportunity to connect with others through a collective academic purpose.

When asked about the challenges and benefits of the classes, an African-descended male 11<sup>th</sup> grade student who took the classes at the Honors level noted that the projects gave him the opportunity to experience academic leadership responsibilities when his previous homogeneously-grouped, traditional Honors classes did not.

Um, I think that working in a group in this class was, wasn't a challenge. Working in a group in my other Honors class, other Honors classes, was a challenge for me because, um, I'm - I'm used to, like, not being the head of things but, like, when, like, even on the soccer field, like, I kinda dictate what we do. And I like that. So, in my other Honors classes when we work in a group, I'm not, I'm usually not the one spearheading the, the project, or whatever, but in here I felt as though I was free to do that. And I - I liked it 'cause

that's just how I am. I like being the head of things, and I thought I was able to do that here. (Participant 10)

This student emphasized the freedom that projects in his mixed ability classes gave him to be a leader, a role that he enjoyed on the soccer field, but rarely experienced in his previously separated homogeneously grouped Honors classes. It is arguable that the breadth of learning styles and students in the mixed ability classes gave this student the kind of learning and leadership opportunities that he was seeking.

The projects category was a strong indicator of the impact that quarterly projects had on the academic lives of the students interviewed. The opportunities these projects provided for students taking the courses at both the College Preparatory and Honors level became evident in their responses. These projects exposed students to new ideas, encouraged them to seek help from their teachers as a group, and allowed them to take a leadership role within the academic setting.

#### *Academic similarity to other classes*

Academic similarity to other classes (*typical*) was the second category. This category focused on the ways in which mixed ability classes were similar to the previously separated College Preparatory and Honors classes that students had attended. The curriculum, the class work, and the workload were three facets of the two different academic environments that the interviewed students found to be similar.

A European-descended male 12<sup>th</sup> grade student who had taken the classes at the College Preparatory level stressed the academic similarity of the mixed ability classes to his other classes when asked how the classes were similar or different from the classes he was taking at the time.

Um, I mean, the curric – I mean, like, the regular curriculum was basically, like, similar to a lot of things. I mean, obviously, the subjects would vary from subject to subject. But, um, I think that the thing that was different, was, again, like I said, every English and Social Studies both coincided. So that really, I think, helped me, my learning process far more. Because, I mean, if you're, I mean, I mean, it wasn't really the same, um, so, like, if I, I would just, it just helped me learn better. It helped things click easier when I was learning about the same time period and the same kind of things as I did in English and Social Studies. So, um, I think that helped me immensely. (Participant 11)

This student discussed the academic similarity of the mixed ability classes to the other classes he was taking with emphasis on the added connection between English and History as a continuity that proved beneficial. When asked the same question, an African-descended female 11<sup>th</sup> grade student who took the classes at the College Preparatory level answered similarly.

Um, it's different because it's more people in the class so you have, um, it's like easier to find someone that you can bond with that can help you in the class, or that you can work with in class. Um, it's similar because it's a class, and you do, you're doing the same work, it's just more people. (Participant 2)

Here the student referenced the increased class size when you have both English and History taught in an inter-disciplinary mixed ability class as well as the social benefits (to be discussed later). However, the academic consistency with her

other classes is still emphasized, "you're doing the same work, it's just more people."

An African-descended male 11<sup>th</sup> grade student who took the classes at the Honors level re-iterated the overall academic similarity of the mixed ability classes to his other classes in his response to the question of similarities and differences with separated homogeneously grouped classes.

Um, it was - it was similar. The workload was similar, except, um, there were more projects. And that's not necessarily a bad thing because during, like, project times there, the homework would be cut back a little bit...  
(Participant 10)

Here the student emphasized the similarity of the academic environment to his other classes while also mentioning the impact of projects and the flexibility of the homework schedule.

Academic similarity to other classes represented another important facet of the interviewed students' mixed ability experience. The academic similarity of their mixed ability classes to their previously separated College Preparatory or Honors classes provided a consistency that these students appreciated. The similarity between the curriculum, the class work, and the workload were the three academic elements that benefited these mixed ability students.

### *Connections*

Connections addressed the connections between the English and History classes and their impact on these mixed ability students. This category included 2 subcategories: between subjects (*typical*) and between classes (*typical*).

These connections manifested themselves in the ways in which the History and English courses were taught and informed one another, and the ways that two separate academic classes were transformed into one through the double-period classroom.

*Between subjects.* The sub-category between subjects (*typical*) refers specifically to the connections between the subject matters of English and History. One of the primary concepts behind these interdisciplinary mixed ability classes is that the literature provides a context for History and vice versa. Likewise, the quarterly projects are designed to unify the two subjects.

One European-descended female 11<sup>th</sup> grade student who took the classes at the Honors level commented on the connection between the two subjects when she was asked what she liked or disliked about the class.

Um, I liked the historical approach to literature, the literary approach to History, and, uh, um, being able uh, to have those two things together 'cause I think that's really what you're supposed to be doing academically is, you know, being able to make connections and, um, you know, learn actively, I guess. (Participant 3)

This student's comments emphasized the aforementioned reciprocal contexts for each subject and the active approach to making these connections apparent through the projects and group work in these mixed ability classes. When asked about the differences and similarities between these mixed ability classes and the classes he was taking at the time, a European-descended male 11<sup>th</sup> grade student who took the classes at the College Preparatory level also stressed the significance of the connection between the two subjects.

And I liked, I really liked how the classes coincided with each other. So I'd be learning, eh, about one thing in History, and then we'd read a book from that time so I felt like the classes were connected. (Participant 6)

This student's comments highlighted the fact that the literature in the class always coincided with the time period of History that students were studying, an approach that seemed to benefit students.

A European-descended male 12<sup>th</sup> grade student who took the classes at the College Preparatory level referenced the connection between subjects when he was asked what he liked or disliked about the classes.

Um, I liked how it coin – that Social Studies coincided with English, and we tried to stay with the same time period during each class. And, um, that - that made the class more enjoyable, and I think a better, like, a more efficient way to learn, so you know what's going on in each time period and everything. (Participant 11)

The subject matter connection that this student referenced seemed to benefit both Honors and College Preparatory students in these mixed ability classes.

Similarly, the connections between the classes extended this foundation into the students' perceptions of the double period, combined English and History environment, as well.

*Between classes.* The literal connection between classes (*typical*) in the form of a one hundred minute long double period, combined English and History class, contributed to students' perceptions of their experience. These double period classes were utilized to introduce and present quarterly projects, view and discuss films, host guest speakers, and facilitate larger group activities when one

hundred minutes was the preferred instructional time and/or groups and projects encompassed students in both classes. These double period classes would take place several times each month.

A female African-descended 11<sup>th</sup> grade student who took the classes at the Honors level emphasized the connection of the combined classes with the connection between subject areas when asked how her mixed ability classes were similar or different from the other classes she was taking at the time.

Um, well, first of all, it was - we had double periods. Uh, my other classes we didn't combine two classes. Which I also liked, because our - whatever we learned in History, kind of correlated with the book that we read in English. (Participant 8)

In this comment, the student stressed the way in which combined classes reinforced the combination of English and History in her mixed ability classes.

A European-descended female 11<sup>th</sup> grade student who took the classes at the Honors level addressed combined classes when asked what she liked or disliked about the class.

I liked that there were, like, two separate classes, but there were, like, a lot of the times you were combined, so you got to know both, like, pretty much equally as much. (Participant 4)

The idea of an expanded community in which students were actually part of two classes instead of one seemed to appeal to this student. However, she also mentioned later in her comment that this large environment did come with its own set of challenges.

I liked, I like it a lot, but that they were combined sometimes, but it was also frustrating because there were so many people. That it was sometimes hard to get help when there were, like, so many kids with all the same questions or – it was just kinda difficult. (Participant 4)

As much of a benefit that this student enjoyed from the combined classes, the same student also alluded to the fact that in a combined setting two teachers then had to address the needs of nearly fifty students, and answering individual questions became more challenging.

A European-descended male 12<sup>th</sup> grade student who took the classes at the College Preparatory level re-iterated the positive benefit of the combined approach when asked what he liked or disliked about the class.

Um, I liked how there were two teachers teaching the class, not just one. Um, I liked how there are Honors and CP, not just, like, one. (Participant 11)

This student's response emphasized not only the benefit of two teachers in the combined classes, but also how the combined classes included the mix of College Preparatory and Honors students in a larger setting.

The impact of the connections between the English and History classes on these mixed ability students was evident through this category. Between subjects and between class connections focused on the within class and between class structures the interviewed students emphasized. The ways in which the History and English courses were taught and informed one another, and the ways that two separate academic classes were transformed into one through the double-period classroom made these connections evident to these mixed ability

students. Likewise, these students emphasized the positive aspects of being exposed to both College Preparatory and Honors students in the mixed ability environment.

*Exposure to both CP/H*

Exposure to both CP/H (*typical*) referred to the exposure to both College Preparatory and Honors students and the level of assignments. The interviewed students felt that they benefited, their peers benefited, and a sense of diversity was emphasized by this exposure, with the exception that sometimes learning was slowed down by diverse student needs.

A female African-descended 11<sup>th</sup> grade student who took the classes at the College Preparatory level, when asked about the benefits or challenges of being in a mixed ability class, alluded to the academic benefit of being exposed to Honors level work and the option of “moving up” to Honors if they so desired.

Benefits, were that I feel for College Prep students they could still get the Honors work and earn the Honors work and have the chance to move up if they wanted to, and for Honors students they could help them move up. That would - that should make them feel good about themselves.  
(Participant 2)

This student’s comments highlighted the reality that in these mixed ability classes, students were exposed to both College Preparatory and Honors content and assignments and could opt to complete either option. With this exposure, some College Preparatory students chose to complete Honors assignments and assessments and received extra credit for those assignments or assessments or moved into the Honors level and re-registered for the class at the Honors level.

Likewise, if students who registered at the Honors level felt overwhelmed, they could re-register at the College Preparatory level. This student commented on this benefit from a College Preparatory perspective and also estimated the benefit that Honors students could receive from helping their College Preparatory classmates, specifically the positive self-perception that they had helped their peers succeed academically. Interestingly, this sentiment was shared by a European-descended female 11<sup>th</sup> grade student who took the classes at the Honors level when she responded to the same question concerning benefits and challenges of taking College Preparatory/Honors mixed ability classes.

Um, I liked it because, uh, there would be, like, some people, whether they were College Prep or Honors, that would have, like, questions. And they could be, like, they would ask their peers. And, uh, it - I liked it because you could always - like, teaching other people, is, like, the best form to learn something. So, when you're talking to other people, whatever level they're in, then you help yourself, because it - you're helping yourself to learn that material. I liked that. (Participant 4)

Here a student who took the class at the Honors level responded that helping her peers allowed her the opportunity to re-enforce and strengthen her own learning and affirmed the idea of a peer who took the class at the College Preparatory level. However, this same student addressed the challenges, as an Honors student, of exposure to both College Preparatory and Honors peers.

Um, sometimes it kinda felt, like, restricting. Like, because, if you'd want to, like, get farther and get better at something, there'd be, like, like...the other level would still be working on something else, just because, like, that was the way that, like, the lesson plan was set...And that's fine, because you

have to accommodate for everybody, and that's great. But, it was just kinda frustrating sometimes. (Participant 4)

The honesty in this student's response illustrated that the benefit of exposure to both College Preparatory and Honors could sometimes be tempered by a sense of being limited by the needs of students who did not acquire understanding of the materials at the same pace.

Another European-descended female 11<sup>th</sup> grade student who took the classes at the Honors level alluded to an even broader benefit of exposure to both Honors and College Preparatory students in her response to the question concerning whether her mixed ability classes were different or the same as she expected.

I don't know if it was different or the same as I expected necessarily, since I didn't have expectations about the College Prep/Honors, um, you know, kind of system. But, um, it was interesting 'cause you got a greater variety of kids in there, which I think also helped the experience overall. And I found that that helps, you know, when you take an even mix of different levels of classes you can, um, you get to experience more people and kinda live into the whole diversity of (the school district) more, instead of, um, excluding yourself, sort of. Which I know a lot of people do, maybe not on purpose, but they don't get to make friends with as many people because they take the same classes with the same people all the time. (Participant 3)

In other words, this student discussed how exposure to both levels gave her the opportunity to experience a diversity of students that she would not have otherwise experienced had she taken a homogeneously grouped class. She also felt that the value of diversity that the school district emphasized and celebrated

was reinforced by this exposure instead of contradicted by the experience of her peers who were only exposed to single ability, homogeneously grouped classes.

The exposure to both College Preparatory and Honors students and their level of assignments is what typified this category. Students observed that they benefited, their peers benefited, and a sense of diversity was emphasized by this exposure, with the exception that sometimes learning was slowed down by diverse student needs. Students also benefited from the content and activities in their mixed ability classes.

#### *Content and activities*

Content and activities (*typical*) emphasized the significance of the class content and in-class activities that shaped students' experience in these mixed ability classes through the day-to-day assignments and experiences that students had while in class. The American Experience Olympics, field experiences, and dramatization were three such activities that interviewed students emphasized.

When asked about an experience with classmates that stood out, one male European-descended 11<sup>th</sup> grade student who took the classes at the College Preparatory level described one activity that students taking the classes at both levels described as essential to the class, the American Experience Olympics.

Um, I would feel since, OK, since the first day when we had the Olympics, or whatever. It was a very, it was, it was a very...it brought us closer than we wanted to be, but it was a good thing in the end. 'Cause I remember, like, 'I c - I just came here, what am I doing? I don't know these

people.' But now I have some – some really good friendships... (Participant 6)

The activity the student mentioned, the American Experience Olympics, was an activity utilized at the beginning of the course to help students bond and build community. The activity itself included a series of team-building track and field events to establish a positive tone and atmosphere of co-operation in the class, as well as to break down any separation based on course level. Although the activity was non-academic, several students mentioned the significance of the event to their perception of the course.

Another feature of the classes, that represented both content and activity, were field experiences. These field experiences were utilized to reinforce, through direct experience, both the History and literature the students were studying as part of the course. An African-descended female 11<sup>th</sup> grade student who took the class at the Honors level, when asked about an opportunity her mixed ability class gave her to learn or experience something that her homogeneously grouped class did not, reflected a sentiment expressed by several students.

Um, we went once, like, one of the gardens in, uh, in (the city), and I don't, like, we didn't, I don't even think we, like, really went on any field trips based off of things that we learned in English class my freshman year. So, like, not only were we learning about American Experience, we also, like, went to go and see it. So, that way, like, we had, like, a visual aid of what we were studying, instead of just, like, looking at it through a picture. (Participant 8)

The field experience the student mentioned took place after the student had studied turn of the century literature and History as well as being in the middle of their quarterly project researching an immigrant group that contributed significantly to American life and specifically the central city the school district is located near. The field experience was a tour of the local cultural gardens that featured gardens dedicated to each ethnicity that had contributed to the population of the central city and featured turn of the century architecture. These kinds of field experiences occurred several times during the year to reinforce class content and extend quarterly projects and typically included musical and theatrical performances, museum visits and tours of historical locations.

A European-descended female 11<sup>th</sup> grade student who took the classes at the Honors level alluded to the impact of another central feature of the mixed ability classes mentioned by several participants, active presentation through dramatizing content and discussion, when commenting on an experience with classmates that stood out in her memory.

Um...(laughs)...probably...I don't know, just, like, being in class and, like, working with, um, when we would like act stuff out. That was always really funny, because everyone would try and do stuff, like, their way. And sometimes people would get frustrated, but sometimes people just embraced it and they'd act goofy, but it - like it never really mattered. Like, it didn't hold anyone back from learning, because that helped you remember. Like, if you were acting something out, then you'd, like, get to a question on the test or something, you'd be, like, 'that was the time that 'such and such' did that, and it was so funny' and blah, blah, blah. So you'd know what that was. (Participant 4)

In this student's comment the enjoyment and utility of active participation is evident in that it was "funny" and it helped her recall content for the assessment. A regular component of both English and History mixed ability classes was this type of activity. Three of the four quarterly projects featured a presentation component, student-led discussions were common in both English and History, and students were consistently called upon to share and present their work and opinions in class. A central goal of all of the presentation activities was to bring Honors and College Preparatory students together through the open sharing of their ideas.

Three activities that interviewed students emphasized were The American Experience Olympics, field experiences, and dramatization. This category emphasized the significance of the class content and in-class activities that helped shape students' experience in these mixed ability classes. Student's experiences were also shaped in that their efforts resulted in academic rewards.

*Effort resulted in academic rewards*

The final category that emerged was effort resulted in academic rewards (*variant*). Within this category, student participants discussed the ways in which their personal efforts impacted their academic outcomes in mixed ability classes. In their responses, students discuss the academic "pay off" of investing themselves in their work, the manageability of their workload, and ways in which they were motivated to complete challenging work.

When asked how these classes were similar or different than other classes he was taking at the time, a European-descended male 11<sup>th</sup> grade student who had taken the classes at the College Preparatory level stated the simple equation that made the class work for him. "You had to put work into it, but eventually you could see it paid off" (Participant 6). Essentially, this student explained that work done in class and on projects resulted in better grades and increased understanding.

An 11<sup>th</sup> grade African-descended male student who had taken the classes at the Honors level gave an honest response to the question about the challenges and benefits of the classes and shared his perception of the manageability and academic payoff of effort.

Um, I thought the class was manageable. I just didn't really work hard, so that's - that was the main issue that, when I would study and do my homework I - the class was ver - very manageable. (Participant 10)

This student admitted his own lack of effort while at the same time acknowledging the fact that the classes were manageable and academic effort paid off.

Finally, a European-descended female 12<sup>th</sup> grade student who took the classes at the College Preparatory level, when asked whether the classes were different or the same than she expected, alluded to the payoff of academic effort and the ways this effort was motivated and encouraged by her teachers.

But, it was good, though, because I think you guys gave us the option, like, 'Oh, if you wanted to do this, like, for Honors, you guys can get a little extra credit. Blah, blah,

blah.' So, it gave us more incentive to do whatever. And it was good, though, 'cause it was motivation. 'Cause everyone else was doing everything, and I was like, 'Oh, this looks easy. I'm gonna do it too, and I'll get extra credit,' and it was good. (Participant 12)

This student explained that students taking the course at the College Preparatory level could take the Honors level options for extra credit for different assignments in order to help improve their grade and also give them a taste of the Honors level. In this way, students saw that effort did affect their academic performance in the classes and were motivated to take part in these opportunities.

Effort resulted in academic rewards was the final category that emerged in the academic environment domain. Student participants discussed the ways in which their personal efforts impacted their academic outcomes in mixed ability classes. The academic "pay off" of investing themselves in their work, the manageability of their workload, and ways in which they were motivated to complete challenging work were all aspects of their responses.

Overall, these responses began to indicate how students in mixed ability classes perceived their academic environment. Responses that concerned students' perceptions of their learning environment and dealt directly with the content and outcome-based (e.g. assignments, assessments, grades) elements of the class were important as evidenced by student comments such as those regarding the impact of their quarterly projects, the academic similarity of their mixed ability classes to their single ability classes, and the idea that their efforts

were fairly rewarded. These categories indicated the experiences interviewed students had in their mixed ability classes.

### Social Environment

This domain included those responses that describe the social environment in mixed ability classes. The social environment in these mixed ability classes included those aspects that dealt with the non-academic dimension of the class. The interpersonal dimension was explored within this domain. In this class the idea of “community” was regularly emphasized, through group projects and co-operative learning, and this domain represented that emphasis. Within the domain social environment were the categories changes in peer relationships – divided among the subcategories development of new and diverse friends (*typical*), connection with peers (*typical*), and good friends (*variant*); classroom climate - divided between the subcategories climate similar to other classes (*general*) and fun personal interactions (*typical*); and choice of group partners – divided into subcategories similar work ethic (*typical*) and random selection (*variant*).

#### *Changes in peer relationships*

How the students interviewed interacted with their peers was reflected through the sub-categories development of new and diverse friends (*typical*), connected with peers (*typical*), and good friends (*variant*). These sub-categories indicated the changes in peer relationships that interviewed students experienced in their mixed ability classes.

*Development of new and diverse friends.* This (*typical*) sub-category included responses that focused on the kinds of friendships students developed while in their mixed ability classes. When asked whether or not he had made friends in these classes that he would not have made in separated Honors or College Preparatory classes, a European-descended male 12<sup>th</sup> grade student who had taken the classes at the College Preparatory level responded in a way that illustrated the impact of the mixed ability environment on his relationships.

Um, some of the kids who were, like, more popular were in the Honors level. And I became friends with a few of 'em. And I was kind of surprised that I was gonna become friends with the popular kids, 'cause I'm not popular. So... (Laughs). (Participant 9)

This student's comment shows how mixed ability classes gave him the opportunity to begin new friendships with students who he previously would not have imagined being friends with, including those "popular" students taking the classes at the Honors level.

When asked about an experience that her mixed ability classes had given her that her previously separated classes had not, a female African-descended 11<sup>th</sup> grade student who had taken the classes at the College Preparatory level discussed how the issue of diversity arose within the social environment of her mixed ability classes.

Different types of people - because people, um, I mean like it's a stereotype College Prep is colored people, but that's basically what it is. And in the Honors classes you have more of a mixture, and - but it's predominantly white - and the College Prep, Honors together just made it pretty much even. (Participant 2)

While addressing the College Preparatory and Honors stereotypes, specifically the stereotype of "CP" as standing for "Colored People", this student alluded to how these stereotypes were challenged by experiencing both groups of student in the social environment created by their mixed ability classes. Another African –descended male 11<sup>th</sup> grade student who took the classes at the Honors level, when asked to describe the friends he had made as a result of the classes, discussed the new and diverse friendships he made, including the diversity of personality types.

Um, there - there's a lot of – there's a wide - wide variety of people in the class, so I can't really choose one or a couple words to describe `em. Some of `em were really smart and, like, just fun to be around. Others were goofy but all – not – not saying that they were dumb, but they weren't as smart as others, so it was, I just liked it. There were, I met a lot of people and made, or, became better friends with others... (Participant 10)

This student's comments resonated with the theme of the mixed ability social environment as a place where new and diverse friendships could take place, relationships that would not have taken place in a separated, homogeneously grouped Honors or College Preparatory social environment.

*Connection with peers.* In this (*typical*) sub-category students discussed how the mixed ability social environment gave them the opportunity to connect

with peers they knew but had not socialized with due to their separated classes. An African-descended male 11<sup>th</sup> grade student who had taken the classes at the Honors level discussed his connection with both new and old peers when asked if the students he met were new acquaintances or if he had known them before the class.

Participant: I think it's a mix. I've known some of 'em. Others I met through the class...

Interviewer: ...Um, have you made, did you make friends in this class that you believe you would not have made if you had taken a separate, um, Honors class?

Participant: I think so, because there were a lot of people who were in the CP class that I would not have been in class with. And then I wouldn't have contact with them, so. I – I met a lot of friends that otherwise I would not have. (Participant 10)

This student's comments illustrated both his connection with new and previously known peers as well as the concept that these peers would have remained unknown without his taking his mixed ability classes.

When asked whether she had made friends with people in her mixed ability classes that she would not have made if she had taken a separated class and why, an African-descended female 11<sup>th</sup> grade student who had taken the classes at the Honors level illustrated this concept.

Um, I usually don't have classes with CP class-taking people... 'Cause I don't, I haven't taken a CP class in high school... Yet. So I'm usually with the Honors and AP kids. And in that class I was with the CP kids as well. (Participant 7)

In this exchange the student illustrated the fact that her mixed ability classes gave her the opportunity to experience different peers, especially peers who had taken classes at different levels than she had. This same sentiment was echoed by another European-descended female 11<sup>th</sup> grade student who had taken the classes at the Honors level when asked if she had made friends in these classes that she would not have made if she had taken a separate Honors class.

Participant: Just, like, some people that I probably...like, I'd, like, never even seen a couple people in the class. And, uh, like, uh, you already have, like, previous experiences with some people but, like, then to get in the class, and you're with them all the time then you, like, do see that other side. And, so, it was kind of, like, cool to be, like, well, 'I thought you were really annoying, but you're actually alright.' So, I mean, it - from - it was kind of cool because you just didn't know that person, then when you're with them all the time with - for those double periods and everything, then you, like, see them. And you see, uh, like, how they act, and how they interact with other people so you're, like, 'Alright. You're alright. You're fine'.

Interviewer: Why do you think you –you wouldn't have m – met them had you taken a separate class?

Participant: Um, probably just because, like, we, wouldn't have been in the same classes in general. Like, um, I was considering taking, like, like, a general Honors History class and, like, a general, like, Advanced English, or something. But, um, it's, like, if I hadn't that - or if I'd done that then I wouldn't have met them. (Participant 4)

Here again the mixed ability environment made it possible for this student to encounter peers she was familiar with but did not know until these classes. Likewise, she mentioned the fact that, had she not taken mixed ability classes, she would not have had this opportunity.

*Good friends* . A seemingly simple classification, this (*variant*) sub-category displayed the depth of the relationships in this mixed ability social environment. One African-descended female 11<sup>th</sup> grade student who took the classes at the College Preparatory level described the friends that she made as a result of being in the classes. "Good friends. I still talk to some of them" (Participant 5). After this comment, the student went on to discuss her relationship with a European-descended female student who had taken the classes at the Honors level. Considering this student a "good friend" indicated an ongoing relationship that still persisted during the time of the interview. These two students created a cross-race, cross-ability friendship that may not have occurred had they not taken these mixed ability classes.

An African-descended female 11<sup>th</sup> grade student who had taken the classes at the Honors level replied to the same question about describing the people she had met as a result of being in her mixed ability classes.

We're still friends today, especially the people that are in my, um, decades group. 'Cause we had met up so many times to go over different things, and then do a skit, and go over some people's houses. And we had to practice and rehearse, and we had to feel comfortable with one another in order for us to do all of that. (Participant 8)

Here the student described the persistence of the friendships over time and the idea that they had been cemented by the decades group project that blended both College Preparatory and Honors students together. Likewise, the multi-dimensional nature of the decades project necessitated meeting outside of

school, often at one another's houses, which further created bonding experiences for these mixed ability students.

Another European-descended male 12<sup>th</sup> grade student who had taken the classes at the College Preparatory level re-iterated how outside of class experiences helped establish friendships when he was asked to describe the friends that he had made or the people he had met as a result of being in his mixed ability classes.

Um, like I said before, I knew these people –(student names) - before, but I wasn't, like, really close to them before American Experience. And, it was sophomore year, so - that's American Experience year - it was sophomore year that I actually got to know these people. And I started hanging out with them when we had free time on the weekends, and whatever. So, it got us closer, and it bound us closer. And I made, I wouldn't say, like, hanging out friends, but I made acquaintances, and good acquaintances at that. Um, with, uh, a lot of people in the class, you know (student name). Um, even though (student name) and I were not, uh, in the same class, me and (student name) we talked, we studied a lot, and talked about American Experience, and um, yeah. (Participant 11)

Interviewed two years after his experience in these mixed ability classes, this student still stressed that many of the peers he worked with in the classes were still "good acquaintances". He also alluded to his relationship with an Honors student who was taking the classes at a different time of the day in a completely different American Experience team, indicating the expanded community that many students experienced as part of their mixed ability classes.

Interviewed students experienced changes in peer relationships as reflected in these responses. The sub-categories development of new and

diverse friends, connected with peers, and good friends indicated how the students interviewed interacted with their peers. These peer relationships also seemed related, in part, to the unique classroom climate of these mixed ability classes.

### *Classroom climate*

The second category, classroom climate, represented how students perceived the classroom dimension of their mixed ability classes. The in-class experience of students in mixed ability classes was reflected through these responses. Through classroom climates, which were similar to their other non-mixed ability classes (*general*), and their fun personal interactions (*typical*), the interviewed students discussed the impact the classroom climate had on their social experience in the mixed ability environment.

*Climate similar to other classes.* The (*general*) sub-category climate similar to other classes focused on the similarity of the classroom climate in mixed ability classes to students' previous single ability, homogeneously grouped classes. This similarity was reflected in the consistencies of class length and size, subject matter, and academic emphasis with their other non-mixed ability classes.

A European-descended male 11<sup>th</sup> grade student who had taken the classes at the Honors level emphasized this concept when questioned how the classes were similar or different than the other classes that he was taking at the time.

Um, well, on days when it was split up it was basically like any other class because, you know, it was the same length and, you know, same size, but

on the days when we were together it was different 'cause, you know, we'd have double the time to do stuff together, twice as many people, and all that stuff. (Participant 1)

This student found the climate similar to the other single-ability classes he was taking at the time, with the exception of the times when the classes joined English and History together in the double period.

A European-descended female 11<sup>th</sup> grade student who had taken the classes at the Honors level responded in kind when questioned how the classes were similar or different than the other classes that she was taking at the time.

I think it was a lot more interactive than my other classes. Th - all the other ones were, like, more straight forward, but, you guys were, like, always open for questions, and always available for help, and other classes weren't always like that. (Participant 4)

This student found similarity in the classroom climate with the other single-ability classes she was taking at the time, with the exception of what she felt was her teachers' openness to answering questions and helping students. A male African-descended 11<sup>th</sup> grade student who took the classes at the Honors level responded in a similar way to the question of similarity and differences with the classes he was taking at the time.

It was - I thought it was very similar, because there was, there wasn't an emphasis on linking the two necessarily, but it would just - there would be s - uh, kinda linked by themselves. Which is why I thought it was good, because there wasn't an effort to kind of link the classes, I don't think. (Participant 10)

Here again, the student saw similarity to the other classes he was taking at the time, while emphasizing the natural connection between the two classes that

emerged as a result of their shared academic focus (i.e. time period, major historical themes, shared projects). The commonality between the climate in the mixed ability classes with the climate of other homogeneously grouped classes seemed to be a feature of the mixed ability class that these students appreciated and made the connection between the two classes and the additional projects both beneficial and manageable.

*Fun personal interactions.* This (*typical*) sub-category described the enjoyable peer interactions that students reported in the mixed ability social environment. A European-descended male 11<sup>th</sup> grade student who had taken the classes at the Honors level described these interactions in the context of the decades quarterly project when asked about an experience with classmates that stood out in his mind.

Decades project was really fun. Working with classmates to, uh, to come up with a presentation that represents a decade.  
(Participant 1)

This simple description of the decades project as a fun project that focused on working with classmates to develop a presentation emphasized the enjoyable aspects of the classroom climate.

A female African-descended 11<sup>th</sup> grade student who had taken the classes at the College Preparatory emphasized the enjoyable peer interactions that took place, especially with the decades project, when asked what she liked about the classes.

Um, the class is for the most part, fun. Uh, I liked the final project, the fourth quarter project. And I liked the Olympics

because it was a good bonding experience.... Um, it was just fun for the most part. (Participant 2)

Here again the student emphasized “fun” as a key component of the fourth quarter decades project as well as the American Experience Olympics team-building activities at the beginning of the year. A European-descended male 12<sup>th</sup> grade student who had taken the classes at the College Preparatory level focused more generally on the enjoyable interactions he had with his peers and then extended his comments into the decades project when he responded to the question of what he liked or disliked about the classes.

Um, I really liked, uh, you know, like, uh, I mean I really liked the classmates. I mean, you know, me and (student names). It was always fun. Um, so I liked working with them, especially. Um, so it kinda made a camaraderie, if you will, throughout the year...And, um, I really liked, I mean, at least three out of the four projects. I really didn't like the research paper, but who really does like a research papers? Um, I loved decades. That was the greatest project probably I think I'll get my whole high school career. Um, it was the most fun too. (Participant 11)

Once again, the student emphasized the centrality of “fun” in his peer interactions, especially as they relate to the decades project and the camaraderie he developed with his classmates. These fun interactions were central to these students experience in the classroom climate of their mixed ability classes.

How students perceived the classroom dimension of their mixed ability classes represented the second category of classroom climate. Students' classroom experiences in mixed ability classes were reflected through these responses. The interviewed students discussed the impact the classroom climate

had on their social experience, an experience also affected by their choice of group partners.

### *Choice of group partners*

The third category was choice of group partners, which represented how students chose work partners in their mixed ability classes. Group partnerships were a central part of the social environment of the class because many activities and assignments were centered on a co-operative group dynamic. These responses reflected both the purposeful (*typical*) and random (*variant*) selection processes that students utilized.

*Similar work ethic.* The first sub-category, similar work ethic (*typical*), focused on students who chose partners with a similar outlook on completing coursework to work with on group projects and activities. When asked what kind of student he would choose to work with when working in groups or with a partner, a European-descended male 11<sup>th</sup> grade student who took the classes at the Honors level indicated how he chose partners with a similar work ethic.

Uh, once, you know, the year had gotten started I knew, like, how people worked. I tried to pick people I knew would accomplish their part of the work, and, you know, we'd be able to work together to do it. (Participant 1)

Here the student commented on the importance of choosing students who would complete their part of their work so he could work with them to complete the project. This importance of co-operation in group work was emphasized by several students. Another female African-descended 11<sup>th</sup> grade student who took the classes at the College Preparatory level emphasized the same concept

when answering the same question concerning who she would select for group partners. "Um, no one specific. Just people that, um, would put in work ethic, 'n...You know, work well with me" (Participant 6). Once again, this student emphasized the importance of compatible partners.

A European-descended male 12<sup>th</sup> grade student who took the classes at the College Preparatory level stressed the same concept when asked the question about selection of group partners.

Um, I tried to go with some friends. Somebody that I could, I, like, click with. And, then again, somebody who I know is gonna be a reliable person... (Participant 11)

Partners that individuals could "click with" represented those students who were deliberately selected because they would help this student complete his work and that he could rely upon to complete their portion of the assignment. However, some students utilized a more random approach to selecting their group partners.

*Random selection.* The second (*variant*) sub-category focused on students who chose partners randomly, or for more undefined reasons, to complete group projects and activities. A European-descended male 11<sup>th</sup> grade student who took the classes at the College Preparatory level answered the question about choice of group partners and indicated his rationale his selection of group partners.

Um, at times, I would want, like, if I knew if I could do it real well, I – I really wouldn't care. Like, I did a lot of the projects by myself, or whatever. But I just, someone that wasn't gonna start something, or just felt that they would

participate, or if they wouldn't just so they wouldn't give problems. (Participant 6)

This student answered the question by indicating that he was self-reliant and would only choose partners who would participate or not be difficult. This selection rationale could also be part of an effort to avoid any conflict in personal interactions. Another European-descended female 11<sup>th</sup> grade student who took the classes at the Honors level also reported her more random approach to selecting group partners.

Um, I generally s – like, tended to stay with the people that I knew. But there were sometimes when, I - like, I didn't have a problem working with people that I didn't know. But, I mean, it's just kinda, like, first instinct to just, like go, like, flock to the people you already know. (Participant 4)

This student answered the group partner question by indicating her preference for friends but also indicated her comfort with selecting partners she did not know. However, neither selection criteria was based on shared academic goals.

Finally, a male African-descended 11<sup>th</sup> grade student who had taken the classes at the Honors level discussed his random approach to the selection of group partners.

I was really indifferent. I - I worked with whoever was just available at the time. I didn't really choose to work with a Honors student or a CP Student. I would just work with whoever didn't have a - not that you didn't have partner, whoever I was just near, or whatever. It was - there wasn't a lot of logic behind it. (Participant 10)

Here again, the student indicated a random approach to selecting group partners. Perhaps due to the communal nature of the mixed ability classes,

these students were comfortable with selecting group partners randomly due to their increased familiarity with their peers.

The purposeful and random selection processes that students utilized were reflected in these responses. These group partnerships were a central facet of students' social interactions.

The social environment in mixed ability classes was described in this domain. The non-academic, interpersonal dimension of the class was central to the experience of the students interviewed. This interpersonal dimension was explored within this domain. Students' lived experiences in the mixed ability classroom were touched upon through these student responses. The classroom climates that the interviewed students experienced and the peer relationships they established, in many ways, represented the significant social environments that these mixed ability classes fostered. These categories also contributed to a discussion of the mixed ability classroom that leads from the interpersonal to the personal.

#### Self-Perceptions

The domain that addressed students' perceptions of themselves in the mixed ability learning environment most aptly was self-perceptions. Within the domain self-perceptions were the categories good/comfortable – divided among the subcategories social (*typical*), personal (*typical*) and academic (*variant*); validated – divided between the subcategories academic (*variant*) and personal (*variant*); and challenged – divided between the subcategories academic (*variant*)

and social (*variant*). These self-perceptions concerned students' academic, personal, and social self-concepts while they were attending their mixed ability classes.

*Good/comfortable*

The first category represented how the students interviewed felt positively about themselves in their mixed ability classes. These positive self-perceptions related to their social (*typical*), personal (*typical*), and academic (*variant*) self-concepts.

*Social.* The first (*typical*) sub-category focused on the positive social self-perceptions that the interviewed students reported while in their mixed ability classes. When asked how she felt about herself socially in her mixed ability classes, a female African-descended 11<sup>th</sup> grade student who had taken the classes at the Honors level responded positively.

Pretty good. I mean, we talked almost every single day in class anyhow as it is, whether in between time, like, within the four minutes, or just in class having a discussion, or any free time that we had. (Participant 8)

This student discussed the positive social perception she had while in her mixed ability classes and its relationship to the on-going communication she experienced with her peers, both inside and outside of class, including the four-minute breaks between classes. A European-descended female 11<sup>th</sup> grade student who took the classes at the Honors level also reiterated her overall positive social self-perception in her mixed ability classes.

Um, I mean, I was generally pretty quiet in the class. It –I didn't have that many friends, even though I was friendly with a lot of people, but, um, you know. I - I felt, like, warm, but not the most outgoing person in the room....Yeah. I – I was comfortable, but I didn't feel like I needed to talk all the time, though. (Participant 2)

Here the student acknowledged that, although she was quiet in her mixed ability classes, overall her social perception was characterized by warmth and comfort.

A male African-descended 11<sup>th</sup> grade student who took the classes at the Honors level, emphasized both the comfort and sense of open-communication in his social self-perception while in his mixed ability classes.

I just felt really comfortable in here. I, there were, there were just so many people I could relate to and, like, I would, I know I would, like, make a lot of jokes and everything. So, I just felt really comfortable, as though I can express myself without fearing what people are going to think about me or about my actions. (Participant 11)

This student in his mixed ability classes emphasized the combination of his comfort and communicative openness. This good/comfortable social self-perception seemed key to these students.

*Personal.* The second sub- category was personal (*typical*). This sub-category focused on the positive personal self-perceptions interviewed students had about themselves in their mixed ability classes. When asked how his mixed ability classes made him feel about himself personally, a European-descended male 11<sup>th</sup> grader who took the class at the College Preparatory level answered the question directly and simply, "I was comfortable" (Participant 6). This

student's simple statement was a comment on his personal self-perception in the classes, while other students elaborated more fully on their experience.

A female African-descended 11<sup>th</sup> grade student who took the classes at the Honors level explained her positive personal self-perception and the reason for this perception when she responded to the question of how she felt personally in her mixed ability classes.

I felt good, 'cause, like, some classes, like, (other) class I've noticed that sometime your opinion isn't respected, and you kind of get shut down for saying what you believe in, but in American Experience, it wasn't like that. Everybody, like, you may have had one or two people that may have - may have disagreed, but you didn't have a lot of people just say, you know, 'You're wrong,' you know, like, 'Shut up.' And then also, like, the, teachers, like, supported your opinion of it as well. (Participant 8)

Here the student attributed the reason why she personally felt good in her mixed ability classes to the support she received from her teachers and peers in voicing her own perspectives. This free and supported expression of ideas was a key concept in the mixed ability class dynamic.

Another European-descended male 12<sup>th</sup> grade student who took the classes at the College Preparatory level attributed his positive personal self-perception to the individual relationships he was able to establish as a result of being in his mixed ability classes when asked how the classes made him feel personally.

I mean, it made me feel better that I actually had some friends, and I could relate with some people. Um, it's really big, in my opinion, to have, 'cause I mean there was that initial, uh, friendship, I guess you could call it a friendship

attraction, freshman year between me and some people. I knew (student name) and (student name) from baseball, and (student name) from (teacher's name), uh, 9<sup>th</sup> grade Global Studies class. But if American Experience wasn't there, I highly doubt that we would become, um, so close - as close as we did throughout these years. I'm really still really close with (student name). He's one of my best friends, and (student name) as well. Without that, uh, I don't know if the - if the, these relationships are as strong as they are today. (Participant 11)

This student found a positive personal self-perception through the long-lasting relationships he established with friends he still had at the time of the interview. This sense of connection between positive personal self-perceptions and peers seemed essential to students in these mixed ability classes.

*Academic.* The third sub-category was academic (*typical*). This sub-category focused on the positive academic perceptions interviewed students had about themselves in their mixed ability classes. A European-descended female 11<sup>th</sup> grade student who had taken the classes at the Honors level discussed her positive self-perception when asked how she felt about herself academically. "I felt strong, academically. You know, I felt like I could do the work, and do it well" (Participant 3). This student's direct commentary represented her positive academic self-perception and her confidence in her abilities.

Another European-descended female 11<sup>th</sup> grade student who took the classes at the Honors level discussed how she felt about herself academically in the class as well.

I think I did pretty well. I mean, there would be sometimes where I'd slack. (Laughs.) I'm not gonna lie. I mean, there

would be those times, but then a lot of the times you can pull through, and, um, I think I did alright. (Participant 4)

This student discussed both her tendency to at times “slack” and not put in full effort, but overall her academic self-perception remained positive.

A female African-descended 11<sup>th</sup> grade student who took the classes at the Honors level explained her positive academic perception and her reason for it.

I think I was doing good in the class. English is my better subject between English and History, but History was never, like, my strongest subject...But, (History teacher), like, 'cause the one - my previous English, I mean, um, my previous History teachers I haven't necessarily cared for either. But, (History teacher), that was completely different. Like, (laughs) I loved going to her class. (Participant 8)

Here the student elaborated on her positive academic self-perception by explaining her strength in English and her enhanced performance in History due to her affinity for the History teacher in our American Experience team. These positive academic self-perceptions appeared to be shaped and enhanced by the mixed ability environment.

Social, personal, and academic self-concepts were all positive self-perceptions interviewed students discussed. This category represented how the interviewed students felt positively about themselves in their mixed ability classes. Interviewed students also discussed how their self-perceptions were validated as well.

### *Validated*

The second category, validated, represented how the interviewed students' feelings about themselves were confirmed in their mixed ability classes.

These validated responses concerned students' academic (*variant*) and personal (*variant*) self-perceptions.

*Academic.* The first sub-category within the consistent sub-category was academic self-perception (*variant*). This validated academic self-perception related to ways in which students self-concepts about their academic ability were confirmed by their experiences in their mixed ability classes.

A female African-descended 11<sup>th</sup> grade student who took the classes at the Honors level described how she felt about herself academically in a simple and direct manner, "Normal...I had B,s, A's" (Participant 7). This student's sense of consistency in her academic self-perception was rooted in her "normal" academic performance in the class, which she defined as receiving A's and B's in her mixed ability classes.

A female African-descended 11<sup>th</sup> grade student who had taken the classes at the College Preparatory level responded to the question of how she felt about herself academically in her mixed ability classes as the same as in any class.

Um, academically, I felt kinda the same I feel about every class. It was still a class. I still had to do work and get homework done. But, personally, like, I think my speech was improved because, I've always had a problem with public speaking, and the class was just so big that it just forced me to work on that. (Participant 2)

This student felt the same about herself academically in her mixed ability classes as she did in any other. However, she also mentioned the improvement in her public speaking that took place due to the presentation and discussion aspect of the course.

For one female European-descended 12<sup>th</sup> grade student who took the classes at the College Preparatory level, when asked how the classes made her feel about herself academically, discussed that consistency in her academic self-perception indicated her ongoing struggles with test-taking.

Well, it's a tough one because, I mean, I always do well with my homework, and, but I'm a really bad test-taker. So, like, that is what really affected my grade the most, was the tests. I've always been bad at tests, so, like, that brought my grades down a lot. And I never really learned the correct ways to study for tests to take tests, so that's kinda what I'm screwed over with. But, if that class didn't have any tests, I would have gotten an A, and I would have been fine. (Laughs)...I need to learn how to do this before I'm screwed over in high school and I don't graduate. That type of thing. (Participant 12)

This student's ongoing struggle with test-taking was a consistent factor in her academic self-perception both before and after the course. However, she also noted that her mixed ability classes motivated her to try and overcome this obstacle.

*Personal.* In this (*variant*) sub-category students interviewed explained how their personal self-perceptions were validated during their mixed ability classes. The interviewed students discussed how their personal self-perceptions had been established early, focused on completing high school, and confirmed their views of their personal learning styles.

One African-descended 11<sup>th</sup> grade student who took the classes at the Honors level responded to how the class influenced how he thought about himself.

Um, I don't think it really has, because I've had a idea of who I was since I was really young. I don't really, I haven't changed much since I was younger. I - I'm the same me since third grade, maybe. So, I don't think the class really has affected the way I see myself. (Participant 10)

This student believed that his personal self-perception had remained consistent since his youth. Thus, he felt his mixed ability classes did not affect his personal self-perception.

A female 12<sup>th</sup> grade European-descended student who took the classes at the College Preparatory level, when asked how the classes made her feel about herself personally, explained the consistency in her personal self-perception as being a result in her over-riding goal of completing high school.

Personally. Uh, (sighs). I'm trying to remember. I mean, I'm trying to think of when I actually went to class too... So. I mean, it wasn't, kinda indifferent, I guess...Just, it didn't really matter. It's just a class that you're gonna take for a year and then you're done with, so... Just do your best and get it over with. (Participant 12)

This student's honest response to the question illustrated that her goal of completing high school was her primary concern and kept her personal self-perception consistent throughout her high school career.

A female 11<sup>th</sup> grade European-descended student who took the classes at the Honors level, when asked how the classes influenced how she thought about herself, discussed how her personal self-perceptions of her learning style were shaped by her experience in her mixed ability classes.

Um, I've come to kind of think of myself as maybe more of a - I don't know, I don't know what the right word would

be, but, I guess, someone who can form those connections, likes a free-er curriculum... (Participant 3)

The student's response illustrated that her growing personal self-awareness was validated through her experience in her mixed ability classes.

This category discussed how the interviewed students' feelings about themselves were confirmed in their mixed ability classes. Students' academic and personal self-perceptions were the subjects of these responses. Although consistencies in academic self-perceptions for some of the students interviewed were present, challenges to students' academic self-perceptions also occurred.

### *Challenged*

The third category was challenged, which represented how the interviewed students' feelings about themselves were confronted and often contradicted in their mixed ability classes. These challenges took place in the areas of students' academic (*variant*) and social (*variant*) self-perceptions.

*Academic.* The first sub-category dealt with the challenged academic (*variant*) self-perceptions that interviewed students experienced in their mixed ability classes. These challenged self-perceptions focused on students' work ethic, their view of their intelligence, and their academic self-concept relative to their peers.

A female African-descended 11<sup>th</sup> grade student who took the classes at the College Preparatory level discussed the challenge to her academic self-perception that her mixed ability classes presented to her.

Academically? Um, it was tough, but, um, it made me work a little bit harder. So, the results were good at the end, so.  
(Participant 5)

This student's comments illustrated that her mixed ability classes challenged her academic self-perception on a very basic level and made her work more diligently.

A white male 12<sup>th</sup> grade student who had taken the classes at the College Preparatory level, when asked how the classes influenced the ways he thought about himself, expressed a similar sentiment but with more of a reflection on how his extra effort reflected on his academic self-perception.

Yeah, like, if I was given an extra credit, or if Honors students were given an extra credit but C – or had to do extra credit, whereas the CP students had the option, I'd usually take the option to do it, just to challenge myself.  
(Participant 9)

This student expressed his feeling that the extra effort he expended in his mixed ability classes helped him realize that he was smarter than he had previously believed. This change in academic self-perception was a profound one for this student. The same student went on to elaborate that his mixed ability classes, by allowing him the opportunity to complete higher-level Honors work, fostered this enhanced academic self-perception. Likewise, an African-descended 11<sup>th</sup> grade student who took the classes at the Honors level explained how and why his mixed ability classes challenged his academic self-perception when he responded to the question of how he felt about himself academically in the classes.

Oh, I see. Um, in my other Honors classes, I would be, I wouldn't be, like, in the bottom tier of, like, in terms of

grades and whatnot. But in this class I felt as though people would look to me to, for answers and things like that because, I don't know, I just, I - I would read and it would stick with me for a very long time. So, I would, I felt as though I was more, not advanced 'cause that's kind of condescending, but I think it came easier to me, so I kind of, um, felt, like, smarter in here. Rather than in my Math class, where there are a lot of really, really smart kids. I wouldn't feel as smart as them. So, I think that that's how it made me change - academically, at least. (Participant 10)

Here the student emphasized that the mixed ability environment allowed him the opportunity to share his knowledge with others and, in the process, enhanced his academic self-perception in a way that he was unable to in his homogeneously grouped Honors classes. The result was a different, although equally profound realization, as his peer who had experienced a challenge to his previous academic self-perception at the College Preparatory level.

*Social.* The second sub-category dealt with the challenged social (*variant*) self-perceptions that interviewed students experienced in mixed ability classrooms. These challenged social self-perceptions focused on the way exposure to the other group changed students' point of view concerning their peers and themselves.

A European-descended female 11<sup>th</sup> grade student who had taken the class at the Honors level discussed how being in classes with both Honors and College Preparatory students challenged her previous notions concerning College Preparatory students when asked how the classes changed the ways she viewed and related to College Preparatory students.

I don't know that I would have ever disrespected anybody who wasn't in a different class, but maybe, maybe more respect, at least, uh, you know, just 'cause, um, a lot of people get this mentality, even though they don't think they do, or maybe don't want to but, you know, the higher off you are, the better you are and there's obviously something that you have that these people don't. But, um, when you're with other people, and you're taking a variety of, you know, different level classes, or you're with other people from different levels, it – you - really kind of dispels those, um, you know, notions, I guess. You – you can't think that (laughs) when you're hanging out with people, and they're really the same as you are. It's just kind of a silly idea to think that they're not. (Participant 3)

In this statement, the student explained how being exposed to both levels of students challenged her previous perceptions.

Another European –descended female 11<sup>th</sup> grade student who took the classes at the Honors level reiterated the same sentiment in a different way when asked how the classes changed the way she viewed and related to College Preparatory students.

Um, I mean, it's kind of like you're bound to judge people no matter what. Like, depending on whether it's, um, you're like – I mean, there's always going to be some way – especially at – at this age – that you're going to judge people. It's just kinda, like, how things work. But, um, I don't know, taking the class you kind of learn not to. And, uh, I don't know. It's kinda - (laughs) – reminds me of (student racial diversity group), but, um, I mean, I don't know. (Participant 4)

The student's reference to the mixed ability classes' similarity to the student racial diversity group highlighted the exposure students in mixed ability class had to diverse classmates. In a similar manner,

mixed ability classes helped this student not to judge classmates who were taking the class at the College Preparatory level.

A European-descended 12th grade male student who had taken the class at the College Preparatory level explained how his previous view of Honors classes had been challenged in his mixed ability classes when asked how the classes changed the way he viewed and related to Honors students.

It wasn't, my view is now is, it's like, it's not that hard. Honors is not that intimidating. It's just a bit more of a, a bit more challenging, but not much ...Yeah, I feel more comfortable in a higher-level class, also. (Participant 9)

The student's new perspective on Honors classes came out of his mixed ability classes and the challenges they presented to his previous self-perceptions.

Students' feelings about themselves were confronted and often contradicted in their mixed ability classes in the third category, challenged. The areas of students' academic and social self-perceptions were where these challenges were most apparent.

Self-perceptions was the domain that addressed students' perceptions of themselves in the mixed ability learning environment. This domain was characterized by students' good/comfortable, validated, and challenged views of themselves in mixed ability classrooms. In some instances, these self-perceptions appeared to benefit from mixed ability classes. In other instances, students' self-perceptions were affirmed in these classes. The last group of responses represented those students who were challenged and encouraged to

see beyond their previous self-perceptions in their mixed ability classes. The self-perceptions concerning students' academic, personal, and social self-concepts were all addressed in students' responses related to their mixed ability classes.

### Reflection

The domain that addressed students' reflection on the mixed ability learning environment most aptly was reflection. This domain represented those comments that concerned general retrospection from the interviewed students concerning their experience in mixed ability classes. Within the final domain of reflection were the categories would/have taken another CP/H class (*general*); reasons for taking another CP/H class – divided among the subcategories like combination of CP/H (*typical*), availability (*variant*), and no difference between other non CP/H classes (*variant*); and good class/recommended (*typical*).

#### *Would/have taken another CP/H class*

The first category was would/have taken another CP/H class (*general*) and explained the interviewed students' view of their mixed ability classes after their 10<sup>th</sup> grade experience. Of the twelve students interviewed, all twelve stated that they would take another College Preparatory and Honors mixed ability class. Nine of the twelve either had or were, at the time of the interviews, currently taking a mixed ability class.

#### *Reasons for taking another CP/H class*

The first category addressed students' reasons for either being willing to take or actually taking another mixed ability class. The reasons were divided into

like combination of CP/H (*typical*), availability (*variant*), and no difference between other non-CP/H classes (*variant*).

*Like combination of CP/H*. This sub-category (*typical*) addressed students who were willing or who were taking further mixed ability classes because they preferred the mixture of College Preparatory and Honors levels.

A European-descended female 11<sup>th</sup> grade student who took the classes at the Honors level, when asked if she would or had taken another CP/H class, answered that she would take another mixed ability class because she liked the combination of College Preparatory and Honors students.

Probably...because, um, I like that, like, if you're used to taking just an Honors class and you don't get to see the people in, like, a CP class, or you're with mostly CP classes and you don't get to meet the people in, like, mostly Honors classes because you're so separated by that. But, it's cool being able to get combined and, like, meeting new people. And, picking up on their ideas and the way they think, and everything. I just liked it. I mean, it worked out well for me. (Participant 4)

This student's affinity for mixed ability classes and the opportunity to meet students with different perspectives seemed shaped by her time in her American Experience classes.

A European-descended male 12<sup>th</sup> grade student who took the classes at the College Preparatory level explained that he chose to take further mixed ability classes because they gave him the opportunity for exposure to Honors students when asked why he had taken more College Preparatory/Honors classes. "Um, because I thought it'd be good to be around Honors students ... See how

they learn” (Participant 9). This student’s comment illustrated that a College Preparatory student appreciated exposure to the Honors level and sought to continue the experience.

A European-descended male 11<sup>th</sup> grade student who had taken the class at the Honors level cited his affinity for the mixed ability American Experience as a rationale to choose other mixed ability and interdisciplinary courses when asked if he would or had taken another mixed ability class.

Um, yeah, actually, I’m in Astronomy now, which is CP/Honors, and then the World Experience is AP/Honors... Um, well, I really liked the way American Experience was set up, so I decided to go into World Experience. And then for Astronomy, I couldn’t decide what science to take, and Astronomy was interesting, and it was CP/Honors, so... (Participant 1)

This response reflected the students’ positive feeling towards his original mixed ability class as well as the availability of the CP/H format in Astronomy.

*Availability*. This sub-category (*variant*) covered students who would or had opted to take other mixed ability classes because they were offered mixed ability as the primary class option they could take for the given course they had chosen.

A European-descended male 11<sup>th</sup> grade student who had taken the classes at the College Preparatory level explained how he had taken further mixed ability classes as a result of their availability when asked if he had or would take another College Preparatory/Honors class.

Yeah, there – there’s a lot of CP/Honors courses. Like, I think, isn’t all English CP/Honors?...That’s what, that’s what

I have now... And I have a, it think I have a CP/History class. The only CP/CP class I have is Math... I think I just picked it 'cause it was, that's what I had. (Participant 6)

In this instance, several of the student's current classes were mixed ability due to the prominence of the mixed ability arrangement in 11<sup>th</sup> grade classes.

An African- descended male 11<sup>th</sup> grade student who had taken the classes at the Honors level expressed his affinity for the mixed ability arrangement and his reasoning for taking another CP/H class when asked if he would or had taken another College Preparatory/Honors class.

Um, I - I didn't choose to, but I'm not against it. Um, I'm in a College Prep/Honors English class now. And I like it. It's the same thing as here, except it's not linked to History... I - I like it a lot. I think the idea is really good.... I think I put down Honors English, but I was put into a CP/Honors class. So, I think that's just how it worked out, or maybe that's how they do it now in 11<sup>th</sup> grade. I'm not sure. (Participant 10)

This student's assumption that all Honors classes were mixed ability at the 11<sup>th</sup> grade level was correct. The only other levels for 11<sup>th</sup> grade English are a remedial level and an Advanced Placement level. Thus his rationale for choosing the class falls primarily into the availability subcategory of reasons for taking another CP/Honors class.

A European-descended male 12<sup>th</sup> grade student who had taken the classes at the College Preparatory level also ended up in another mixed ability class due to availability. Yet taking the class at the Honors level, instead of the College Preparatory level, reflected his positive previous experiences in his 10<sup>th</sup>

grade mixed ability class, as he explained when asked if he would or had taken another College Preparatory/Honors mixed ability class.

Participant: I have already. I'm in Amer – I'm in Anatomy of Writing. I'm currently in Hon – in the Honors. I am Honors Anatomy of Writing, but it is a mixed class, and I, I don't really see it being the same. I don't know why. Not, I don't think it's even close to being the same. I don't think you can duplicate, um, the experience of that year in American Experience. I just don't. I mean, everybody was a piece to the, uh, the puzzle for that whole class, and if you just took one of, one of those people away who know, who knows what would have happened. But, I mean, for our benefit that didn't happen, and, um, it turned on to be one, probably of my favorite class in my high school career.

Interviewer: Great. Why did you choose to take another College Prep/Honors class? Why did you take the split level...?

Participant: Uh, I was recommended it by (11<sup>th</sup> grade English teacher) last year. Um, she said she didn't know what level I should take it at. I decided to try to achieve more and go with Honors. But, um, I don't really see it as being a big deal with the slash in between. I just see it as being students with students. Uh, really the, the, uh, the work and everything else we did in there wasn't any, isn't any different between College Prep and Honors, except a few additional assignments and more reading and whatnot. So, I just think that it was, I – I don't even think if it, I don't even know if the Honors/CP really even flashed my mind before I decided to take that class. (Participant 11)

Here the student discussed his rationale for taking the course at the Honors level of a mixed ability English class and, while availability could be included as part of his reasoning, the fact that the student saw no difference between the College Preparatory and Honors levels of the class illustrated a key element of his understanding of the differences between the levels.

*No difference between other non CP/H classes.* This sub-category (variant) covered students who either would or currently would take another mixed ability CP/H class because they saw no difference between mixed ability classes and other non mixed ability classes.

A European-descended female 11<sup>th</sup> grade student who took the classes at the Honors level indicated that she would take another mixed ability class although she had not had the opportunity when asked if she would or had taken another mixed ability class.

I haven't but I would again. Um, definitely, just because, I mean, if the class material was what I was interested in studying, then definitely because, I mean, it's not like the College Prep/Honors thing was ever really a factor to me in choosing to take the class. I didn't really think about it that much. (Participant 3)

This student's response illustrated her positive perspective on taking another mixed ability class, as well as her reasoning that it was not a factor in her decision.

An African-descended female 11<sup>th</sup> grade student who had taken the class at the College Preparatory level discussed her reason for taking another mixed ability College Preparatory/Honors class when asked. "Because, um, it's more mixed, and basically we get the same work, so, you know, it gives me a chance" (Participant 5). This student's comment showed that she felt the mixed ability class she had taken gave her "the same work" and thus was not different than her other single ability class.

An African-descended female 11<sup>th</sup> grade student who took the classes at the Honors level discussed how the mixed ability College Preparatory/Honors classes she had opted to take were the same as a single level Honors class and thus no different, when asked why she chose to take another CP/H class.

'Cause I didn't want to take just a – a only CP class.  
'Cause I like to stay in Honors and AP, but there was no only Honors, so I just took Honors/CP. (Participant 7)

Here the student's comment reflected her desire to take another Honors class, but her acceptance of taking the Honors level in an College Preparatory/Honors class due to its similarity to other Honors classes and its availability.

*Good class/recommended.* The good class/recommended sub-category (*typical*) represented those responses from students who recommended the classes as a quality option for their peers. The students interviewed discussed their mixed ability classes as being fun, a good mix of students, and a strong offering at an outstanding school.

When asked if he had anything to add about the class, a European-descended male 11<sup>th</sup> grade student who had taken the classes at the Honors level offered his simple recommendation, as seen in Table 68.

Um, the class is just really fun. I'd definitely recommend it to people, to other students. (Participant 1)

This student's simple sentiment represented the feelings of many of his peers taking the class at both the Honors and College Preparatory level.

An extended recommendation was offered by a European-descended male 12<sup>th</sup> grade student who took the classes at the College Preparatory level when asked if he had anything to add about the course.

I think it's a great course. Um, I tried to get my little brother to take it. He didn't bite. Um, I don't know why. I think it's probably the, my g – like I said, greatest, my, my definitely one of, if not the most favorite courses, my most favorite courses taken throughout this whole, uh, you know, this whole, thing that they call high school. And, um, I think, uh, I made a lot of friends, and I really appreciate what (teacher name) and (teacher name) did for me. And, um, I recommend it highly to a lot of other students. And I don't believe that the CP/Honors interferes with, you know, I don't think the CP interferes with the Honors, contrary to what a lot of people say. It's not dumb kids with smart kids. It's smart kids with smart kids with a few bad eggs, and you're gonna get that in every class. So, uh, that's, that's what I think about that. (Participant 11)

This student's strong recommendation was a good support for the benefits of the course. However, it was his analysis of the class as being "smart kids with smart kids" that especially illustrated the aims of the mixed ability class: the elimination of labels often created by homogeneous or "tracked" classes.

Finally, an African-descended male 11<sup>th</sup> grade student who took the classes at the Honors level made a recommendation that extended beyond the confines of the classroom when asked if he had anything to add about the course.

Um, I don't know. I just, I liked the idea a lot. I've never heard of it, 'cause I went to school in Maine... Um, my 9<sup>th</sup> grade year, up until I got suspended. So, um, I - that wasn't there. It was, either you're in CP, or you're in Honors. But, even when I was taking the Honors class, um, it was, it was, it was so easy. We were reading books that you would

read in, like 5<sup>th</sup> grade, or whatever, so. I don't know. I - I grew to realize how lucky people are in (school district name). Um, 'cause it's a really good school and m - you don't seem to notice now that you're, now that you're here, but, I've not, I've been gone so, I know that it's a good class. And beyond just the (school district name) school, I think that the CP/Honors classes are really good classes. I like it. (Participant 10)

This student's observations and recommendation of the class were significant because he was able to reference the experience he had in another district and how the present district was more advanced than his previous district, including the mixed ability classes he had taken. These recommendations went far in suggesting the strengths of the mixed ability environment, as well as the school in which the study took place.

Students' reasons for either being willing to take or actually taking another mixed ability class were addressed in this category. The reasons were that students the combination of CP/H, the availability of mixed ability classes, and they found no difference between their mixed ability classes and their other mixed ability classes. These reasons lead into a discussion of students' final comments on their experience. Good class/recommended reflected the final recommendations from students concerning their mixed ability classes in the reflection domain.

Reflection was the domain that expressed interviewed students' general retrospection concerning their experience in their mixed ability classes. Within the final domain of reflection, students discussed that they would and had taken

more mixed ability classes and they strongly recommended mixed ability classes to their peers.

## CHAPTER V

### DISCUSSION

#### Summary

This purpose of this study was to understand the social justice implications of interdisciplinary mixed ability co-operative classrooms and the impact on students' perceptions of their learning environment, their peers, and themselves. Research indicated both reasons for (Kulik, 1993; Shields, 2002) and reasons against (Slavin, 1988; Burris, Heubert, & Levin, 2006) a mixed ability approach.

A qualitative analysis of interviews with twelve diverse high school students in mixed ability classrooms within an inner-ring suburban high school in Northeast Ohio were conducted. These students were all part of mixed ability, interdisciplinary English and history classes that utilized projects and co-operative learning techniques to create a learning environment for 10<sup>th</sup> grade students at

both the College Preparatory and Honors level that emphasized social justice (Hackman, 2005). A grounded theory qualitative research methodology (Strauss & Corbin, 1998), analysis revealed interviewed students emphasized the domains of academic environment, social environment, self-perceptions, and reflection.

Students found their interdisciplinary mixed ability co-operative classes to be a challenging and rewarding learning environment. Cross-level, cross-race friendships, a positive classroom climate and an understanding of the intersection between personal and academic relationships were fostered through the peer environment. Students' personal self-perceptions were positive, validated and challenged by their experiences in their mixed ability classes. Overall, students in this study strongly recommended these classes to their peers.

There are two lenses through which this study can be viewed. One lens is reflective and self-referent. The other lens is comparative and considers the findings from this study alongside findings from previous studies on mixed ability grouping. For a qualitative study, both lenses are necessary to complete the picture.

#### Research Questions

*How do students in interdisciplinary mixed ability co-operative classes perceive their learning environment?*

The findings from this study indicated that students in these interdisciplinary mixed ability co-operative classes perceived their learning

environment to be both challenging and rewarding. The emphasis that many of the students put on the projects and their co-operative nature echo the emphasis on co-operative learning methods that proponents of mixed ability grouping emphasize as necessary to make the approach work for students (Ascher, 1994; Drake & Mucci, 1993; Slavin, 1988). Students also valued the consistency they experienced with their other classes and the mixed ability learning environment as shown in the emphasis on the class being academically similar to other classes at both the Honors and College Preparatory levels. The connections between subjects and classes was also an extension of the co-operative approach emphasized by mixed ability proponents (Ascher, 1994; Drake & Mucci, 1993; Slavin, 1988). The efficiency of the subject matter connection seemed to benefit the understanding of both College Preparatory and Honors students and provided a core foundation for these interdisciplinary mixed ability co-operative classes.

The exposure to both College Preparatory and Honors students within the mixed ability classes was a benefit that both groups of students stressed as well. As the Lyle (1999) study stated, "...mixed ability teaching provides a setting in which both low-and high-achieving students value the opportunity to work together where both groups believe they benefited." This beneficial exposure combined with the "content and activities" of the class resulted in challenging subject matter and course content that resulted in a co-operative environment in which diverse students experienced projects and course work that pushed them

at their individual levels. This push also represented the differentiation (Anderson, 2007) that can successfully occur in a mixed ability environment when each level is pushed or leveled-up to the highest standard (Burriss, Heubert, & Levin, 2006). However, it is important to note that at least one student interviewed did acknowledge the challenges of learning in a larger academic environment in which peers may be acquiring content at a different pace than themselves, in some way verifying the meta-analytic findings of Kulik (1993) that single-ability classes allowed advanced students to learn at a faster pace.

Students came to understand that their effort resulted in academic rewards when they invested themselves fully in the course and project requirements. These elements of the mixed ability learning environment were reflected in the research on effective detracked environments. Successful de-tracking was found to rely on co-operative learning through structuring collaborative work groups that focus on individual achievement and improvement, team awards and the inclusion of high, middle, and low achieving students representing balanced gender and race (Drake & Mucci, 1993). This illustrates, in part, why the participants perceived such a challenging and rewarding learning environment.

*How do students in interdisciplinary mixed ability co-operative classes perceive their peers?*

The findings from this study indicated that the peer environment for these students helped foster cross-level, cross-race friendships, a positive classroom

climate and an understanding of the intersection between personal and academic relationships. Overall, study participants indicated that the mixed ability learning environment helped foster friendships and positive connections with peers, many of which continued outside of the classes. Many of the participants felt that these relationships would not have occurred if it was not for the combination of Honors and College Preparatory students in the same class. These relationships also included, at least in one instance, the inclusion of students in a group of peers considered "popular". This understanding gets to the social justice and social identity impacts of the mixed ability classroom. When divisions based on ability level are re-enforced on a systemic level, students are often unexposed to peers from different racial, ethnic, social and economic backgrounds (Khmelkov & Hallinan, 1999; Hallinan, 1994b; Ansalone, 2003 ). These new friendships and peer relationships crossed barriers of ability level, gender, race, and previous academic experience. One of the most significant barriers was the one created by the stereotype of "CP" classes as standing for "Colored People" and Honors classes as being only occupied by whites (Ogbu, 2003; Clemetson, 1999). By allowing diverse students at both the College Preparatory and Honors level to experience one another in the same classroom, these stereotypes were dispelled. Likewise, acquaintances that were distanced from each other due to previous separation based on ability level became friends when the ability level dividing line was removed. The removal of these social barriers and the establishment of these new relationships through mixed ability grouping seemed to be a

profound experience for the students interviewed in this study and an important consideration when evaluating our goals of educating and socializing the students we, as educators, aim to serve. In essence, the lived experience of the students interviewed was improved through the relationships that were allowed and encouraged to take place in mixed ability classrooms.

According to those interviewed, many of these barriers would have remained uncrossed in single ability, homogeneously grouped classrooms. This awareness helped create the “empowering, democratic, and critical educational environment” necessary for social justice education (Hackman, 2005, p. 103). Similarly, the new social identities that emerged through inclusion among “popular” and socially diverse peers helped meet the need among students, that social identity theory stresses, to establish a positive social identity (Tajfel & Turner, 1979, 1986 cited in Alexandre, Monteiro & Waldzus, 2007).

The idea that the classroom climate was similar to other classes and emphasized fun personal interactions was also critical to the way that the participants perceived their peer environment. The academic consistency of the classrooms benefited students who took the class at both the College Preparatory and Honors level in keeping them appropriately challenged and intellectually stimulated. Similarly, the social environment’s similarity to single ability classes also provided a consistency that students seemed to appreciate. Here the shared standards for behavior and community awareness nurtured by group discussions and co-operative activities were also emphasized. The

classroom climate likewise featured fun personal interactions that seemed to enhance students' experiences in their mixed ability classes and provided a payoff for the level of effort, focus and group interaction they were required to put forth.

This personal investment was engaged when it came to the selection of group partners. As previously discussed, the co-operative nature of the class relied upon group projects and in-class group assignments as essential elements. This dimension often called upon students to make important decisions regarding who they would select for group partners. While some chose partners based on similar work ethic or took a random approach, all were required to reflect on the reasons for and consequences of their decisions as they related to their academic work. This mature, reflective process indicated a level of engagement that made them more critically aware of the social dimension of their peer environment and themselves and the intersection between their personal and academic lives.

*How do students in interdisciplinary mixed ability co-operative classes perceive themselves?*

Self-perceptions in mixed ability classes were divided among good/comfortable, consistent and challenged responses, with these perceptions focused on the academic, social and personal dimensions of the students being interviewed. Those participants who had good/comfortable self-perceptions of their social, personal and academic dimensions were confident and motivated in their mixed ability classes. At least one student interviewed emphasized how the

open group discussions made her feel good about herself and supported by her peers and teachers due to the shared sense of a respectful community of learners, a community arguably created by a diverse and social justice oriented classroom. Those interviewed students who had consistent self-perceptions concerning their academic and personal dimensions often had the perspective that these elements of themselves had been settled before the classes and would likely endure throughout their academic careers. These self-perceptions varied from students' sense of themselves as capable learners or as students who just needed to "get through" their academic classes and high school. However, those participants whose academic and social self-perceptions were challenged by the mixed ability environment are those that this environment seemed to best serve.

The students whose academic and social self-perceptions were challenged within their mixed ability classes experienced one of the central aims of a social justice education, to question and critically consider existing social norms. These students found that they were academically challenged by the mixed ability environment, but were up to the challenge they were presented. They were challenged by being in a social environment with peers of differing races, perspectives, and educational experience and embraced that environment. Some of these student began to embrace a new social identity (Kelly, 2008) that cross-cut (Deschamps & Doise, 1978 cited in Goar, 2008) their previous single category description of College Preparatory or Honors student and instead

became American Experience or CP/H students. Many even switched levels, taking more challenging Honors level courses after having experienced the College Preparatory level.

Likewise, the challenged social-self perceptions that participants reported experiencing could be due to their newly emergent social identity that helped them see themselves as a member of a group of College Preparatory and Honors, diverse, and (as previously mentioned) socially “popular” peers. The linking of the challenges to these academic and social self-perceptions is where the impact of mixed ability classes come into play. If one of our goals as educators is to help shape citizens who will participate in a global society with diverse citizens, what better way than to help break down their sense of intellectual and social isolation than through direct exposure to the broadest range of peers in their academic culture.

### *Reflection*

The findings from the student reflections indicated that the participants embraced mixed ability classes, enjoyed them for a variety of reasons, and recommended them to others. All of the twelve students interviewed indicated that they would and nine indicated they were currently or had taken mixed ability classes. Their reasons for doing so included their affinity for the combination of College Preparatory and Honors classes, the availability of the mixed ability classes due to the fact that the only other options at the 11<sup>th</sup> grade level was Advanced Placement and remedial, and the idea that they found no

differences between the mixed ability classes and the single ability classes. A majority of the interviewed students strongly recommended these mixed ability classes to their peers.

#### Recommendations for Further Research

The implications of this study for research are far reaching. Research studies need to take place to further the themes found in this study related to grade level, subject matter, ability level, course configuration, longevity, and implications outside this single educational environment. This study was limited to students at the 10<sup>th</sup> grade level due to the fact that I teach these classes and the 10<sup>th</sup> grade is also the first year at the high school that mixed ability grouping is introduced. It would be equally relevant for research to be done at the 11<sup>th</sup> grade level where mixed ability grouping continues in both the English and History subject areas.

Likewise, it would be relevant to research mixed ability grouping in other subject areas such as science and mathematics, which are not yet taught at the mixed ability level within the high school examined. It would also be relevant research to examine classrooms in which students with physical, behavioral, or other disabilities are mainstreamed into mixed ability classrooms to examine the experiences of those students in the environment as well. As mainstreaming continues to occur, this will become an increasingly relevant issue.

As previously discussed, the participants came from mixed ability English and History classes that were taught in an interdisciplinary configuration with a

focus on co-operative learning. This research would also be important in an environment that was not interdisciplinary or co-operatively based, which is the configuration of the other mixed ability courses taught within this high school. The interdisciplinary, shared schedule allowed our mixed ability classes to complete projects, activities, and field experiences that other single-subject mixed ability classes may be challenged to complete. Looking at these single-subject mixed ability classes would be vital for examining the breadth of the mixed ability method at the high school examined.

A longitudinal study would need to be conducted to examine the long term implications of these mixed ability classes. Revisiting these students one and two years after their initial experience in their mixed ability classroom was in part achieved in this study. However, more regular monitoring of progress, course enrollment, academic outcomes, and student relationships would also be warranted, including the collection of more quantitative data. A mixed method approach with both qualitative and quantitative measures may elicit the kinds of findings that would help identify the measureable and quantifiable dimensions of the achievement gap that may be bridged by mixed ability, interdisciplinary and co-operative teaching methods.

Finally, a study that goes beyond collecting self-reported data would be necessary to further investigate the mixed ability classroom. This data could be collected in the form of students' grades, classroom observations conducted by trained researchers, teacher reports or parent perspectives. These non self-

reported data sources would add to the depth and breadth of the research on mixed ability grouping. A specific possible study would trace several classes of mixed ability students over their high school career and report their grade histories, their parent and teacher observations, and researcher observations for a mixed method, longitudinal study.

Outside of the high school environment in which this study took place, further research dimensions could be pursued. In districts in which mixed ability grouping takes place at the elementary and middle school levels, further research could be conducted on the experiences of those students of their learning environment, peers, and self-perceptions. As previously mentioned, research on more subject areas in which mixed ability grouping is utilized, such as science, needs to be examined. In districts in which there is a larger non-English speaking population, research needs to take place on the efficacy and impact of mixed ability grouping. More research needs to be completed on the impact of mixed ability grouping in schools that have more homogeneous and more diverse racial, social, and socio-economic student populations. In light of the re-authorization of the No Child Left Behind Act, more research also needs to examine how students in mixed ability environments perform on standardized tests as compared to their homogeneously grouped peers. All of these areas would provide fertile grounds for the examination of this important approach to ability grouping in American schools.

## Implications for Theory

The implications for theory are provided by the ways in which this study's findings line up alongside other findings done on mixed ability grouping. It is evident that the perceptions of students in these mixed ability classes concerning their learning environment, their peers and themselves substantiate many of the research findings of other studies (Anderson, 2007; Boaler, William, & Brown, 1999; Lyle, 1999; Ascher, 1994; Drake & Mucci, 1993). The mixed ability environment appears to be a place where students of various ability levels, backgrounds, and educational experiences can learn and be challenged at appropriate levels. Likewise, they can experience a diverse learning environment without jeopardizing their own academic advancement. The impact on their self-perceptions also seems to be directed in the positive and the environment has no detrimental effects on either ability level of students. Social identity theory (Kelly, 2008) and cross-cutting (Goar, 2007) also appear to be, in part, substantiated by the findings of this study, in that a new social identity for many of these students seemed to emerge as they began to see themselves as American Experience students instead of simply College Preparatory or Honors level students. The new social identity that resulted from the cross-cutting created by the American Experience student classification appeared to benefit many of these students. Similarly, tenets of social justice education also seemed re-enforced in a learning environment in which students could work in a multi-racial, mixed ability environment in which they could see and choose which ability level they

wanted to work within (Hackman, 2005). This conscious decision making process, combined with the collaborative work environment, created a space in which democratic educational decisions could be made by the students, empowering them within their own work environment.

### Implications for Practice

The implications for practice are also evident through the findings of this study. Essentially, this study suggests that mixed ability grouping should be embraced, at least at the intermediate and advanced levels, in the high school environment. If, in the school in which this study took place, students at the College Preparatory and Honors level could be taught together effectively, it should be explored at every grade level. Granted, students who are identified as in need of substantial remedial help or a profoundly enriched curriculum may need their own classroom. However, for many students, it appears that single-ability, homogeneously grouped classes may divide students along the lines of race, previous educational experience, and perhaps (although not explored in this study) socio-economic status. To group students homogeneously seems as if it will simply continue to exacerbate the divides we already see in the education our diverse students receive.

This study suggests that mixed ability classes can be utilized to encourage the best in all of our students. The standards for academic content and assessment should be held high, while the individual manner in which these standards are met should be tailored to address students' individual needs. By

differentiating in such a manner, the necessity of tracked classes is challenged. Granted, this will necessitate a paradigm-shift in educators' thinking. Many of us feel more comfortable when we believe we have a clear concept of what our students can and cannot do. However, what this study reveals is that often times student themselves do not realize what they can or cannot achieve, until they are exposed to content and peers that challenge them to rise above their own expectations.

In some instances, will mixed ability grouping necessitate educational aides or supplementary services in and outside of the classroom? Yes. Do tracked classes call for the same kinds of services? Yes. So, why not mix abilities and allow students to benefit from the influence of their higher ability peers? The reality touched upon in this study is that educators are often confounded by effective classroom practices that they cannot clearly measure or control, but are nonetheless effective. We like to think we are the primary source of learning in the classroom. However, this study suggests that the social environment and peer influence that our students experience may very well be as, or potentially more, influential on the academic performance and long term goals of our students than we are.

The other practical implications of this study are clear. Mixed ability classrooms should incorporate co-operative learning techniques that include students of various ability levels, gender and race. Unifying projects that are product or presentation based and work off a grouped co-operative dynamic are

preferable. Teaching mixed ability classes in an interdisciplinary setting is also beneficial to both students and teachers. It allows mixed ability students a larger sense of a learning community, provides them with two shared teachers, and allows those teachers to collaborate and collectively monitor the progress of students. The classroom should not be divided in any way according to ability level. The only places in which differentiation should take place is within individual assessment standards and limited enhanced content for individually completed projects. Fluidity between ability levels should also be encouraged within the mixed ability classroom, allowing students to freely move between ability levels based on their willingness to take on more challenging projects and assignments. Optimally, mixed ability classes will not have the designations of College Preparatory or Honors. However, if these designations must remain in place, this fluidity and flexibility between levels will allow students a sense of academic freedom that would allow them to “move up” and challenge themselves. Overall, these practice implications should help create a mixed ability class that is just, equitable, and provides the highest level of challenge and most potential for growth for students at all ability levels.

#### Limitations

A limitation of note is my familiarity with these classes and students. At times during the interview process, students did not elaborate more fully and I did not probe further into responses due to our shared History and familiarity with these classes. Perhaps if I had interviewed students who I had not taught,

I would have asked more follow-up questions and students would have felt the need to have elaborated more in their responses concerning their experiences in their mixed ability classes. Likewise I would have emphasized more open-ended as opposed to closed-ended questions that elicited brief responses. However, our shared familiarity with these classes did seem to encourage an honesty in student responses that may have been lost had I interviewed students who I had not previously taught.

### Conclusions

As an educator who has seen the benefits of a mixed ability classroom, I am hopeful yet apprehensive that it will ever be completely accepted by a majority of America's schools, especially in the light of the funding at stake through the No Child Left Behind Act. However, mixed ability classrooms seem the ideal place to foster the democratic ideals we celebrate as a nation. Mixed ability grouping is a technique that takes time, training, and effort. This study is as much a testament to the challenges as it is to the benefits of this method. However, it seems to be a step in the right direction, a direction advocated by the dozen or more reputable professional organizations that publicly support it. Once again, the question is whether or not our country is willing to support such a paradigm-shift in education. The decision we make will affect the future of our nation's most significant shareholders – our children. Hopefully, one day we will consider our classes to be composed of "smart kids with smart kids" instead of students divided by ability grouping.

## REFERENCES

- Alexandre', J., Monteiro, M., & Waldzus, S. (2207). More than comparing with majorities: the importance of alternative comparisons between children from different minority groups. *International Journal of Psychology and Psychological Therapy*, 7(2), 201-212.
- Allan, S. (1991). Ability-grouping research reviews: What do they say about grouping and the gifted? *Educational Leadership*, 3, 60-65.
- American Montessori Society. (2004). *AMS Position Paper*. Retrieved January 1, 2005, from <<http://www.amshq.org/positions/documents/keyconcepts.pdf>>.
- Anderson, K. (2007). Tips for teaching: Differentiating instruction to include all students. *Preventing School Failure*, 51(3), 49-54.
- Ansalone, G. (2003). Poverty, tracking, and the social construction of failure: International perspectives on tracking. *Journal of Children & Poverty*, 9(1), 2-30.
- Ascher, C. (1994). Successful detracking in middle and senior high schools. *Emergency Librarian*, 21(5), 30-33.
- Boaler, J., Wiliam D., & Brown, M. (2000). Students' experiences of ability grouping – disaffection, polarization and the construction of failure. *British Educational Research Journal*, 26(5), 631-647.

- Bogden, R., & Biklen, S. (1998). *Qualitative research for education: an introduction to theory and methods*. Needham Heights, MA: Allyn & Bacon.
- Burris C., Heubert J., & Levin, H. (2006). Accelerating mathematics achievement using heterogeneous grouping. *American Educational Research Journal*, 43(1), 105-136.
- Burris, C. & Welner, K. (2005). Closing the achievement gap by detracking. *Phi Delta Kappan*, 86(8), 594-598.
- Clemetson, L. (1999, June 7). Trying to close the achievement gap. *Newsweek*.
- Collin, A. (in press). Multidisciplinary, interdisciplinary, and transdisciplinary collaboration: Implications for vocational psychology and vocational guidance. *International Journal of Educational and Vocational Guidance*.
- Deschamps, J., & Doise, W. (1978). Crossed category membership in intergroup relations. In H. Tajfel (Ed.), *Differentiation between social groups* (pp. 141-158). Cambridge: Cambridge University Press.
- Denzin, N.K., & Lincoln, Y. (Eds.). (2000). *Handbook of qualitative research (2<sup>nd</sup> ed.)*. Thousand Oaks, CA: Sage Publications.
- Donelan, R., Neal, G. & Jones, D. (1994). The promise of Brown and the reality of academic grouping: The tracks of my tears. *Journal of Negro Education*, 63(3), 376-387.
- Drake, D. & Mucci, M. (1993). Untracking through the use of cooperative learning. *Clearing House*, 67(2), 123-127.

- Feagin, J. (2003). Black American students in an affluent suburb: a study of academic disengagement (Book) *Journal of Multilingual and Multicultural Development, 24(6)*, 557-560.
- Foster, K. M. (2005). Narratives of the social scientist: understanding the work of John Ogbu. *International Journal of Qualitative Studies in Education, 18(5)*, 565-580.
- Gale, T. (2000). Rethinking social justice in schools: how will we recognize it when we see it? *International Journal of Inclusive Education, 3*, 253-269.
- Gibson, M.A. (2005). Promoting academic engagement among minority youth: implications from John Ogbu's Shaker Heights ethnography. *International Journal of Qualitative Studies in Education, 18(5)*, 581-603.
- Goar, C. (2007). Social identity theory and the reduction of inequality: can cross-cutting categorization reduce inequality in mixed-race groups? *Social Behavior and Personality: An International Journal, 35(4)*, 537-550.
- Hackman, H. (2005). Five essential components for social justice education. *Equity and Excellence in Education, 38*, 103-109.
- Hallinan, M. (1994). School differences in tracking effects on achievement. *Social Forces, 72(3)*, 799-821.
- Hallinan, M. (1994). Tracking: from theory to practice. *Sociology of Education, 67(2)*, 79-85.

- Harlen, W. (1999). Making sense of the research on ability grouping. SCRE Center for Educational Research. Retrieved January, 20, 2005, from <<http://www.scre.ac.uk/rie/nl60/nl60harlen.html>>.
- Hill, C.E., Thompson, B.J., & Williams, E.N. (1997). A guide to conducting consensual qualitative research. *The Counseling Psychologist, 25*, 517-572.
- Hochschild, J. & Scovronick, N. (2002). *The American dream and the public schools*. New York: Oxford Press.
- Kelly, S. (2008). Race, social class, and student engagement in middle school English classrooms. *Social Sciences Research, 37*, 434-448.
- Khmelkov, V. & Hallinan, M. (1999). Organizational effects on race relations in schools. *Journal of Social Issues, 55(4)*, 627-645.
- Kulik, C., & Kulik, J. (1982). Research synthesis on ability grouping. *Educational Leadership, 30*, 619-622. Retrieved October 8, 2005, from <<http://search.epnet.com/login.aspx?direct=true&db=aph&an=7727213>>.
- Kulik, J. (1993, Spring) An analysis of the research on ability grouping. *National Research Center on the Gifted and Talented Newsletter*. Retrieved January 1, 2005, from <<http://www.gifted.uconn.edu/nrcgt/newsletter/spring93/sprng935.html>>.
- Liu, W., Wang, C., & Parkins, E. (2005). A longitudinal study of students' academic self-concept in a streamed setting: The Singapore context. *British Journal of Educational Psychology, 75*, 567-586.

- Lyle, S. (1999) An investigation of pupil perceptions of mixed ability grouping to enhance literacy in children aged 9-10. *Educational Studies, 99(25)*, 283-297.
- Merriam, S. and associates. (2002). *Qualitative research in practice: Examples for discussion and analysis*. San Francisco: Josey-Bass.
- Morris, J. (2004, March). *Mixed ability grouping: A qualitative view of detracking classes*. Paper presented at the meeting of the Midwestern Educational Research Association, Columbus, OH.
- Morrow, S. (2005). Quality and trustworthiness in qualitative research in counseling psychology. *Journal of Counseling Psychology, 52(2)*, 250-260.
- National Association for Gifted Children. *Position paper: Ability grouping*. (2005). Retrieved January 20, 2005 , from <<http://www.nagc.org/Policy/abilgroup.htm>>.
- National Association of School Psychologists. (2005). *Position statement on ability grouping*. Retrieved January 20, 2005, from <[http://www.nasponline.org/information/pospaper\\_ag.html](http://www.nasponline.org/information/pospaper_ag.html)>.
- Oakes, J. (1985). *Keeping track: How schools structure inequality*. New Haven: Yale University Press.
- Ogbu, J.U., with Davis, A. (2003). *Black American students in an affluent suburb: a study of academic disengagement*. Mahwah, NJ: Lawrence Erlbaum.

- Schweiker-Marra, K. & Pula, J. (2005). Effects of a homogenous low-tracked program on academic performance of at-risk students. *The Delta Kappa Gamma Bulletin*, 33, 105-119.
- Saleh, M., Ard, L., & De Jong, T. (2005). Effects of within-class ability grouping on social interaction achievement, and motivation. *Instructional Science*, 33, 105-119.
- Scott, R. (2001). Tracking in schools: Can American social scientists objectify such a sensitive topic? *Mankind Quarterly*, 42(1), 47-53.
- Shields, C. (2002). A comparison study of student attitudes and perceptions in Homogeneous and heterogeneous classrooms. *Roeper Review*, 24(3), 115-120.
- Slavin, R. (1998). Synthesis of research on grouping in elementary and secondary schools. *Education Leadership*, 9, 67-77.
- Strauss, A. & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks: Sage Publications.
- Tajfel, H. & Turner, J. (1979). An integrative theory of social conflict. In W. Austin & S. Worschel (Eds.) *The psychology of intergroup relations*. (pp. 33-47). Monterey: Brooks/Cole.
- Tajfel, H. & Turner, J. (1986). The social identity theory of intergroup behavior. In W. Austin & S. Worschel (Eds.) *The psychology of intergroup relations*. (pp. 7-24). Chicago: Nelson-Hall.

- Urban, L. & Miller, N. (1998). A theoretical analysis of intergroup conflict. In W. Austin & S. Worschel (Eds.), *The social psychology of intergroup relations* (pp. 33-47). Monterey: Brooks/Cole.
- U.S. Department of Education. (2004). *A guide to education and No Child Left Behind*. Retrieved January 1, 2005, from <<http://www.ed.gov/nclb/overview/intro/guide/index.html>>.
- VanTasell-Baska, J. (1992) Educational decision making on acceleration and ability grouping. *Gifted Child Quarterly*, (36)2, 68-72.
- Venkatakrisnan, H. & Wiliam, D. (2003). Tracking and mixed ability grouping in secondary school mathematics classrooms: A case study. *British Educational Research Journal*, 29(2), 189-204.
- Wheelock, A. (1992). *Crossing the tracks: how "untracking" can save America's schools*. Boston: New Press.
- Whitehouse, J. (2008). Discussion with a difference: Questions and co-operative learning. *Ethos*, 16(1), 11-15.

## APPENDICES

APPENDIX A Interview questions.....	138
APPENDIX B Introduction and informed parental consent.....	142
APPENDIX C Introduction and informed minor consent.....	145
APPENDIX D Demographic information sheet.....	147

## APPENDIX A

### Interview questions:

*How do students in a mixed ability class perceive their new learning environment?*

Tell me about your experience in your class.

What did you like?

What did you dislike?

How was it similar or different than the other classes you were taking?

What did you expect when you chose to take this class?

As you know, this was a College Preparatory/Honors class - in what ways, if any, was this class *different or the same* than you expected?

What, if any, were the *benefits or challenges* of being in a College Preparatory/Honors class?

If you can, tell me about a time when you felt that your College Preparatory/Honors class gave you the opportunity to *learn or experience* something that your previously separate College Preparatory or Honors classes did not give you the opportunity to *learn or experience*.

*How do students in a mixed ability class perceive their peers?*

I am interested in learning what it has been like, so far, in this class.

If you can, tell me about one particular experience with one of your classmates that stands out in your mind?

Did you hang out with students in this class?

1. If yes, were these new acquaintances or did you know them from before this class?
2. How would you describe the friends that you have made or the people that you have met as a result of being in this class?
3. Have you made friends in this class that you believe you would not have made if you had taken a separate College Preparatory or Honors class? Please tell me about it.

What kinds of students did you choose to work with when working in groups or with a partner? Why?

In what ways, if any, has being in this class changed the way you view and relate with students who are taking classes at a different level than you are?

If you can, tell me about a time when you felt your peers helped you learn or experience something in a way that you had not previously learned or experienced in separate College Preparatory or Honors classes.

*How do students in a mixed ability class perceive themselves?*

In what ways, if any, has this class influenced how you think about yourself?

Some students say that they feel differently about themselves in different classes (e.g. in some classes they may be more competent, or perhaps more bored).

How did you feel about yourself in this class...?

...Academically?

...Socially?

...Personally?

If you can, tell me about a time when you felt this class gave you the opportunity to learn something about yourself that you would not have been able to learn in your previously separate College Preparatory or Honors classes.

Would you or have you taken another College Preparatory/Honors class?

Why or why not?

Anything to add?

## APPENDIX B

### Introduction and Informed Parental Consent

My name is John Morris and I am an English instructor at (High School) as well as a PhD student at Cleveland State University. I am doing research on mixed ability classes for my dissertation under the instruction of Dr. Donna Schultheiss. Through this research I hope to find out about student learning experiences in classes in which college preparatory and honors students are combined. I will be asking your child to complete a basic questionnaire containing demographic information that will take approximately five minutes of their time. I will also interview your child about his or her perceptions of their learning, their peers and themselves in a mixed ability classroom in a 30 to 60-minute interview session. The interview will be audiotaped. Both the questionnaire and the interview responses will be completely confidential. There will be no identifying information on the questionnaire or interview answers that will be associated with your child as an individual. Random numbers will be assigned to participants as identifiers.

There is no foreseeable risk in your child's answering of these questions. I am not currently your child's teacher, and his or her grades will not be affected in any way by participating, or choosing not to participate, in this research. The potential benefits of this study is that students may gain more insight into their educational experiences and peer interactions in school. They may also gain

more insight into their choice of the level of class they take; whether College Preparatory, Honors, or mixed ability. Students will be instructed to pass on questions that they prefer not to answer. In the unlikely event that your child is uncomfortable with any of the questions he or she is asked, he or she may also talk to his or her school counselor about the issues.

Your child's participation in this research is completely voluntary. If, at any time, you wish to withdraw him or her from the research, you are free to do so. Your child may also decide to withdraw at any time. Your child will also sign an Assent Form, which explains that he or she can decline participation even if you have agreed for him or her to participate.

I have read and understand the information that has been provided regarding the procedure, the tasks, and the risks that may be involved for my child in this research project. I understand that my child's participation is voluntary and that he or she may withdraw at any time. I understand that if I have any questions about this research, I can contact John Morris at (216) 295-6261 or Dr. Donna Schultheiss at (216) 687-5063.

I understand that if I have any questions about my child's rights as a research subject, I may contact the Cleveland State University Institutional Review Board at (216) 687-3630.

---

Parent/Legal Guardian Signature

---

Date

## APPENDIX C

### Introduction and Informed Minor Assent

My name is Mr. John Morris. I am an English teacher here at the high school and a student of Dr. Donna Schultheiss at Cleveland State University. I am trying to learn more about students' experience in mixed ability (honors/college preparatory) classrooms. I want to find out how you perceive your class, your peers, and yourself in the mixed ability classroom environment.

I have some written questions and some interview questions I would like to ask you. This interview will take no longer than 60 minutes. The interview will be audiotaped. No one will know which answers are yours because a random number will be assigned to you in place of your name. If you do not feel like answering a question, you can pass on that question. You can stop answering the questions any time you want without penalty.

There are no known risks in this study. The potential benefit of this study is that you may gain a better understanding of your educational experiences and peer interactions in school. You may also gain a better understanding of your choice of the level of class you take; whether College Preparatory, Honors, or mixed ability.

Even if your parents said you can answer these questions for me, you can still say no if you do not want to answer them. If you are uncomfortable with any of the questions you are asked, you may also talk to your school counselor about the issues.

Signing the line below indicates that you understand and agree to take part in the interview.

I understand that if I have any questions about my rights as a research subject, I may contact the Cleveland State University Institutional Review Board at (216) 687-3630, or that I may contact John Morris at (216) 295-6261 or Dr. Donna Schultheiss at (216) 687-5063.

---

Student Name

---

Date

APPENDIX D

Demographic Information Sheet

1. Gender (Circle one): M or F
2. Age\_\_\_\_\_
3. Race (Circle one): European descent African descent Asian Hispanic  
Native American/Pacific Islander Other: Please specify  
\_\_\_\_\_
4. Class level when taking AMEX (Circle one): Honors or College Preparatory
5. Class level before AMEX (Circle one): Honors or College Preparatory
6. Grade from 9<sup>th</sup> grade year (Circle one):  
First semester: A B C D F  
Second semester: A B C D F
7. GPA: \_\_\_\_\_