The Case for Weighting Grades and Waiving Classes for Gifted and Talented High School Students

Anne M. Cognard
Lincoln East Junior-Senior High School
Lincoln, Nebraska

May 1996
Number RM96226
The Case for Weighting Grades and Waiving Classes for Gifted and Talented High School Students

Anne M. Cognard
Lincoln East Junior-Senior High School
Lincoln, Nebraska

May 1996
Number RM96226
The National Research Center on the Gifted and Talented (NRC/GT) is funded under the Jacob K. Javits Gifted and Talented Students Education Act, Office of Educational Research and Improvement, United States Department of Education.

The Directorate of the NRC/GT serves as the administrative unit and is located at the University of Connecticut.

The participating universities include the City University of New York, City College, Stanford University, the University of Virginia, and Yale University, as well as a research unit at the University of Connecticut.

University of Connecticut
Dr. Joseph S. Renzulli, Director
Dr. E. Jean Gubbins, Associate Director

City University of New York, City College
Dr. Deborah L. Coates, Site Research Coordinator

Stanford University
Dr. Shirley Brice Heath, Site Research Coordinator

University of Virginia
Dr. Carolyn M. Callahan, Associate Director

Yale University
Dr. Robert J. Sternberg, Associate Director

Copies of this report are available from:
NRC/GT
University of Connecticut
362 Fairfield Road, U-7
Storrs, CT 06269-2007

The work reported herein was supported under the Educational Research and Development Centers Program, PR/Award Number R206R50001, as administered by the Office of Educational Research and Improvement, U.S. Department of Education. The findings and opinions expressed in this report do not reflect the position or policies of the National Institute on the Education of At-Risk Students, the Office of Educational Research and Improvement, or the U.S. Department of Education.
Note to Readers...

All papers by The National Research Center on the Gifted and Talented may be reproduced in their entirety or in sections. All reproductions, whether in part or whole, should include the following statement:

The work reported herein was supported under the Educational Research and Development Centers Program, PR/Award Number R206R50001, as administered by the Office of Educational Research and Improvement, U.S. Department of Education. The findings and opinions expressed in this report do not reflect the position or policies of the National Institute on the Education of At-Risk Students, the Office of Educational Research and Improvement, or the U.S. Department of Education.

This document has been reproduced with the permission of The National Research Center on the Gifted and Talented.

If sections of the papers are printed in other publications, please forward a copy to:

The National Research Center on the Gifted and Talented
University of Connecticut
362 Fairfield Road, U-7
Storrs, CT 06269-2007
About the Author...

Dr. Anne M. Cognard has been a university professor of English, a co-director of a state humanities’ committee, and is currently a gifted facilitator and Advanced Placement teacher in Lincoln Public Schools, Lincoln, Nebraska, while teaching education courses at Nebraska Wesleyan University. Her interests are eclectic. While most of her publications are in the area of humanities’ education, these publications show an academic commitment toward interstices, the places in education where disciplines, approaches, publics connect and reconnect to form new programs, paradigms, and relationships. Her study of weighted grades and waiving classes resulted from a specific request on the part of Lincoln Public Schools, Lincoln, Nebraska, to chair a recommendation committee on these subjects. That committee of 10 people investigated the questions through local, regional, and national assessments. The committee developed the questionnaires, interviewed administrators and teachers, analyzed secondary source materials, and discussed the issues of waiving classes and weighted grades in order to form a policy recommendation for Lincoln Public Schools.
The Case for Weighting Grades and Waiving Classes for Gifted and Talented High School Students

Anne M. Cognard
Lincoln East Junior-Senior High School
Lincoln, Nebraska

ABSTRACT

A great deal of controversy surrounds questions of weighted grades and waiving classes. The center of the controversy appears, indeed, to be that no systematic study has been completed on either of these topics. Therefore, an attempt was made to alleviate that problem by researching the questions of weighted grades and waiving classes in a comprehensive way.

Four approaches to research occurred. First, interviews with teachers, counselors, and administrators were conducted in the four high schools of the research team. Second, questionnaires that asked for short-essay responses were sent to state and regional high schools. Third, 300 questionnaires that asked for a fill-in response were sent out nationally under the auspices of The National Research Center on the Gifted and Talented. Fourth, short-answer questions were sent to college admission directors of selected public and private colleges. Also, a review of published literature was conducted.

Questions guiding the study of Weighted Grades included: Should a school district weight grades? If so, under what circumstances and in what way(s)? What is the main definition of "equity" when the question of weighting classes is discussed? What do colleges and universities demand in their admission procedures? And, most important of all, what best aids students in their learning and in their future?

Questions guiding the study of Waiving Classes included: What classes should be waived? How is the waiving of a class best accomplished? What is required of a school district to accomplish that? And, most important of all, what best aids students in their learning and in their future?

This research study on weighted grades indicates that the majority of schools that responded weight some classes, though there is no consistency among schools as to which classes or grades are weighted, how much each grade is weighted, and/or how labeling (on transcripts or in published course nomenclature) occurs. However, all schools which weight grades have one thing in common: a commitment to defining "excellence" and to giving credence to what excellence means to them through the process of weighting grades. Respondents state a correlation between their decision to weight grades and their interest in reinforcing able students to take the most demanding courses.
The study on waiving classes also shows a lack of national consistency on how classes are waived, what classes might be waived, how such classes are graded, and by what means they are or are not figured into the grade point average (GPA). One consistency does occur in all but two of the returned materials: no class is waived unless students show mastery of material. Therefore, "waiving" is not often defined in its root sense but as a word that means "alternative methods of completing course objectives." Those "alternative methods" include final examinations, demonstrations, portfolios, exhibitions, and the like. When students are allowed to skip/waive lower-level classes, such classes usually generate no credit and students are often required to take more advanced classes in the same academic discipline.

As a result of these assessments of weighting grades and waiving classes, some conclusions appear to be clear. For weighting grades, the cumulative advantages of equity for students, the importance of encouraging students to take honors and AP classes, the fact that simple, unweighted GPA may place students at a disadvantage for college admissions and/or scholarship awards indicate that high schools should weight grades. Weighted grades appear to benefit students in most cases, according to national and regional responses and the literature in the field. As a result of the assessment on waiving classes, school districts and at times state legislatures recognize the importance of alternative ways by which a student's individual needs might be met. Although graduation requirements should not be minimized, the waiving of classes is assumed to be a needed option when classes are a repetition of students' knowledge, when course learnings and/or outcomes have been completed by students in ways other than in class, and/or when a particular course is unable to give certain students the kind of knowledge their own particular abilities indicate should be made available to them.
The Case for Weighting Grades and Waiving Classes for Gifted and Talented High School Students

Anne M. Cognard
Lincoln East Junior-Senior High School
Lincoln, Nebraska

EXECUTIVE SUMMARY

Weighted grades or waiving classes are two separate issues. What they have in common is that they affect students, specifically gifted students. Because of that latter point, both of these issues were studied, not as interactive issues associated with gifted students, but as two of many that affect such students.

They also have in common that they attract disagreement among educators. Indeed, a great deal of controversy surrounds questions of weighting grades and waiving classes. Some of that controversy comes from turf protection; other difficulties come from the lack of consensus on whether weighting and waiving classes is viable in helping gifted/talented students reach their highest academic and imaginative heights. Still other controversy surrounds the questions of elitism leveled at a number of programs for gifted students, not the least of which deals with whether classes should be weighted and/or waived only for the gifted student population. This controversy is most effectively demonstrated in the literature on weighted grades.

The center of the controversy appears to be that no systematic study over a period of time has been completed on either of these topics. In fact, the national literature on these subjects is limited.

An attempt was made to alleviate the latter problem by researching in a comprehensive way the questions of weighted grades and waiving classes. Four approaches to research occurred. First, interviews with teachers, counselors, and administrators were conducted in the four high schools of the ten-member research team. Second, questionnaires that asked for short-essay responses were sent to state and regional high school administrators. Third, 300 questionnaires that asked for a fill-in response were sent to administrators nationally under the auspices of The National Research Center on the Gifted and Talented. Of these, 189 were returned; 80 of the schools also sent their policies on weighted grades; nineteen sent waiving policies. Fourth, short-answer questions were sent to college admission directors of selected public and private colleges. Also, a review of published literature was conducted to help identify the problem.

Specifically, questions guiding the study of Weighted Grades included: Should a school district weight grades? If so, under what circumstances and in what way(s)? What is a definition of "equity" when the question of weighting grades is discussed?
What do colleges and universities demand in their admission procedures when they compare schools with weighted grades and those without? And, most important of all regarding the weighting of grades, what best aids students in their learning and in their future?

Questions guiding the study of Waiving Classes included: What classes should be waived? How is the waiving of a class best accomplished? What is required of a school district to establish a policy for waiving classes? And, most important of all, what best aids students in their learning and in their future?

Nationally, a question of "equity" exists as part of the discussion of weighted grades. "Equity" questions work in both directions. Some state that students not in a gifted program are unfairly left out of education by a weighted program and others state that without weighting some students can and do attain valedictorian status and higher class ranking than peers even though they have not taken differentiated, honors, and Advanced Placement classes.

For waiving classes, the dilemma is also apparent. If a school district, by establishing graduation requirements, stands for the necessity of certain classes and certain learnings, then how can these classes and learnings be waived? Yet if, conversely, a district believes that students as individuals presuppose exceptions be allowed and accounted for in policies, then how can all students be expected to take required classes?

Because learning is also an affective experience for students and not simply an end and measurable result, the value of the experience, the skill, and the content of any given course must be reviewed when a student is considered for waiver. Either the benefits of that course to be waived must be provided to the student in an alternative way or these benefits must be proven to be less worthy for that particular student than other benefits and values from another course. Value appears to be the key. Students, in waiving a class, are waiving more than the test-measurable skills of a class; students are also waiving how the construction of knowledge is presented to them as part of their understanding of the world around them. Since the purpose of education is to provide students through classroom experience with opportunities for such knowledge, then it must be emphasized that only in the making of a convincing case or in demonstrating mastery of the knowledge, the experience, the content, and not merely the skills of a class, might a student be seen to have fulfilled a school's educational goals. Thus, the question of waiving is a difficult one since the needs of the individual are studied against each school's published graduation requirements.

The study on weighted grades indicates that the majority of schools that responded weight some classes, though there is no consistency among schools as to which classes they weight, how much each class is weighted, and/or how labeling, whether on transcripts or in published course nomenclature, occurs. However, all schools which weight classes have one thing in common: a commitment to defining "excellence" and to giving credence to what excellence means to them by having made the decision to
weight grades. The latter assume that with more students taking more demanding classes, excellence in academics is more likely.

For weighting grades, the vast majority of respondents stated that advantages outweigh disadvantages. Disadvantages cited include: lower numbers of students taking elective classes; "demanding" parents who insist students take more weighted classes at any one time than perhaps students should; the procedures themselves for figuring weighting. Advantages include: the creation of more Advanced Placement classes; increased enrollment in academically rigorous classes where weighting has already been established in the school; more students admitted to more demanding public and private colleges and more receiving scholarships from the colleges where they are admitted.

The study on waivi classes also shows a lack of national consistency on how classes are to be waived, what classes might be waived, how such classes are graded, and by what means they are or are not figured into the GPA. Having said that, one consistency does occur in all but 2 of the 19 policies on waiving classes sent by schools: no class is waived unless students show mastery of material. Therefore, "waiving" is not often defined in its root sense but as a word that means "alternative methods of completing course objectives." Those "alternative methods" include final examinations, demonstrations, portfolios, exhibitions, and the like. When students are allowed to skip/waive lower-level classes, such waived classes usually generate no credit and students are often required to take more advanced classes in the same academic discipline. Finally, though a majority of those responding cited a willingness to waive classes for students, there appears to be a discrepancy between theory and practice since particular students with particular requests are often not allowed to waive a class.

When waiving is allowed, the purposes are: to avoid repetition of knowledge, skills, and experience; to substitute a course that appears to be more commensurate with intellectual giftedness; to illustrate that a student's singular educational goals can be better fulfilled in a way other than through a particular, required course.

Such findings reinforce the idea that waiving classes, even those required for graduation, is workable; that the waiving of classes can generate credit when mastery of the material is the judging criterion; and that students who waive classes are expected to take higher-level classes to accommodate student mastery of materials.

As a result of these assessments of weighting grades and waiving classes, certain conclusions appear to be clear. For weighting grades, the cumulative advantages of equity for students, the importance of encouraging students to take honors and AP classes, the fact that simple, unweighted GPA may place students at a disadvantage for college admissions and scholarship awards indicate that high schools should consider a weighted-grade system. Each school must find the right mix of classes to be weighted, the weighting procedures, and the presentation of standards to colleges and universities—these indicate the necessity for each school to wrestle with student population and curriculum possibilities. However, the overall conclusion stands: weighted grades
appear to benefit students in most cases, according to national and regional responses and according to the literature in the field.

As a result of the assessment on waiving classes, the conclusion is, again, clear. School districts and at times even state legislatures recognize the importance of alternative ways by which a student's individual needs might be met. Although graduation requirements should not be minimized, the waiving of classes is assumed to be a needed option when classes are merely a rote repetition of students' knowledge, when course learnings and/or outcomes have been completed by students in ways other than in class, and/or when a particular course cannot provide certain students the kind of knowledge their own abilities indicate should be made available to them. As long as schools struggle with the paradox that when it comes to students, equity is not sameness, they will attempt to find equally rigorous but complementary ways to help students achieve a high school education.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>vii</td>
</tr>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>ix</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Weighted Grades</td>
<td>1</td>
</tr>
<tr>
<td>Waiving Classes</td>
<td>3</td>
</tr>
<tr>
<td>Methods</td>
<td>4</td>
</tr>
<tr>
<td>Results of Investigation</td>
<td>5</td>
</tr>
<tr>
<td>Weighted Grades</td>
<td>5</td>
</tr>
<tr>
<td>Part I: The National Research Center on the Gifted and Talented Survey Results</td>
<td>5</td>
</tr>
<tr>
<td>Part II: Results From Other Research Materials</td>
<td>6</td>
</tr>
<tr>
<td>Waiving Classes</td>
<td>9</td>
</tr>
<tr>
<td>Part I: The National Research Center on the Gifted and Talented Survey Results</td>
<td>9</td>
</tr>
<tr>
<td>Part II: Results From Other Research Materials</td>
<td>11</td>
</tr>
<tr>
<td>Conclusions</td>
<td>12</td>
</tr>
<tr>
<td>References</td>
<td>15</td>
</tr>
<tr>
<td>Appendix: The National Research Center on the Gifted and Talented Survey</td>
<td>17</td>
</tr>
</tbody>
</table>
The Case for Weighting Grades and Waiving Classes for Gifted and Talented High School Students

Anne M. Cognard
Lincoln East Junior-Senior High School
Lincoln, Nebraska

Introduction

A great deal of controversy surrounds questions of weighting grades and waiving classes. Some of that controversy comes from turf protection. As noted through interviews, some teachers see their classes as less important than others where the grades are weighted or the class is waived. Other difficulties come from the lack of consensus on whether weighted grades and waiving classes are viable options in helping all students and in particular gifted/talented students reach their highest academic and imaginative heights. Still other controversy surrounds the question of elitism leveled at a number of programs for gifted students, not the least of which deals with whether classes should be weighted and/or waived for students who, by definition in taking weighted classes, are often assumed to be students with high abilities.

The center of the controversy appears to be that no systematic study over a period of time has been completed on either of these topics. In fact, the literature on these subjects is limited, both regionally and nationally. No national definition exists for either of these terms. However, for the purpose of this study, a "weighted grade" is a grade that carries more numerical value than the counterpart non-weighted grades in a class so designated by a school to be "weighted" (academically advanced and honors classes in most schools). "Waiving" a class usually entails a student's being given permission not to participate in "seat time" with the other students because the permitted student has demonstrated mastery of the material. Waiving a class may or may not carry credit, depending on the school's policy. These terms are often, though not exclusively, related to the education of "gifted" students, students whose intellectual prowess places them in highly demanding curriculum that requires high achievement.

Weighted Grades

Nationally, a question of "equity" exists around the discussion of weighted grades. Is it "equitable" to all students to weight classes for the gifted? Is it equitable to gifted students not to weight more demanding classes? These questions regarding equity work in both directions: those who state that students who are not gifted are left out of a weighted program and those who state that without weighting some students can and do attain valedictorian status and higher class ranking than peers even though they have not taken differentiated, honors, and Advanced Placement classes. As student Gregg Downey says, "The traditional reporting method—assigning grades of A, B, C, D, and F to student work—discourages college-bound students from electing to take classes that require rigorous effort" (Bravin, 1983, p. 40). This question of "equity" was reiterated by
a number of respondents to surveys (see Appendix) sent out locally, regionally, and nationally. A sampling of these responses includes:

I believe that weighted grades would correct some of the injustices in an imperfect system.

Traditional systems of letter grades discourage college-bound students from taking difficult courses.

The only ones being penalized by not having weighted grades are our students.

College entrance requirements are becoming more demanding. As our world "shrinks" and we compete with others, it is increasingly more important that our high school students be allowed to attempt these differentiated courses without hurting their GPAs and thus their options for college choice.

Our high school curriculum includes a number of exceptionally challenging courses, designated variously as honors or Advanced Placement courses designed for highly motivated students. Because these rigorous courses present an intellectual challenge and require a considerable commitment of time on the part of the student, a system of weighting grades for such classes is proposed.

In attempting to answer the question of what is best for students, researchers have often studied college admissions' policies and scholarship decisions. Miller, Rivell, and Walker (1991) found that:

The degree of difficulty of courses taken by high school students and the grades earned have long been considered important in the admission decisions at competitive private colleges. . . . During the 1980's, increasing numbers of public universities began using GPA [grade point average] and RIC [rank-in-class] as standards of admission. (p. 15)

To validate these findings, the authors cite the College Admissions Practices Project of 1989 which shows that 68% of public universities use GPA and RIC for admission decisions. Again, the authors state:

Of the schools that used a GPA, a weighted GPA was most prominent at institutions with most/very entrance difficulty (87 percent). . . . Special recognition of honors classes through the use of weighted standards is practiced by just over half of the flagship universities surveyed (51 percent). Also, the use of weighted standards differs depending on . . . entrance difficulty more than size of the school. The schools with most/very entrance difficulty favored the use of weighted GPA and RIC standards. (Miller, Rivell, & Walker, 1991, pp. 18-19)

Mitchell (1994) in "Weighted Grades" revisits these issues and reiterates the finding of Siegel and Anderson that "two-thirds of the colleges and universities surveyed
wanted high schools to include both the weighted and unweighted class ranks and grade point averages" (p. 28). Talley and Mohr (cited in Mitchell) indicated that 72% of college admission officers suggested that no preference was given to students who had weighted grades. They found that "the same percentage responded that they actually chose weighted-grade applicants. According to their survey, 61 percent of the admission directors thought high schools should weight honors grades because students without them were at a disadvantage" (p. 28). Mitchell's survey of selective colleges showed that of the nine private institutions listed, seven use weighted grades, one "does not require weighted grades, but . . . expects that most of its applicants will have taken rigorous courses in high school" (p. 29) and does use GPA. And only one does not use a weighted system at all.

Nowhere is this idea of admission determination through weighted standards made more forcefully than in the Talley (1993) article, "The Case for a National Standard of Grade Weighting." As with Mitchell, Talley and Mohr found an inconsistency between what admission directors say about weighted grades and what they do: "In actual practice . . . the student with the weighted average on the same basic transcript was the one who was chosen in 76 percent of the cases studied" (p. 10). Of the 1,800 high schools and of the 775 directors of undergraduate admission surveyed (with 784 high school and 559 college responses), Talley and Mohr concluded "[a] weighted grading system is preferred by college admission professionals" and "[h]igh schools most favor a system of weighting that adds quality points to honors and AP classes" (p. 12).

**Waiving Classes**

For waiving classes, the dilemma is also apparent. If a school district, by establishing graduation requirements, expects of students certain classes and certain learnings, then how can these classes and learnings be waived? Yet if, conversely, a district believes that all students are individuals and that exceptions must be allowed and accounted for in its policies, then how can all students be expected to take all classes listed as required?

Much of the discussion on waiving classes centers on a Jeffersonian principle: equality is not sameness. Students do receive a high school diploma in a variety of ways because to be fair and equal, schools do base their response on student difference: on exactly how individual students react to and accept various educational possibilities.

From the survey and interview discussions, several tenets have emerged. Because learning involves both the cognitive and the affective domain, the value of the experience, the skill, and the content of any given course must be considered when a student applies for a waiver. Either the benefits of that course to be waived must be provided to the student in an alternative way or these benefits must be proven to be less necessary for that particular student than the benefits and values of another course. Value is the key. Students, in waiving a class, are often waiving more than the test-measurable skills of a class; students may also be waiving the in-class pathways provided for their construction of knowledge essential to understanding the world around them. Only in the
demonstration of mastery in the knowledge, the experience, the content, and not merely in the skills of a class, might students be seen to have fulfilled a school's educational goals.

Thus, both for the weighting of grades and for the waiving of classes, the questions raised nationally indicate a need for an assessment of these two issues. Such an assessment was done during the fall of 1994 and the spring of 1995. A summary of the results follows.

**Methods**

Questions guiding the study of Weighted Grades included: Should a school district weight grades? If so, under what circumstances and in what way(s)? What is the primary definition of "equity" when the question of weighting grades is discussed? What do colleges and universities require in their admission procedures? And, most important of all, what aids students in their learning and in their future?

Questions guiding the study of Waiving Classes included: What classes should be waived? How is the waiving of a class accomplished? What is required of a school district to accomplish that goal? And, most important of all, what best aids students in their learning and in their future?

Four approaches to research were used. The first was 19 interviews with teachers and administrators at each of the four high schools of Lincoln Public Schools.* The second broadened the investigation to high schools in the state of Nebraska and region (Kansas, Missouri, South Dakota). The questionnaire sent to the regional schools differed from that used on the national level. The former asked for short-essay responses and not simply a fill-in-the-bubble scan form.* The third research approach expanded the information base to include a national high school population, with 300 questionnaires sent out under the auspices of The National Research Center on the Gifted and Talented (189 returned). These questionnaires were exclusively fill-in forms,* though 80 schools also sent written and/or typed addenda with their returned forms, including policy statements and handwritten comments. The fourth research method was an adaptive approach: an attempt to determine the status of weighted grades from another perspective, i.e., the view of admission directors of selected public and private colleges.* Also a review was made of the published literature both on weighted grades and on waiving classes.

The research team approached the material as a qualitative study based on the answers to questionnaires (developed by the research team and authorized by The National Research Center on the Gifted and Talented). The team also received anecdotal responses and written policies from schools.

---

* A copy of interview questionnaire and forms are included in Appendix.
Results of Investigation

Weighted Grades

Part I—The National Research Center on the Gifted and Talented Survey Results

From the national questionnaires sent out by The National Research Center on the Gifted and Talented, the results overwhelmingly supported the weighting of grades for high school students. For example, in answer to the question: "Do you have a system of weighted grades for your high school students (9-12)?" — 71.6% of respondents answered "yes," with 27.6% who said "no."

Of 72% respondents with a weighted system, 24.4% weighted only AP courses (grades 11-12), 16.3% weighted all honors classes defined by 38.5% of respondents as courses which use a differentiated curriculum. Though an equal percentage noted a weighting of classes other than honors classes, almost none of the addendum materials, whether regional or national, showed a listing of classes. Of the very few that did (see below for data from regional schools), only three cited classes such as advanced dance, visual arts, theater, music, industrial arts, home economics, physical education and health, business education, journalism. Of the remaining schools which weight grades, by far the majority of those sending policies weight only Advanced Placement classes, that is, those designated by the AP label as college-level classes. The schools which do weight honors classes other than AP do so in the more traditional academic areas—English, social studies, math, science, and foreign language. They also have some system of marking such classes "honors" ("advanced," "college prep," "international baccalaureate coursework," "accelerated," "honors," "Level IV," etc.). Though no consistency occurs in labeling or among the classes chosen school-to-school for weighting, one centrality is clear: all the schools which weight classes cite a commitment to defining "excellence," to giving credence to what "excellence" means to them by the process of weighting classes. The policies attempt to correlate high-level learning and difficult curriculum with weighting.

For those school systems which weight classes, 40.3% adjust the point system, usually from 4.0 to 5.0; 18.7% use another form of grade weighting. These range from partially weighting 10th grade honors classes (4.5) to a full-point weighting for 11th and 12th grade classes to a half-point weighting (4.5) across the board to some fairly complicated point systems (for example, in one school a .70 computed value for AP classes divided by 5—the academic load per semester—to render the value of .14 for an individual course). The systems for weighting do indicate a school's commitment to weighting. For example, the more classes chosen for weighted grades in any given school system, often the more complex the system; those schools which weight only AP classes tend to have a simple 1.0 per AP class additional weight to GPA.

Since the majority of schools which sent weighted policies have as their written goal stimulating more students to take more demanding classes, it is not surprising that 20.7% of those that weight classes list "more students taking weighted classes" as the
major "positive effect(s) of the [weighted] system" with a close 18.5% stating that their top students who graduate at the highest rank-in-class are taking the most demanding classes in the school because such classes are weighted. Other responses from schools which currently weight grades include: better student self-esteem, higher acceptance rates into colleges and universities, the opportunity for students to improve GPA and to win college scholarships. The concomitant negatives centered on the tracking of students (12.8%); greater stress among students (9.57%); students at the lower end of the academic spectrum being left out (6.38%); and greater parental pressure to take weighted classes (4.25%).

Concluding the national response on weighted grades from the surveys returned to The National Research Center on the Gifted and Talented, the following trends are noted:

1. The large number of surveys returned indicates weighted grades is an important education topic.
2. The large number of schools volunteering policies shows their commitment to weighted grades.
3. That commitment is probably the result of "political" difficulties which confront a district choosing to study, then implement, such policies; when schools have formed policies, it is inevitably the result of careful decisions which result from the highly individualized needs of each school.
4. Those individualized needs explain why almost no consistency exists among school policies. Even when there appears to be some unanimity (weighting by a 1.0 addition to the GPA), such schools are as likely to have only AP courses weighted as to have a system where all courses, even the non-"academic," are weighted.
5. Most schools that presently do not weight grades but who returned questionnaires have studied it in the past or are studying it now.
6. Finally, the majority (but two exceptions) of those sending policies state that what they hoped to get from weighting, they achieved, even though a number indicate the changing nature of their policies: i.e., that continued fine-tuning is expected and encouraged.

**Part II—Results From Other Research Materials**

The overall response from short-essay surveys and interviews of Midwestern and Nebraska schools regarding weighted grades can be summarized by the following quoted material:

High grades for high-level students may be perceived as elitist; honors classes may be perceived as elitist; but students can get hurt in terms of scholarships and college admissions because grades are not weighted.

Weighted grades often provide a safety net for students to allow them to take more challenging classes without punishing them for being self-demanding. This
is at the heart of the issue. Able students wanting to protect GPA may choose not to take a demanding class if the grade is not weighted.

The hypocrisy of a system that rewards mediocrity by giving accolades to students who take easier classes but have higher GPAs is not lost on students who have challenged themselves by taking advanced and honors classes.

Weighted classes place a school district's emphasis where it should be—on academic rigor and on encouraging students to choose harder courses.

A weighted grade gives the student an extrinsic, as well as an intrinsic, reward.

Weighted classes can allow an upgrading of all areas of the curriculum.

As with national results, so on a regional level, the response to weighting grades centered on "equity" for students, encouraging students to take more rigorous classes, and enhancing student admission and scholarship opportunities regarding college. Although "equity" is a connotative word, it is a word used by respondents and in the literature. "Equity" appears to imply the treating of all students fairly by treating them as individuals.

Regionally, the number of schools contacted was as follows: 16 in Kansas; 10 in Nebraska; 1 in Missouri; and 1 in South Dakota. Of the 17 regional and Nebraska high schools returning the survey (short-essay response), 12 employ a weighted system and weight academic courses only.

As with the national response, so regionally: there is little consistency in how schools weight classes. Of the 12, 7 said weighting helps students gain admission to college; 8 specifically mentioned that more students take more challenging courses, as one school wrote: "No system is perfect! Our system is supposed to 'reward' students who enroll in advanced, more rigorous classes. It probably does." Another school stated, "AP courses are college courses and should reflect that in the GPA."

Disadvantages seem to center on the following points: the question of a lower number of students taking non-weighted elective classes; the "demanding" parents who insist students take more weighted classes at any one time than might be considered wise by school personnel; the procedure itself for figuring weighting. But on the whole, advantages seem to outweigh disadvantages in the responses of schools. These advantages include the creation of more AP classes and an increase in enrollment in classes where weighted grades have been implemented. In fact, one school maintained that weighted grading is the single, most telling factor in encouraging students to enroll in AP/honors classes.

Finally, the response from college admission directors themselves is highly informative. Some of the literature indicates that although admission directors say they give none-to-little emphasis on weighting, when "one team of researchers presented sets
of transcripts with identical course work to several east coast colleges" (where one set had weighted grades and the other did not), "[a]lthough denying that weighted grades made a difference, the hypothetical student whose grades were weighted was offered admission twice as often" as the student whose grades were non-weighted (Dunham, 1994, p. 1).

The response to surveys sent out to 15 admission directors of private and public colleges and universities gives an honest, behind-the-scenes look at the selection process. School districts responded that the weighting of grades increases enrollment in honors classes; weighted grades apparently help students gain admittance to some colleges and universities. Some colleges give no leeway for weighted against non-weighted in determining scholarships but simply look at GPA as a first cut. The latter use GPAs without refiguring on a weighted standard. The following quoted excerpts from admission directors indicate the seeming importance of weighted honors and AP classes in the college-selection process.

We find rank-in-class . . . to be helpful and prefer to have grades for more challenging courses weighted. Weighted grades give more legitimacy and credibility to those at the top of the class and could help a student who has performed well in difficult courses but scored less well on standardized testing. Most important of all, we feel that differential weighting, which reflects the academic level of each course, encourages students to pursue a more challenging curriculum.

Some sort of weighting of rank in class based on the strength of the academic program makes most sense to us.

Both the willingness to enroll in the most difficult classes available and the ability to still achieve at a high level are of the utmost importance. . . . We . . . are far more interested in the type of students who would "risk" their rank and take the most challenging courses.

As shallow as this may seem, I think that every college would rather see more 4.0 applicants. It makes our profile look better. It makes us appear more selective. . . . A weighted system can help colleges better focus on deserving students. In addition many of our scholarship requirements are initially based on GPA or class rank. . . . Some more qualified students could fall below our initial standard without weighted grades.

The GPA is very important in the admission decisions. . . . A weighted scale rewards the students who took the more challenging courses and therefore would help the class rank.

A weighted grading scale insures that we appreciate your school's view of the toughest courses available. . . . Level of difficulty gives meaning to the grade.
Unweighted systems disadvantage ambitious students in scholarship competitions that require a particular class rank.

[W]e feel that weighted rank helps to distinguish the student who has taken a stronger program from the student who does not.

We do not consider honors or AP courses as an advantage in the admission process. They would be considered in scholarship reviews however.

One flagship university believes that a weighted system actually gives a disadvantage to students. They suggest that weighting a grade diminishes the importance of learning for learning's sake. Yet, the majority of the schools surveyed acknowledge the importance of weighting grades.

Waiving Classes

Part I—The National Research Center on Gifted and Talented Survey Results

Seventeen questions were asked on the questionnaire sent out by the Center. This issue seems to be receiving less national attention than that of weighted grades; only 19 school districts sent written policies with their returned surveys. Of those 19, several indicated their state legislatures have mandated a policy for credit by examination; therefore, the question of a need to waive classes generated by the particular needs of a school's student body is moot.

With waiving classes there is no nationally consistent policy of how classes are to be waived, what classes should be waived, how such classes are graded, and by what means they are or are not figured into the GPA. One consistency does occur in all but 2 of the 19 policies sent: no class is waived unless students show mastery of material.

"Demonstration that the learner outcomes of the course are met" is the typical designation for waiving. In most districts which do waive, some type of examination is required. In some cases such an exam might be complemented by an alternative "demonstration," such as portfolios and exhibitions. In most cases the credit is earned with a "P" and a noncomputation on GPA. Only in one school did the policy specify an "A" for the course since the requirements for waiving required a 94% or better final-test grade or a 90% test grade plus other "performance assessment instruments." In this one case, the student is expected to show "A" mastery of the material.

Variations in waiving policies move from the extreme of skipping lower-level classes generating no credit, with the requirement to take a more advanced class in the same discipline, to no real waiving of classes per se but simply the opportunity for students to compact a class or to fulfill requirements of the class by independent study. In the latter cases, waiving is not actually taking place; instead, the school has established alternative ways for complete course requirements.
Where most districts require a set number of units for graduation which must be achieved through full-time status, at least one school allows for a consideration for waiving "of the four-year, full-time attendance requirement" based on any of the following: family financial needs, vocational needs, personal circumstances, or the demonstrating of "academic precariousness and readiness for post-secondary education."

Of the 19 school districts that sent policies, 2 indicate they are currently developing a waiving policy, and only 1 of the 19 specified the option for students to waive a requirement (physical education) outside school, i.e., students in private dance, gymnastics, and ice-skating classes who "have lessons . . . for approximately the same number of hours per week" and who are involved with "performance or competitive activity."

Of the 137 respondents to the questionnaire on waiving classes, 47.4% reported some form of waiving; 50.4% said they did not. Of those who sent policy statements, 33.9% stated that students are not required to take the class in some other form. However, 59.1% responded that no formal policy for waiving classes is in place. This position is further corroborated by the fact that 23.1% stated the decision to waive is made by a principal.

Although the majority of those who sent policies do allow the generating of credit for waived classes, 29.4% of all who responded to the survey said no credit is granted when a class is waived.

A further indication of the relative nature of class waiving is the following. Although the same percentage of respondents said "yes" as "no" to waiving required courses, when asked to respond in the survey to specific examples of waiving classes, 29.2% would not waive physical education credit for a cross-country team member; 36.5% would not give citizenship issues' credit to a politically active student; and 27% would refuse the waiving of a required class, such as "Career Education," in order for a student to take a more academic class. There seems, thus, to be a discrepancy between what may be stated as theory—the waiving of a class—and what may occur in practice—a particular request by a specific student.

Of the respondents, 40.1% said that students who waive classes take more electives. But the waiving of classes does not allow an option to finish high school more quickly, according to 39.4% of those responding.

Most surprising of all regarding this topic is that 62% of those responding said they would institute a waiving policy if they could. This is a surprise because there seems to be little or no discussion among school administrators or personnel, based on returned surveys, to make this a priority, unlike the highly charged and very alive national responses to weighted grades. Again, it would seem a likely indicator that theory and practice may not be together in the question of a policy for waiving classes.
Part II—Results From Other Research Materials

What does it mean to waive a class? As suggested earlier, respondents indicate the necessity of student mastery of the course material. They imply that because in-class learning is also an affective experience and not simply an end result, the value of the experience, the skill, and the content of any given course must be considered. The benefits of that course to be waived must be provided to the student in an alternative way or must be proven to be less worthy for a given student than other values from another course. In waiving a class, students are waiving more than the test-measurable skills of a class; students are also waiving the way knowledge is constructed and presented to them.

The purposes of waiving appear to be: to avoid repetition of knowledge, skills, and experience; to substitute a course commensurate with mastery to be achieved in an alternative way; and to illustrate that a particular student's singular educational goals can be better fulfilled in a way other than through a required course.

In other words, when it occurs, the waiving of a course appears to be a stringent process. Yet school districts wrestle with making the procedure flexible enough so that students with legitimate claims to waive classes can, indeed, facilitate that process.

The respondents prefer giving credit when students present the learnings from the waived class in a demonstrable way—portfolio, an essay examination, etc. To be given credit, the students are asked in most schools to produce a product to demonstrate that the essential learnings of the class have been fulfilled in an alternative, but valid, way to in-class learning. Such a proviso allows for students to get away from seat-time as the major decision for the granting of credit; it also moves away from testing as the sole measure of knowledge toward education by demonstration and other forms of authentic learnings.

Summary information from regional surveys shows the majority of respondents (16 high schools) have some type of class waiving. Of these, 12 expect some form of demonstration and 8 offer some way by which the course objectives for waived classes are fulfilled. The majority of respondents assume that waiving includes all classes, even those required for graduation. Finally, as is true nationally, the respondents allow credit for waived classes only if the objectives of the class have been completed.

Even though 58% of the schools that waive classes do not have a formal system or policy, when a formal system is available, the policy is generally open to all students. Policies tend by a small margin not to allow credit for the student. In most cases a principal or associate principal makes the decision (though the second most common means of waiving classes is through committee). This is correlative to national survey results.

Such findings reinforce the idea that waiving classes, even those required for graduation, is workable; that the waiving of classes can generate credit when mastery of
the material is the judging criterion; and that students who waive classes are expected to take higher-level classes.

**Conclusions**

As a result of this assessment of weighting grades, the conclusion appears to be clear. The cumulative advantages to students, the importance of encouraging students to take honors and AP classes, and the fact that simple, unweighted GPAs may place students at a disadvantage for college admissions and scholarship awards indicate that high schools should weight grades. Each school must determine the right mix of classes to be weighted, the weighting procedure, and the presentation of its standards to colleges and universities, considering its own student population and curriculum possibilities. However, the overall conclusion stands: weighted grades appear to benefit the student in most cases, according to national and regional responses and the literature in the field.

As a result of an assessment of waiving classes, the conclusion, again, appears to be clear. School districts and at times even state legislatures recognize the importance of alternative ways by which a student's individual needs might be met. Although graduation requirements should not be minimized, the waiving of classes is assumed to be a needed option when classes are a repetition of students' knowledge, when course learnings and/or outcomes have been completed by students in ways other than in class, and/or when a particular course is unable to give certain students the kinds of knowledge their own particular abilities indicate should be made available to them. As long as schools struggle with the paradox that equity is not sameness, they will attempt to find equally rigorous but complementary ways to help students achieve a high school education.

Many other questions are raised by this study, particularly since it was not intended to be comprehensive but rather a first-of-its-kind analysis of what is happening with weighted grades and waiving classes among a sampling of the nation's schools as part of their gifted programs. Relatively few scholarly materials are available on weighted grades and even fewer on waiving classes; those available tend not to deal with the more detailed points that such a study as this has raised. Among these points could be the following. If students move from one school district to another, would their grades for comparable classes change to weighted if the latter system is weighted? If a student completes an equally rigorous or more rigorous course in a summer program which is accepted by a school that weights its grades, would the student get a weighted grade? Would students enrolled in a university class that carries dual credit be weighted if the school weights that class? If weighted classes have enrollment limits and qualified students are unable to gain admittance to the class, are such students penalized with unweighted grades? Are bright students tracked into certain disciplines (such as math and science) because such courses are weighted where fine arts or humanities courses might not be? How does the weighted system of particular school districts compare with the formulae of certain colleges and universities in determining GPA? Is there a correlation between weighting grades and waiving classes; in other words, do gifted
students tend to waive certain classes in order to access classes with weighted grades? Another important question not developed but implied by some comments from respondents is: Shouldn't a weighted system have a national common denominator to avoid the confusion that currently exists?

Whether in the weighting of grades or in the waiving of classes for gifted students, this study gives school personnel a preliminary overview on what is currently happening in a sampling of the nation's schools.
References


Appendix

The National Research Center on the Gifted and Talented Survey
Return Rates of Surveys

1. To college admission directors: short-essay response (11 returned)—see survey example
2. To schools nationally from The National Research Center on the Gifted and Talented (189 returned)—see survey example
3. To principals and administrators locally (20 returned)—see survey example
4. To regional Midwestern schools (17 returned)—see survey example
5. Other material from schools including:
   • policy statements (80 returned by schools nationally)
   • in-house analyses on Kansas and Missouri schools
   • local memos and surveys (10 returned)
THE NATIONAL RESEARCH CENTER ON THE GIFTED AND TALENTED SURVEY

WEIGHTED GRADES

1. Do you have a system of weighted grades for your high school students (9-12)?
   ___ Yes
   ___ No

2. If so, what kinds of classes do you weight?
   ___ Honors classes (9-12)
   ___ Advanced Placement classes (11-12)
   ___ Other(s): Please explain.

3. If honors classes, how do you define "honors"?
   ___ Use of a differentiated curriculum
   ___ Use of enrichment activities
   ___ Use of additional reading
   ___ Other(s): Please explain.

4. How does the system of weighted grades work?
   ___ Give 5.0 for an "A" on a 4.0 scale
   ___ Give extra credits to students (If a course is worth five credits per semester,
       then a weighted course is worth more. If so, how much more? ________)
   ___ Other(s): Please explain.

5. What are the positive effects of this system?
   ___ Higher acceptance rates into colleges/universities
   ___ Higher response by the more prestigious colleges/universities
   ___ More scholarship moneys for students
   ___ Better self-esteem among students
   ___ More students taking weighted courses
   ___ The top students in the graduation pool taking weighted courses
   ___ Other(s): Please explain.

6. What are the negative effects of this system?
   ___ Greater stress among students
   ___ Students at the lower end of the academic spectrum left out of the process
   ___ Students at school becoming tracked into "those who take these courses" and
       "those who can't or don't"
   ___ Greater parental pressures
   ___ Greater pressure from colleges/universities
   ___ Students taking too many weighted courses in a given semester
   ___ Charges of elitism
THE NATIONAL RESEARCH CENTER ON THE GIFTED AND TALENTED SURVEY

WAIVING CLASSES

1. Do you allow students to "waive" certain classes in your high school?
   ___ Yes
   ___ No
   ___________ Grade Level(s)

2. How do you define "waiving" classes?
   ___ Students do not have to take a class at all
   ___ Students do not have to take a class but must fulfill class objectives
   ___ Students do not have to take a class but must take the final examination students would take in class
   ___ Students must present a portfolio or demonstration of competence on class material
   ___ Other(s): Please explain.

3. Do you have a formal system/policy for waiving classes?
   ___ Yes
   ___ No

4. If "yes," is the formal system/policy available for?
   ___ Gifted only
   ___ All students

5. If a student waives a class, does s/he generate credit for the class?
   ___ Yes
   ___ No

6. If "yes," under what circumstances?
   ___ Only if the student fulfills the class objectives
   ___ Only if the student completes a final exam
   ___ Only if the class is prerequisite for a higher-level class
   ___ All classes that are waived generate credit
   ___ No classes waived generate credit

7. Who makes the decision to waive a class?
   ___ The principal or associate principal
   ___ The department chairperson
   ___ The gifted facilitator
   ___ A committee
   ___ A district-office administrator
   ___ Other(s): __________________________________________
8. Do you have quite a number of students who decide to apply for waiving?
   ___ Yes
   ___ No

9. If "yes," then define "number":
   ___ Half the students eligible or more
   ___ One-fourth to one-third of the eligible students
   ___ One-tenth of the students eligible
   ___ Fewer than 5% of the eligible students
   ___ Fewer than two students a year

10. Do you waive district-level required classes?
    ___ Yes
    ___ No

11. If "yes," could a student in the following categories waive a class?
    ___ A cross-country team member waive PE requirement
        ___ Yes
        ___ No
    ___ A politically-active student waive "Citizenship Issues"
        ___ Yes
        ___ No
    ___ A high academic and college-bound, focused student waive classes like
        "Career Education" to take more "academic" subjects
        ___ Yes
        ___ No
        ___ Other(s): Please explain.

12. Do students who waive classes tend to take more elective classes?
    ___ Yes
    ___ No

13. If "no," then do students take more study halls or work-study?
    ___ Yes
    ___ No

14. Have you found waiving classes a successful way to motivate students to get out
    of high school more quickly?
    ___ Yes
    ___ No

15. Do you have any difficulty with college-entrance requirements if a class has been
    waived?
    ___ Yes
    ___ No
16. If "yes," in what way(s)?
   ___ Colleges/universities regard waiving as problematic
   ___ Colleges/universities require make-up classes
   ___ Colleges/universities judge entrance status by completion of all courses
   ___ Other(s): Please explain.

17. If you were in charge of your high school, would you recommend your institution waive classes?
   ___ Yes
   ___ No
SURVEY TO REGIONAL SCHOOLS
(Short-Essay Responses)

WEIGHTING CLASS GRADES

1. Does your school district offer a weighted grade for specific classes?
   ___ Yes
   ___ No

2. If yours is a multi-school district, is the policy administered centrally or on a per school basis?
   ___ Centrally administered
   ___ School-by-school basis
   ___ Single school district

   Why?

3. Please list the classes which are weighted.

4. Please explain your weighting system. When was it implemented?

5. Have there been any impacts (positive/negative) when students apply to colleges? Please explain.

6. Does your school use more than one GPA on a student's transcript (i.e., the weighted GPA, the unweighted GPA)?
   ___ Yes
   ___ No

7. How does the weighting system affect class rank?

8. In your opinion what are the advantages/disadvantages in a system of weighting grades?
SURVEY TO REGIONAL SCHOOLS
(Short-Essay Responses)

WAIVING CLASSES

1. Does your school district offer the option of waiving classes?
   ___ Yes
   ___ No

2. If yours is a multi-school district, is the policy administered centrally or on a per school basis?
   ___ Centrally administered
   ___ School-by-school basis
   ___ Single school district

   Why?

3. Please list the classes which may be waived (and if they are prerequisites for other classes, required curriculum for graduation, etc.).

4. What are the requirements for waiving a class?

5. Have there been any impacts (positive/negative) when students apply to colleges (i.e., confusion regarding all requirements have been met)? Please explain.

6. In your opinion what are the advantages/disadvantages in allowing a student to waive classes?

7. Has your district considered or allowed waiving classes in the past?
   ___ Yes
   ___ No

8. Does your district have a written policy regarding waiving classes?
   ___ Yes (we would appreciate receiving a copy)
   ___ No

9. May we contact your school for more detailed information in the future? If "yes," please list the contact name, title, telephone number, and office hours.
Questionnaire on Weighted Grades
Sent to College Admission Directors

1. To what extent does a student's GPA and class rank affect her/his acceptance prospects at your school?

2. Is it necessary that students you accept have a perfect 4.0 GPA or close to that average?
   ___ Yes
   ___ No

3. How does a "weighted" grading scale in high school affect a student's acceptance at your institution?

4. How are courses taken on a Pass/Fail basis (which has no affect on class rank or GPA) viewed by your admissions office?

5. If student X took a regular English course and received an "A" in the course and student Y took an Advanced Placement English course and got a "B" in the course, would either student X or Y have an advantage for acceptance based on the English grade alone? ______
   Why, Why not?

6. Generally do you feel either a "weighted" or "unweighted" grading scale has an advantage for high school students with respect to college admission?
   ___ Weighted
   ___ Unweighted
Questionnaire on Waiving Classes
Sent to Local High School Administrators and Department Chairs

1. Should students be allowed to "waive" certain classes in high school?
   ___ Yes
   ___ No

2. How do you define "waiving" classes.
   ___ Students do not have to take the class at all.
   ___ Students do not have to take the class but must fulfill the objectives of the class.
   ___ Students do not have to take the class but must take the final examination that students in the class would take.
   ___ Students must present demonstration of competence on class material.

3. Should waiving classes be available for
   ___ gifted students only?
   ___ all students?

4. If a student waives a class, should credit be granted for the class?
   ___ Yes
   ___ No

5. If the answer to Question 4 is "Yes," under what circumstances should credit be granted for the class?
   ___ Only if the student fulfills the class objectives
   ___ Only if the student completes a final examination
   ___ Only if the class is prerequisite for a higher-level class
   ___ All waived classes should generate credit
   ___ No waived classes should generate credit

6. Who should make the decision to waive a class?
   ___ Principal or associate principal
   ___ Department chairperson
   ___ Gifted facilitator
   ___ A committee
   ___ A district office administrator
   ___ Other __________________

7. Should students be allowed to waive required classes such as citizenship issues or physical education?
   ___ Yes
   ___ No

   If "Yes," under what circumstances?
8. What classes would you consider waiving in your department?

9. What effect would waiving classes have upon your particular department?

10. In your opinion, what are the advantages/disadvantages of waiving classes?
The National Research Center on the Gifted and Talented
University of Connecticut
362 Fairfield Road, U-7
Storrs, CT 06269-2007

Production Assistants
Dawn R. Guenther
Siamak Vahidi

Reviewers
E. Jean Gubbins
Jeannette Parker
Mary Rizza
Lilia Ruban
Ellie Schatz
University of Connecticut
Dr. E. Jean Gubbins, Associate Director
University of Connecticut
School of Education, U-7
Storrs, CT 06269-2007
860-486-4676
Dr. Deborah E. Burns
Dr. Sally M. Reis
Dr. Karen L. Westberg

City University of New York, City College
Dr. Deborah L. Coates, Site Research Coordinator
City University of New York (CCNY)
138th and Convent Avenue
NAC 7/322
New York, NY 10031
212-650-5690

Stanford University
Dr. Shirley Brice Heath, Site Research Coordinator
Stanford University
Department of English
Building 50, Room 52U
Stanford, CA 94305
415-723-3316
Dr. Guadalupe Valdés

University of Virginia
Dr. Carolyn M. Callahan, Associate Director
Curry School of Education
University of Virginia
405 Emmet Street
Charlottesville, VA 22903
804-982-2849
Dr. Donna Ford-Harris
Dr. Tonya Moon
Dr. Ellen M. Tomchin
Dr. Carol A. Tomlinson

Yale University
Dr. Robert J. Sternberg, Associate Director
Department of Psychology
Yale University
P.O. Box 208205
New Haven, CT 06520-8205
203-432-4632