

The Definitive Article on Class Size

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If you are a WPA, sooner or later, you are going to have a fight with your administration over class size. In general, the fight will set up this way: you want to decrease class size and the administration wants to increase it. Not long ago, I revisited this issue with my administration. To fight the good fight, I went looking to find information, statistics, reports, research, national statements, anything I could find to prove that lowering class size was a good, urgent, necessary step. What I found was scattered around in various places, and because of time pressure, I know I did not find it all. Most importantly, I did not find, in a single place, a compilation of everything we know about why small writing classes are better, nor did I find a solid empirical study to demonstrate, once and for all, that smaller classes help students become more effective writers in college. However, there is some evidence: there are empirical research studies, albeit not focused specifically on writing, and other kinds of evidence to show that smaller class size in writing courses improves student success, so it is good for students. In addition, research shows that smaller writing class size improves teaching effectiveness, so it is good for faculty. Finally, the evidence indicates that smaller writing class size is cost effective, so it is good for institutions. My goal here is to present, in a single place, a compilation of all the evidence that I could find, providing the resources needed to win the fight on class size; in addition, the absence of detailed, thorough empirical evidence further suggests that the national organizations concerned with the teaching of writing should work together to fund and execute studies to support the need for smaller writing classes.

STUDENT SUCCESS

Intuitively, we know that smaller classes are a good idea to help students succeed. It is easy to say that critical reading and writing skills taught in typical first-year composition courses are essential to success in most courses in college, so if students develop these skills in first-year writing, they are more

likely to succeed in their other courses. Small classes are good for students for other reasons, too. For example, students report that small classes that require extensive writing (i.e. twenty pages or more of final drafts during the term) make a significant difference in their engagement and motivation and improving their writing. Recent studies show that student engagement is essential to success, a finding reported by education researcher Richard Light at Harvard (55-56) and by many other education scholars. Light's survey of 365 undergraduates about the role of writing produces a particularly pertinent finding:

The relationship between the amount of writing for a course and students' level of engagement—whether engagement is measured by time spent on the course, or the intellectual challenge it presents, or students' level of interest in it—is stronger than the relationship between students' engagement and any other course characteristic. (55)

Clearly, extensive writing cannot reasonably be assigned, read and responded to in large sections. To raise students' level of engagement and learning, small classes with extensive writing are essential. Alexander Astin's work on the impact of college on students supports Light's findings with broadly based data gathered over more than thirty years and published in his 1993 report *What Matters in College?* Using a wide range of measures of student success and satisfaction, Astin examined the impact of student-faculty ratio and reported that a low student-faculty ratio has a positive impact on student satisfaction in terms of relationships, quality of teaching and on virtually all other aspects of students' experience. Astin also says that a low student-faculty ratio has a positive impact on whether students finish their degrees (Astin 328-29).

So it is clear that in general smaller class sizes and lower student-faculty ratios are helpful to students' engagement and success. In and of itself, this claim does not support smaller classes specifically in writing courses, since virtually every subject area can and does make the same claim. However, Astin's data show why the need for small classes in writing should have priority over other subject areas' claims. First, examining various aspects of the college experience, such as course content and campus amenities, Astin writes that "the number of writing-skills courses taken has significant positive effects on all areas of self-reported growth except job skills, and on all areas of student satisfaction except Facilities" (377). So more writing courses increase students' levels of satisfaction and their own assessment of their development.

Students see their own growth in writing courses in other ways as well. Astin reports that students respond positively to the higher levels of involvement or engagement resulting from how many writing courses they take, how much feedback they get from teachers, the number of essay exams they take, and their use of word processors (228). These are all features of small writing classes. The student orientation of the faculty (i.e. how concerned about students and committed to teaching are they (47-48)) as reported by Astin has a direct positive effect on students' overall academic development, especially in three areas: writing, critical thinking and problem-solving/analytical skills (342). These are all areas that relate to overall success in college, ones that are the focus of small writing classes. Finally, students report, according to Astin, a direct positive impact on writing skills and abilities if their papers are critiqued by faculty members (384). And while faculty may critique student work in many different kinds of courses, students get the most help with their writing from writing teachers who can only provide the kind of detailed critiques that produce these positive effects in small classes. So, while many subject areas may clamor for small classes, writing has, on all these bases, the strongest claim and should have the highest priority. Ultimately, writing and the critical reading that is one of its essential components underlies virtually all courses in college; success in college is tied to success in writing, taught well in small classes.

Extrapolating from K-12 Findings and Research in Other Areas

But surveys of engagement or other broad data on student satisfaction like Light's and Astin's studies are not enough to win a fight with the dean's office on any campus. There is specific research that examines the impact of class size on student academic achievement. While the most intensive work has been done in studies of K-12 education, it seems fair to extrapolate from such studies to the college level. In a book devoted to the issue of class size, Charles Achilles, professor of Educational Leadership at Eastern Michigan University, and the principal investigator on a major study of class size and student success in public schools in Tennessee (Project Star), makes clear that good research on class size shows that smaller classes have a positive effect on student learning. He reports findings in such areas as levels of student engagement, and development of basic skills (i.e. reading and writing) as well as raising teachers' morale (Achilles 83-103, 159-61).¹ The work in public schools clearly supports the need for smaller classes in writing. And then there is additional work that is at the college-level, but not focused specifically on writing. A study in economics courses (Arias and Walker) and a study on cognitive development both show the positive impact of smaller

classes with evidence of improved student learning and academic performance (Fischer and Grant).² These studies support the claim that smaller classes for college writing are essential for students' success.

Class Size Research on Writing Courses

A brief review of the few studies that look more directly at class size specifically in college writing courses make a consistent case for smaller classes, according to Trish Roberts-Miller at the University of Texas. Roberts-Miller reviewed other available research literature on class size on various types of courses, mostly at the K-12 level, not specifically focused on writing, that use assorted kinds of measures like timed exams. Her study leads her to conclude that "This is an area where good qualitative or quantitative research would be very helpful; unfortunately, it does not exist." More recent discussions of this issue have described the need for focused research as the "holy grail" for making the case to lower class size (*Declining*). But Roberts-Miller draws several useful inferences, despite the absence of specific empirical data to support every writing program administrator's argument for smaller class sizes. She says that, first, good practices in the teaching of writing, such as extensive writing practice and detailed teacher feedback get harder with more students. In addition, if the goal in teaching writing is not to have students memorize grammar rules but to learn through doing and getting feedback; these activities can only be accomplished in small classes where students actually *do* a lot of writing.

Finally, writing courses that emphasize revision through multiple drafts (admittedly, an area of my own research which I naturally support, and which my studies for *Revision Revisited* show is essential to professionals' successful writing) require small class size so that teachers can read and comment on students' work over multiple drafts. Roberts-Miller makes one additional point about assessing the impact of smaller classes in teaching and learning writing: measures involving exams, single timed writing samples or single research reports are too limited to reveal students' true writing ability. Thus, the empirical research is lacking, but there is plenty of indirect evidence, evidence from K-12 research and research in various subject areas to support the need for smaller writing classes. The need for empirical evidence demonstrating the efficacy of smaller classes for college writing is also clear.

The Students' Perspective

If students are asked about the issue of class size, they report clearly that class size makes a difference to them. In *Making the Most of College*, Light

reports on more than sixteen hundred interviews with undergraduates at his institution plus collaboration with colleagues from twenty colleges and universities of different sizes and types over a number of years (Light 106). Among the many interesting and useful findings of these in-depth interviews is the one on class size: “student after student brings up the importance of class size in his or her academic development. Not surprisingly, small-group tutorials, small seminars, and one-to-one supervision are, for many, their capstone experience” (Light 9).

More specifically, students’ satisfaction with their experience is clearly correlated to the number of small classes they have taken; students’ definition of “small” in this context is classes with fifteen or fewer students (Light 45). Light’s findings show that students find small classes have the greatest impact on their learning for two specific reasons: “First, such classes enable a professor to get to know each student reasonably well. Second, a professor can use certain teaching techniques that are hard to implement in large classes” (Light 47). The open discussion of controversial topics is only one of many such teaching possibilities available in small classes (Light 48-50). Glau’s data (see Appendix 1) on retention and success at Arizona State, when writing class size was reduced, support Light’s findings. Writing classes of small size, particularly those that meet students’ definition of small, are thus essential from the students’ perspective in making the most of college and succeeding in their studies.

A different way of looking at this issue comes from studies of strategies that contribute to student success and student engagement. It would probably be fair to say that these are two focal points in current thinking about higher education, as demonstrated by conferences (in April, 2005, for example, the Association of American Colleges and Universities held a conference on “Pedagogies of Engagement”) and books published (Kuh et al.). The National Survey of Student Engagement (NSSE), a national survey of students’ college experiences begun in 2000, is yet another indicator of the interest in this area. Drawing on data from the NSSE reports, Kuh and his colleagues note that students report “prompt feedback and discussing ideas presented in reading or class discussion” (303) and individual research experiences with faculty make a significant positive difference to their undergraduate experience. Clearly, these kinds of contacts are more likely in smaller classes of all kinds, including smaller writing classes, even if they are not taught by senior faculty, because the contact itself is important. Thus, the students themselves specifically report greater success and more learning in smaller classes.

A different study of student engagement, focused specifically on writing classes, is reported by Nancy Sommers, Director of Writing at Harvard and

Director of the Harvard Study of Undergraduate Writing, and Laura Saltz, who worked as a research associate for the study. Their detailed report, which appeared in the flagship journal in college composition, *College Composition and Communication*, in 2004, refers to Richard Light's work and a number of other studies of students' development as writers and their levels of engagement, including one at Pepperdine University (a small private, religious institution in California) and one at City University of New York (a large public institution). Sommers and Saltz confirm Light's findings of students' reports on their levels of engagement in classes that entail extensive writing at a range of different kinds of institutions. They quote a number of individual students, including the following:

You can say that you went to lecture or went to discussion section, but when you hold in your hand sixteen papers that you have written your freshman year, then you feel that you have accomplished something. (127)

The Harvard study, which followed the writing development of more than four hundred students over four years of college, clearly shows the importance of good writing instruction and extensive writing experience to the overall success of students (Sommers and Saltz 126-127). The students themselves report that writing is an essential element by which they get "invited into their education" (127), whether they wrote for smaller or larger classes (129). As a practical matter, though, students get more direct instruction in writing when they are in small classes. Sommers and Saltz go on to point out that the positive impact of writing on undergraduate education must be assessed carefully and may not show up on a one-time measure of student writing. Moreover, because what changes over time is not only students' writing but also their attitudes toward writing and their total college experience as a by-product, the importance and positive effect of writing may not show up until much later if at all (144). The first year is a crucial positive time for this development to begin according to Sommers and Saltz (146-7), so it warrants small classes to get students off to a good start. These studies provide some evidence to support the need for small writing classes but the need for a focused empirical study on the positive impact of smaller writing classes on students remains.

TEACHING EFFECTIVENESS

There are a number of reasons why smaller writing classes are good not only for students, but also for faculty—above and beyond the fact that faculty generally do like to see their students succeed. In terms of teaching effectiveness, it is much harder for faculty members to be effective teachers

for all students in a class of one or two hundred or more if the goal is for students to develop their individual skills in critical thinking and writing, along with key ideas and conceptual content. The students bring an array of backgrounds, levels of preparation, interest and motivation into the classroom. It is difficult to learn students' names, much less understand their learning styles and engage them fully with the material in large groups.

Strategies for enhancing student engagement, even in large classes, such as those described by Light (114-117) effectively create a small-class experience in a large class context. However, detailed, individualized responses to students' writing, in particular, are nearly impossible in large lecture classes, but become more and more possible as class size drops. The exact number of students must derive from various calculations of teachers' time reading and responding to student writing; no specific study says twenty is the very best number, but all agree that smaller is better. Based on the evidence presented here, it should be clear that a well-funded, focused study of the impact of class size in college writing is definitely needed. Despite more alternatives now with course management software (WebCT/Blackboard), the crucial element for student success is one-to-one teacher student interaction on written work, for which smaller classes are essential. There is research, much of it admittedly indirect, to support the need for smaller class size in college writing courses, based on teachers' compensation and time, on the recommendations of national organizations, on studies of institutions' peer groups, and other kinds of teacher-focused studies.

Pay and Hours

The amount of time teachers have to spend with or on individual students has been carefully examined specifically for writing courses in college. In terms of issues like time per student and pay rates for teachers, it is clear that smaller classes are crucial. Richard Haswell of Texas A&M Corpus Christi has calculated a conservative estimate of the time involved in teaching typical first-year writing courses, using forty minutes per paper and allowing for two drafts, comments and grading, as follows:

25 students, four substantial out-of-class essays, one required individual conference, end-of-the-semester portfolio of writings. The total is 231 hours. That is the most conservative estimate, and a more realistic one probably would add at least 20-30 hours.

Notice that an 8-hour day of 15 weeks of 5 working days a week adds up to 600 hours. With two writing courses, and with one third the preparation time allowed for the second

course (30 minutes instead of 90), the total is 402 hours. With three writing courses, the teacher is already working overtime (633 hours). (Haswell n.p.)

Add a fourth class, as do many part-time instructors and teachers in community colleges, and the time factor increases significantly. As Haswell goes on to point out, this is the reason that several national organizations have called for lower class sizes in first-year writing courses.

Moreover, Randall Popken, who is a WPA at Tarleton State University in Texas, writing in *College Composition and Communication* in 2004, showed that class size is a long-standing, serious issue with his historical case study of Edwin Hopkins, a writing teacher at the University of Kansas from 1889 to 1937 (618-41). Hopkins, following the then relatively new composition pedagogy of having students write extensively, reached the point of a breakdown from sheer overwork. As a WPA, he tried repeatedly to get his administration to lower class size, but in a story familiar to us all, was unsuccessful (Popkin 625-29). Popken's report on Hopkins becomes particularly pertinent to this discussion when he describes the argument Hopkins used with his administration, helping to explain why composition class sizes should be treated differently than the class sizes of other subjects, namely that composition entails intensive labor in reading student writing and seeing students for individual conferences. His argument, as Popken reports, falls on deaf ears (627), not a surprising outcome to WPAs.

Pay rates make the same argument more strongly—a point also raised by Hopkins (Popken 621, 634). Using my university, a fairly typical medium-sized state university of 17,000 students, as an example, the following calculation shows why smaller classes would be helpful to teachers. Our current union contract sets beginning first-year writing instructors' salaries at about \$3800 per section taught. Teachers have 22 students per section currently, so the pay is about \$172 per student. If teachers have 20 students, the pay is \$190. If teachers have 18 students, the pay is \$211. Given this calculation, naturally instructors are in favor of smaller classes since lowering class size produces a pay raise.

Moreover, the pay situation creates a disincentive for teachers to give individual students the individual time and attention needed to help them become effective writers. The more time teachers spend grading and conferencing, the less they are getting paid. My institution pays pretty well, better than many places. At an hourly rate, using Haswell's figure of approximately 230 hours per course, and my institution's pay rate of \$3800, the pay works out to \$16.50 an hour. Increase class size and the hourly pay rate goes down. On the whole, then, in terms of pay, small classes are better for faculty.

The National Organizations' Recommendations for Teachers

A number of national organizations that serve writing teachers support the faculty position on the need for smaller classes for first-year writing. The first of these is the Conference on College Composition and Communication, which is a professional organization within the National Council of Teachers of English specifically focused on college writing. It is thus the national umbrella organization for all teachers of college composition. In 1966, the CCCC issued a position statement entitled "Statement of Principles and Standards for the Postsecondary Teaching of Writing," which includes a section specifically on the issue of class size in relation to "teaching conditions necessary for quality education." The specific recommendations from the CCCC statement are these:

- A. No more than 20 students should be permitted in any writing class. Ideally, classes should be limited to 15.
- B. Remedial or developmental sections should be limited to a maximum of 15 students.
- C. English faculty members should teach more than 60 writing students a term. In developmental writing classes, the maximum should be 45. (CCCC n.p.)

The leading national organization on the teaching of college writing, then, clearly states that the maximum class size for writing classes should be twenty or fewer students for regular classes, and recommends an even smaller size for developmental courses, in which students need even more individual attention.

A second national organization to address the class size issue with a policy statement is the Association of Departments of English, which is the national administrators' organization for English department chairs under the auspices of the Modern Language Association. The Modern Language Association is the flagship organization for teachers of English and foreign languages. In its prefatory remarks, before setting forth numerical guidelines consistent with those of the CCCC group, the ADE statement raises the following concern:

Despite an abundance of experienced teachers to provide sound instruction in English, we find that in many institutions, the number of courses taught by each instructor and the number of students in each class, especially in writing courses, has reached unacceptable levels. This problem has become acute in independent and public institutions alike. (ADE n.p.)

This statement, issued originally in 1974 and revised and updated in 1992, goes on to state the following recommendations on class size:

College English teachers should not teach more than three sections of composition per term. The number of students in each section should be fifteen or fewer, with no more than twenty students in any case. Class size should be no more than fifteen in developmental (remedial) courses. No English faculty member should teach more than sixty writing students a term; if students are developmental, the maximum should be forty-five. (ADE, n.p.)

The ADE specifically states that it is supporting policy statements from CCCC, the National Junior College Committee and the American Association of University Professors.

All of these groups offer the same set of recommendations: no teacher should teach more than three sections of composition, and no section should be more than twenty students, preferably fifteen, and no more than fifteen in any developmental level class. Many instructors, and especially part-time faculty, teach four or five sections, often of twenty-five students or more. Such classes are simply too big; class size in writing courses should be reduced in accordance with these guidelines.

The national organization for writing program administrators, the Council of Writing Program Administrators (WPA), sponsors an online listserv where the issue of class size is discussed regularly. Writing program administrators turn to colleagues via the listserv for support in their discussions with administrators over class size. Several WPA members undertook to compile a list of colleges and universities and their class sizes. The list was published by experienced writing program administrator Richard Haswell in the Comppile online database of research in rhetoric and composition in June of 2004. Haswell's compilation lists data from 183 colleges and universities, including community colleges, state institutions, private schools, ivy league schools, a full range. Not every institution provided a class size number for both regular first-year composition and basic writing. The following table shows the overall averages:

Regular first-year composition	N=177	Mean class size=21.49
Basic writing	N=87	Mean class size=17.98

Clearly, most writing programs are well above the recommended class sizes for both regular first-year composition and for developmental or basic writing.

Teacher Support from Peer Institutions

Additional support for an argument on class size can be based on peer institutions' class sizes. The concept of peer institutions is one used by offices of institutional research. Institutional research administrators identify a group of other institutions that are similar to their own on a number of criteria: student enrollment levels, demographics, program offerings, budget, type of institution (in terms of Carnegie categories or other criteria) and related features. The peer group may be used for comparison purposes on any issue. When I checked our peer group on the class size issue, I found that all had classes larger than ours, but all reported much higher attrition rates, effectively lowering class sizes. The peer institution argument can provide a strategy that may help build a case for lowering class size in first-year writing courses, particularly if the administration is concerned about being compared to a peer group.

Other Teacher Research

A fairly comprehensive review of research on the class size issue focused specifically on reading and writing was published in 2000 by University of Texas emeritus professor of English Edmund Farrell and former NCTE President Julie Jensen. They examined fifty years of research, beginning with a report in the 1955 *Illinois English Bulletin* of a doctoral research study on teacher time to evaluate student writing, and including the meta-analyses (studies of studies) done by Glass and Smith, education researchers from the University of Colorado, which is frequently cited in all discussions on this topic. Although, as Farrell and Jensen point out, Glass and Smith's work is often criticized, they showed clearly that

smaller classes by a factor of nearly 9 to 1, would show superior outcomes in student, teacher, and instructional effects, including students' behavior and self concepts, and teachers' morale and professional growth. (315)

Follow-up work to correct some of the flaws in Glass and Smith's original work leads Farrell and Jensen to sum up this research with three broad points of agreement:

(1) class size affects the educational environment (e.g., smaller classes positively influence students' behavior); (2) the relationship between class size and students' achievement is indirect (e.g., smaller classes lead to better communication of expecta-

tions, to more individual attention to students' interests and needs, and to more student-teacher interactions); and (3) students will achieve more in classes of 15 or fewer.... (316)

While this work does not examine writing classes specifically or directly, it does show a clear advantage for smaller classes across a variety of language arts areas. Research on this issue led the International Reading Association to offer its own resolution on class-size reduction in 1999; the resolution recommends that class size be reduced to twenty or fewer students in order to increase reading achievement ("International" 327). From the teachers' perspective in the area of reading and writing courses generally, smaller classes are needed. Looking at more broadly based reviews of research on the class size issue, mostly at the K-12 level, admittedly produces a mixed picture, but again, these studies are not directly focused on college composition classes.³

From the perspective of teachers, then, class size is an issue of critical importance. All teachers want to be effective in the classroom and they really want to help students. College writing teachers are no different; especially the huge army of part-time or adjunct faculty often work long hours for low pay, few benefits if any, little job stability and other poor conditions. The findings of research on teacher expectations regarding time and pay support the goal of smaller classes. The national organizations have recognized this goal in their position statements, across the board. Comparing peer institutions shows this need as does research done in a variety of disciplines on the class size issue. Altogether, while the need for an empirical study to settle this issue remains, the case for smaller class size is strong and clear from the perspective of college writing teachers.

INSTITUTIONAL PERSPECTIVES

Institutions care about class size for a variety of reasons besides the ways in which class size impacts students and faculty. Chiefly, institutions are concerned about cost, but they are also concerned about other issues, such as rankings. More importantly, public institutions, at least, need to be concerned about retention, a huge national problem, and about their overall performance as measured by the number of students who not only return from year to year, but actually complete degrees within a reasonable period of time. In these areas, again, there is evidence to support smaller classes, especially in writing.

Cost Issues

At my institution, one of the key cost issues is the part-time budget. The vast majority of our first-year composition courses are taught by part-time teachers. These faculty members are poorly paid in general and do not receive adequate benefits, but still do cost the institution money. Larger classes mean fewer classes serving more students, a direct cost savings. This is a spurious argument at best. College writing classes are huge money makers for most institutions, especially if graduate students or part-time faculty are the majority of the teachers, as they are at so many institutions. Using the numbers from my institution, the teacher is paid \$3,800 per course, while students pay tuition of \$649 per four credit course. With 22 students per course, our current class size, the income is \$14,278. Subtract the \$3,800 paid to the teacher, and the university makes \$10,478 per class. Of course, that \$10,000 plus is not pure profit, since the university must pay for heat, lights, technology, custodial services and so on. Still, a large composition program like mine makes money for an institution. Lowering class size to twenty changes the income to \$12,980, a difference of less than \$1,300. Little changes to class size, which can make such a difference to students and faculty would make a relatively small dent in the money an institution makes on these courses.

Smaller Class Size and Higher Rankings

What would serve institutions better is being able to offer more of these money-making classes, i.e., strong enrollments. There are a number of ways to increase enrollment in the competitive marketplace for new students. Some of these are through national prominence in athletics, through achievements in particular fields of study, or through high rankings on widely publicized surveys or ratings, such as those done by *US News and World Report*. The *US News* rankings are interesting for a number of reasons, but especially because they get a lot of attention in the media and because colleges then use them to recruit new students. However, the most interesting aspect of the *US News* rankings for this discussion is the fact that one measure used in the rankings is a measure of class size. The more classes an institution has of nineteen students or less, the higher its ranking by *US News*.

The *US News* ranking system warrants a close look because of the way it addresses the class size issue. The class size factor has a weighting of 30% within the area of faculty resources, whether in the category of national universities and liberal arts colleges or the category of master's granting universities or comprehensive colleges (*US News* n.p.). Faculty resources

are weighed 20% in the overall assessment of schools. *US News* considers faculty resources only slightly less important than peer assessment (25%), and equal to institutions' graduation and retention rates, the three most important factors in the overall rating system. Within the category of faculty resources, only faculty compensation (at 35%) is weighted more heavily than class size; student-faculty ratio, a different way to look at class size, is weighted at 5%. Institutions can improve their scores in the *US News* rankings by lowering class size to nineteen or less. Given the large number of first-year composition classes offered at many institutions, such a change would likely have a positive impact on any school's standing in these rankings.

Institutional Data on Class Size and Performance

Some institutions have looked closely at what difference smaller classes might make to overall performance on issues like retention and degree completion. I polled members of the Council of Writing Program Administrators organization through its online listserv, seeking individual studies from institutions across the full spectrum of the Carnegie Foundation's categories of types of institutions. My goal was to be able to present data from the established categories of higher education, using the Carnegie classifications of Doctoral-Extensive, Doctoral-Intensive, Master's I and II, Baccalaureate Liberal Arts, General, and Associate, Associate's, Specialized and Tribal Colleges and Universities (Carnegie n.p.). I did not get data from all categories, but a reasonable sample of several categories supports the need to lower class size in all college writing courses. A well-funded empirical study might gather this kind of data from a broad cross-section of institutions across the country; such a study would almost certainly provide further support for my claims based on just a few institutions.

The University of California system has been studied by the UC System's Committee on Preparatory Education (UCOPE). Most of the institutions in the UC system are in the Doctoral-Extensive Carnegie group. In an April 2005 report, the committee noted that all UC schools except Berkeley and San Diego have class size caps above the nationally recommended levels. In addition, the UC peer group, which includes many Doctoral-Extensive institutions such as Harvard, MIT, Stanford, University of Michigan and University of Virginia all have class sizes at or below the nationally-recommended levels (University Committee 4). These are high prestige institutions; other schools that want to look more prestigious can do so by lowering class size.

Arizona State, also in the Doctoral Extensive category, for example, lowered all its composition class sizes in part to improve its rating in the *US News* survey (Glau). Arizona State's data (see Appendix 1) shows how smaller class sizes in first-year writing have a clear impact on retention rates. ASU lowered class sizes to nineteen students in first year writing and math. As shown in Appendix 1, the data on student performance show clearly that lowering writing class sizes:

- improved pass rates for both ENG 101 and ENG 102. While the percentage gains are less than one percent (.79 in ENG 101 and .36 for ENG 102), the data sets are so large that no one can expect huge gains, percentage-wise. Each one percent gain means roughly more than *500 additional students* are succeeding in these classes than were previously passing.
- improved retention: smaller classes helped to increased the continuation of students from the first to the second required writing course for both of the fall-spring academic years following the implementation of Project 85.
- lowered the number of students who withdrew from or failed these courses (the D, W, E rate).
- improved student evaluations for *all* ranks of faculty teaching ASU's 100-level courses—which means students also appreciate the smaller class sizes. (Glau)

ASU reports similar positive results in mathematics. It seems clear that smaller classes play a key role in student success in early college work, and with that success comes a greater likelihood of persistence and degree completion. Thus it serves institutions' needs for positive performance data to have small classes in which students succeed.

In the Master's I Carnegie 2000 category, Texas State University-San Marcos has found a clear connection between class size and student success as measured by the number of students receiving grades of D or F or withdrawing from their College Writing I course. Sue Beebe, the director of the program, sent me the data that appear in Appendices 2 and 3. In the course of the last ten years, the number of students who were unsuccessful as measured by DFW grades, has declined substantially as the class size has been reduced.

Retention and Class Size

Although students may leave college for a variety of reasons that have nothing to do with classes, class size, teachers or other features of their experience in the institution, overall retention gives some indication of how well

students are doing. Nationally, college retention is pretty poor: fewer than half of the students who enter college manage to complete a degree, across all institutions and all kinds of students according to education researcher Vincent Tinto (1). Based on this fact, it seems clear that colleges and universities need to improve their performance and that doing so can be an institutional advantage.

Tinto explored this issue in depth in his 1993 report, *Leaving College*, in which he resists providing a recipe or formula for helping students stay in college. Instead, he argues that institutions are chiefly responsible for fostering students' intellectual and social development. Everything institutions do should be focused on the goal of creating an environment that supports students' development and when this is the case, retention will follow naturally. If colleges and universities want to keep students, Tinto writes, they must understand

the reciprocal obligation institutions and individuals accept when an individual is admitted to a higher educational community. ...If there is a secret to successful retention, it lies in the willingness of institutions to involve themselves in the social and intellectual development of their students. That involvement and the commitment to students it reflects is the primary source of students' commitment to the institution and of their involvement in their own learning. (Tinto 9)

Tinto's argument centers on this mutual sense of commitment. One way for an institution to demonstrate its commitment to students and their learning is to lower class size, especially in beginning writing classes that are a linchpin in overall academic success.

Tinto speaks specifically about the importance of what goes on in the classroom to the overall situation in higher education. Classrooms, he says, are the main place where students "come to participate in the intellectual life of the institution" (210). Faculty and student interaction in the classroom is the central place where social and intellectual development occur, so engaging students there is most important. Finally, Tinto says

if institutions wish to make substantial progress in educating and retaining more, especially those who have been underrepresented in the higher educational system, their communities must involve all students. They must actively engage students in the life of the classroom and allow them to gain a valued voice in the educative process. To a very real degree, our failure to make significant improvements in learning and retention over the past several decades reflects the regrettable

fact that student experience has not led students to become actively involved in learning. Instead, they have been alienated from education, seeing the task of college completion as a barrier to be overcome, a ritual to endure, rather than an experience to be valued. (210-211)

This description is no less accurate now that it was when it was published in 1993. Greater engagement and involvement is the key to greater retention, and these goals can best be achieved through smaller writing classes. Richard Light's findings from student data, discussed earlier in this article, support this claim as students recognize smaller classes and more direct contact with faculty as essential to their making the most of college.

Sue Beebe makes the further point that retaining students is cost effective for institutions. Recruiting is a very expensive enterprise, whether admissions advisers are sent to high schools or students come to visit and are given talks and meet administrators, or paper advertising or other approaches are used. It is less expensive to keep students already enrolled than to go out and find more. For this reason, retention serves the institution by saving money on recruiting. Beebe writes:

I figured that if our Fall 04 DFW rate in College Writing I had been 15%, 203 students at TX State would have received, Ds, Fs, or Ws. With the DFW rate at 8.7%, 118 students actually received Ds, Fs, or Ws. Thus, 85 more students succeeded than would have succeeded were the DFW rate still 15%—a substantial saving in instructional time and money, as well as a factor in retention and graduation rates. (Personal comm.)

Student engagement data (see Appendix 2) support these statistics and suggest that students see the value in smaller classes. Smaller classes are not just preferred by students; they actually result in a savings to the institution in terms of student retention. A broad study of national trends would surely show the same results more convincingly, demonstrating the need for smaller writing classes.

Other institutions are moving toward lower class size, including a number of large public universities. Sue Beebe has sent me the following additional data on Colorado University in Boulder and Old Dominion University in Virginia Beach:

...[I]ncreasing numbers of large public universities are beginning to take note of the advantages of small writing classes, even using writing class size as part of their institutional branding. For example, at Colorado University-Boulder, where class size has been a priority for some years, FYE [first-year English]

classes are now capped at 18. The July 11, 2005, *Virginian-Pilot* reports that Old Dominion, with 21,000 students, has made a concerted effort to lower class size in its first-semester First-Year English classes for Fall 2005:

Old Dominion University will add five full-time faculty members this fall to keep first-semester freshman-composition classes at fewer than 20 students each.

The writing courses, considered a crucial gateway to success in college, at ODU had averaged 23 students per class, above the nationally recommended level. (Pers. Comm.)

These decisions reflect the view of some institutions that smaller classes are cost effective and can help institutions meet their overall goals more effectively.

Declining by Degrees, a 2005 nationally televised report with an accompanying published book by Hersch and Merrow on problems in higher education, also supports this point about class size and its relationship to retention or student attrition. Hersch and Merrow studied a number of institutions, including both large and small colleges and universities, reporting that overall size of large institutions is a problem for many students for a variety of reasons, but particularly because of large classes. Smaller classes don't necessarily prove that students are actually learning more; such a finding would be the "holy grail" as they say (*Declining*). Clear measures that would establish this relationship specifically in writing courses in college are certainly needed in educational research. However, again as noted earlier in Richard Light's work, students report that they spend more time on smaller classes that require extensive writing and are more fully engaged by those classes. It seems reasonable to think that greater investments of time and fuller engagement are likely to produce more learning, both by-products of smaller classes, particularly in writing. Thus, if institutions wish to improve their overall performance and want to enhance students' engagement and learning, they should lower class size, particularly in those courses that entail the highest levels of writing, engagement and faculty interaction—composition courses.

It should be clear that class size is important from a number of different perspectives in college writing courses. For students, smaller classes can make a difference in how much attention they get from teachers, how deeply they engage with their coursework and how well they can develop their writing skills. Ultimately, these differences make a difference in their performance and persistence to degree completion. For teachers, there are

issues of time and pay as well as the morale-lowering problem of working in situations where the number of students they teach far exceeds the numbers called for by national organizations. Research focusing on the impact of class size on teachers makes the case for smaller classes from their perspective as well. Institutions and administrators can also benefit from smaller class sizes in writing courses. While cost is important to institutions, it must be viewed from a big picture point of view. From this vantage point, smaller classes can help students become strong writers, a key to success in college that, again, can contribute to retention and degree completion. Smaller classes can also increase an institution's attractiveness to students, boosting enrollment. Across the various Carnegie categories, many institutions have data showing the benefit of smaller classes particularly in college writing; a detailed study focused on this point could draw all this data together and prove the advantage of smaller classes. Meanwhile, for all these reasons, class size must come down.

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NOTES

¹ Achilles' work at the K-12 level suggests that lower class size not only improves students' academic performance, but also supports student learning because of its positive effect on other aspects of students' lives, including their level of engagement, an area of recent focused study by Kuh et al.

² One careful study of class size done at the college level examines economics courses, showing a statistically significant positive effect of smaller class size (Arias and Walker 311-29). Although this study does not look at writing courses, it does look at the issue of class size and controls for a number of variables, providing a valuable finding that class size really can

help students learn more effectively; this research also suggests a methodology that might be useful to national organizations in studying this question with respect to composition courses. There is also specific empirical research on cognitive development and critical thinking in college classes, examining the impact of class size on student development in these areas (Fischer and Grant).

³ In a review of the literature published in 2002, education scholars Fleming, Toutant and Raptis report that the research is “contradictory and filled with problems” including trouble with methodology and statistical validity (26). However, they note that associations of English teachers have consistently argued for smaller classes because of the additional work required to evaluate student writing. So, the research on class size does not present a completely clear picture, but the point about workload in this research review is consistent with Haswell’s calculations discussed previously. Lower class size certainly makes it possible for teachers to spend more time on student papers and provide more direct instruction to students on writing.

A final more comprehensive meta-analysis report appeared in 2002, done by Toth and Montagna of the Psychology Department at California University of Pennsylvania, looking at eight studies of various kinds of research on the effect of class size at the college level published between 1990 and 2000 (Toth and Montagna). The findings of this report are again mixed, noting that confounding variables such as methodological flaws, grade inflation, learning styles, teaching styles and so on may play a role in student performance. Final course grades, used as the measure of student achievement in most studies, may not tell the whole story about the impact of class size on student learning. Some of the studies examined in this meta-analysis do show a positive effect for smaller classes, especially if the course entails critical thinking, problem solving and other analytical skills (256-57).

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APPENDIX 1: ARIZONA STATE UNIVERSITY RETENTION DATA

Arizona State University Data

Pass rates:

Academic year comparison:

ENG 101:

Previous 5 academic years (AY 1999-00 -- AY 2003-04)

registered 24707
 passed 22249
 percentage **90.05%**
 DWE * 2437
 percentage **9.86%**

After Project 85:

AY 2004-2005 Change:
 5295
 4810
90.84% (higher is better)
 423
7.99% (-1.87% (lower is better))

ENG 102:

Previous 5 academic years (AY 1999-00 -- AY 2003-04)

registered 25140
 passed 22241
 percentage **88.47%**
 DWE * 2775
 percentage **11.04%**

After Project 85:

AY 2004-2005 Change:
 5946
 5282
88.83% (higher is better)
 655
11.02% (-0.02% (lower is better))

* DWE = Drop, Withdraw, Failure rate

ENG 101 --> ENG 102 Continuation Rate

Of those who passed ENG 101 in the fall, the number who subsequently enrolled for ENG 102 the next spring

last 5 academic years
 ENG 101 in fall 2004 --> ENG 102 in spring 2005
 ENG 101 in fall 2005 --> ENG 102 in spring 2006

Change:

88.86%
89.24% (higher is better)
89.33% (higher is better)

Student Evaluations:

100-level courses only

Professors, Lecturers, Academic Professionals, Instructors
 Teaching Assistants
 Faculty Associates (adjunct faculty)

The three semesters after Project 85:

fall 2004, spring 2005, fall 2005

Change:
 1.45
 1.63
 1.63

Previous 12 semesters before Project 85:
 1.57
 1.49
 1.56

(lower is better)
 (lower is better)
 (lower is better)

At ASU, evaluations are on a 1-5 scale, with 1 being the best.

APPENDIX 2

Department of English
Texas State University-San Marcos
From Sue Beebe, Director, Lower-Division Studies in English,
Texas State San Marcos (Master's I in Carnegie 2000)
Class Size and "DFW" Rates for First-Year Students
Enrolled in English 1310: College Writing I

<u>Fall</u>	<u>Class Size</u>	<u>% DFW</u>
1995	25.29	17
1996	24.95	15
1997	24.12	15
1998	24.06	12
1999	22.09	10
2000	21.76	10
2001	20.14	9
2002	20.53	9
2003	20.58	9
2004	18.47	8.7

Sources:

DFW Rates—IRP Grades in Selected Courses
Class size—English Department Statistical Report

APPENDIX 3

Department of English

Texas State University-San Marcos

From Sue Beebe, Director, Lower-Division Studies in English,

Texas State San Marcos (Master's I in Carnegie 2000)

Survey of Student Engagement

In Fall 1999 we conducted a survey of several engagement indicators. Of 1,493 College Writing I students surveyed,

- 96% agreed (with 56% strongly agreeing) that “This course gave me opportunities to interact with the teacher, both in and out of class meetings.”
- 97% agreed (with 62% strongly agreeing) that “This course gave me opportunities to interact with other students in the class.”
- 99% agreed (with 75% strongly agreeing) that “This course gave me opportunities to think, to write, and to participate in discussion rather than to merely memorize information.”
- 97% agreed (with 66% strongly agreeing) that “I received frequent comments on my writing from the teacher and/or from other students in the class.”
- 92% agreed (with 48% strongly agreeing) that “Success in this course required me to spend substantial time on assignments both in and out of class.”
- 96% agreed (with 55% strongly agreeing) that “The teacher communicated high expectations and required me to perform to high standards.”
- 94% agreed (with 75% strongly agreeing) that “This course provided opportunities to learn in a variety of ways, such as writing, reading, listening, speaking, and working in groups.”
- 96% agreed (with 75% strongly agreeing) that “The small size of this class helped me to learn.”

