



THE SUMMER BEFORE:

IMPROVING COLLEGE WRITING BEFORE FRESHMAN YEAR

*Findings from 10 Years of a
College Preparation Program*

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BACKGROUND

For the last decade the Pullias Center for Higher Education has offered a writing program for college-bound youth. By way of grounded theory, action research, trial and error, and rigorous pretests and posttests, we have learned a great deal about what works and what does not in aiding low-income youth to improve their writing skills and increase what we call “college knowledge.” Too often I have found that analyses of writing programs and college preparation programs are at either end of a continuum. On the one hand, we have analyses that are merely reports of what had been attempted but they are presented in a manner as if they are successful and deserve replication. A program will report, for example, that it began with 50 students and ended with 50 students and everyone went to college. The program is judged successful. But surely there are possible errors of sampling and learning outcomes. On the other hand, we have large-scale quantitative analyses that suggest a particular outcome for a program, but they do not capture what actually happens within a program, how it might be replicated or brought to scale. And too, what is statistically significant may be irrelevant for policy and practice.



To be sure, background information is useful to see how other programs function. Metadata that report findings about the success or shortcomings of one or another approach are also extremely useful. But what students learn before college is by necessity embedded in a host of frameworks that frequently are overlooked or not discussed. The current obsession, however well-intentioned, with “what works” frequently

gets reduced to the outcomes of thousands of students on a writing test. Such a reductive analysis misses the nuances that occur. These nuances circumscribe action and all too often retard systemic reform.



At the same time, college readiness for America's high school graduates is only going to grow in import. High schools need to do a better job of graduating college-bound students who are able to write and communicate at a college level. Colleges and universities need to do a better job of articulating what they expect of entering freshmen.

Students who graduate from high school who are college-ready are more likely to graduate within a shorter time horizon than those who are not college-ready. The need for remediation on college campuses costs postsecondary institutions monies that could be employed elsewhere. Information alone is not sufficient to improve a student's writing skills. Simply informing a student or parents in high school that the student is not writing at grade level may provide useful information, but unless the student takes action nothing will change. More problematically, lowering what is an acceptable level for college-level writing only pushes the problem of "college readiness" further down the college road and into "career readiness." Obviously, one way to lower the need for remediation is to lower the score needed to place out of a remedial class such as the California State University recently has done. But at a time when workforce preparation skills are increasing, postsecondary institutions should expect more of students rather than less.

The challenge, then, is to think about how to structure students' learning experiences prior to their freshman year so that they arrive college-ready. In what follows, I offer an overview of the structure and logistics of the program, the theoretical framework that has guided its development, the evaluation model, the results and findings about what matters and what does not, and finally the obstacles we have faced.

PROGRAM OVERVIEW: *Goals*

The goals of the program are straightforward:

- to increase writing competence, and
- to improve students' college knowledge (CK) and better prepare them for freshman year.

From these goals have flowed the program objectives:

- to increase students' expository writing abilities,
- to improve students' grammar and language capabilities,
- to increase students' ability to serve as a self-editor and evaluator of their work,
- to have written a competent 15-page paper on a social science theme,
- to have mastered two CK skills (financial literacy and time management), and
- to provide students with resources and tools for transitioning from high school to college.

The rationale of the program is that a college-level argumentative paper gives students the opportunity: (a) to think seriously about a question of interest; (b) to build on the research of others by contributing their insights to the topic; (c) to practice important academic skills such as conducting library searches, managing time, organizing information into coherent ideas, substantiating arguments using research, presenting insights about the research; and (d) to be challenged intellectually to write a college-level essay.

Although the program occurs in June and July, planning for SummerTIME begins in the fall with fundraising and a review of the previous summer's classes. The Pullias Center has one full-time individual who oversees the programmatic activities, and one person who focuses on curriculum development and teacher preparation. One individual works part-time on the College Knowledge part of the program, and Pullias Center staff oversee the administration, budgeting, and reporting details. Beginning in January the SummerTIME staff meet once a month, and the hiring of teachers begins in March. About 6 of the 8 faculty are invited back from the previous summer, based on an evaluation of teaching by the program director, instructor availability, and desire to return. The teachers have an orientation in June, and staff meet weekly from June through the conclusion of the program.

Requirements

The requirements to be considered for the program are threefold:

- to have been admitted to a four-year institution,
- to have a letter of recommendation from a high school counselor or teacher, and
- to write a two-page personal statement.

Many, but not all, of the 100 students come from the Los Angeles Unified School District. About 60 percent have participated in a mentoring program that the Pullias Center runs during the academic year for high school seniors bound for college. Eighty percent of the students are Latino or African American and about 65 percent are women.



Prior to the first class, students must attend a half-day orientation and take a pretest that we have developed to gauge their writing ability and college knowledge. The program begins in late June and lasts for four weeks, or 20 instructional days. A typical day lasts from 8:00 a.m. until 1:45 p.m.; each student will meet with a financial aid advisor at least once after the day ends. The day has three main components: a 1.5-hour session of College Knowledge, a 1.5-hour morning writing seminar, and a 1.75-hour afternoon writing workshop. Students have lunch before the afternoon workshop.

Although there are special sessions with an invited speaker or panel, generally on Fridays, they are kept to a minimum largely because the philosophy of the program is that as much time needs to be spent on writing as possible.

PROGRAM DESIGN: *Writing*

Students produce four drafts of a 15-page paper, the first three of which receives peer and instructor feedback. The fourth and final draft is due at the conclusion of the program. Each draft is a complete paper with an introduction, multiple body paragraphs, and a conclusion. A complete paper signifies a complete cycle of the writing process.

The morning seminar is devoted to the “how” of producing college-level writing. Each day focuses on a component of writing. The afternoon session works from the assumption that feedback to one’s writing is critical and students become better writers not only by learning from others about their own writing, but also by critiquing others’ work.



Class size is approximately 10–13 students; a teacher stays with his/her class for the morning and afternoon sessions. We initially divided students into classes based on writing ability. Students who will attend the University of California, for example, are better writers, based on GPA and SATs, than students who are going to attend the California State University. However, the division of students in this manner, in a cohort of only 100 students, created a certain friction that was neither useful nor necessary. The result is mixed classes consisting of students attending a range of campuses. However for each class we do have small groups of students attending the same institutions so that they have the opportunity to get to know other students attending their same college.

College Knowledge

The College Knowledge classes are divided into two sections: one focuses on financial literacy and the other on time management. Financial Literacy sessions are meant to inform students about the financial aid processes in subsequent undergraduate years. Students will learn how to continue securing state and federal aid, conduct effective scholarship searches, and learn how to budget and save money during college. Time Management sessions highlight students' time management in college by teaching students how to balance academic, work, and social life in college. Specifically, students will learn to manage their time with regard to studying, work, campus involvement, and personal life.

“CLASSES ARE DIVIDED INTO TWO SECTIONS: ONE FOCUSES ON FINANCIAL LITERACY AND THE OTHER ON TIME MANAGEMENT.”

The classes rotate so each class receives roughly 10 hours of instruction on each topic. We chose these two topics largely because of the lack of financial understanding on the part of low-income first-generation youth. A significant body of literature also has pointed out the problems students encounter during their freshman year with regard to managing their time in a largely unregulated environment as opposed to the

to the relatively rigid structure students have become accustomed to in high school.



The final day of the program students take a posttest that is then compared with their pretest. They also have a section that delineates how much they learned from College Knowledge and provide feedback about the program. The program ends with a graduation ceremony where each class makes a short presentation, an invited speaker offers remarks, and we provide a barbecue for everyone.

THEORETICAL FRAMEWORK

The scaffolding of the theory of action for the program is twofold. First, we assume that students need to develop learning strategies for college success that are framed by self-regulated learning. The assumption here is that learners need to have a sense of self-efficacy and control over their work. They are reflective learners who come to believe that their work may improve through the tasks they undertake. Our assumption is that, although in many of the schools that the students have attended they may not have had opportunities for these sorts of activities, self-regulated learning is essential for work in four-year colleges and universities.

We have coupled the idea of self-regulated learning with the idea of group learning, which may seem self-contradictory. Group learning assumes that individuals learn within a group rather than as autonomous individuals. The purpose of SummerTIME, however, has been to enable, foment, and sustain self-regulated learning within the activities and actions built by a group.

“THE PURPOSE OF SUMMERTIME HAS BEEN TO ENABLE, FOMENT, AND SUSTAIN SELF-REGULATED LEARNING WITHIN THE ACTIVITIES AND ACTIONS BUILT BY A GROUP.”

From this perspective, rather than teaching and learning occurring as if each individual is an autonomous learner, we have constructed activities whereby students learn from one another. Indeed, learning is impossible without the comments and criticism of the other learners. Such learning, however, not only occurs within a group but also enables reflection on the part of the individual learner. Students do not simply receive feedback on a paper from the instructor once the text is complete, but instead, are involved in activities where they work with one another on a text that gets revised four times. The student is responsible for his or her final product, but that product has been informed and bolstered by group action.

The dynamics of the program and the classes, then, move in two manners in consort with one another. By way of revision a student learns from other students and provides feedback to one's classmates. The assumption is that the improvement of one's text is impossible without interaction with other individuals. At the same time, those sorts of interactions help create a reflective identity for the individual that motivates the learner. Thus, self-regulated learning with regard to the improvement of writing occurs by way of the group.


EVALUATION MODEL

Evaluation has been essential for the program, not only to gauge the progress students have made in their writing, but also to enable us to change one or another aspect of the curricular design. There are two major components to the evaluation: (a) writing and (b) college knowledge. Each utilizes a pre-post comparison group design to obtain quantitative data in assessment of the program. The pretests are distributed during the program orientation sessions in June. The posttests are given during the program's last week. One test assesses students' college knowledge and the other is a writing test.

A comparison group of similar students (underrepresented, graduating seniors of Title I LAUSD high schools who are attending a four-year university) was secured. These comparison students were given the same pretests—writing and college knowledge—in June, at approximately the same time as the SummerTIME orientation. The students were invited to campus at the end of July to complete the posttests. To encourage their participation, we provided a financial incentive of \$50 for completion of pretests and posttests.



We also included a qualitative aspect for the writing evaluation. Writing classrooms and instructors were observed during the first and last week of classes by trained observers. Points of observations included students' understanding of college-level expectations, students' demonstrated self-efficacy in college writing, and students' motivation and engagement in class.



Students are given a writing prompt that they respond to in essay format during a 45-minute period. The prompt is adapted from a four-year university writing prompt to reflect writing assessment at the college level. The model of assessment follows a gains or revision model. In traditional single-sample models, students' writing is assessed during a timed period. In the revision model, two samples of students' writing are taken. Also important, during posttest administration, students receive their pretest essay. During the posttest, students are instructed that they can revise or rewrite their essay as they find necessary. This process is aligned with the literature described above regarding college-level writing skills. Since SummerTIME's main curricular goal is to teach revision, an assessment process that measures this specific skill is warranted. Research suggests that these models may be a better representation of students' college-level writing ability than simple "one-shot" exams that are divorced from student products and classroom contexts.

The writing test is scored according to a six-point rubric, which is consistent with national standards of four-year university grading schemes. Scores of 4 and above indicate college-ready writing, whereas scores of 3 and below suggest remedial-level writing. Graders who have experience grading writing placement exams at a four-year university are hired. Two graders review the essays and give the student a score. In the event that a student's essay received two grades that differed, a third grader of similar experience reviews the essay for the tiebreaking score. This process is used to ensure inter-rater consistency. Raters are not told the identity of the students' essay, which test was the pretest or posttest, nor which students were in the intervention group. This information is withheld in order to protect against any possible biases in scoring.

The college knowledge test includes 10–11 questions per stream (financial literacy, time management). The questions follow a multiple-choice format. There is one correct answer per question, with three answers that are common misnomers or misconceptions of the topic area. The items thus become dichotomously coded (where 1=correct and 0=incorrect). The test consists of conceptual items that test knowledge about college as well as situational questions. Two expert reviewers, one with expertise in college access and transition, and another with expertise in self-regulation theories of college students, review the questions for content validity.

RESULTS

Over the course of the program history the findings have been consistent. Student learning has been high with regard to the improvement of writing. Although students have demonstrated knowledge of the College Knowledge curricula, we are less certain that the demonstration of issues relating to time management, for example, gets translated into practice once a student arrives on campus. Some of the findings from the most recent study were:

- **60%** of SummerTIME students who were classified as remedial at the start of the program according to a writing pretest were classified as college-ready on the writing posttest.
- **80%** of SummerTIME students improved by one score or more on a writing test from pretest to posttest.
- Participation in SummerTIME was associated with an approximately **50%** greater chance of receiving a college-ready score on the writing posttest than being in the comparison group.
- After controlling for background factors, previous achievement, and college knowledge pretest scores, participation in SummerTIME was associated with an increase of **5%** on the college knowledge posttest.



FINDINGS: *What Works*

Over the last 10 years we have been able to distill our ideas about writing into four principles that have correlates not only in our work, but also in the research literature.

PRINCIPLES

1. *Set specific and understandable goals.* Abstract test scores—“You score in the 85th percentile”—do not help students, especially first-generation learners, know if they are underprepared to write in college. If students somehow discover they are not good writers, they have no idea what they need to do to improve. Teaching students the skills they need to acquire to write at college level is the first step to making remedial writing a onetime experience.
2. *Teach students how to revise.* What students need to understand is how to make the essay they just wrote better. A teacher’s general comments at the end of an essay, the usual practice, are like an autopsy report: They may tell the student why the paper is weak, but they do not help the writer fix the problem. Research and experience show that students learn best through rewriting their text, a practice enhanced by clear, consistent, and meaningful feedback.
3. *Teach summarizing, not analyzing.* Critical thinking in and of itself is not a precursor of good writing. Putting thinking into words, sentences, and paragraphs is the endgame, and that crucially involves the ability to summarize material, a more concrete and therefore teachable skill. If students are able to summarize what they have read, they can better grasp how to put together their own arguments.
4. *Require more and longer writing.* Budgetary pressures have led to increased class sizes, making short-essay assignments—and cursory instructional comments—the norm. That is not going to help students improve their writing. Longer papers would make the last-minute, overnight writing session tougher to pull off, if not impossible, and help students develop complex arguments. The more students are assigned manageable writing tasks with successive deadlines, the more opportunities they will have to improve their writing.

CORRELATES

- 1 . Teach students strategies for planning, drafting, and revising their compositions.
- 2 . Teach students strategies and procedures for summarizing reading material which improves their ability to concisely and accurately present this information in writing.
- 3 . Develop learning strategies in which students work together to plan, draft, revise, and edit their compositions.
- 4 . Set clear and specific goals for what students are to accomplish with their writing product. This includes identifying the purpose of the assignment as well as characteristics of the final product.
- 5 . Teach students how to write increasingly complex sentences that convey simple, clear ideas. Instruction in combining simpler sentences into more sophisticated ones enhances the quality of students' writing.
- 6 . Provide teachers with professional development in how to implement the process writing approach.
- 7 . Engage students in activities that help them gather and organize ideas for their compositions before they write a first draft. This includes activities such as gathering possible information for a paper through reading or developing a visual representation of their ideas before writing.
- 8 . Provide students with good models for each type of writing that is the focus of instruction. These examples should be analyzed, and students should be encouraged to imitate the critical elements embodied in the models.

OBSTACLES TO SUSTAINABILITY

A conundrum exists. SummerTIME works. The Pullias Center is able to demonstrate through pretest and posttests that student writing improves prior to attendance at a four-year institution. A model also exists for the structure of the program that presumably could be scaled up in the same location or exported to other locations. Unlike many other programs that have neither a discernible model nor an evaluative component, SummerTIME has both. What, then, prevents the program from expansion? Five hurdles exist.

INSTABILITY OF FUNDING

The program has existed through grants from local and national foundations, state agencies, and the federal government. Although we have been able to provide the necessary services every year and even grow and expand in some areas (such as financial aid counseling), the instability of funding makes the program unsustainable over a long-time horizon. The purpose here is not to enter into a discourse about how foundation and governmental agencies' priorities shift often on a whim, but the result is that programs such as SummerTIME suffer due to an unstable funding base. Further, funders frequently have a particular priority which makes the development, sustainability, and expansion of a program difficult, if not impossible. A foundation provides programmatic support one year, for example, and its board decides to shift to financial aid the next. Such shifts make planning haphazard and expansion impossible.

THE COST OF THE PROGRAM

The cost of the program is roughly \$3,500/student. One of the ironies of such a cost is that program officers often have commented that the cost is higher than other programs where programmatic activities may be as low as \$500/student. The irony, of course, is that any middle- or upper-class parent would spend much more than \$500 for a month's worth of activities in the summer for their son or daughter. When the Educational Testing Service did a comparative analysis of our program with other similar programs they found ours to be the most cost-effective with the greatest learning outcomes. One of the primary reasons that we have been successful is that the assumption of SummerTIME is that teachers need to have a pedagogical structure that enables active engagement of everyone in the class. The result is that class size is never larger than 13 students. The program also requires constant attention throughout the year which necessitates a staff. The simple point is that writing improvement for first-generation, low-income students who largely attend low college-going high schools requires a program that will cost what we have created.

AND SCALING UP

TEACHERS AS INTELLECTUALS



The curricula we have developed are a model that may be exported and used by other programs in other cities. However, it would be a mistake to assume that the curricula are “teacher-proof.” We are very clear about the underlying assumptions of the program, the structure that exists, the weekly goals and activities, and what needs to be accomplished each day. From this perspective, the program is quite different from college-level classes where administrators and instructors

in general have only the vaguest ideas about what occurs in a colleague’s classroom. One core assumption of academic life is that professors have broad leeway, academic freedom, if you will, to determine the content of a course and teach the course in a style that he or she sees fit. SummerTIME is the opposite, but by no means have we assumed that because the program has a structured curriculum that anyone could teach the course. To the contrary, the sort of teachers that we have worked with not only have a set philosophy about teaching and about students, but they also are adept at using a structured curriculum in a way that enables modification during the class based on a student comment. Sometimes, those who put together a structured curriculum do so in an attempt to ensure that whoever teaches the class will do so in the same way that the individual does in the adjacent classroom. Our approach is entirely different. We assume that teachers are intellectuals and the hiring of those who will teach for us is one of the most important activities that we do. The result is that scaling up SummerTIME is possible, but the caution is that it is not mechanical as if we were simply looking for additional classrooms.

CONCLUSION

MAKING SUMMERTIME COUNT

SummerTIME is a stand-alone program that students take in the summer prior to their freshman year. Although we have been able to demonstrate the gains that students make in their writing, neither the student nor the institution has benefited structurally from what students have learned. That is, some of our students still need to take a remedial course because their writing is perceived as poor even though it may have improved over the summer; others begin the year without any advanced credit. Still others may not participate in SummerTIME because their institution offers a summer program where students earn credit even if learning outcomes are unclear or negligible. A significant part of the problem of enabling credit for students who attend and succeed in SummerTIME pertains to long-standing issues that impact all of postsecondary education. In theory, transfer credit should be easy, clear, and pervasive. In reality, it is complex, confusing, and rare. If a student takes a summer program and he or she benefits from the program so that a remedial class is unnecessary, then why should the institution waste resources and the student's time requiring him or her to take a remedial class? At a time when students are under pressure to graduate as quickly as possible, why would that same student not be able to get credit for the course? And if the student has clear learning outcomes in a SummerTIME course and not another, then does it not stand to reason that credit should be provided in one program and not another?

EXTENDING SUMMERTIME

The single greatest improvement to increase learning in the program would be to extend the program's learning experiences. One possibility would be to begin the process in the second term of a student's senior year in high school; another possibility would be to extend the process during the first term of freshman year. Students learn more and more deeply when learning occurs over a longer time horizon. SummerTIME could begin on weekends during senior year; writing activities could be provided after class or on the weekend during freshman year. Student learning would improve, but the challenges that I have listed above all would need to be overcome. Program costs would rise. Student costs would go up. The organizational hurdles of working with the high schools, colleges, and universities would be significant. The impediments, then, are so considerable that we only have imagined such a program rather than attempted to implement it. But that is where programs such as SummerTIME need to go.

WHERE WE NEED TO GO AND WHERE WE ARE

A concern for college readiness is only going to grow in importance. Colleges and universities can little afford to spend scarce dollars on courses aimed at bringing students up to speed. Lowering standards so that students ostensibly are college-ready when they are not verges on being unethical. At the same time, to call for whole-scale reform of the high school curricula or to suggest that the country should implement a common core curricula as if all high school students will be college-bound may well be a good goal (or not) but I do not see such a revolution occurring in the near term.

The result is that programs such as SummerTIME with demonstrable goals need to be increased and extended. What we have learned offers a model that might be implemented in other cities and scaled up in our own city of Los Angeles. The rubrics of the model are clear and straightforward.

The challenges we have outlined are equally clear and equally straightforward which is why last year's program was our final summer program. We learned a great deal and educated over a thousand students so that when they approached their institutions they were better writers and held more college knowledge than if they had not participated in our program.

The challenge for the future is for others to take what we have learned and see if they are able to overcome the obstacles for enabling America's youth to approach academe's doorstep that much better prepared the summer before freshman year.



RELATED READINGS

- Ackerman, S. P. (1991). The benefits of summer bridge programs for underrepresented and low-income students. *College and University*, 66, 201–208.
- Albaili, M. A. (1997). Differences among low-, average- and high-achieving college students on learning and study strategies. *Educational Psychology*, 17, 171–177. doi:10.1080/0144341970170112.
- Armstrong, S. L., & Paulson, E. J. (2008). Whither “peer review”? Terminology matters for the writing classroom. *Teaching English in the Two-Year College*, 35, 398–407.
- Attewell, P. A., Lavin, D. E., Domina, T., & Levey, T. (2006). New evidence on college remediation. *The Journal of Higher Education*, 77, 886–924. doi:10.1353/jhe.2006.0037.
- Augustine, C., Sloan McCombs, J., Schwartz, H. L., & Zakaras, L. (2013). *Getting to work on summer: Learning recommended practices for success*. Santa Monica, CA: RAND Corporation.
- Belfield, C. R., & Levin, H. L. (2007). *The return on investment for improving California’s high school graduation rate*. Santa Barbara, CA: California Dropout Research Project.
- Britton, B. K., & Tesser, A. (1991). Effects of time-management practices on college grades. *Journal of Educational Psychology*, 83, 405–410.
- Bowman, N. A. (2010). Can 1st-year college students accurately report their learning and development? *American Educational Research Journal*, 47, 466–496. doi:10.3102/0002831209353595.
- Chen, H., & Volpe, R. P. (1998). An analysis of personal financial literacy among college students. *Financial Services Review*, 7, 107–129.
- Claessens, B. J. C., van Eerde, W., Rutte, C. G., & Roe, R. A. (2007). A review of the time management literature. *Personnel Review*, 36, 255–276. doi:10.1108/00483480710726136.
- Condon, W., & Kelly-Riley, D. (2004). Assessing and teaching what we value: The relationship between college-level writing and critical thinking abilities. *Assessing Writing*, 9, 56–75. doi:10.1016/j.asw.2004.01.003.
- Conley, D. T. (2007). *Toward a more comprehensive conception of college readiness*. Eugene, OR: Educational Policy Improvement Center.
- Conley, D. T. (2008). Rethinking college readiness. *New Directions for Higher Education*, 2008(144), 3–13. doi:10.1002/he.321.

- Fitzgerald, J. (1987). Research on revision in writing. *Review of Educational Research*, 57, 481–506.
- Graham, S., & Perin, D. (2007). A meta-analysis of writing instruction for adolescent students. *Journal of Educational Psychology*, 99, 445–476.
- Hooker, S., & Brand, B. (2010). College knowledge: A critical component of college and career readiness. *New Directions for Youth Development*, 2010(127), 75–85. doi:10.1002/yd.364.
- Horn, L., Kojaku, L. K., & Carroll, C. D. (2001). *High school academic curriculum and the persistence path through college: Persistence and transfer behavior of undergraduates 3 years after entering 4-year institutions*. Washington, DC: U.S. Department of Education.
- Kellogg, R., & Raulerson, B. (2007). Improving the writing skills of college students. *Psychonomic Bulletin and Review*, 14(2), 237–242.
- Mandell, L. (2008). Financial literacy of high school students. In J. J. Xiao (Ed.), *Handbook of consumer finance research* (pp. 163–183): New York, NY: Springer.
- Mandell, L., & Klein, L. S. (2009). The impact of financial literacy education on subsequent financial behavior. *Journal of Financial Counseling and Planning*, 20, 15–24.
- Porter, A. C., & Polikoff, M. S. (2011). Measuring academic readiness for college. *Educational Policy*, 26, 394–417 doi:10.1177/0895904811400410.
- Reardon, Sean F., (2011). The widening academic achievement gap between the rich and the poor: New evidence and possible explanations. In R. Murnane & G. J. Duncan (Eds.), *Whither opportunity? Rising inequality and the uncertain life chances of low-income children*. New York, NY: Russell Sage Foundation Press.
- Strayhorn, T. L. (2011). Bridging the pipeline: Increasing underrepresented students' preparation for college through a summer bridge program. *American Behavioral Scientist*, 55, 142–159. doi:10.1177/0002764210381871.
- Venezia, A., Kirst, M., & Antonio, A. L. (2003). *Betraying the college dream: How disconnected K–12 and postsecondary education systems undermine student aspirations*. Pao Alto, CA: Stanford Institute for Higher Education Research.
- Wathington, H. D., Barnett, E. A., Weissman, E., Teres, J., Pretlow, J., & Nakanishi, A. (2011). *Getting ready for college: An implementation and early impacts study of eight Texas developmental summer bridge programs*. New York, NY: National Center for Postsecondary Research.

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With a generous bequest from the Pullias Family estate, the Earl and Pauline Pullias Center for Higher Education at the USC Rossier School of Education was established in 2012 (the center was previously known as the Center for Higher Education Policy Analysis). The gift allows one of the world's leading research centers on higher education to continue its tradition of focusing on research, policy, and practice to improve the field.

Dr. Earl V. Pullias was one of the founding faculty of USC's department of higher education in 1957. He was the author of more than 100 research articles, primarily focused on philosophical issues in higher education, and the author and co-author of numerous books.

MISSION

The mission of the Pullias Center for Higher Education is to bring a multidisciplinary perspective to complex social, political, and economic issues in higher education. The Center is located within the Rossier School of Education at USC. Since 1996 the center has engaged in action-oriented research projects regarding successful college outreach programs, financial aid and access for low- to moderate-income students of color, use of technology to supplement college counseling services, effective postsecondary governance, emerging organizational forms such as for-profit institutions, and the retention of doctoral students of color.

GOAL

The goal of the Pullias Center is to provide analysis of significant issues to support efforts to improve postsecondary education. Such issues intersect many boundaries. The Center is currently engaged in research projects regarding effective postsecondary governance, emerging organizational forms such as for-profit institutions, financial aid and access for students of color, successful college outreach programs, the educational trajectories of community college students, and the retention of doctoral students of color.

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