

Preparing Underprepared Students for College: Remedial Education and Early Assessment Programs

William G. Tierney and Lisa D. Garcia

Abstract: Postsecondary level remediation has recently received a great deal of attention with the public questioning the efficacy of spending money on remedial classes, and scholars questioning whether such courses are effective in helping students graduate. The California State University (CSU) system has responded to the challenge of remediation by creating an Early Assessment Program (EAP). The authors discuss the EAP's strengths and weaknesses, questioning whether testing students is the best route to overcoming the problem of remediation.

Introduction

Remedial education at the postsecondary level has received a great deal of attention over the last decade (Attewell, Lavin, Domina, & Levey, 2006; Grubb & Oakes, 2007). While scholars agree that several definitions exist, Parsad and Lewis (2003) at the National Center for Education Statistics (NCES) define postsecondary remedial education as "courses in reading, writing, or mathematics for college-level students lacking those skills necessary to perform college-level work at the level required by the institution" (p. 1). Many American high school graduates gain admission to four-year postsecondary institutions only to find that they are not prepared for college-level work. As a result, the number of remedial courses in reading, writing, and mathematics has increased at four-year postsecondary institutions. The public has questioned the efficacy of public postsecondary institutions spending money on classes that are not postsecondary. Scholars also have questioned whether such courses are effective in helping students to graduate from college. Regardless of one's position on the cost and effectiveness of such courses, one point is clear: students are better off if they arrive at higher education's doorstep prepared for college-level work.

Public postsecondary institutions have fashioned different responses to how to improve preparedness. Some institutions have set higher standards for admission so that those who are not ready for college-level work simply are not admitted. Other institutions have continued admitting underprepared students and provided them with remedial courses. And still other institutions are trying to ameliorate the problem. One possible way to solve the problem is to offer an assessment for students in high school that enables the student and the institution to gauge whether he or she is prepared; if the student is not prepared, the student

might then take coursework while in high school to better prepare for college.

The desire to ameliorate the problem of underprepared students by way of assessment is under consideration in numerous states (Long & Riley, 2007) and is the focus of this paper. We discuss how one public state university system—the California State University (CSU)—has responded to the challenge of remediation. We begin with an overview of the current state of postsecondary remedial education in the United States, and then consider the effects it has on student outcomes. In order to narrow the discussion, we focus on remedial English skills. We then consider the specifics of the CSU System's efforts in preparing California high school students for college-level English work. Our purpose is to bring into question if claims can be made that these efforts have succeeded, or if they even have the potential to succeed as they are currently configured in significantly reducing the need for English remediation at CSU campuses.

Underprepared Students and Postsecondary Education Background

Underprepared students have participated in American higher education for well over a century (Boylan, Bonham, & White, 1999; Merisotis & Phipps, 2000). Students at all levels of postsecondary education have long been the beneficiaries of tutoring services, intensive instruction, and preparatory programs aiming to get them caught up in academic skills and practice. Scholars point out that remedial services in the postsecondary setting have contributed to many students' successes in postsecondary education, allowing students of varying abilities and backgrounds to continue formal schooling past the secondary level (Boylan et al., 1999; Lavin, Alba, & Silberstein, 1981).

Using data from the National Center for Education Statistics' 1982 Postsecondary Education Transcript Study, Wirt et al. (2001) reported that a higher percentage of community college students than four-year college students were assigned to remedial courses. Approximately 63% of students who attended only a two-year institution and 64% of those who attended both two- and four-year institutions enrolled in at least one remedial course. Forty percent of those who attended only a four-year institution enrolled in at least one remedial course. Depending on the college or university, students place into a remedial course by way of a placement exam (either institution-specific or a standardized exam such as the SAT) prior to the beginning of classes, but after having been admitted to the institution. Public two-year institutions are more likely than any other type of postsecondary organization to offer remedial courses; 98% of public two-year colleges in 2000 offered at least one remedial course. Public four-year universities are also more likely to offer remedial courses and have a higher percentage of students taking remedial courses than their private counterparts (Parsad & Lewis, 2003).

Within the ranks of remedial education are high numbers of students who successfully completed college preparatory tracks in high school (Attewell et al., 2006). For example, in California, 33.5% of high school graduates in 2003 completed the college course requirements for admission eligibility to California State University (CSU) and the University of California (UC) (California Postsecondary Education Commission [CPEC], 2005b; California State University [CSU], n.d. d; University of California [UC], n.d. b). However, even exceeding the minimum required courses, as many CSU and UC applicants do, does not ensure a student's college-readiness at the time of high school graduation (Redden, 2007). Many of California's high school students are qualified for admission to the state's four-year public institutions—approximately 14.4% for the UC and 28.8% for the CSU in 2003 (CPEC, 2005a). In the CSU, approximately 37.5% and 45.3% of the 46,081 fall 2006 regularly admitted first-time freshmen needed remedial course work in mathematics and English respectively, while only 69.8% of fall 2006 UC enrolled freshmen satisfied the UC Analytical Writing Requirement (CSU, 2007b; UC, n.d. a). These students are underprepared for the rigors of college-level academic work and study.

Compounding the significant numbers of underprepared students in California is the ethnic and socioeconomic distribution of the underprepared. Roughly 63.2% of African Americans and 62.0% of Mexican Americans needed English remediation in fall 2006 (CSU, 2007b). The spring 2007 cohort who took the early assessment exam of the CSU System shows that 92% of economically disadvantaged students needed remediation in English (Educational Testing Service [ETS], n.d.). Given the numbers of students who are identified as underprepared for CSU-level English coursework by the university's placement test and early assessment sections, any early assessment effort has a significant challenge in helping California's high school students—especially historically underrepresented students—become CSU-ready by high school graduation.

One concern pertains to the effect of remedial education on overall degree attainment rates. Clifford Adelman (1996) has shown an inverse relationship between a student's need for remediation and completion of a degree. Further, for those students who are unable to

secure a place in a four-year institution, beginning their postsecondary careers at a two-year community college rather than at a four-year institution decreases their chances of obtaining a baccalaureate degree (Dougherty, 1987; Grubb, 1991; Shaw, 1997). Examining National Educational Longitudinal Study of 1988 (NELS: 88) data, Attewell and colleagues (2006) found that, on average, "students who took remedial coursework in reading at a four-year college had between a 7% (logistic model) and 11% (propensity model) lower probability of completing a degree than otherwise identical students who did not enroll in remedial reading" (p. 909). They conclude that taking remedial courses in reading has a negative effect on graduation for students underprepared at four-year institutions. Students who start in remedial coursework often do not complete a baccalaureate degree, citing extra courses, time, and money as reasons contributing to noncompletion. Breneman and Haarlow (1998) point out that remedial students are also often limited to the courses they can enroll in while they are completing remedial coursework depending on the institution they attend. Further, many students do not receive credit towards a degree for remedial courses.

Looking at the three main areas of remediation (mathematics, reading, and writing), scholars have found that particular academic skill shortcomings hinder students in different ways. Adelman (1998) pointed out that "when reading is at the core of the problem, the odds of success in college environments are so low that other approaches are called for" (p. 11). Simply stated, students who lack strong English language skills are at a significant disadvantage compared to their well-prepared peers (Adelman, 1996; 1998).

The concern over whether students are receiving the appropriate preparation for postsecondary work while in secondary school in part has sparked the current standards movement (Hoyt & Sorensen, 1999). Education practitioners and scholars see a link between the underpreparation of students in secondary school and their inability to do college-level work (Hoyt & Sorensen, 1999; Kirst, 1998). Because of this link, colleges and universities are increasingly creating partnerships with high schools in order to address and remedy the remedial education problem while students are still in high school (Hoyt & Sorensen, 1999). These partnerships attempt to bridge the gaps between the two educational systems by identifying students who are not ready for college-level work while they still have time to catch up in high school (Merisotis & Phipps, 2000).

State Postsecondary Responses to Underprepared Students

In light of the remedial English and mathematics problem in higher education, a number of state and large urban public colleges and universities in Florida, Massachusetts, and New York have recommended policies that would locate all remediation within the community college sector (Shaw, 1997). Since 1985, four-year institutions in Florida have contracted with the two-year state colleges to offer whatever remedial instruction that is needed by the four-year students (Breneman & Haarlow, 1998). In 1995, the City University of New York (CUNY) attempted to move all students who needed more than a year of remediation from its senior colleges to the system's community colleges and night schools in the attempt to limit costs of providing such services in the senior colleges. The plan had the

potential to affect two-thirds of the entering freshman population at the senior colleges who start their college careers in remedial courses (Gumport & Bastedo, 2001). A similar CSU System policy impacts students who do not transition from remedial coursework to college-level coursework within a year. Current numbers (fall 2005 to fall 2006) show that 4,115 CSU students did not successfully complete remedial coursework after the first year of enrollment (CSU, 2007a). Of these, 2,742 students were not allowed to reenroll in the CSU the following year.

Other states have attempted additional strategies. Ohio, Oklahoma, and Illinois, for example, have created an early placement exam (Long & Riley, 2007). Montana, New Jersey, and Oregon have suggested holding secondary schools responsible for the underpreparedness of students by passing the cost of postsecondary remedial education to the states' K-12 school districts (Merisotis & Phipps, 2000; Shaw, 1997). Ruppert (1996) explains that legislators are split three ways—34% agreed, 32% disagreed, 32% neutral—in response to the statement that colleges and universities should give remedial education more attention. However, virtually all legislators agreed that underprepared college students are a problem inherited from the K-12 sector.

Thus, although the success of remediation varies based on factors such as intensity, type of classes, type of student, and institution, a few overarching conclusions can be reached. Those in a four-year institution prefer not to have to offer such classes, and when they do offer them they have varying rates of success in enabling students to persist. The topic of remediation is of public policy concern on national, state, and institutional levels, but a solution has proven elusive. Shaw (1997) explains that “remedial education has recently emerged at the forefront of educational policy debates at the district, state, and national levels [and it] is a result of the reemergence of long-standing ideological debates regarding the nature and purpose of ‘higher learning’” (p. 285). We turn now to one possible solution by first describing the genesis of the CSU program, what the program entails and how it is perceived, and then consider how successful it has been.

California State University's Early Assessment Program Background

The California State University (CSU) system, the nation's largest university with 23 campuses and more than 400,000 students, has struggled with the remedial education issue for over a decade. The university enrolled 50,144 first-time freshmen in fall 2006 (CSU, n.d. a). Of these first-time freshmen, 46,081 students were required to prove their English and mathematics proficiency either by way of a standardized test or the CSU placement exam; 20,860 students were placed into remedial English courses and 17,303 went into remedial mathematics courses (CSU, 2007b).

The financial cost of providing wide-scale remedial education in the CSU System is considerable. One figure estimates that the CSU System spent approximately \$9.3 million in remedial education services to students in 1995 (Breneman & Haarlow, 1998). The California Legislative Analyst's Office (2006) estimates that in 2005, the state of California paid about \$7,500 per full-time equivalent (FTE) student

to provide remedial courses. While the CSU System does not publish how many FTEs are spent on remedial education annually, education analysts estimate that in recent years, the figure is between \$3,800 and \$5,500 per year. With these FTE estimates, the CSU System is spending between \$28 million and \$42 million a year to provide remedial education to CSU students. In 2004, David Spence, then-CSU System Executive Vice Chancellor, stated that the expenditure could be as much as \$30 to \$35 million a year (Mills, 2004). Regardless of the estimate one chooses to accept, the amount of money the CSU System invests in remedial education is by any measure sizable.

The CSU System Board of Trustees, in response to the remedial education dilemma, proposed shifting all of its remedial education to the community colleges insofar as so many remedial courses “threaten[ed] the value of a CSU diploma” (Gallego, 1995, p. 3). When the CSU System Trustees' plan failed to be supported by the California community colleges and other educational leaders, alternatives were considered. One suggestion was to deduct part of the cost of university remedial courses from state aid to state-supported high schools (Kirst, 1997). In responding to the overwhelming numbers of students in remediation, CSU System officials proposed and adopted a comprehensive remedial education program that focused on identifying and correcting the problem at the secondary level. The need for remedial education would be identified and remedied before students moved to one of the campuses.

Early Assessment Program

The Early Assessment Program (EAP) is a collaborative effort among three California state entities: the CSU System, the California Department of Education, and the California State Board of Education. The goal of the EAP is to “ensure that college-bound high school graduates have the English and mathematics skills expected by the state university” (CSU, n.d. b). The EAP seeks to remedy the remedial education problem by providing California high school students with an early indication of whether they are ready for college-level coursework in English and mathematics. EAP tests are taken in the spring semester of 11th grade as part of California's public school testing and accountability system. The augmented EAP tests have been developed by teams of CSU and K-12 public school instructors; the teams have spent a considerable amount of time assessing the validity and reliability of the test. The CSU System Board in 2008 also asked them to undertake a more extensive assessment (CSU, 2008a). Both groups of instructors ensure that the California high school standards and the CSU System placement standards are covered in the exams. The English and math sections of the EAP are composed of an additional 15 questions; the English section also includes an essay (CSU, 2006).

All 11th grade students attending public high schools in California receive a letter in the winter of their junior year that invites them to take the optional EAP English and mathematics tests later that semester when they take the mandatory high school standards tests. Of the 461,682 11th grade students who took the mandatory state standards exams in spring 2007, 342,348 of them participated in the English EAP. Eighty-three percent (282,775) of the test-takers were notified that they did not demonstrate readiness in college English (ETS, n.d) (Table 1).

Table 1

Early Assessment Program (EAP) Results, 2007

Reported California Standards Test (CST) Enrollment in Grade 11: 461,682			
	EAP	CST	Participation Rate
Students Tested	342,348	440,763	78 %
Ready for College	55,206 16 %		
Did Not Demonstrate College Readiness on this Assessment	282,775 83 %		

Source: Educational Testing Service (ETS). (n.d.). *Early assessment program (EAP) 2007 test results*. Retrieved October 2, 2007, from <http://eap.ets.org/eap2007/viewreport.asp>

Students find out if they passed the EAP in the summer between the 11th and 12th grades. If a student demonstrates readiness on the EAP English section, the student is excused from taking further placement tests upon admission to a CSU campus. Everyone else will have to take a placement exam after they are admitted. In order to prepare for the placement test, the letter the student receives suggests they enroll in additional English (or math) courses. One possibility is a specially designed English class by CSU faculty and high school teachers, but very few schools offer the class (CSU, n.d. c). Additional options that students might utilize are to take an Advanced Placement (AP) or honors course in their school. Students also may make use of the CSU System Web site and work on various online preparation exercises (CSU, n.d. b).

The potential of the program is significant. If the EAP is a framework for success, then the implications are significant for all of American higher education. Indeed, prestigious foundations such as the Lumina Foundation, as well as the United States Department of Education, already have touted the program as a model to be emulated even before results have been shown. A recent issue of *Focus* magazine, for example, stated that the EAP “is playing a huge role in helping [students] realize [their] dream [of earning a college degree]” (Lumina Foundation, 2007, p. 4). Further, “EAP is expected to have a huge and positive impact on the state’s public higher education institutions and the students they serve” (p. 5). The Institute of Education Sciences (IES) identifies the EAP as one of its “programs, practices, and policies that are effective for improving access to or persistence in postsecondary education” (2007, p. 44). In her remarks at the 2006 U.S. University Presidents Summit on International Education, U.S. Secretary of Education Margaret Spellings encouraged postsecondary institutions to work more closely with state and local school officials to implement early assessment programs like EAP. The Campaign

for College Opportunity (2007) cited EAP as a “practice with promise . . . [that is] remarkable” (p. 2). These statements, however, are based on very little data. Our purpose here is to bring into question whether students who are notified early of their non-readiness for college-level coursework are at any advantage to their counterparts who do not partake of the program and are admitted to the CSU.

Good Intentions: Analyzing the Early Assessment Program

Described as a “promising collaborative . . . between K–12 and postsecondary systems” (Callan, Finney, Kirst, Usdan, & Venezia, 2006, p. 8), the EAP is unique in that it attempts to remedy the under-preparedness of college freshmen by informing high school students of their readiness for college-level work before they have submitted college and university applications. In theory, early notification provides students with ample time to get ready for college-level work. Early notification also provides incentives for students who are and are not prepared for CSU-level work. For those who pass the EAP, they will not have to bother with any additional English placement exams. For those who are not prepared, they have a more clearly defined goal in preparing for college-level work, and the path to that goal presumably is clear.

However, a student who is not ready for English college coursework can only prepare for college-level work as best as possible given the resources of one’s respective high school. The high schools where low-income students attend in general do not provide the courses necessary to enable potential remedial college students to overcome their English deficiency. The only certain preparation for students not ready for CSU-level English coursework is to review the online materials offered to all students. Presumably, the materials will help the individual pass the university placement exam, allowing for placement and subsequent enrollment in college-level English.

According to the CSU System EAP Web site, the EAP serves all stakeholders (students and the citizens of California) by ensuring that CSU-bound students are being well-prepared for college coursework. Students “get an early wake-up call about their preparedness for college” while “citizens of California can be sure that required high school standards and tests are meaningful, have consequences, and connect to readiness for college” (CSU, n.d. b). Most importantly, all Californians “can know that the state’s resources are being used wisely” in the education of its youth (CSU, n.d. b).

The program’s ambitious goals, however, face several hurdles and, at present, there is virtually no evidence that the specific goals of the program are successful in any significant manner. In the junior year in high school, every 11th grade student (as well as teachers, counselors, superintendents, and others) receives a letter encouraging the student to take the English EAP. Although students take the exam, as noted above, over 80% fail it, and there is no evidence that the failure is a “wake-up call” that enables remediation to lessen in the CSU.

Two problems exist. First, the courses that students are encouraged to take are frequently not available, or they conflict with other required courses that students need to take, or they are simply classes these students would have taken anyway. Students who are not ready for CSU-level English coursework may prove readiness by submitting a qualifying score on an approved standardized exam. Qualifying scores

include: (a) a score of 550 or higher on the critical reading section of the SAT Reasoning Test; (b) a score of 24 or higher on the ACT test; (c) or a score of 3 or higher on the Advanced Placement (AP) Language & Composition or Literature & Composition tests (CSU, 2008b). For students who cannot provide these scores, CSU System officials suggest they take the CSU-developed course that is not widely available, or an existing high school English course (e.g., Senior English, British Literature, AP English Literature) (CSU, 2008b). Parenthetically, one might wonder about the advisability of conducting remediation in Advanced Placement classes.

The result is that there has been no diminution in the number of students who take remedial English courses as college freshmen, and no decrease in the monies the state spends on remedial education. Indeed, insofar as the entire Early Assessment Program costs additional resources, the CSU System now spends more resources on remedial education than they did prior to the implementation of the EAP. The best that can be claimed is that some students learn about one year prior to admission to a CSU campus that they are college-ready. For those who are not college-ready, they remain where they were prior to having taken the exam—underprepared for college. At a minimum, the EAP has not yet succeeded in helping the CSU System Board of Trustees meet its goal of 90% proficiency by 2007 (Admission & Enrollment Updates, 2004).

The 2007 EAP results underscore an unfortunate truth in California secondary education: The majority of students who are considering enrolling in the CSU after high school are not ready for CSU English instruction. And those students who are not ready for the CSU work have less than a year to catch up to their CSU-ready peers. While the university gives all underprepared students options about what they can do to remedy their deficiencies, the vast majority of the students are directed to rely on the same secondary schools and personnel that left them underprepared in the first place for assistance in catching up. Most of the course options that students have to learn the appropriate skills are the same courses (regular, honors, AP) they would have enrolled in during their senior years regardless of their performance on the EAP. Even for those students who are able to take the limited number of CSU-developed courses at their high schools, there is still no evidence, much less a guarantee, that they will be able to catch up and learn the necessary reading and writing skills to pass the placement exam after they have been admitted (CSU, n.d. c).

Students who are not ready for college-level English fall into two different general groups. The first group of students will receive some sort of formal and directional counseling from high school teachers or counselors or from a CSU-campus official. These students receive advice about how to prepare for the placement test besides the practice exams found on the CSU Web site. Also, campus-specific EAP offices may do extra outreach and programming within their local service areas, targeting students identified as not ready by the EAP test. Students who receive these types of services and counseling have the benefit of informed and targeted guidance and instruction.

The second group of students receives no additional advice or support after taking the EAP. These students have to rely on the placement test practice exams available on the CSU English preparation Web site, and their English instructors at their high schools. Realistically, a student may not even investigate the CSU System Web site

for further information. Nevertheless, the students who receive no extra guidance or counseling are in the same situation as if they had never taken the EAP.

To be sure, the leaders in the CSU System should not be faulted for making a concerted effort to resolve a problem that shortchanges some of California's citizens of educational opportunity, and costs all California taxpayers monies that would be better spent on college-level work. Those in a postsecondary system also should be applauded when they actively involve the institution in the secondary system in a collegial manner that ostensibly helps prepare students for college-level work. However, in addition to the lack of evaluative measures, several problems plague the project that has been developed and suggest that significant shifts need to be considered, not the least of which is to suspend the extensive accolades the EAP has gotten based on sketchy evidence that it has been successful.

Testing the Obvious

First, the exam in large part states the obvious. One need not conduct a test in the second semester of 11th grade to predict which schools will have significant numbers of students who will fail the test. One component of the process is to offer help to teachers of students who fail the exam, but again, anyone who works in the public schools in the inner-cities of California knows that teachers need help without having to make students take yet another exam. Is administering a test—which costs extra time, effort, and money in administering, grading, and reporting—worth the effort if the outcomes are already known and the solutions to be proffered are either unavailable or redundant with what will be done?

Delivering the Message

Second, the viability of the program is predicated on delivering a depressing—albeit truthful—message to students that they are not ready for college-level work. The language used in the messages, however, is overly bureaucratic and not aimed at an 18-year-old audience. The notification the students receive is rudimentary and vague. The online report students access simply states that the student's "English skills are not yet sufficiently strong to succeed in required college English courses" (CSU, 2008b).

When students access the CSU System's preparation Web site for more information, they are provided with few concrete steps that they might take other than what they would do anyway (e.g., take senior-level English). Imagine if a medical doctor sent a confusing message to a patient stating that he or she had cancer and then proposed no remedy, or any remedy that was proposed either the patient had intended to do, or was unable to do. There is also no evidence on whether a student takes any action after having received the message.

Solving the Problem

One response to the issues discussed here is to revert to previous years and cancel the EAP. Although the benefit is an immediate savings of time, effort, and money, the problem of underpreparedness will remain. Indeed, the CSU System Board currently (in 2008) is reviewing yet another resolution calling for regularly-admitted first-time freshmen to be ready to take college-level English and mathematics. The

resolution focuses on the EAP as the major solution (CSU, 2008a). The resolution also highlights “the great success of the Early Assessment Program” and touts it as a “model” that is predicated on the need for students and their families to have more information (pp. 13–14). Although one cannot quarrel with the benefit of information, what we are suggesting is that there is little evidence that the EAP has been a “great success.” Simply providing information to individuals without adequate support structures is a placebo rather than a solution.

An alternative is for those in the CSU System and other postsecondary institutions to more directly involve themselves with high schools by offering a course between the junior and senior year and another one after senior year aimed at improving the writing skills of those students who need it. One of the architects of the EAP has called for the “better use of the senior year” (Spence, 2007, p. 114). From this perspective, the importance of an assessment is minimal when compared with the need for actual courses that improve writing before, during, and after a student’s senior year. Such courses have to have pre-tests and post-tests that ensure student improvement. The point here is simple: to prepare students for college-level writing, postsecondary institutions need to offer classes that equip students with the skills for college-level writing.

Conclusion

Proportionately low enrollment numbers of underrepresented and low-income students in postsecondary schools pose a difficult problem for American higher education. In an era of globalization and high competition, more high school graduates need to be prepared for postsecondary education. Unfortunately, high-quality instruction and learning is often lacking at low-performing urban high schools where student test-takers fail exams such as the EAP. Even if the EAP notifies these students at the beginning of their senior year of high school that they are not ready for college-level work, leaving them on their own to find the quality instruction they need to become college-ready is ineffective. Rather than ask teenagers to fend for themselves after they have flunked an exam, what needs to be done is to be more focused on the kinds of services that are provided.

If the Early Assessment Program cannot assure that underprepared students are adequately prepared for CSU-level work by the beginning of their freshmen year of college, then there is no significant incentive for 11th-grade students to participate in the EAP. Further, there is no tangible benefit for the citizenry to continue to support a program with tax dollars that does not significantly help in remedying the remedial education problem in California. A step in the right direction is to shift the focus from generic assessments to actually offering courses before, during, and after 12th grade that enable students to improve their writing.

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Authors

William G. Tierney, Ph.D., is University Professor and Director of the Center for Higher Education Policy Analysis (CHEPA) at the University of Southern California's Rossier School of Education.

Lisa D. Garcia is a Ph.D. student in higher education and a research assistant at CHEPA.
