Senator Scott and members of the subcommittee: Thank you for the opportunity to appear before you. The topic of today's hearing is the education doctorate. But there are two major issues at stake here, both of which are of much greater import than the supply and demand of any particular doctoral degree. As a former campus chancellor and now as UC President, my experience is that the academic labor market in any discipline is a complex and not often easy-to-understand set of supply and demand equations.

The first major issue is meeting the demands of K-12 and our community colleges for qualified and enlightened leaders. The education doctorate is part of that equation, but it is only part of it. I will address that later in my remarks.

The second issue--the main issue at stake in this discussion--is the heart and core of the current Master Plan for Higher Education and California's willingness to stand behind a formula that has been a spectacular success for this state and kept California from costly duplication at the graduate level. Make no mistake about it, changing the Master Plan's assignment of responsibility for the doctoral degree will result in the unraveling of one of the greatest and most successful social compacts ever created.

Educational leadership and the Master Plan

We would probably not even be in the fiscal position to have this discussion if it hadn't been for the 1960 Master Plan. The state's leaders saw a massive wave of student demand coming in the Baby Boom and, rather than devising ways to limit access to higher education, they committed California to one of most audacious promises any state government has ever made. In fact, as Clark Kerr has pointed out, no other nation has ever made such a promise to its citizens.

California's public universities and colleges promised that they would guarantee a space to every high school graduate and adult over the age of 18 who desired to attend. But the Master Plan was not just a promise by the colleges and universities--it was a three-way compact among higher education, the state, and the citizens of California. The Governor and Legislature made a commitment to fund each student, but it was understood that these costs would be borne by the taxpayers only if the institutions agreed to end costly and wasteful duplication of programs and unwarranted geographic expansion.
The Legislature, for its part, agreed to stop introducing bills creating new 4-year universities in members' legislative districts and instead supported a rational planning process. Colleges and universities agreed to rein in the proliferation of academic programs and develop a process whereby only high-quality and genuinely necessary programs would be funded.

But the major cost savings came from segmental divisions of responsibility and function. This occurred in two ways. First, in the admission of undergraduate students, UC agreed to tighten its admissions standards such that 12.5 rather than 15 percent of high school graduates would be eligible. CSU was to target the top 1/3rd rather than the top 1/2, and the community colleges were to handle a much greater number of the students undertaking their first two years of a baccalaureate program. Second, at the graduate level and in the research sphere, there was an agreed-upon differentiation of responsibility—high-cost graduate and professional programs, particularly doctoral education, were to be isolated in a relatively small number of research institutions that would make up the growing UC system.

Polytechnic preparation for high-level jobs in the California workforce, through the master's degree, was given special emphasis at CSU, as was teacher education. And recognizing that some CSU campuses and departments would excel and could geographically extend the reach of UC's doctoral training function, a provision was included authorizing joint doctoral degrees between UC and CSU (later expanded to CSU and independent colleges and universities).

The point about this system is—it worked! It allowed California to educate the baby boomers. And it still works. A much higher proportion of California's population, from every ethnic group and by gender, is in college now than was the case in 1960. Full-time enrollments in public higher education have increased eightfold (from 179,000 to 1.5 million) since 1960, while the state's population has only slightly more than doubled (15.3 to 35 million). Despite this growth, we have high-quality institutions in all segments.

The Master Plan has held overall costs down and has allowed California to provide the highest-quality doctoral education and research up and down the state in a way that no other state has ever achieved or is even close to achieving.

**Creating excellence and containing costs**

The fundamental premise relevant to today's discussion is that doctoral education is expensive. It is expensive no matter who does it. Doctoral education requires intensive faculty supervision of students working at the top of their disciplines, be it in history, computer science, medicine, or education. Good doctoral programs also require access to resources not just in their own disciplines, but access to resources in wide variety of fields. Education doctoral students need access to faculty, graduate-level courses, libraries, and laboratories in fields such as sociology, psychology, and statistics, and to professional programs in fields such as public policy, business, and law.

If CSU campuses were to offer this kind of education for this set of students, they would have to adopt a funding model for these programs very similar to what we use at UC. They would have
significant start-up costs and Chancellor Reed has stated that planning would take about 2 to 3 years alone. Either the state would have to directly appropriate CSU millions more for these programs, or CSU would have to shift resources from other programs--risking the quality of what they are already assigned to do under the Master Plan: provide excellent undergraduate education and what Clark Kerr called the "polytechnic" mission--training the heart of the California work force through the master's degree and educating the largest proportion of the state's new K-12 teachers.

The state has been in good fiscal shape for the last few years, but already funding is becoming scarcer at the very time we see a new Tidal Wave arriving at our institutions. We need to adhere to the Master Plan's differentiation of functions to educate this coming wave of students in a cost-effective way. And, because knowledge is becoming more complex and interdisciplinary, we will need to be even more creative in reducing duplication and overlap. Initiating doctoral-level programs at many of the State University's 23 campuses is exactly the wrong approach. It would require a substantial commitment of State resources for redundant services that the original Master Plan sought to avoid. If we undermine the structural elements of our highly successful higher education system, we may wind up training more leaders whose first task is to repair the damage we have done.

The most challenging education leadership issue facing California is not that we have too few Ed.D.s or Ph.D.s in education. It is that we do not have enough teacher and administrator leaders in K-12 positions who are both scholars and effective advocates for change. UC can address this need by expanding its existing well-regarded Ed.D. and Ph.D. programs in Education and creating new Ed.D. programs at its campuses around the state and in collaboration with CSU.

I believe we can create highly regarded and practice-oriented degree programs that will become models for the state and the nation. UC can establish such programs within our current marginal enrollment cost the State already funds us for graduate education. At UC, we are bringing forward a plan to increase our proportion of graduate students as we grow to meet the demands of Tidal Wave II and the needs of the state. Under this plan, the largest percentage increase for any field is in education. Finally and perhaps most importantly, UC can build on its existing strengths--utilizing resources in departments across each UC campus, as well as at CSU--to combine its research expertise with a degree focused on the needs of the profession, one that links practice and leadership with research and theory.

**New models of educational leadership**

The old model of educational leadership based on 19th century management principles is not what we should be replicating. We need intensive research-based programs that give future K-12 and community college leaders the skills necessary to implement current educational reforms, especially curricular-based reforms. The leader of an educational enterprise, from an academic department to a university campus, needs to be first and foremost a leader with understanding of the subject matter at hand. Such a leadership model should be successful at all levels of education, be it third-grade reading programs or managing a career-oriented technical education program at a community college.
Is the Ed.D. really a doctoral degree? CSU argues that the Ed.D. it would offer is fundamentally different from a degree UC would offer. I reject that notion. UC offers both the Ed.D. and the Ph.D., and it is true that we offer more Ph.D.s than Ed.D.s. But, both UCLA and the UC/CSU Joint Program at Fresno offer the Ed.D. to working professionals.

The two education doctoral degrees emphasize different kinds of scholarly work, with the Ph.D focusing on original scholarly work and research, and the Ed.D. focusing on applied work in the field such as policy, administration, and educational leadership in areas such as curriculum design, teacher supervision, and training. However, throughout education, it is becoming increasingly clear that both degrees must maintain their different emphases while doing a much more rigorous job of informing each other.

On the one hand, education Ph.D.s need to be practical-minded and well-informed about how schools function in communities in order to focus their research attention in ways that address California's most pressing educational challenges. On the other hand, California needs Ed.D.s who have capacity to lead efforts within schools, school districts, and communities to formulate and guide research-informed and theory-informed solutions to our many educational challenges. California requires creative, solution-oriented individuals who are also scholars. We are in danger of repeating past errors unless we provide our educational leaders a deep foundation in educational theory, history, and research. Practical, field-based scholars need sophisticated technical expertise for gathering and interpreting local data from schools and communities.

Thus, the most successful approach is likely to be one in which the research-based Ph.D. programs in education and other disciplines can inform and be informed by the practitioner-based Ed.D. programs.

**Issues in considering demand for the doctoral degree in education**

You have already heard many of the issues and some of the facts and figures regarding the supply and demand for the doctoral degree in education. Like the labor market for any academic degree, the issues of supply and demand are not as straightforward as we would like them to be. However, I want to make some general points:

- My colleagues and I in the University of California do not dispute the need for more and better-qualified individuals to take leadership position in K-12 and the community colleges.

- The chancellors, the faculty, and I are committed to ensuring that UC takes a prominent and active role in meeting those needs for educational leadership. My February 7th letter to Senator Alpert provides detail on those commitments, from doubling the number of professionals trained at the doctoral level in education to establishing a systemwide UC Educational Leadership Institute that would bring a comprehensive research-based approach to the issue.
Those two things said--that we agree there is a need and that UC will do its share in meeting that need--I want to reiterate my conviction that proliferating a large number of State-subsidized doctoral-level programs at the state university is NOT the solution to this problem, for many of the reasons already mentioned. It is similar to the notion that the teacher shortage can be solved by eliminating credential requirements for entering teachers. Emergency credentials may solve the teacher shortage in K-12, but they lower the quality of the teaching force for decades after they are granted and result in harming rather than improving overall educational quality. UC and CSU, working together, can create a rigorous, high-quality Ed.D. programs for working professionals that build on our mutual strengths.

There is another issue as well: the status of education as a profession. UC's goal is to create a truly professional Ed.D. degree that is oriented toward the future educational practitioner--the master teachers, the model principals, current and future superintendents. The premise behind UC's intensifying its activities in K-12 and community college outreach and professional development for K-12 teachers is that the University has a responsibility as the state's land-grant institution to serve California society. We have the obligation to offer our expertise in partnership with K-12 professionals. We can elevate education to the status accorded other great professions such as law or medicine within the University of California if we pursue the plan I have outlined.

There are already numerous efforts at our campuses to enhance the field of education. UC Davis is transforming its Division of Education into a new model School of Education; UCLA is successfully linking its graduate programs in education with our teacher training and outreach efforts. Similar efforts are occurring at all the UC campuses.

The 1960 Master Plan assigned medicine, law, dentistry, and veterinary medicine as the exclusive province of the University of California. As I mentioned earlier, this was due in part to the high cost of doctoral and professional education. But it was also to ensure that the University served society in key occupations and did not retreat into a narrow focus on academic questions.

I strongly believe that UC must remain committed to research-oriented Ph.D. programs that study education and are linked to its practice. But I also believe that UC could create a model Ed.D. degree that transforms the profession in the same way that the M.D. and the J.D. transformed medicine and law earlier in American history.

It is true that other states have allowed their state colleges and universities to offer the Ed.D. Few of those programs are at the same level of distinction as those on the flagship campuses, however, mainly because they are inadequately funded. State support is one aspect, but education is a discipline unlikely to receive the level of private and industry support that other professions or disciplines receive. Thus we have a special obligation not to dilute resources in this area and to create exemplary programs.

As the correspondence between UC and CSU shows, we are committed to establishing joint programs in which the combination of UC and CSU resources makes sense. Sometimes the imperative is geographic, as in the UC Riverside proposal to work with CSU K-12 networks throughout the LA Basin. Sometimes the imperative is a confluence of disciplinary expertise that
transcends geography, as in the UC Santa Barbara/Sacramento State program in public history or UC Berkeley's and San Diego State's planned joint program in evolutionary biology. Joint programs take extra effort, but if both UC and CSU are committed, we will create programs that build on our mutual strengths.

It is not true that UC made promises and failed to deliver in the past. When Chancellor Ann Reynolds of CSU sought the Ed.D. in the mid-1980s, then-UC President David Gardner made a commitment that UC would address the issue pending a CPEC study. That CPEC study concluded that "no compelling evidence exists that the supply of persons with the doctorate in educational administration will fail to meet demand within the next decade." It recommended that "no new doctoral programs in educational administration be established in any institution not now offering the degree."

Despite this finding, UC recognized, as did the CPEC study, that there were areas of the state not being adequately served. CSU and UC devoted substantial resources and established the Joint Doctoral Program in Educational Leadership (JDPEL) in Fresno with Fresno State. That program has been quite successful. Its graduates are in leadership positions up and down the Central Valley. If you talk with them, they state unequivocally that the program was better because of the involvement of UC faculty. A recent review of the program found that the presence of UC faculty in the program from more than one UC campus was a strength. According to the review, and I quote, "Students reported that having access to faculty throughout the University system is an incredible strength of the program."

While UC Davis provides the UC anchor to this program, faculty positions at Santa Barbara and UCLA are also allocated to it, and UC Merced has already committed to providing faculty as well.

President Welty and others have been quoted as saying that the program is small and is not meeting all the demand in the Valley. However, applications have remained constant over the last five years (35-40 per year). Nevertheless, we would be willing to work with Fresno State to expand that program if demand warrants. Almost all the students in the program are working full-time in various jobs in the Valley.

**Conclusion**

In conclusion, I am committed to meeting the need for educational leadership on a number of levels:

- Creation of a major new Institute for Educational Leadership to study the field and provide academics and practitioners alike the opportunity to explore the issues and propose solutions.
- Expansion of existing and creation of new doctoral degree programs in education at UC in a manner that ensures that the Ed.D. is available systemwide and in a manner accessible to working professionals.
• Expansion of existing and creation of new joint doctoral degree programs in education with CSU in order to build on the mutual strengths of the two systems and make the degree more accessible geographically.

• Ensuring that the production of doctoral degree recipients in education at UC and UC/CSU joint programs doubles within a decade.

• Rethinking the Ed.D. and its delivery in such a way as to recast the education profession in a manner similar to the way in which the J.D. and the M.D. reformed the practice of law and medicine earlier in U.S. history.

• Expanding leadership programs that do not require a doctoral degree, such as the Principals' Leadership Institutes.

• Linking doctoral training and the activities of the Education Leadership Institute with our current outreach and teacher training activities.

It is crucial that teachers trained at our successful summer institutes return to schools and districts staffed by principals and superintendents who understand and support the kinds of disciplinary-based K-12 programs the State is investing in--for the teachers to be successful, they need successful leadership.

It is imperative that the University do its share as the state's land-grant institution in addressing issues of the quality of K-12. Our own undergraduate students come primarily from California's K-12 schools, so it is in both our own interest and the state's interest to do so.

But it is also crucial to the future of the state that we do not unravel the Master Plan. UC has expanded and intensified its activities in working with the K-12 schools in a way that none of us would have imagined possible as recently as just five years ago.

Expanding and linking doctoral education more closely with these efforts is a logical next step. Graduate education is a hallmark of the University. I assure you that you will see results in this area from the University of California.

Thank you very much. I will be happy to respond to any questions or comments you might have.