

The Regents of the University of California

COMMITTEE ON EDUCATIONAL POLICY

January 22, 2014

The Committee on Educational Policy met on the above date at UCSF–Mission Bay Conference Center, San Francisco.

Members present: Regents Feingold, Flores, Gould, Island, Kieffer, Reiss, and Ruiz; Ex officio members Brown, Lansing, Napolitano, and Varner; Advisory members Engelhorn, Jacob, Leong Clancy, and Saifuddin; Staff Advisors Barton and Coyne

In attendance: Regents Blum, De La Peña, Makarechian, Pattiz, Schultz, Sherman, Wachter, and Zettel, Faculty Representative Gilly, Secretary and Chief of Staff Kelman, Associate Secretary Shaw, General Counsel Robinson, Provost Dorr, Executive Vice President Brostrom, Chief Financial Officer Taylor, Senior Vice Presidents Dooley and Stobo, Vice Presidents Allen-Diaz, Brown, Duckett, and Lenz, Chancellors Block, Desmond-Hellmann, Drake, Katehi, Leland, Wilcox, and Yang, and Recording Secretary McCarthy

The meeting convened at 1:05 p.m. with Committee Chair Reiss presiding.

1. **APPROVAL OF MINUTES OF PREVIOUS MEETING**

Upon motion duly made and seconded, the minutes of the meeting of November 13, 2013 were approved.

2. **DESIGNATION OF MERCED VERNAL POOLS AND GRASSLAND RESERVE, MERCED COUNTY, NATURAL RESERVE SYSTEM**

The President recommended that the Regents designate the Merced Vernal Pools and Grassland Reserve as the 39th component of the Natural Reserve System (NRS) to be administered by the NRS systemwide office with operational management provided by the Merced campus.

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Chancellor Leland stated that the designation of the Merced Vernal Pools and Grassland Reserve (Reserve) as part of the UC Natural Reserve System (NRS) has her strong support, as well as that of the Merced campus, the local community, and the NRS. The action would enrich the NRS and preserve the 6,500 acres as an asset for UC students and researchers. Provost Dorr expressed her strong support.

Regent Ruiz expressed his support, but asked about funding for operations. Chancellor Leland said the required funding would be no more than the campus had been supplying for the prior two years, since the campus already uses the site for research and is obligated to preserve the grasslands and vernal pools. By becoming part of the NRS, the Reserve will become more widely known, giving the campus increased funding possibilities. The campus has already initiated a campaign in the local community to restore an old barn on the land as a visitor and information center with a small wet laboratory for researchers. Provost Dorr added that the NRS would provide some additional support and opportunities for funding to support the Reserve's activities. The Merced Reserve would add a unique habitat that is currently not a part of the NRS.

Committee Chair Reiss acknowledged the William and Flora Hewlett Foundation's commitment to the Reserve.

Upon motion duly made and seconded, the Committee approved the President's recommendation and voted to present it to the Board.

3. **DEVELOPMENTS REGARDING THE THIRTY-METER TELESCOPE AND THE PARTICIPATION OF THE UNIVERSITY OF CALIFORNIA**

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Executive Vice President Brostrom, speaking in his capacity as a member of the Board of Directors of the Thirty-Meter Telescope (TMT), said this discussion would update the Regents on the TMT.

Chancellor Yang, Chair of the TMT Board of Directors for the past seven years, acknowledged the efforts of UC Office of the President Senior Counsel Scott Abrams on this project. Excellent progress has been made in selecting and negotiating for the TMT site, recruiting four international partners, securing a National Science Foundation planning grant, negotiating a master agreement, and receiving a major gift from the Gordon and Betty Moore Foundation.

Chancellor Yang emphasized the great value of the TMT for scientific discovery and education of UC students and faculty. He predicted that the TMT would be one of the premier scientific facilities of the century, by helping to understand the contents, origin, and evolution of the universe. Providing one of the largest increases in telescope capability in history, the TMT will enable measurement of physical properties of the first stars in the galaxies formed after the Big Bang, and mapping of the evolution of the universe from 13 billion years ago.

The TMT project is a continuation of more than 125 years of UC participation in world-leading observatories and astronomical research, drawing directly on UC scientists' technical innovations that led to the W. M. Keck Observatory (Keck), built and operated with the California Institute of Technology (Caltech). Development of the TMT design

was generously supported by a \$50 million grant from the Gordon and Betty Moore Foundation, which then donated an additional \$200 million toward construction. The Moore Foundation expects UC and Caltech to raise jointly \$100 million from private sources.

The TMT will be built at Mauna Kea on the island of Hawaii, near the Keck Observatory. Given the area's many environmental and cultural sensitivities, the Conservation District Use Permit to build and operate the TMT was granted only after extensive discussions and consideration of the many parties with interests in Mauna Kea.

Chancellor Yang stated that the total cost of the TMT required enlisting additional international partners. In spite of competition from two other large telescope projects, Canada, Japan, China, and India have joined the TMT project as partners. A master agreement was signed by all international partners in July 2013. Chancellor Yang thanked Mr. Brostrom, UC Santa Cruz Professor Michael Bolte, and Mr. Abrams for their leadership representing UC in the development of the master agreement.

The TMT would continue UC's long tradition of world-leading research in astronomy and astrophysics. UC access to Lick Observatory, Keck, and the future TMT attracts the best faculty researchers and students to UC and these facilities would enable them to carry out exceptional research. Chancellor Yang cited three examples. Professor Sandra Faber of UC Santa Cruz received the National Medal of Science; UC Santa Cruz Professor Jerry Nelson received the Kavli Prize in Astrophysics for his original idea of using 492 individual segmented mirrors in the design of the TMT. UC Berkeley Professor Saul Perlmutter received the Nobel Prize in Physics. The TMT was identified as a top priority by a systemwide committee of UC astronomers.

UCLA Professor Andrea Ghez, a MacArthur Fellow, emphasized the tremendous scientific potential of the TMT. She recalled that she came to UC to innovate and have access to the world's largest telescopes; she stays at UC because of its access to these telescopes, in spite of offers from many other of the world's best universities. Access to these telescopes has enabled her to explore some of astronomy's most fundamental questions. At Keck, using the revolutionary adaptive optics technology developed at UC and yielding the sharpest images ever obtained, Professor Ghez discovered a super massive black hole at the center of the Milky Way galaxy. The TMT will enable important next steps in understanding black holes. This research also engages students. The TMT will be 81 times more powerful than the Keck and will be the most powerful astronomical facility in the world, fundamentally changing researchers' understanding of the universe. Professor Ghez noted that the UC astronomical community and its international partners are unified in their support of the TMT.

Chancellor Yang said funds for the construction of the TMT would not come from the University's budget. When the TMT is completed in eight years, its operational costs would not affect the budget of the UC Office of the President.

Mr. Brostrom added that UC would be a 12.5 percent participant in the TMT project. Funds would come from the generous gift from the Gordon and Betty Moore Foundation and fundraising through UC campuses and Caltech. The four other international partners have signed the scientific authority and would sign the financial authority in the coming months. A remaining financial gap could be filled by adding another partner. Construction has started on the access road; the groundbreaking would occur this summer. Ongoing funding would come from the scheduled reduction of UC's portion of the Keck's operating costs.

Chancellor Yang added that UC Santa Cruz has one of the world's strongest astronomy programs. Chancellor Blumenthal emphasized that this remarkable opportunity is made possible by leveraging all ten UC campuses to do collectively what no single campus could have done. The TMT will keep UC at the forefront of international astronomy.

Regent Island commented that the TMT fits squarely with UC's missions of teaching, research, and public service, and said he strongly supports the project.

Regent Kieffer thanked Chancellor Yang for his leadership on the TMT.

4. **PROGRESS REPORT ON ONLINE EDUCATION AT THE UNIVERSITY OF CALIFORNIA**

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Committee Chair Reiss noted that, even before recent increased interest in online education and Governor Brown's allocation of \$10 million in support, all UC campuses had developed online courses. UC would continue to find ways to use online education to improve its students' learning experiences.

Provost Dorr reported that, since her last update on online education to the Committee, much has been accomplished through collaboration among the UC Office of the President (UCOP), the Academic Senate, and campus administrators and faculty. Students have also participated in the selection of new online courses to fund. In an effort to meet the Governor's and Legislature's expectations about online initiatives, the focus has been on online courses offered during the academic year to UC undergraduates.

Much progress has been made on the new, crucial endeavor of having UC online courses work well for all undergraduates systemwide. Projects are currently being piloted in creating a system for course enrollment and student data across campuses; establishing efficient processes in campus academic units to establish general education and major requirement credit for online courses across campuses; and establishing a searchable database of UC online courses. Work has started on finding a long-term funding strategy for offering online courses across campuses during the academic year. Ms. Dorr emphasized that all of these projects must be accomplished if the initiative for online education is to be successful.

A pilot web-based enrollment system was launched in November for UC online courses for the 2014 winter and spring quarters. Six campuses volunteered to offer 22 of their existing online courses, all developed and approved by UC faculty, to some degree to students from other UC campuses. Ms. Dorr demonstrated how the website works and shared favorable UCLA student comments about how the availability of online courses helped solve scheduling problems. She emphasized that none of the UCLA students solicited for comments said they were desperate to take certain courses, showing that UCLA has done an excellent job of providing students the courses they need to make timely progress toward their degrees.

Ms. Dorr turned to another area of major progress: new online courses developed by UC faculty with dedicated State funds. Two competitions were held to choose courses to fund that would increase the supply of undergraduate online courses available across campuses during the academic year. The team that reviewed the proposals included faculty and students. Of the 67 proposals submitted by faculty from all ten campuses, 30 proposals for development of 37 courses were chosen for funding. These courses will be offered in 2014-15. Budgets for the development of these courses are currently being established. Ms. Dorr remarked that budgets submitted for some courses were high and her office is working to establish appropriate budget levels. These new courses will be in fields of science, technology, engineering, and mathematics (STEM), arts, humanities, and social science; more courses were proposed and funded in STEM fields than in other fields. Faculty of a wide range of ages proposed courses.

Looking ahead, Ms. Dorr said efforts would continue to create and improve online course offerings, to support the capacity of campuses to develop and offer online courses, to continue development of the online cross-campus enrollment system, to begin to develop options for long-range funding, and to evaluate and determine the cost of efforts to date. All work would focus on online courses offered during the academic year, developed and approved by UC faculty for UC undergraduates across campuses, and that provide credit toward general education and major requirements. Ms. Dorr emphasized that substantial progress has been made in areas that are essential to the success of the endeavor. She reported strong engagement from campus faculty and administrators, Academic Senate committees, and UCOP staff, and expressed optimism about the project's future course.

Student observer Vanessa Garcia expressed concern that, according to materials provided with the item, future development of UC's Innovative Learning Technology Initiative would be dependent on State funding. Resources to expand the program, should it prove successful, or reform it, if necessary, would be essential to the effort's ongoing success. She suggested finding a funding source more reliable than State funding. While she agreed that UC's online education efforts should be led and reviewed by faculty, Ms. Garcia added that course development currently seemed to be dependent on individual faculty interest. She encouraged offering more online courses in the arts and humanities.

Regent Island thanked Ms. Dorr for her excellent presentation. He asked why only 30 of the 67 online course proposals were accepted for funding. He also asked Ms. Dorr to

identify any impediments she saw to the acceleration of online course development and implementation. Ms. Dorr responded that any course accepted for funding had to fit the general guidelines of being a lower-division undergraduate course, likely to meet general education and/or major requirements, and likely to be attractive across multiple campuses. The faculty course developer and his or her department chair also had to commit to offering the course during the academic year, multiple times per year, for multiple years. The proposed courses were evaluated for their use of best practices in interactive technology that would engage students deeply with the material, as well as for the extent to which the course material was well developed. Significant engagement of a ladder-rank faculty member with the course was also required. Each proposal was rated by trained readers, with faculty and student participation. Funds were available for more courses, but it was decided to fund only those courses that received high ratings and fit squarely within the criteria. Ms. Dorr reported that campuses were more comfortable with online modules created for hybrid teaching than with completely online courses, even if a course that is completely online includes synchronous engagement of students with faculty or teaching assistants. Many proposals were for online components of hybrid courses and it was decided to fund only those that would clearly benefit the education of students at multiple campuses.

Ms. Dorr said that there was currently much broader acceptance of and interest in online education among faculty than there was when she began as Provost, 18 months prior. As interest continues to grow, more proposals for courses would be submitted. She expressed her view that interest would be encouraged by soliciting participation of those willing to become involved, by providing various options, and by demonstrating the possibilities of online education. At this point, funding was not an obstacle, but the cost of developing the 37 approved courses was still being determined.

Regent Makarechian asked for an estimate of the cost of preparing an online course and whether UC accepted credits toward a degree for courses from other institutions. Ms. Dorr said that it was a campus and departmental decision whether to accept courses from other institutions for credit at UC. Students can take courses at other institutions and then individually request credit toward their degree. There is no formalized system for students to take another university system's courses identified to count toward their degree.

Regent Reiss asked for a clarification of the uses of State funding to develop online courses. Ms. Dorr said the State funding reserved for UC online education is explicitly for courses for UC students.

Regent Lansing emphasized that this is a pilot program and a work in progress. While acknowledging reported student comments that they are not taking online courses because regular courses were unavailable, Regent Lansing said it would be beneficial to examine in the future whether online courses offered a more efficient way to take certain courses across all the campuses. Given UC's mission of maintaining access and diversity, and the current shortage of science and mathematics teachers in California, Regent Lansing remarked that UC's online courses might be used in underserved area high

schools that lack qualified teachers in these subjects. Committee Chair Reiss added that online courses could eventually be offered to future transfer students, for remediation, or for continuing education for UC alumni. Ms. Dorr said that, while current efforts focus on the specific goals of the State funding, the courses developed could have other very beneficial uses.

Governor Brown asked for the highest number of students currently enrolled in a UC online course. Ms. Dorr responded that this number was between 1,000 and 2,000. Governor Brown asked about the structure of a hybrid online course that offered the most promise. Ms. Dorr said such a course would have all components available online and that the majority of requirements would not have to be performed at a particular time. The course would also provide opportunities for the students to engage in real time with a teaching assistant or faculty member online, and with one another. Ms. Dorr said that the online Dance: Cultures and Context course contained all these features.

Governor Brown asked why the online Spanish course was currently closed to new students. Ms. Dorr responded that, in order to be successful in this pilot phase, campuses offering the courses were asked to specify the highest enrollment from their own campus and from other campuses they could accommodate. The Spanish course had reached that level and was then closed. Governor Brown asked if any online course being developed was completely online without any human interaction and therefore would have no limit on enrollment. Ms. Dorr expressed her opinion that the review committee would not approve an online course with no interaction; in fact, interaction is a desired goal and is beneficial to students. Governor Brown asked how online courses with various amounts of human interaction would be tried and evaluated. Ms. Dorr remarked that online courses would have components that supported reading, writing, and human interchange. Governor Brown stated he would like to see a purely online course with no human interaction developed and tested for efficacy. Ms. Dorr responded that research has determined that students are less happy and engaged when taking online courses without any human interaction. Governor Brown said he would like to be provided with research regarding various types of online education, and that UC could be a leader in investigating the potential of this technology. He asked that the next update on online education include a rigorous discussion of research regarding the effectiveness of various types of online courses.

Chairman Varner said a major purpose of pursuing online education was to help decrease students' time to degree.

Committee Chair Reiss asked Secretary and Chief of Staff Kelman and Ms. Dorr to assist those Regents who would like to audit UC online classes.

5. **INVIGORATING THE MASTER PLAN FOR HIGHER EDUCATION**

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Committee Chair Reiss welcomed California State University (CSU) Chancellor Timothy White and California Community Colleges (CCC) Chancellor Brice Harris, and applauded President Napolitano for her emphasis on collaboration with the other two segments of California public higher education. In view of the growing California population, former UC President Clark Kerr and then-Governor Pat Brown developed the visionary California Master Plan for Higher Education (Master Plan), adopted in 1960. At that time there were 15 million Californians; currently there are 38 million. UC tuition was zero; tuition is currently approximately \$13,000 annually. The two guiding principles of the Master Plan remain: access for all eligible California students, regardless of economic background, and distribution of distinct missions to the system's three segments.

President Napolitano expressed her pleasure in being joined by her colleagues in what she believed was the first time the leaders of the three branches of California public higher education had appeared together before the Board. She would subsequently appear at their respective boards in an effort to focus on what the three segments can and should do together to envision goals for California public higher education. President Napolitano commented that the Master Plan had been a practical, collaborative response to planning for higher education for the then-burgeoning population of young people in California. Currently, California faces new challenges and the Master Plan should be viewed with the education of the next generation of Californians in mind, and the ongoing collaboration and cooperation of the three segments of public higher education.

President Napolitano said that the three segments currently collaborate in K-12 outreach, shared procurement and contracting, and streamlining the transfer process between systems, although more can be done in each of these areas. She would address the Regents regarding streamlining the transfer process; Chancellor Harris would address enhancing joint K-12 outreach; and Chancellor White would address ways to collaborate on joint business efforts such as procurement, contracting, and risk management.

President Napolitano stated that student transfers from one segment of the system to another should be as streamlined and transparent as possible. Community college students who plan to transfer to a CSU or UC campus need to have information about required courses and what financial aid will be available to them. Many students decide not to attend a four-year college or university because they think they cannot afford it, without knowing at the outset what resources might actually be available to them. Currently there is a lack of coherent information for students who plan a transfer and the three segments would collaboratively seek a clear, accessible solution to this problem. The segments' respective chief information officers will collaborate to develop a student-centered website portal tailored to each student. The site would contain information on the student's current standing, what needs to be done to improve that standing, and how to align that student's coursework with the requirements necessary at the four-year campuses in which the student is interested. A more ambitious goal for the web portal would be to provide real-time feedback to students, such as reminders during registration periods or when to take specific courses. This joint information technology project, uniting three different sorts of data and databases, would be challenging. Some

infrastructure was already in place at each of the three systems and some data sharing has already occurred. President Napolitano noted Governor Brown's \$50 million budget set-aside for an innovative project involving student transfers and contemplated the three segments' jointly applying to the State for funding.

Chancellor Harris commented that the prior week he, President Napolitano, and Chancellor White had attended a higher education summit at the White House in Washington, D.C., focused on ensuring that young people have access to higher education. The three California leaders were proud of how far California is ahead of much of the rest of the country in the elegance of its Master Plan and the access that California students have to public higher education. However, particularly for educationally and economically disadvantaged youth, college is too often not in their plans. Although the three segments of higher education have historically had outreach efforts into high school and as early as eighth grade, the three systems intend to work with Superintendent Torlakson in the coming months to make these outreach efforts considerably more robust. The three system heads intend to begin a personal information campaign with students at the seventh-grade level and their parents. The strength of California is dependent upon helping its students succeed in greater numbers, not leaving any behind.

Chancellor White remarked that he is a product of the Master Plan, since he attended a California community college, transferred to a CSU campus, and then obtained his Ph.D. at UC Berkeley. He affirmed that the three-legged stool of the Master Plan still stands strong, with one of its purposes being the facilitation of cooperation and collaboration among the three segments. One way to strengthen the Master Plan model for the current economy and for the future would be to collaborate to achieve business savings. These savings could then be redirected to the academic enterprise of teaching and learning, research and scholarly activity, and engagement with the community. Costs must be reduced without diminishing quality. There are opportunities to enable efficiencies by using new technologies to leverage the three systems' purchasing power. It would be important to recognize coherent objections to a centralized system of procurement, along with recognizing ways to move forward. Chancellor White looked forward to considering jointly more possible areas for collaboration, including construction management, risk management, legal services, and others.

Chairman Varner affirmed his long-standing support of this type of collaboration and asked what the Regents could do to assist with the implementation of these efforts. Chancellor White responded that the Regents' public support would be important, and advised the Regents to ask for periodic reports about the progress of the collaborations and hold the three leaders accountable for making progress. He also suggested holding meetings of some members of all three systems' boards to discuss common elements of their functions. President Napolitano added that Board members have special expertise in some of the areas of collaboration and might be willing to contribute some effort on a pro bono basis. She added that, should these initiatives prove successful and result in more California students coming into the California higher education system, fundamental questions of capacity will arise. The Regents could be helpful in thinking through long-

term funding issues to ensure that UC would have the capacity to enable these students to complete their degrees in four years.

Regent Gould remarked that he had wrestled for a long time with the promise of the Master Plan in his various roles on the Board. Most people embrace the Master Plan as a global framework. However, support for the plan by the people of California may have diminished. Showing more tangible results on the local level through cooperation of the three segments of higher education could increase public support. A great amount can be done to demonstrate better results, such as decreasing time to degree and improving remediation efforts that could gain the support of local community and business leaders.

Chancellor Harris agreed, recalling that the only other time he appeared at a Regents' meeting a few years prior was to seek approval of the Sacramento City College Davis Center, the first community college center on a UC campus. The Long Beach College Promise is a successful collaboration among K-12 schools, Long Beach City College, and CSU, Long Beach. Chancellor Harris expressed strong agreement that solutions are often local, rather than global, and that many other opportunities exist for collaboration at the regional level. President Napolitano added that, since the Regents come from all areas of the state, they could help publicize these efforts to their local communities.

Regent Kieffer said the Master Plan, at the time it was developed, was designed to address very clear, inescapable problems. Current problems are different and must be defined. One problem that should be examined is that, if UC and CSU accept specified percentages of the top California high school graduates and if educational results from California's K-12 system worsen, the caliber of students UC and CSU accept would deteriorate. Chancellor White agreed that the problem of remediation for students is shared by the three segments. The state's changing demographics have resulted in new challenges, such as the fact that 180,000 CSU students are currently supported by Pell Grants. He pointed out that some CSU students are older than traditional college students and are working to support their families; these students' progress should not be evaluated by traditional graduation rate measures. In order to serve California's wider needs going forward, such students must be served, even though their circumstances might drive down some traditional measures of productivity. Regent Kieffer expressed his view that if the problems of K-12 education were not addressed through new interventions, the quality of the student bodies of all segments of higher education could deteriorate.

Governor Brown noted that, according to the Master Plan, public higher education should be free and students who were not California residents should be required to have higher class ranks than California applicants to be admitted. These policies are no longer practiced. Governor Brown said that the state's need for a knowledgeable, skilled citizenry does not necessarily mean an unlimited expansion of public higher education as it exists currently. A broader, fresh look should be taken at the most effective ways of certificating knowledge in a changing world. The three segments prescribed by the Master Plan may not be the best solution; higher education is expensive and resources are finite. Governor Brown acknowledged the power of the traditional form of the university,

but urged a rigorous, intellectual reexamination of other possible methods of transmitting and certificating knowledge. He noted that demographics show that the number of 14- to 18-year-olds is not increasing, so the college-age population would not increase in the next four years and an automatic annual increase in UC's capacity might not be appropriate.

Chancellor Harris commented that all three segments are increasingly examining various ways to change the pathway to a college degree. He cited the national movement toward providing credit toward a degree for experiential learning and military service. The joint CCC and CSU Associate of Arts Degree for Transfer program was designed in an attempt to decrease the units necessary for transfer. Many CCCs have six- to 18-unit certificate programs that provide quick workplace training. Chancellor Harris agreed that the greatest challenge the systems face currently is entering students who are not prepared for college work. Of CCC's more than two million students, only 23 percent were sufficiently prepared for college work; 77 percent required remediation in either mathematics or English. CCC students who are prepared for college work succeed at a rate of 77 percent, but that rate drops to 42 percent for those who need remediation.

Governor Brown referred to statistics showing that only 21 percent of California 11th-grade students are prepared to attend CSU. He noted that his proposed State budget contained \$10 billion funding for K-12 schools, some of which was owed from previous years. The Local Control Funding Formula would direct 20 percent of those funds disproportionately to schools in low-income areas. Mandates for spending have been reduced, so local school districts would be able to choose how best to use these funds. The Governor said he would like to convene meetings with key K-12 districts. Funding of \$1.25 billion was provided for K-12 schools to assist with the introduction of Common Core standards and Average Daily Attendance funding was also increased. He emphasized the importance of using these funds wisely. President Napolitano said that UC and the other two public higher education segments would like to be involved in this effort to shape the education vision for the state and to increase the cohesion of the involved public institutions. Chancellor White agreed that all public higher education segments should be convened together with K-12, stating that public higher education is the best antidote for social ills such as economic inequality, street violence, and lack of social mobility.

Chancellor Block acknowledged the Governor's call for new ideas and reducing costs, but pointed out the importance of residential education. Many students' most important college experiences are those gained while living on campus, such as opportunities to participate in laboratory research or lead student groups. He expressed concern about the possibility of developing a new digital divide, where students from less affluent families would learn at home digitally, while students from affluent families would be able take advantage of the benefits of a residential education.

Regent Island expressed his firm belief in the brilliance of the Master Plan as a policy tool for California. Educational opportunities in K-12 are not equal across all communities, and until that can be remedied, the Master Plan is necessary. Many more

California students are in low-performing public school districts currently than in the 1960s. Regent Island expressed his view that, while it is important to find ways to make execution of the Master Plan more cost effective, the Board should heartily endorse and find ways to fully fund this valuable tool that has provided educational opportunities for students from underrepresented minorities across the state.

Regent Ruiz commented that children in his native San Joaquin Valley have suffered educationally for a long time, and would benefit greatly from the Governor's \$10 billion investment in K-12 schools. He expressed his view that collaboration among the three public higher education segments is extremely beneficial for the state. While he agreed with Governor Brown's concern about the cost of higher education, Regent Ruiz emphasized the importance of considering the long-term return on this investment in education, which he believed would be significantly greater than its cost.

Committee Chair Reiss expressed her support for a meeting of the leaders of the three higher education segments with K-12 educational leaders. She asked about efforts to publicize to middle school students the availability of financial aid for higher education. Chancellor Harris responded that the program, through which packets of information about the three systems are sent to all eighth graders, would be expanded. The current effort, which would require funding, would have that information go to seventh graders and their parents through an effective marketing campaign using traditional and social media. Committee Chair Reiss encouraged use of other methods in addition to sending information packets to schools, such as through church groups or after-school programs.

President Napolitano stated that this effort would begin with what is being done currently and then expand from there. One population that would be a focus is those high school students who took the Preliminary Scholastic Aptitude Test, but did not take the Scholastic Aptitude Test or any Advanced Placement examinations.

Governor Brown stated that he had started two charter schools, one of which has been in existence for 13 years and the other 12 years, had been influential in shaping their boards, and had personally raised \$12 million, including \$1 million of his personal funds, for those schools, which have no teacher tenure. In spite of these efforts, achieving good test results at these schools has been very difficult, although almost 100 percent of their graduates attend college. He encouraged realistic assessment of proposals and expressed his support for collaborative regional efforts to address these difficult problems. Governor Brown said he looked forward to working with the heads of the three systems.

The meeting adjourned at 3:10 p.m.

Attest:

Secretary and Chief of Staff