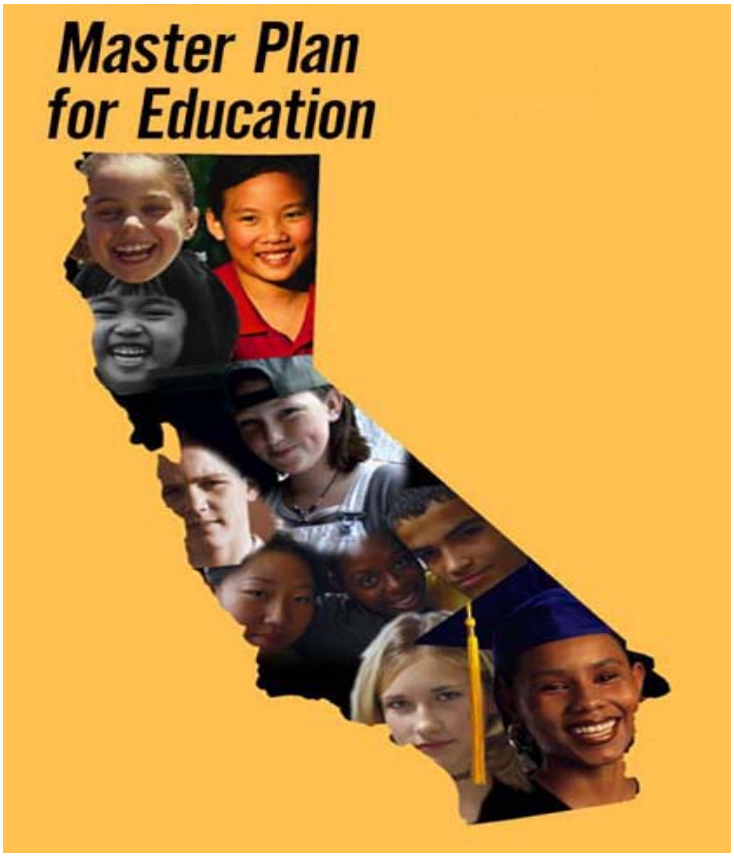
Joint Committee to Develop a Master Plan for Education – Kindergarten through University

Emerging Modes of Delivery, Certification, and Planning
Final Report



March, 2002

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EXECUTIVE SUMMARY

> "[T]he school of the future requires precisely what bureaucracy inhibits: creativity, flexibility, innovation, and originality. The school of the future also requires accountability for results. And if schools are responsible for results they must be free to achieve them as their talents and energies dictate."
>
> *John Murphy & Denis P. Doyle, 2001*
> *Former County Superintendent, Prince George County,*
> *Education writer and analyst, respectively*

The Emerging Modes of Delivery, Certification, and Planning Working Group was charged with:

- Identifying ways in which emerging information technologies can facilitate a more efficient and effective distribution of education services, and more cost-effective use of facilities.
- Identifying best teaching and learning practices from emerging organizational forms, such as charter schools and community partnerships, and exploring how these best practices can best be replicated systemically.
- Identifying methods for certifying learner competencies that are highly responsive to learner needs and that permit customization of student educational plans that can expedite achievement of their educational goals.
- Identifying sensible, long-term remedies for ongoing systems planning, for the modeling of reform alternatives, and for short and long range forecasting of educational change.
- Identifying ways to better coordinate the administration and delivery of noncredit and adult education.

Four overarching principles capture the key themes that must be applied in transforming California's PreK-University education system: equity and access; flexibility to meet learner needs; quality and accountability; and coordination, cooperation, and planning for a seamless delivery system. The recommendations presented in this report are categorized by section as well as these four guiding principles.

SECTION I — EMERGING MODES OF INSTRUCTIONAL DELIVERY

Equity and Access

1. The State should ensure that educational institutions provide multiple modes of delivery, including applying technologies, to ensure meaningful access for all populations and individuals throughout their lives.

2. The State should ensure long-term, continuous support that will result in access to technology by all institutions regardless of how remote the location of the learner.

3. The State should encourage technology that aims for simplicity in design, supports flexibility, is financially feasible, is measured through outcomes and assessment, and allows users to enhance its applications.

Flexibility to Meet Learner Needs

4. The State should provide funding for institutional development of distributed learning.

Quality and Accountability

5. The State should support the ongoing professional development of all staff in technology applications, to ensure they have the skills to help students develop the technology skills, knowledge, and aptitudes needed for lifelong success.

Coordination, Cooperation and Planning

6. The State should take the lead in developing educational technology partnerships that include the public, private, non-profit, and for-profit sectors.

7. The State should encourage local education agencies to establish partnerships with utilities, telecommunication companies, software and hardware providers, and others to facilitate functional universal access to technology.

8. The State should encourage cross-segmental collaboration and dialogue among teachers at the same levels, to improve instructional delivery.

SECTION II — EMERGING ORGANIZATIONAL FORMS

Flexibility to Meet Learner Needs

1. The State and local education agencies should offer incentives to teachers who put learning within the community or environmental context of their students.

2. The State and local education agencies should encourage innovative emerging organizational forms, including charter schools that are standards-based and assessed against those standards on an ongoing basis.

3. The State should set aside a pool of funds to encourage the creation of small schools in K-12 education.

Coordination, Cooperation, and Planning

4. The State and communities should establish incentives for joint development and use of school facilities with cities and counties, including libraries, classrooms, and recreational and community space.
   - New construction should be linked to the community, and better links should be established with the community in existing schools.
   - The structures should be in compliance with the same building codes applicable to other buildings, such as libraries and government offices.
   - Technology should support distributed learning in these and other settings.

5. The State should establish an Innovation Fund to support innovative projects and intersegmental collaboration in education.

SECTION III — ASSESSMENT

Quality and Accountability

1. Institutions should assess and document instructional innovations, outcomes, and achievement.

2. The State and local education agencies should assure that accountability expectations and measures for assessment and testing are made public and understandable for all participants in the system. Any assessment used for 'high-stakes' decisions and consequences should have measurement validity and reliability, and should reflect the level at which knowledge and skills are gained from appropriate instruction.

3. The State should encourage schools and postsecondary institutions to use test results from one set of instruments in multiple ways to avoid over-testing learners, although high stakes decisions about student placement and promotion should not be made on the basis of a single test.

Coordination, Cooperation and Planning

4. The State should encourage creation, by 2005, of a digital learning portfolio for each learner that would allow the student to move through a variety of coordinated delivery systems, regardless of the provider.

SECTION IV — CERTIFICATION

Flexibility to Meet Learner Needs

1. The State should identify an entity to develop a common set of requirements for certificates to be developed by a consortium of partners, including education institutions, employers, and community-based organizations.

SECTION V — FORECASTING AND PLANNING

Coordination, Cooperation, and Planning

1. The State should conduct an annual forecast, through a designated entity, of education trends and needs, including elements critical to state policy-making and resource allocation.

2. The State should develop all-electronic data collection processes by the year 2005 that would make minimal demands on school districts while providing sufficient information for policy decisions.

3. The State should develop unique identifiers for critical elements of the educational system when continuity and cross-correlation of information is important, particularly (1) students, (2) instructors, and (3) institutions.

SECTION VI — ADULT CONTINUING EDUCATION

Equity and Access

1. The State should establish a funding base adequate to the increasing challenges facing California's Adult Continuing Education System.

Flexibility to Meet Learner Needs

2. The State should develop a broad set of program categories that allow for the substantial flexibility necessary to meet local needs of adult learners.
   - Proposed categories include Life Management Skills, Civics Participation, Workforce Learning, and Foundational/Academic Skills Development.

Quality and Accountability

3. The State should expand adult continuing education course standards to include student performance measures such as those developed by the National Skill Standards Board, the Secretary's Commission on Achieving Necessary Skills (SCANS), and Equipped for the Future.

4. The State should support an accountability system for adult continuing education students, emphasizing student performance and rewards for institutions for achievement.

5. The State should support the ongoing professional development of all staff who work with adult learners to enable the students to develop the skills, knowledge, and aptitudes for life-long successes.

Coordination, Cooperation, and Planning

6. The State should review the governance structure for adult continuing education, including the role of the Joint Board Committee on Noncredit and Adult Education, with the goal of achieving a seamless delivery system among multiple providers that ensures a smooth transition for those adult learners continuing on to formal education, pursuing other goals, or entering the workforce.

7. The State should develop a mechanism for the reciprocity of instructional credentials, based on minimum qualifications, between the adult education and noncredit systems to allow instructors to teach in either or both systems.

BACKGROUND

As California State Librarian Kevin Starr discussed in his essay entitled *California: The Dream and the Challenge in the Twenty-first Century,* diversity and technology have always played a significant role in California's history.

California is home to nearly thirty-five million people, and approximately one in four of them was born outside of the United States. Further, in just this past decade California has become one of only two states in the nation (the other is Hawaii) to not have a racial majority in its population. This diversity is a great asset and an opportunity for the state's education system. California has a strong role in international relations, and to remain globally competitive, the State must prepare for a diverse workforce.

Since the time of the Gold Rush, California has led the nation in technological innovations. Californians have helped transform a significant number of industries in their state's short one-hundred-and-fifty-year history, including agriculture, aviation and aerospace, entertainment, scientific research, and technology.

The Emerging Modes of Delivery, Certification, and Planning Working Group recognizes the tremendous potential embodied in California's diversity and made possible by the new educational technologies. The Working Group believes that in order for California to continue to prosper, it is imperative to reach for innovative approaches that fully capitalize on the emerging modes of delivery in education.

The Working Group identified and is recommending policies based on innovations, including applied technology that will assist in facilitating the transformation of California's educational system. The envisioned system is one that is flexible, accessible, accountable, affordable, comprehensive (pre-Kindergarten through University), and responsive. With the exceptions of the Adult Continuing Education Section, and where specifically noted in the recommendations, each recommendation is intended to cover the full span of PreK – University education.

Four overarching principles capture the key themes that must be applied in transforming California's PreK- University education system: equity and access; flexibility to meet learner needs; quality and accountability; and coordination, cooperation, and planning for a seamless delivery system. These overarching themes embrace the entire education system. They provide the guideposts to the authentic educational reform that will permit all students entering the system, regardless of their entry point, to qualify for some form of postsecondary education or training.

The recommendations in the six sections of this report are categorized by these principles, as follows.

Equity and Access
All students, including those with language issues, disabilities, and other special needs, must have access to education opportunities, tools designed to support learning, and accommodations necessary for them to meet their academic goals.

Overarching Principles:

Equity and Access

Flexibility to Meet Learner Needs

Quality and Accountability

Coordination, Cooperation, and Planning

Flexibility to Meet Learner Needs
There must be a commitment to instructional design and delivery that is learner focused. That focus includes flexibility in class scheduling, distributed learning opportunities,[1] and instructional tools such as applied information technology.[2]

Quality and Accountability
Access to quality education should be the reality, not the goal. Educational providers must be given the flexibility to meet learner needs and must also be held accountable for outcomes. Students must also be held accountable for meeting their academic goals.

Coordination, Cooperation, and Planning
All educational segments and other partners must come together to meet Californians' educational needs. There are many effective examples of partnerships that are benefiting students, and more of these must be encouraged. Planning is also critical to ensuring that emerging issues are identified and appropriately addressed. Consistent with this principle, Working Group members concluded that the Master Plan should coordinate its recommendations with those of the tactical five-year plans of the *California Commission for Technology in Learning*, with the Master Plan focusing on the broader long-range strategic planning needs of the state.

WORKING GROUP PROCESS
The Working Group, comprising 36 members, met eight times between May 2001 and February 2002. Meetings supported the development of three products: a set of principles, models and examples of promising practices, and preliminary recommendations for action. Members collectively developed discussion papers for each topic to assist in deliberations. Much of the content of those papers has been included in this report.

Members with specific expertise agreed to lead the discussions on the various topics, and a subgroup convened on the topic of adult and noncredit education, meeting several times before presenting their recommendations in January.

In addition to Working Group members, topical experts shared information and participated in discussions that led to development of the recommendations listed later in this document. A

[1] Distributed Learning refers to distance learning or location-independent learning. It is employed in the context of using technology or other means to provide instruction to students outside of — or in addition to — the traditional classroom setting.
[2] Information technology refers to information, communication, and distribution technologies.

ListServ — an on-line forum — was also used to provide information on upcoming meetings and to facilitate dialogue and discussion between scheduled meetings of the group.

DECISION MAKING PROCESS

The Working Group developed recommendations using a consensus process. For all the recommendations in this report, the Working Group achieved some form of consensus. Around some recommendations there was unanimity, while others had some minority disagreement (as noted in the text). *Member comments* have been included following some of the recommendations when a single member had serious concerns about the recommendation or several members voiced similar concerns about specific aspects of the recommendation.

Section I
EMERGING MODES OF INSTRUCTIONAL DELIVERY

OPPORTUNITIES AND CHALLENGES

The diversity of Californians, varying learning styles, new and emerging technology, revised approaches to instructional delivery, and other factors, such as expanded community partnerships, warrant greater access, equity, flexibility, and learning opportunities. Researchers have amassed sufficient evidence to lead some policymakers to accept the premise that along with the accountability required for educational progress, the overall education system must embrace universal efforts to remove the learning barriers facing youth and adults. Specifically, the State must:

- Strengthen learning support systems.
- Align instructional systems.
- Support new governance systems in all segments.
- Strengthen academic accountability throughout the system.

There must be a comprehensive, integrated, programmatic approach that weaves together the efforts of schools and communities that are seen as a critical elements to successful reform, if barriers to learning are to be effectively overcome. Anything less, educationally and programmatically, would result in an inferior delivery system for some students and an unprepared workforce with lower literacy skills than the level required for a strong economy.

Multiple barriers exist that interrupt or deny students access to equitable high quality educational opportunities. The State needs to take advantage of all available opportunities to provide support services that allow students to focus on learning. It is imperative that California public schools and postsecondary education institutions make more effective use of the emerging generation of information and telecommunication technologies to improve the flexibility, accessibility, and responsiveness of the learning and teaching process. Considerable empirical evidence exists demonstrating that these technologies can be used to:

- Institute more flexible academic calendars and course offerings, including academic programs that allow students to combine classroom attendance and online instructional activities.

- Increase student access to flexibly organized learning activities, including standards-based, computer-mediated instructional materials that provide students more frequent and timely feedback than possible within conventionally organized classroom settings.

- Construct learning settings that are more responsive to the diverse educational needs of California's students, including those of English language learners, who can benefit from multimedia instructional materials that combine academic content access in native

languages and English language instruction and of disabled students, who require greater access to self-paced and assisted learning programs.

When other instructional methods are not successful, technology may make the difference in narrowing the achievement gap and reducing student dropout rates. Further, there are many new web-based and stand-alone computer-mediated instructional materials that offer learners the tools to access new knowledge and reinforce newly developed skills. The strategic use of technology can thus expand opportunities for promoting greater student achievement for more diverse students, both effectively and efficiently. The tools of technology:

- Offer convenient ways to tap into multiple learning modalities and languages to help students understand and achieve the instructional objectives set by teachers.

- Provide students with non-judgmental opportunities for 'drill and practice' learning activities that are not constrained by availability of a teacher or tutor.

- Provide teachers with an expanded capacity to respond to the learning needs of special education and disabled students, such that they can achieve high knowledge and skill levels.

Technology should also be used to promote greater collaboration between:

- University-based teacher education and professional development programs and the schools.

- Community-based educational organizations and agencies, including neighborhood youth groups and public libraries, and the schools.

Innovative technologies have changed how businesses are conducted, how lives and homes are managed, and how individuals teach and learn. Technologies offer a unique opportunity to expand the school day, week, and year voluntarily.

The recommendations in this report incorporate the opportunities afforded by the emerging generation of information and telecommunication technologies to support location-independent learning and teaching. The recommendations also address a pressing problem confronting education in California, the looming facilities crisis, which is the product of increasing population and years of inadequate funding for new schools.

[3] "Adult Continuing Education" refers to both adult school and noncredit community college programs in California.

RECOMMENDATIONS

Equity and Access[4]

1. **The State should ensure that educational institutions provide multiple modes of delivery, including applying technologies, to ensure meaningful access for all populations and individuals throughout their lives.**

   Commentary: Individuals learn in different ways. The State must be proactive in responding to individual needs by taking advantage of all available educational resources and by encouraging flexibility. These resources, including technology, must be available to all students, including newcomers with language issues and other special needs, those who are economically disadvantaged, those with disabilities, and those in rural areas. It is also critical that teachers have access to technological tools that can best assist them in effectively teaching their students, and that they receive the training necessary to both use the technology and to effectively enhance all students' skills, especially those with language issues and students with other special needs. The State needs to support multiple venues/media to respond to diverse learning needs. The State must commit to providing funding and other necessary resources to ensure access at all public schools, colleges, and universities.

   Multiple modes of delivery are important in meeting the diverse learning styles of students.

2. **The State should ensure long-term, continuous support that will result in access to technology by all institutions regardless of how remote the location of the learner.**

   Commentary: The Master Plan should include provisions for ensuring that all education segments — PreKindergarten through University — have access to appropriate technology. Further, learners in rural areas must be provided the same opportunities as those in metropolitan areas.

   Technology resources have become increasingly available to learners of all ages, but these resources are not uniformly available over different types of programs. In addition, the type of Internet access available does not always support learning activities; and resources are not always available in the places where learning occurs.

   The State should be responsible for establishing within each education segment a set of basic standards for technology use and ensuring that each segment has the resources

   All students and institutions must have technology access – which requires ongoing state support.

[4] Members expressed their conviction that learning support is critical to achieving equity in the overall learning process. All students must have their basic needs met before they can effectively learn. Students cannot succeed in school when they do not feel safe, are hungry, have untreated illness or have high levels of emotional stress. Academic performance can be improved by ensuring that basic needs are met for nutrition, health care, safe places to be in non-school hours, and enrichment activities that reinforce learning. The State should expand upon the recommendations of the School Readiness Group by ensuring learning-support services for PreK-12 students. Further, some members commented that these supports should be extended to adult learners.

necessary to achieve those standards. Such standards should include a baseline expectation. The elements of that baseline could include, for example: preexisting software, content, appropriate mastery levels, technological literacy, staff development, minimum funding, state functions, and economic development issues.

3. **The State should encourage technology that aims for simplicity in design, supports flexibility, is financially feasible, is measured through outcomes and assessment, and allows users to enhance its applications.**

   Commentary: Technology that is used to support or augment instruction should be easy to use and should not require extensive training. Easy to use features include point-and-click, voice activated, touch-screen, and video technology that can be used at home. Use of web-based tools should be universally available to students. Technology must be both cost-effective and affordable to the user.

   Priorities must be set that define standards for technology resources and provide a framework that the educational segments can use in planning for programs, funding, and professional development. These standards should encompass hardware, software, networking, and professional development. The issues related to technology use must be addressed on an ongoing basis. Technology is a constantly evolving educational resource, and no one-time-only program can be expected to support all the education needs in this major shift in instruction and assessment. The use of technology must be assessed on an ongoing basis. Users must be properly trained, and the appropriate technology must be deployed to facilitate widespread use.

Flexibility to Meet Learner Needs

4. **The State should provide funding for institutional development of distributed learning.**

   Commentary: With so many adult students juggling difficult schedules that include families, working, and going to school, more courses should be made available on a distributed learning basis. Resources should be directed to facilitate this effort as part of the transformation to an educational system prepared to meet the demands, and to take advantage of the opportunities, provided by the 21st century.

   For the PreK through secondary levels, distributed learning may occur not as distance or location-independent learning but as asynchronous learning, with students working on laptops. This configuration would help facilitate differential learning in the classroom setting.

The promise of technology to improve education will not be realized unless instructors have access to professional development opportunities related to the use of technology in the classroom and in distance learning formats.

Quality and Accountability

5. **The State should support the ongoing professional development of all staff in technology applications, to ensure they have the skills to help students develop the technology skills, knowledge, and aptitudes needed for lifelong success.**

   Commentary: The Commission on Technology in Learning heard testimony describing the lack of professional development in the area of technology. It is not enough to ensure that technology is available in schools throughout the state. Teachers must be proficient in the use of the technology that is available to their students.

   The potential that technology holds for improving instruction, assessment, and accountability cannot be realized if instructors do not know the range of available resources and how to use the technology to its fullest, and fail to understand how to integrate it into the classroom and instruction. Success in integrating technology into instruction is influenced by the instructor's attitude and comfort level with technology application.

   The need for professional development changes as the teacher becomes more sophisticated and interested in controlling how technology is used in the classroom. With training and subsequent support, instructors typically go through stages of development that start with using pre-developed solutions, such as packaged software and dedicated web sites that define and control options. As instructors experience success with these initial product types, they then may begin using authoring tools to create software or web sites or developing advanced Internet search skills. Ultimately, instructors then may begin to use more sophisticated software to develop unique products or applications in the learning environment. The challenge in any technology professional development effort is to capture both the rapid changes in technology and the diverse levels of interest, knowledge, and motivation of individual instructors.

Coordination, Cooperation and Planning

6. **The State should take the lead in developing educational technology partnerships that include the public, private, non-profit, and for-profit sectors.**

   Commentary: To develop effective educational technology, the State should take advantage of all available resources. Clearly there are many organizations that have expertise in this arena. The State should draw on this expertise and be responsible for bringing together leaders in the field to develop cutting edge technology to augment instructional delivery. Many agencies have initiated a number of exciting applications of technology to enhance teaching and learning and to streamline administrative practices. Many of these initiatives have already been introduced by private sector business responding to compelling business needs, but they also have applicability for educational institutions. Others have been developed within the education sector and have application in a broader arena. A key consideration for the State is the extent to which education and business can collaborate to scale up their respective initiatives into a coordinated and complementary delivery system that meets both educational and business needs for creating lifelong learners.

Increasingly, states are creating public-private partnerships to 'leverage' and extend resources for e-learning (technologically augmented) capacity. More than two-thirds of the 39 states surveyed by the National Governors Association (NGA) for *The State of E-Learning in the States* [6] have public-private partnerships related to e-learning.

Another innovative technology partnership is one established by the Library of California. Established by the State in 1999 (SB 409 authored by Senator Alpert and Assemblymember Sweeney in 1998) The Library of California has the goal of electronically linking the State's 8,000 public, school, academic, and special libraries and facilitating the sharing of library resources. In its third year of operation, the Library of California is enabling Californians to electronically search library catalogs, access full text databases, initiate their own loans without regard to where they live or work, and do research with a "live librarian" (via the Internet).

Member comments: A minority expressed concern about the role of the for-profit sector in education and wish to ensure that faculty have decision making authority regarding curriculum. Clear guidelines should be established.

7. **The State should encourage local education agencies to establish partnerships with utilities, telecommunication companies, software and hardware providers, and others to facilitate functional universal access to technology.**

   Commentary: While the State should provide the necessary funding to make technology available for every student, the current budget situation may not enable sufficient funding for wide-scale implementation in the near future. Schools should also be encouraged to seek additional resources to support this activity, including grant funding and other available monies.

   In addition to funding, schools should also look to 'leverage' other resources. One example is the Live Homework Help Program administered by the California State Library in conjunction with tutor.com. This homework assistance program in grades 5-12 provides students at more than 45 sites in public libraries statewide the opportunity to connect with tutors on a one-to-one basis by using the Internet. The program combines the best of two worlds – technology and assistance to students.

8. **The State should encourage cross-segmental collaboration and dialogue among teachers at the same levels, to improve instructional delivery.**

   Commentary: There should be a formal venue for sharing effective instructional practices across the segments as well as among teachers at the same levels throughout the state. Such a venue would support teacher professional development and help maintain the state's economic competitiveness. The goal is to develop a set of 'best practices' that could be replicated throughout the state.

[6] Developed by the NGA Center for Best Practices, 2001

Section II
EMERGING ORGANIZATIONAL FORMS

OPPORTUNITIES AND CHALLENGES

Employers are increasingly taking advantage of new technology and flexible work schedules to meet the diverse needs of the workforce. Educational opportunities must follow suit by providing flexibility for learners, including flexibility in instructional styles, locations, and schedules. As the state's population shifts to less urban communities and its mobility increases, and as technology provides the opportunity to bridge these distances, the State must begin to utilize more innovative organizational forms that provide for central coordination, while at the same time providing opportunities for local implementation and flexibility. Technology should be used as a tool that is able to personalize and localize learning while at the same time bridging vast distances and disparate programs, thereby bringing the state together.

Schools must be provided with the flexibility to be innovative but they must also be held accountable. Working Group members expressed their belief that the *Education Code* presents a challenge to implementing innovative educational strategies. Charter schools have had the benefit of being exempted from regulation and have developed many educational innovations. Other schools could benefit from the flexibility that supports promising organizational forms and should be provided with the same incentives. The State should also ensure that students have the benefit of contextual learning, by encouraging additional, non-traditional organizational forms, including charter and small schools, increasing joint use of community facilities, and supporting innovative projects.

RECOMMENDATIONS

Flexibility to Meet Learner Needs

1. **The State and local education agencies should offer incentives to teachers who put learning within the community or environmental context of their students.**

   Commentary: Students learn best when material relates to their own life situations. A students community environment is as much a locus for learning as the classroom. Instruction should be structured to reflect that students are outside the classroom more than they are in it. Students learn in their community, and putting curricula within their community context helps students relate better to the material and emphasizes positive learning opportunities within the community. Examples include:

   - Learning science through a school or community garden.

- Learning science and civic engagement by cleaning and beautifying a public green space.
- Making maps that illustrate relationships between school, childcare, jobs, transportation, and community resources.
- Conducting community surveys, to learn English and math skills.
- Expanding family literacy, and family math and science programs in the schools.

'Contextualized' learning is also an important element in adult learning.[7] Adult learners are diverse, bringing a wealth of life experiences to the learning situation; and active forms of learning help connect the content to the learners' own frame of reference. Most adult learners want to be able to relate content to the specific contexts in their lives; these contexts are often in the form of problems related to their work sites. They prefer to have some degree of control over their learning, and, depending on their maturity levels and familiarity with the content, they demonstrate a range of self-directedness in their learning. In addition, the adult's sense of self has a significant influence on the meaning of the learning situation for that person. Learners have differing degrees of self-efficacy and awareness of their own learning styles. In adult continuing education, the adult learners may feel embarrassed about returning to school, feel embarrassed to join classes with younger students, and/or hold negative impressions about their own abilities, those of the school, and those of the teachers. Incentives could range from professional development activities to informal or formal recognition, special accommodation, and providing funding for supportive services.

Both children and adults learn best when they are actively engaged in learning and can relate the content to their lives.

Member Comments: There was concern that this recommendation attempts to elevate one teaching style over another.

2. The State and local education agencies should encourage innovative emerging organizational forms, including charter schools, that are standards-based and assessed against those standards on an ongoing basis.

Commentary: Much of the debate about charter schools, magnets, and other emerging organizational forms focuses on inputs. The State should support innovative organizational forms so long as they are standards-based and evaluated rigorously.

Member comments: To support innovation, schools must be provided with flexibility. The California's *Education Code* serves as a barrier to flexibility. Obstacles need to be removed for all schools, not just charter schools. There

Innovative, accountable schools should be encouraged and supported.

[7] Emerging research on adult learning is based on the theories of andragogy and social learning, and it identifies certain assumptions about the design of adult learning: (1) adults need to know why they need to learn something, (2) adults need to learn experientially, (3) adults approach learning as problem-solving, and (4) adults learn best when the topic is of immediate value.

needs to be some balance between rigid application of the *Education Code* and complete deregulation.

3. **The State should set aside a pool of funds to encourage the creation of small schools[8] in K-12 education.**

   Commentary: Research is overwhelming in its support of small schools as facilitators of student achievement. At the same time, the economics of school construction lead to the creation of large schools.

   Students in small schools equal or outperform their counterparts in large schools. Indicators used include grades, test scores, honor roll attainment, subject-area achievement, higher-order thinking skills, and years of education attained after high school. In Nebraska, 73 percent of students in districts with fewer than 70 high school students enrolled in a post-secondary institution, compared to 64 percent in districts of 600 to 999 high school students. These findings hold even when other variables, such as student attributes or staff characteristics, are taken into account. Although many small schools are in rural areas, researchers have concluded that it is the smallness of the school, not its setting, that makes it successful (*Journal of the New Rules Project*, Summer 2000, Volume 2, Issue 1).

   For example, in New York City, 90 percent of the entering 9th grade students at El Puente Academy - a small high school open to all students – graduate in four years and go on to some form of postsecondary education, as contrasted to less than 30 percent of the entering ninth graders at a nearby large high school. (*Smaller, Safer, Saner, Successful Schools*, National Clearinghouse for Educational Facilities, Center for School Change, 2001)

   It is in the State's interest to promote the creation of small schools, both in the construction of new schools and in the reform of existing schools.

Coordination, Cooperation, and Planning

4. **The State and communities should establish incentives for joint development and use of school facilities with cities and counties, including libraries, classrooms, and recreational and community space.**
   - **New construction should be linked to the community, and better links should be established with the community in existing schools.**
   - **The structures should be in compliance with the same building codes applicable to other buildings, such as libraries and government offices.**
   - **Technology should support distributed learning in these and other settings.**

   Commentary: All California students deserve safe, clean, well-organized, productive, and attractive spaces in which to learn and play. The need for new school facilities is very large – more than the state can afford – if schools do not work in cooperation with the communities whose learners they serve. Schools are centers of neighborhoods and should be used as such.

[8] Small schools are to be defined by the communities they serve.

Joint development and use of facilities is a sensible, cost-effective solution to the facilities problem facing California. Their creation requires only that school, city, and county leaders 'think outside the box' and work together for the well being of the segments of the public for which they have mutual responsibility.

Leased facilities, community agencies, businesses, career centers, libraries, even private homes can be viable alternatives to large campus sites where teaching and learning occur routinely, thereby expanding access to older working adults and residents of communities remote from educational campuses. Strategic use of technology offers the possibility of mitigating capital expenditure needs by distributing teaching and learning opportunities throughout broader sections of California communities.

Partnerships should be forged and agreements established for joint use of educational and community facilities.

In June 1998, the U.S. Department of Education convened educators, facilities planners, architects, government officials, and interested citizens to discuss the idea of community schools. This group developed six key principles that should be a part of designing new schools. They suggested communities should design schools that: enhance teaching and learning and accommodate the needs of all learners; serve as centers of the community; result from a planning/design process involving all stakeholders; provide for health, safety, and security; make effective use of all available resources; and allow for flexibility and adaptability to changing needs. (U.S. Department of Education)

In Roseville, California, partnerships help schools improve services, save money, and build better facilities. For example, city planners and parks and recreation staff work closely with school facilities planners to develop parks adjacent to school sites. Schools use city parks for team sports and physical education classes, while the Parks and Recreation Department uses school facilities for leisure classes and city sports leagues. (http://www.roseville.ca.us/education/ed_partners.htm)

State sponsored incentives should support the development of these partnerships.

5. The State should establish an Innovation Fund to support innovative projects and intersegmental collaboration in education.

Commentary: Innovation is often created in individual institutions with only local application. A State-capitalized fund would enable innovators to locate funds and support from a central agency, which, in turn, could aid in the dissemination of promising practices. An example would be funding universities to work in collaboration with high schools to develop online honors and Advanced Placement courses. Findings should be widely shared, with the goal of replicating positive outcomes.

Section III
EMERGING MODES OF ASSESSMENT

OPPORTUNITIES AND CHALLENGES

The number of standardized tests being used to assess student learning in California's public schools is increasing rapidly. Moreover, the surge in student testing is likely to continue unabated for the foreseeable future. President Bush's agenda for reforming the public schools, known popularly as "Leave No Child Behind," will require California to annually administer more standardized tests, at more grade levels grades, in more subject areas than ever before. If the increase in state and federal assessment activities is to be useful in informing the design of educational programs intended to improve student learning, their results must be made available to teachers, students, and parents on a timely basis. Such is not the situation today.

In many instances, the time lag between administration of a standardized test and release of the results is greater than six months. Few teachers ever get back test results on their students early enough to modify their teaching strategies. This delay, particularly in light of the availability of relatively inexpensive networked database technologies, is inexplicable. Today, standardized tests are auditing devices, not instruments of educational practice and improvement.

The problems afflicting standardized testing programs stem not only from the tardiness of their results, but also from their design. Many tests continue to focus on those aspects of knowledge that can be captured in the multiple-choice format. The National Research Council's Committee on the Foundations of Assessment has recommended that the current generation of standardized tests be abandoned. The Committee recommends that the next generation of these tests provide the information needed by teachers to track the learning progress of their students at a higher level of detail than is currently provided by today's assessment instruments. Such detailed information would allow teachers to give their students information and guidance on what they need to do to improve their academic performance. The Committee also argued that such assessment instruments would better serve the paired goals of educational equity and excellence.

Three trends show promise of being able to significantly improve current assessment practices. The first is new research on cognition and learning, particularly findings on the critical role timely feedback plays in fostering productive learning. The second is development of computer-mediated instructional materials that incorporate sophisticated embedded assessment capabilities, and the findings that these capabilities foster adaptive learning activities. The third trend is the emerging generation of distributed database technologies, which can used to gather, analyze, sort, and disseminate assessment results quickly.

The Working Group agrees with the findings and recommendations of the National Research Council. It is therefore recommended that the State take action to make its assessment programs more flexible, accessible, and responsive.

- A more flexible assessment system would permit teachers to receive timely customized reports, illuminating the learning performance, trends, and unique needs of their students. A more flexible system would also make similar information available to students and their parents, in easy-to-use formats they can jointly use to improve student learning.

- A more accessible assessment system would take into account the diverse range of students attending the public schools, including English language learners, students with disabilities, and students with other special needs. Many of these students are ill-served by current assessment practices.

- A more responsive assessment system would tie information on student learning performance more closely to the subject matter standards adopted by the California State Board of Education. This combination of performance and curriculum information would help students better prepare themselves for college and other postsecondary educational opportunities. It would also provide postsecondary education institutions baseline information on the relationship between the content standards and the academic performance of entry-level students.

Collectively, these changes would produce assessment policies and practices that would be more student-focused, learning centered, and supportive of school improvement.

RECOMMENDATIONS[10]

Quality and Accountability

1. **Institutions should assess and document instructional innovations, outcomes, and achievement.**

   Commentary: Practice-oriented research and documentation can serve as valuable tools and can support decisions to continue or discontinue current practices. This information may also be used as a basis for allocating funding and/or State incentives. Schools often are not provided with specific resources for this activity, but it should be a priority. A priority should also be placed on disseminating 'best practices' for potential replication.

2. **The State and local education agencies should assure that accountability expectations and measures for assessment and testing are made public and understandable for all participants in the system. Any assessment used for 'high-stakes' decisions and consequences should have measurement validity and reliability, and should reflect the level at which knowledge and skills are gained from appropriate instruction.**

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[9] Embedded assessment refers to assessment that is incorporated in to the learning experience and provides immediate feedback to the user.

[10] The Working Group used research findings from the National Center for Research on Evaluation, Standards and Student Testing (CRESST) Standards for Accountability Systems, 2002 to develop its recommendations.

High-stakes testing impacts learners by driving decisions that have important consequences for each student's future: promotion, retention, graduation, diploma awards, and possible postsecondary placements. State and local education agencies should ensure that any examination used for high-stakes consequences for individual students actually measures what it is intended to measure for all students. The State must therefore ensure that all students have equal access to the core curriculum, regardless of the location of the school district or school, and that the core curriculum is accurately reflected in the test content. When tests are used in making educational decisions for individual students, they should accurately measure the student's abilities, knowledge, skills, or needs in ways that do not discriminate or violate federal law on the basis of the student's race, national origin, gender, or disability.

The following principles, which embody research recommendations and 'best practices' developed by the National Research Council, CRESST, and the National Academy of Sciences Board on Testing and Assessment should apply to any testing that has consequences for individual students, institutions, or systems:

- If tests are claimed to measure content and performance standards, analyses should document the relationship between the items and specific standards or sets of standards. To the extent possible, language assessments should be used to measure academic performance against standards, and English assessments to measure growth in English proficiency.

- The validity of measures that have been administered as part of an accountability system should be evaluated and documented for the various purposes of the system.

- Evidence of test validity for students with different language backgrounds should be made available publicly.

- Speakers of languages other than English should have appropriate assessments based on language and English proficiency.

- Standards set for passing or passing at different levels of proficiency should be made clear. In particular, the justification for different 'cut scores' should be made on the basis of validity evidence.

There is a fine line between using multiple test and assessment measures to make sound educational decisions for students and over-testing learners to meet accountability requirements.

3. **The State should encourage schools and postsecondary institutions to use test results from one set of instruments in multiple ways to avoid over-testing learners, although high stakes decisions about student placement and promotion should not be made on the basis of a single test.**

Commentary: Students are required to take a multitude of assessments, many of which cover the same subject matter, thereby making more sense to combine assessments than to duplicate items. Especially with the passage of the new federal Leave No Child Behind (the

reauthorized Elementary and Secondary Education Act), the State risks turning schools in to assessment centers. The State must be careful to develop assessments and tests that are robust and not duplicative. To support innovative non-duplicative results, the State should encourage establishment of a cross-segmental forum for sharing effective practices and ensuring assessment and testing alignment.

A combination of measures should be used to assess students, including:

- Standardized achievement instruments, such as SAT 9 or SABE II.
- Standards-based proficiency tasks based on academic standards.
- English proficiency assessments for English learners.
- Teacher assessment, such as report cards and classroom measures.

Coordination, Cooperation, and Planning

4. The State should encourage creation, by 2005, of a digital learning portfolio for each learner that would allow the student to move through a variety of coordinated delivery systems, regardless of the provider.

Commentary: Assessment addresses both the needs for initially placing students in appropriate programs and measuring growth and success in meeting standards-based programs. As policy-makers and learners are evaluating their investment in education, it is time to use technology to facilitate and enhance the assessment process. Technology provides an important tool for meeting the accountability requirements in state and federal law when teachers and administrators measure student learning, modify instructional services and strategies to meet learner needs, and help learners take control over their own educational experience. With a coordinated data collection system among the education segments, learners can move within a seamless coordinated delivery system of services to meet their education needs.

Coordinated information systems would provide students easy access to their own academic records.

California's adult continuing education system includes technology in its assessment and accountability systems. However, its current data collected on adult continuing education students is incorporated into unique software systems that unfortunately do not 'talk' to each other. One data collection system specifically responds to the data elements required for the federal funding available from the Workforce Investment Act, Title II; some, but not all, of the data points in the other predominant data systems correspond to the items collected for federal reporting requirements. Collaborative efforts need to focus on standards for common data collection elements, a data dictionary with a common definitions of terms, and processes to share the information generated among agencies; these collaborative efforts would result in an ability to define the needs of current populations as well as forecast future populations and needs.

Member comments: Student confidentiality must be assured and protected. Parent and student access is essential to assuring quality control in individual digital learning portfolios.

Section IV
EMERGING MODES OF CERTIFICATION

OPPORTUNITIES AND CHALLENGES

According to the U.S. Department of Labor, educating the 21st Century workforce is not just about making sure that Silicon Valley has enough engineers. Its mission is to provide hope – to ensure that all American workers have the opportunity to equip themselves with the necessary tools to succeed in their careers amidst the tremendous change occurring across the country and around the globe. America's 21st Century workforce needs to adjust to the changes of the 21st Century economy. These changes include a fundamental transformation for all industries and their increasingly higher skill set and postsecondary requirements.

What California already has in postsecondary education are well-established degree programs that generally follow disciplines in informed ways. Individual institutions have established cross-skill certifications that are topical rather than disciplinary, for example screenwriting, marketing, and human resources. In the 21st century economy, more flexibility is being applied in both education and the workforce. With the Master Plan effort, there is further opportunity to establish certification programs that are student-focused.

RECOMMENDATIONS

Flexibility to Meet Learner Needs

1. **The State should identify an entity to develop a common set of requirements for certificates to be developed by a consortium of partners, including education institutions, employers, and community-based organizations.**

   Commentary: The average adult will have six to seven jobs and cannot expect to spend his or her entire career with a single organization. Further, emerging technologies and business practices require continuous education. It may also not be practical for all to earn a traditional four-year degree. Extension programs, continuing education units, certificate programs, and vocational training are increasing to meet the needs of individuals and employers. Over the next twenty years, the demand for short-term, customized education programs can be expected to increase. If California is to remain competitive; its educational institutions must be prepared to meet this demand. One successful example is the certification programs established by the high-tech industry.

   Any representative of a legitimate partnership should be eligible for certification approval, as long as valid proof of commitment is demonstrated, such as a memorandum of understanding from all partners and a proposal including a detailed outline of course curriculum. The

certificates should be recognized statewide by institutions and employers, but still allow development of custom certificates for institutional or employer needs. These would not be in lieu of, but in addition to existing certification programs.

Students completing adult continuing education courses should have recognition of their level of competency. The State should have assessments appropriate to all approved program categories in adult continuing education to determine the level of student competence in all approved program categories. Certification for adults would assist them when presenting their skills and experience to employers and would also be beneficial to employers seeking employees with specific skill sets. Further, the certificates should be portable and recognized throughout the state.

Section V
FORECASTING AND PLANNING

OPPORTUNITIES AND CHALLENGES

The variety of instructional settings, arrangements, and systems that characterize California public education makes it extremely difficult to design new educational initiatives intended to benefit students distributed across this broad range of organizational entities. It is difficult to imagine how responsible individuals and groups can design, implement, and continuously improve these new efforts in the absence of valid, reliable information. It is even more difficult to imagine how these parties might compare the relative effectiveness of these new initiatives with existing programs, or to identify programmatic redundancies. Yet, this is exactly the situation in California. On a daily basis, elected officials, agency heads, school district and campus academic leaders, professional educators and, most important of all, the citizens of California are being asked to pass judgment on a bewildering array of new educational initiatives without the comprehensive, reliable, flexibly arranged, easily accessible and timely data one needs to exercise informed judgment.

For example, no single entity or agency in the State is responsible for collecting and validating the baseline data needed to forecast the demand for capital expenditures in PreK-12, adult continuing education, and postsecondary education. Consequently, the Working Group heard projections that varied greatly. When the Group asked agency representatives to explain the differences in their data projections, the Group discovered different databases, different assumptions, and different methodologies drive California's current projections. In addition, there is no single entity responsible for reconciling these differences. There is minimal forecast analysis of current data and there is no identified path to provide feedback in future years which when combined with the forecasting methods of today could drive the development of more accurate forecasting methods in the future.

A long-range cohesive system for accurate forecasting and meaningful educational planning should answer questions such as:

1. Are the right things being done?

2. What content or curriculum should be available to students to prepare them for the future?

3. What resources are needed to effect this change, including technology?

4. What about the academic calendar?

5. What infrastructure would be needed to effect this system?

6. What steps should be taken to provide for ongoing renewal of the system?

However, one of the driving factors behind this next generation Master Plan for Education was a basic disagreement at the statewide level on the sets of needed and available resources, currently and in the future, to accomplish the State's educational goals. If an analogy is drawn between the State's education system and a manufacturing system, the status of the manufacturer's facilities (buildings), tools (educational equipment such as desks, textbooks, and technology), workforce (educators), and their influence on the product (educated students) are poorly characterized. For example, early on in the Joint Committee's investigations widely divergent views were presented on the school facility capitalization shortfall over the next 20 years.

The development of a Master Plan for Education, pre-Kindergarten through University, should support the development of systemic data collection and planning efforts, and provide the opportunity to:

- Identify the data needed to manage and evaluate the effectiveness of public education system requirements and produce useful data.
- Ensure there are sufficient facilities that are learner-driven.
- Consolidate existing reporting and other venues to educate teachers and students.
- Prepare the State to adequately respond to the changing needs of businesses and the economy, to technological changes, and to changes in public policy.
- Facilitate long-term systemic planning to ensure the educational needs of students and teachers are being met.
- Make better use of public education funds through informed decision-making.
- Structure a cohesive system of schools, colleges, and universities that places a priority on the learner and embraces accountability.

Planning and forecasting should allow the state to best manage its educational system in terms of:

- Student access to teaching and learning opportunities.
- Demand, supply, distribution, and retention of teachers.
- Maintenance, renovation, safety, accessibility, and replacement of physical facilities.
- Evaluation of the quality of teaching and learning opportunities throughout the state.

- Success of students in achieving specific competencies and educational objectives.
- Effectiveness and currency of materials used in support of teaching and learning.
- Impact of new policies on any or all of the above.

RECOMMENDATIONS

Coordination, Cooperation, and Planning

1. **The State should conduct an annual forecast, through a designated entity, of education trends and needs, including elements critical to state policy-making and resource allocation.**

   Commentary: Currently, the State of California does not have a centralized or coordinated system for educational forecasting and long-term planning. As a result, many policy and funding decisions made by the State are made in a void or made with incomplete information. Although there are research entities that serve both bodies of the Legislature and the Governor, they typically respond to isolated requests only on specific topics. A coordinated approach to forecasting and planning along with a centralized oversight body is necessary to identify and then mitigate systemic problems, such as teacher and facility shortages.

   Data collection efforts must be effectively coordinated, streamlined, and linked to planning and forecasting.

   To gain the broadest look at data for public policy decisions, the proposed entity would work closely with the Governor, Legislature, and a representative cross-section of educational and public interest groups to identify the types of data required to inform, guide, monitor, and continuously improve the quality, effectiveness, and responsiveness of California's publicly financed schools, colleges, and universities. Policy-makers, administrators, educators, students, parents, professional associations, economists, and research organizations are the beneficiaries of such data when they can make appropriate operational decisions based on the data.

   There is a critical core of forecasting information the State must regularly collect and examine if it is to make appropriate decisions that impact the delivery of education in California. At a minimum, the information summarized in a forecasting report should predict total student demand, capital facilities and their condition, changes in the educational workforce, changes in the state's economic needs for the products of the educational system, and system performance due to changes (actual or formally proposed) in state or federal mandated rules, regulations, and policies. With such information, the assigned entity could make short, intermediate, and long-term forecasting projections,[11] and it could annually identify corrections to data projections based on actual, unforeseen events during the year.

[11] The report should have short (1-3 year), intermediate (5-10 year), and long-term (20 year) projections.

Specific information about the condition of the educational system could be far-reaching but would identify critical factors that should influence funding decisions: the condition of facilities in the state (room-by-room; with condition and capabilities), the full set of learning resources (such as textbooks, computers, desks) available at each facility along with a depreciation model for each; a demographic model of the educator population including geographic availability; and a demographic model of the learner population including traditional needs (such as K-12 educational standards), special needs (such as those for individuals with disabilities and for those learning English as a second language), and workforce needs (including all forms of adult education). These sets of information form a critical-basis set for understanding the condition of California's education infrastructure, and for being able to forecast the condition of that infrastructure into the future. Development and financing of this infrastructure is a years-to-decades problem.[12]

The State's understanding of the physical state of its existing educational capital infrastructure is of particular concern. In response to state queries about the physical state of individual schools, several districts told the Group that they only send in lists of facilities to be recapitalized that they believe the State will be able to support. Hence, the State probably has too optimistic an assessment of the state of all of education facilities.

Member comments: Members expressed a concern that they did not want to create a new bureaucracy.

2. **The State should develop all-electronic data collection processes by the year 2005 that would make minimal demands on school districts while providing sufficient information for policy decisions.**

   Commentary: A system of this nature would have the ability to minimize the collection of duplicative data elements. Existing reporting requirements should be reviewed and efforts made to discontinue any unnecessary requirements. Data should continue to be collected by all educational segments, but collection, analysis, and planning efforts should be streamlined. Additional data, beyond current reporting requirements, could be collected based on planning needs, and to assist in assuring continuous improvement and accountability.

   Clear guidelines must be developed to identify intended uses of the data and preclude breeches in confidentiality and other unacceptable uses.

[12] As an example, to produce a new K-12 accredited teacher from a high school graduate takes at least four years of post-secondary education, educational institutions (with their own instructors) that can provide that education, in-class internship opportunities, and an eventual geographic distribution system that moves these teachers to the districts that can use them. Once a teacher arrives at a district, the district must have a classroom and supplies to support that teacher. Securing baseline forecasts of teacher supply and demand proved to be problematic. When the Group sought to secure a forecast of the demand for K-12 teachers, assistant principals, and principals, disaggregated by school level, subject matter expertise, and geographic area, it discovered that there was no single agency or entity in the State responsible for collecting the baseline data needed to generate these forecasts. Instead, it heard numerous accounts of fragmented data collection efforts relevant to forecasting teacher supply and demand, mounted by individual colleges and school districts, the California State University, the University of California, the California Department of Education, the California Department of Finance, and the California Commission on Teacher Credentials.

In addition, the State's requests for information should be accompanied by as many prefilled-out data fields as possible, provide real or near-real-time data checking with historical and/or comparable perspectives, and in a timely manner provide integrated data sets back to the districts for their own uses. Whenever possible, integration with and direct support for federal reporting requirements should be facilitated.

3. **The State should develop unique identifiers for critical elements of the educational system when continuity and cross-correlation of information is important, particularly (1) students, (2) instructors, and (3) institutions.**

Unique identifiers would assist in individual, institutional, and systemic planning efforts.

Commentary: Californians are very mobile; and students frequently move and transfer to new schools. Too often K-12 academic records are not readily available or lag behind when a student transfers to another school or postsecondary institution; adult students often have no academic record when they transfer from one program to another and as a result often face repetitive requests about past learning experiences. If students had immediate access to their own academic portfolios, they could be spared inappropriate placements and easier access to education programs.

State and federal reporting requirements typically request data specific to student progress and outcomes, and these requests can be fulfilled if there a means of pairing data from one agency with that of another. California and its schools are becoming more automated, and technology advances will allow student information to be more centralized with the use of unique identifiers — a number or code that would connect a student to his or her educational records — to assist in statewide and nationwide data collection efforts. However, schools are reluctant to use or distribute Social Security numbers because of fear of violating state and federal confidentiality laws, and possible subsequent lawsuits. However, student identifiers could facilitate access without compromising confidentiality if the unique identification numbers can be issued without including any personal identifiers. Any statewide system of student identifiers should start from the work done with the California Student Information System (CSIS) and ensure that personal information is scrambled and eliminated from state and federal data collection efforts.

In addition to student identifiers, teacher identification numbers would assist in determining supply and demand needs. According to the Commission on Teacher Credentialing (CTC), the number of credentialed teachers is rising and more teachers are being employed. There may be enough teachers statewide, but the problem is they are not teaching in the areas where they are most needed. The effect on supply and demand in teaching has dramatically changed. The CTC has found that approximately 78 percent of teachers are still teaching, but it doesn't know where, whether they are working part or full-time, or if they are teaching at primary or secondary schools. When teachers renew their credentials every five years, there is an opportunity to extract some information concerning teacher retention, but more frequently reported information would be useful.

Unique institution identifiers would aid in monitoring and predicting facility availability and condition, forecasting future facility needs, and would support the development of portable student portfolios.

Section VI
ADULT CONTINUING EDUCATION

OPPORTUNITIES AND CHALLENGES

As California considers the educational challenges of the 21st Century, it faces a new reality for those living and working in a changing economy — one that has a foundation of information and communications technology and one that is influenced by national and international events. This 'new' economy provides advantages to those who have demonstrated strong basic skills in language, reading, writing, mathematics, technology, and critical thinking. Without these basic skills, people are less prepared, if prepared at all, to benefit from the advantages presented to them in such a society.

California also faces daunting challenges as it accommodates the needs of its newcomers. Many come into the United States through California. As reported in the report, *Less-Educated Workers in California: A Statistical Abstract,* California Research Bureau, nearly one of every five adult workers in California lacked a high school degree in 1999. About 70 percent of these workers were foreign born, and a large percentage received public assistance. To participate effectively in the education, employment, and civics opportunities of this State and country, immigrants and other limited English-proficient persons must master English and be able to understand and navigate government, educational, workplace systems, and health care.

California's economy underscores the need for and importance of short-term vocational training for adults in non-degree, non-tuition programs. Today's technology, globalization, and changing job markets result in most adults' changing jobs every three-to-five years and careers every ten years. Short-term vocational training provided by adult continuing education allows adults with entry-level skills and limited incomes to become employable and then pursue college and university options while supporting themselves and families. This training is particularly important for those adults losing welfare support.

The adult continuing education system[13] is comparable in context to its K-12 and postsecondary education counterparts that grant credit or degrees: as a system; it addresses the challenges inherent in instruction, professional development, assessment and accountability, facilities, and governance.

[13] Two state agencies — the California Department of Education and the Chancellor's Office of the California Community Colleges — oversee noncredit and adult education. These programs are offered in unified and high school districts and in community colleges as noncredit classes. In some areas of the state, adult schools are the predominant providers; in other areas, the community colleges are the predominant providers - and in many areas, the two segments share the provision of instruction. When the two segments share instruction in a given geographical area, there may be formal or informal agreements to delineate responsibilities or there may be competition for students. The availability of noncredit and adult education courses varies by geographic region.

California's population, like that in other states, is aging and presents educational challenges to its communities. The fastest growing population today includes those over 85 years old, and recent brain research reveals that education, or life-long learning, can be linked to the prevention of cognitive decline. Active older learners can maintain independent living, avoid depression, actively participate in civic affairs, and promote health through sound interaction in educational settings.

As California targets academic achievement for all children, it needs to concurrently address the needs of parents. The literacy skill of the parent is a significant factor in a child's potential to be successful in school. As the State addresses the ability of parents to speak English, get and retain a job, and develop skills equivalent to a high school diploma it increases the potential to help all children to succeed.

RECOMMENDATIONS

Equity and Access

1. **The State should establish a funding base adequate to the increasing challenges facing California's Adult Continuing Education System.**

   Commentary: Current levels of financing for Adult Continuing Education are inadequate to the needs of this burgeoning system. The State should base the funding for California's Adult Continuing Education System on population size, and should factor in other variables including economic conditions, income levels, levels of educational attainment, and limited English proficiency of learners. California's Adult Continuing Education System must provide funding that adequately supports instruction, assessment, professional development, infrastructure, and interagency coordination. Funding should also support curriculum development services, recruitment and retention, and commensurate employment conditions.

   Learners should have access to quality programs that are supported with adequate funding.

   With adequate funding, the system can provide to its students access to counselors and advisors,[14] technology, safe and adequate facilities, quality instructors and administrators receiving ongoing professional development and mentoring, and work-based education. Funding formulas therefore need to provide adequate means for these programs and services that is comparable to that provided for community college credit programs and not based on hour-by-hour attendance or capped funding levels.

   Member comments: The subgroup's recommendation was to increase funding on a per-pupil student basis to match the revenue limit for the K-12 system. Currently, the funding levels for adult continuing education offered in adult schools is approximately one-third that of K-

[14] Members of the subcommittee of the Working Group assigned to explore adult continuing education heard many pleas for increasing the number of counselors and advisers to assist adult learners navigate the educational system, develop career plans, and remain in programs long enough to develop the basic literacy skills needed for postsecondary education, workforce placements, and participation in their children's education.

12 education and does not include access to the categorical funds that augment the K-12 programs. The Working Group as a whole did not support this funding model, although members agreed that funding should be increased. Some members expressed concern that with finite funding available for all of education, increases in adult continuing education would come at the expense of the K-12 program.

Flexibility to Meet Learner Needs

2. **The State should develop a broad set of program categories that allow for the substantial flexibility necessary to meet local needs of adult learners.**
   - **Proposed categories include Life Management Skills, Civics Participation, Workforce Learning, and Foundational/Academic Skills Development.**

Commentary: California's adult continuing education system must be flexible to provide relevant courses, based on adult learners' needs and educational goals and on workforce needs**.** Courses should reflect the community's social, business, and economic needs, rather than a predetermined list of course titles and program areas. Providers indicate that students in need of services are denied access to programs because of limitations stemming from such factors as meeting high demand with limited resources, geographic isolation of students and programs, and small size of some providers. With flexibility in development and delivery of course offerings, providers could identify and meet previously unmet learner needs.

Courses should be organized according to learner needs.

The program categories currently offered are:

1. English as a Second Language
2. Elementary and Secondary Basic Skills
3. Short-term Vocational Education
4. Adults with Disabilities
5. Older Adults
6. Home Economics
7. Health and Safety
8. Parenting
9. Citizenship for Immigrants

Following is a description of proposed categories and of courses.

Life Management Skills —supports high performance skills necessary to many aspects of functioning, based on life changes. This category would include the following courses.

- ***English as a Second Language*** to provide English literacy skills for limited English speaking adults.
- ***Citizenship for Immigrants*** to provide citizenship education and preparation for the citizenship application process.
- ***Adults with Disabilities*** to emphasize community access and independent living.
- ***Older Adults*** to offer opportunities for personal growth and development, community involvement, and survival skills needed for self-maintenance and economic self-sufficiency.

- ***Health and Safety*** to emphasize the positive aspects of maintaining health literacy, including physical, mental, and emotional well being, and to demonstrate how good health and safety practices can prolong life and add to the quality of living.
- ***Parenting*** to assist parents of children from infancy through adolescence in parenting and child-rearing skills, to help parents have a positive effect on children's health, behavior, success in school, and emotional development.
- ***Home Economics*** to prepare individuals for entry-level or advanced training in home occupational areas and to help other individuals and families meet the challenges of daily living and improve the quality of home and family life.

Civics Participation — supports those individuals who need the skills required to participate effectively in civic life, at the neighborhood, community, county, state, and federal levels.

Workforce Learning — supports skill development in a work setting, or through integrated worksite experiences in classroom instruction.

Foundational/Academic Skills — supports courses in basic skills leading up to and including a high school diploma or its equivalent.

Quality and Accountability

3. The State should expand adult continuing education course standards to include student performance measures such as those developed by the National Skill Standards Board, the Secretary's Commission on Achieving Necessary Skills (SCANS), and Equipped for the Future.

Commentary: Currently there are state-approved model standards for five of the nine existing categories for noncredit and adult education. The established standards support programs in English as a Second Language, Adult Elementary and Secondary Skills, Parent Education, Older Adult, and Adults with Disabilities Programs. With the exception of the Adults with Disabilities category, the standards are now being reviewed and updated by providers of noncredit and adult education. If the program categories are revised to include an emphasis on workforce learning, these standards should be expanded to include student performance measures such as those developed by the National Skills Standards Board, SCANS, and Equipped for the future.

These standards should be the basis for professional development in the adult continuing education system. Trained professionals are better able to deliver new content, and they have an increased capacity to continuously improve programs by using local data to make informed decisions about content, delivery modes, and appropriate student-support systems.

Member comments: State model standards should be in place for all instructional categories before applying performance measures.

4. **The State should support an accountability system for adult continuing education students, emphasizing student performance and rewards for institutions for achievement.**

   Commentary: The oversight body for adult continuing education should identify and set reasonable standards for learner performance and should hold educational programs accountable for student performance across the many types of programs for adult learners not enrolled in college and university credit programs. This accountability requirement would require adult continuing education providers to measure growth in adults' knowledge of content, skills, and competencies that can be taught and learned through instruction.

   With the emphasis on accountability from both the State and federal government, the adult continuing education system must include strategies to determine the effectiveness of its various programs. Such data will assist policymakers to determine the appropriate future funding for the system. Such research on program effectiveness should be grounded in appropriate research designs, complete and accurate data, and identified outcomes that are appropriate and sufficient to indicate program effectiveness. Therefore, the system must address current challenges that exist with incompatibility of data collection approaches between adult schools and noncredit community colleges.

5. **The State should support the ongoing professional development of all staff who work with adult learners, to enable the students to develop the skills, knowledge, and aptitudes for life-long successes**

   Commentary: The scope and content of the state model standards for adult continuing education should become the basis for professional development in the adult continuing education system. Trained professionals not only are in a position to deliver new content, but have an increased capacity to continuously improve programs by using local data to make informed decisions about content, delivery modes, and appropriate student support systems.

Coordination, Cooperation, and Planning

A formal structure must oversee the development and implementation of policy.

Instructors must meet common minimum qualifications and have reciprocity within the delivery system.

6. **The State should review the governance structure for adult continuing education, including the role of the Joint Board Committee on Noncredit and Adult Education, with the goal of achieving a seamless delivery system among multiple providers that ensures a smooth transition for those adult learners continuing on to formal education, entering the workforce, or pursuing other goals.**

   Commentary: California's current dualistic delivery system for adult continuing education places challenges on the providers to sufficiently cooperate and coordinate efforts so that an adult learner can take courses from different providers and still meet long-term educational goals. To meet that challenge, the State Board of Education and the Board of Governors agreed to establish a joint working group to address mutually important

and recurring issues. This Joint Board Committee, however, has had no funding or formal staff to conduct regular meetings of adult continuing education practitioners; as a result, there has been minimal progress in meeting the twelve recommendations that emerged from a series of public hearings related to adult and noncredit education.

With the Governor's proposal to move some adult education programs from the Department of Education to the Community Colleges, there has been recent attention on these programs and the current governance structure. The Governor has assigned a formal review to identify pertinent findings that can be used to inform policy decisions.

Working Group members discussed the current governance structure but did not come to consensus on a specific recommendation. The majority of the adult continuing education subgroup members preferred that the existing Joint Board for Adult and Noncredit Education be strengthened and empowered. There was not the same support for this option from the larger group, given that the Governor's proposal was not sufficiently outlined at this point, making it difficult for the group to form an opinion. For example, the Governor's proposal was not clear about who would provide services and did not address concerns that the community college system does not have the capacity to serve all adult learners. There is widespread need throughout the state for multiple providers to ensure access to adult programs.

Member comments: Many organizations oppose the Governor's proposal including school districts, the Association of California School Administrators, the California Department of Education, the California Teachers Association, and some local community college districts. Many members expressed a view that overall the existing system has served adult learners well and that California's current system has been a model at the national level. Further, since members did not agree on a new proposed governance structure, there was some hesitation to include this recommendation in the report.

7. **The State should develop a mechanism for the reciprocity of instructional credentials, based on minimum qualifications, between the adult education and noncredit systems to allow instructors to teach in either or both systems.**

Commentary: California's current dualistic delivery system for adult and noncredit education places challenges on providers to sufficiently cooperate and coordinate efforts so that an adult learner can take courses from different providers and still meet long-term educational goals. Although the categories for instruction for community college noncredit and adult schools are identical, there are different requirements for instructor qualifications. Adult school instructors must be credentialed by the CTC; community college noncredit instructors must meet minimum qualifications established by the Academic Senate of the California Community Colleges.

Currently, to teach noncredit courses in a community college, a person must meet subject-specific minimum qualifications specified in state regulations unless he or she is a "grandfathered" credential-holder. Of the nine categories, adult education credentials in only

two categories — short-term vocational programs, and English as a Second Language — satisfy the minimum qualifications to teach in community colleges.

A policy in place such that instructors in one system would be accepted in the other without the necessity of going through the other system's process for qualification to teach. Another option would be a policy requiring uniform minimum qualifications.

CONCLUSION

California's Master Plan for Education must reflect the changes necessary for California to improve its education system. California's education system must once again be considered a force in the global economy. The Plan should be bold in providing a template for education policy implementation for the Legislature and the Governor over the next twenty years. The Plan should also be flexible enough to undergo change, as necessary. There is tremendous opportunity to close the achievement gap and to improve access to quality education programs.

There is a need for both flexibility and accountability. Charter schools, community-partnerships, small schools, and joint use of facilities should be continued and expanded as appropriate. Emerging assessment capabilities should be used to support student learning and to streamline faculty review processes. Technology should be used as a strategic tool for learning and for extending access to all populations. The State is in desperate need of a comprehensive data collection system that would support forecasting and planning at the district and state levels. This is a systemic need that was raised by each of the seven working groups of the Joint Committee.

Through increased accountability, partnerships, innovation, strategic use of technology, flexibility, proper planning, and adequate State support, California can have a world-class education system.

These changes and challenges will continue, and perhaps accelerate, in this new century. They will require California's adults and youth to continue learning throughout their lives. All Californians learn through a variety of venues - in the workplace, at home, in formal educational institutions - and through new, emerging strategies. The lifelong learner needs rich educational opportunities and the basic skills to take advantage of these available offerings. When learners do not have high levels of skills, they find it difficult to continue lifelong learning. As parents, they become less able to participate in their children's academic development; and with emphasis on the academic performance of children, California must recognize and support increased educational development of their parent. The literacy skill of the parent is a significant factor in a child's potential to be successful in school. If all learners — adults and children — are to be able to access the opportunities in this country, they must have access to an even playing field on which they can succeed in their adult roles as workers, family members, and citizens.

APPENDIX

Guest speakers
The following guest speakers addressed the working group on each assigned topic.

Forecasting and Planning
- ✓ August Cubillo, California Postsecondary Education Commission
- ✓ Peter Eliasberg, American Civil Liberties Union
- ✓ Steve Mills, WestEd
- ✓ Leonard Napolitano, Sandia National Laboratories*
- ✓ Anne Padilla, Commission on Teacher Credentialing

Assessment and Certification
- ✓ Theodore Mitchell**
- ✓ Evelyn "Sam" Weiss, Golden West Community College
- ✓ David Wadbrook, Heald College
- ✓ Jerry Neece, Sun Microsystems

Emerging Modes of Instructional Delivery
- ✓ Bernard Gifford**
- ✓ Karen Steentofte, California Commission for Technology in Learning
- ✓ Michael Ricketts, Finance and Facilities Working Group Consultant
- ✓ John Fleischman, Outreach and Technical Assistance Network, Sacramento County Office of Education
- ✓ John Kernan, Lightspan, Inc.*
- ✓ Roy Pea, Stanford University
- ✓ Richard Navarro, Commission on Technology in Learning
- ✓ Eric Rofes, Humboldt State University
- ✓ Richard Schorske, E-Learn Foundation

Emerging Organizational Forms
- ✓ Jill Wynns, San Francisco Board of Education/California School Boards Association*
- ✓ Joe Lucente, Fenton Charter School
- ✓ Doris Alvarez, Preuss School
- ✓ Keith Larick, Discovery School*
- ✓ Andi Fletcher, Community Schools
- ✓ Jack Azzaretto, University of California, Riverside

Adult/Noncredit Education
- ✓ Felix Aquino, San Diego Community College
- ✓ Katheryn Garlow, Palomar College*
- ✓ Steven Glick, City College of San Francisco, Downtown Campus
- ✓ Aaron Ogden, City College of San Francisco, Downtown Campus
- ✓ Victoria Morrow, Chancellor's Office of the California Community Colleges*
- ✓ Sylvia Oshima, Stockton Unified School District/California Teachers Association*

- ✓ Joan Dailey Polster, Sacramento City Unified School District*
- ✓ Chui Tsang, San Jose City College (Subgroup Chair)*
- ✓ Mary Tobias Weaver, California Department of Education*

Adult/Noncredit Education (presented to subgroup)

- ✓ Sharon Brannon, California Council on Adult Education
- ✓ Patricia de Cos, California Research Bureau
- ✓ John Delmatier, Proteus, Inc.
- ✓ Rudolph Kastelic, Association of California School Administrators
- ✓ Edward Kissam, Aguirre Inc.
- ✓ Lynda Lee, Mira Costa College/Association of Community and Continuing Education
- ✓ Bob Marr, Employment Development Department
- ✓ Norma Morris, Chancellor's Office of the California Community Colleges
- ✓ Patricia Rickard, Comprehensive Adult Student Assessment Services
- ✓ Rona Sherriff, Senate Office of Research
- ✓ Sandra Steiger, Adult Education Administrator's Association

* Working Group members
** Working Group Co-Chairs