ABSTRACT
              This annual report outlines activities of the California
Educational Research Cooperative (CERC). The CERC was established in 1988 to
bring educational professionals and research scholars together, and its
partnerships involve 26 school districts working with the University of
California, Irvine. The document lists CERC's mission and goals, its research
cycle, its research agenda, and its organizational capacity. Much of the
report focuses on the core research of the Cooperative, including phase two
of a class-size reduction study, a study of cultural diversity in the teacher
labor market, a review of educational indicators, and an analysis of multiple
assessments and student achievement. Other research includes a
beginning-teacher support and assessment training for principals and
school-site administrators evaluation; the California beginning-teacher
support and assessment program evaluation; a study that documents language
development in a Canadian school district; a tobacco-use prevention education
program; a beginning-teacher support and assessment program; and a study of
student success and school to career. A fiscal summary outlining operations,
revenue, and expenditures, and a list of CERC publications, sponsors,
members, faculty, and staff is also provided. (RJM)

ANNUAL REPORT

1999

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CALIFORNIA EDUCATIONAL
RESEARCH COOPERATIVE

UNIVERSITY OF CALIFORNIA, RIVERSIDE

THE CALIFORNIA EDUCATIONAL RESEARCH COOPERATIVE (CERC)

CERC is a unique partnership between county and local school systems and the School of Education at the University of California, Riverside. It is designed to serve as a research and development center for sponsoring county offices of education and local districts – combining the professional experience and practical wisdom of practicing professionals with the theoretical interests and research talents of the UCR School of Education faculty.

CERC is organized to pursue six broad goals. These goals serve the needs and interests of cooperating public school members and the University by providing:

- Tangible practical support for school improvement

- Proven strategies for resolving instructional, management, policy and planning issues facing public education.

- Valuable professional development opportunities for current and future school leaders.

- Support for data-based decision-making among school leaders.

- Research, planning and evaluation activities that are meaningfully interpreted and applied to school district problems.

- Data analysis to assist in generating public support for effective school programs.

In addition to conducting research in these areas, CERC publishes reports and briefs on a variety of educational issues. CERC also sponsors regional workshops for local educational leaders.

CERC
Executive Staff

Robert C. Calfee
Professor & Dean

Douglas E. Mitchell
CERC Director & Professor of Education

Anthony J. Lardieri
Executive Program Manager

Roseanna Barrón-López
Chief Administrative Officer

School of Education, University of California, Riverside, CA 92521-0128   (909) 787-3026   FAX (909) 787-3491

CERC MEMBERS

SPONSORING OFFICES OF EDUCATION

Riverside County Office of Education   San Bernardino County Superintendent of Schools

SPONSORING SCHOOL DISTRICTS

Apple Valley Unified
Baldy View ROP
Banning Unified
Chaffey Joint Union High
Desert Center Unified
Desert/Mountain SELPA
East San Gabriel Valley ROP
Etiwanda Elementary
Helendale School District
Jurupa Unified
Moreno Valley Unified
Ontario-Montclair School District

Oro Grande Elementary
Palos Verdes Peninsula Unified
Perris Union High
Redlands Unified
Rialto Unified
Riverside Unified
San Jacinto Unified
UC Riverside/Sherman Partnership
Val Verde Unified
Victor Elementary
Victor Valley Union High
Yucaipa-Calimesa Joint Unified

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CALIFORNIA EDUCATIONAL RESEARCH COOPERATIVE

CERC

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Message from the CHANCELLOR

schools of Engineering and Management to disciplinary departments in the physical and social sciences – UCR faculty and staff have found important opportunities to build on the spirit of our agricultural experiment station history by putting knowledge into the service of community development.

Stronger partnerships with Inland Empire communities are being translated directly into a stronger and more diverse University. For the first time in our history, we are offering admission to more than 10,000 freshman students in 1999 – an increase of 18.4 percent above last year.

Not only does CERC continued to grow in stature and influence with each passing year, it has become the model for a broad range of UCR partnership activities. CERC has established close working relationships with California State agencies, and with other research and development agencies throughout the country. During the past year, working closely with the School of Education's new Dean, **Robert C. Calfee**, we have created a new community based organization – The Friends of Education – to strengthen ties between Inland Empire schools and the University. **Dean Calfee** has also assisted greatly in the creation of the Alpha Center, a public school outreach and engagement coordination center working under the direction of **Executive Vice Chancellor David Warren.** This center, directed by **Dr. Pamela Clute**, is now coordinating support for a broad program of School University Partnerships designed to help public schools in this region prepare more students for successful entry into the University of California. Across the campus – from the professional

Not only are we growing in numbers, but UCR is leading the University of California in providing educational opportunities for students of from diverse ethnic and racial backgrounds. Over the last two years, admission of African American students has risen 95.4 percent at UCR. Chicano admissions have risen 86.7 percent; American Indians, 65.6 percent; Latinos, 54.9 percent; Whites, 51.9 percent; Asian Americans, 36.6 percent; and others, 31.7 percent. All of these students meet regular UC admission requirements, ranking among the top one-eighth of all high school graduates.

These outstanding young men and women have worked hard to meet UCR's very high standards. They are being recognized for their accomplishments, and will be prepared for leadership in the next millennium by mastering a rigorous course of study during their years at UCR. I am delighted with the record of caring and sensitive leadership among the UCR faculty and staff. And I am especially pleased with way CERC has served as a model of close cooperation

between the University and the public schools to improve our entire educational system.

While CERC has had the steady hand of continued leadership from its founding director, **Doug Mitchell**, other changes have been quite remarkable during the past year. Our good friend **Tony Lardieri**, the retiring superintendent of Riverside Unified School District has joined the CERC staff to help us keep in close touch with developments in the public schools.

In both Riverside and San Bernardino, countywide leadership has passed into the hands of a new generation of County Superintendents of Schools. **Dr. David Long** was elected Riverside County Superintendent of Schools after a distinguished career as district superintendent in the Banning and Lake Elsinore school districts. And **Dr. Herbert Fischer**, who received his Ph. D. from the UCR School of Education in 1983, was elected San Bernardino County Superintendent of Schools after serving with distinction as superintendent of the Colton Unified School District. These outstanding leaders are vital to the continuing success of CERC. They serve as bridges and interpreters of this school university partnership as new school district leaders join the cooperating districts each year.

For my part, I look forward to CERC entering the new millennium as one of the brightest beacons for public school support and enhancement.

Raymond L. Orbach
Chancellor

UNIVERSITY OF CALIFORNIA
RIVERSIDE

Message from the DEAN

A year ago my distinguished predecessor, **Irv Hendrick**, wrote this column, announcing my imminent arrival, and providing wise counsel about CERC's roles in the Inland Empire's public schools. **Irv** now serves as Assistant Vice Chancellor for Development - he is looking for money for the University, the School, and CERC!

As **Irv** noted in his column, the CERC concept was part of what led me to take on the responsibilities as Dean - a working model demonstrating how to connect research and practice. Educational indicators, the effects of class-size reduction, the pragmatics of bilingual programs, and sponsorship of the Beginning Teacher Support and Assessment Project are just a sampling of CERC activities. **Doug Mitchell** and his colleagues certainly have a full agenda. So do all of us.

Since my July arrival, things have been busy in the nation, the state, the region, the University, and the School. We have yet to see what the President and the Congress will come up with, so pass for now. State-level developments - what can I say! The **Davis Initiatives** are still in flux, but reading, teaching, and administrative leadership will surely take the front rows. The region - the astonishing economic and population growth in the Inland Empire appears in the newspapers almost daily, with frequent references to the critical importance of education in years to come. The University – **Chancellor Orbach** is committed to opening the doors for any qualified student to enter the University of California, arguably one of the most distinguished institutions of higher education in the world. His energy and enthusiasm has paid off - UCR will double in size during the next decade. And the Alpha Center- the new coordinating unit for University outreach and support of public schools - now stands as a beacon to this commitment. The School-University Partnership, funded by the Office of **UC President Richard Atkinson**, is a unit of the Alpha Center with direct and immediate consequences for schools within our region.

And what about the School? **Rodney Ogawa** joined me as Associate Dean, and we are beginning to understand the system. Most significantly, the School has just completed its Five-Year Plan. Let me share the highlights. The faculty will examine and review ideas and explorations during the months to come. These ideas include:

➢ **An Expanding Faculty** - Searches are underway for positions in Teacher Education, Education Psychology, School Psychology, Education and Technology, and Foundation/Anthropology.

> **An Expanding Doctoral Program** - In collaboration with several regional California State University campuses, we are presently recruiting candidates to prepare for careers in research, in teaching (tailored to CSU positions), and service (administrative and policy positions), as well as our current programs.

> **An Expanding Credential Program** - for both teachers and principals. **Governor Davis** has asked UC to increase the number of candidates, and UCR will be part of this effort.

We will emphasize both quantity and quality. For example, we plan to connect undergraduate, fifth-year, and induction experiences, so that our graduates emerge with a range of experiences that prepare them for leadership in local districts.

A proposal for an *Institute for Improvement of Educational Practice (IIEP)*, a think tank, providing a "place" for the School's activities designed to bring theory and practice together for implementing solutions to educational problems. Complementary to CERC in some ways, the *IIEP* umbrella will be designed to cover the various credential programs, along with the School's numerous research and development projects. The idea is not to "manage" these activities, but to bring participants together on a regular basis to compare notes.

A full platter, and one with many implications for the CERC community. Public schools can expect a new deluge of State initiatives in the near future. We must link and evaluate these diverse projects to realize their potential. CERC, along with other units within the School and University, stands ready to serve as your partner in these challenging endeavors.

Robert Calfee
Professor and Dean
School of Education

UNIVERSITY OF CALIFORNIA

RIVERSIDE

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Message from the DIRECTOR

California's new governor, Gray Davis, has succeeded in putting public education at the center of the public policy agenda. He convened a special session of the legislature, and persuaded them to enact a package of reform bills. These new initiatives come on top of the massive Class Size Reduction initiative sponsored by former governor Pete Wilson and the dramatic changes in education for children who enter our schools speaking a non-English native language that are required by the passage of Proposition 227 in June of 1998. Even as these historic changes in California's educational landscape are emerging, fundamental changes in the preparation, certification and induction of new teachers are encouraging the development of new skills and work orientations within the schools.

All these changes, and others too numerous to mention, have provided local school districts with unprecedented opportunities for change and improvement. They have also made life more complex and challenging. Local schools face a massive shortage of fully qualified teachers, tripling the number of emergency permit teachers in the classrooms. Class size reduction has put substantial pressure on school facilities, forcing many schools to adopt year-round schedules to accommodate the increased number of classes. Many of the new policies require reallocation of local fiscal resources, forcing cutbacks some critical areas of need. Identifying the most appropriate tasks and responsibilities to be assigned to experienced and highly skilled teachers who are being called upon to support the induction of new teachers, re-design and implement new curricula, and undertake peer review of fellow teachers looms as one of the most important issues facing local district policy makers. Other critical policy decisions include:

- how to interpret and then design instructional systems to meet new academic standards,
- how to monitor academic growth among children and adjust instructional programs to improve effectiveness,
- how to contain and manage budget encroachments from class size reduction or categorical programs such as special education, and

- how to recruit and support new teachers in the face of persistent shortages.

How California's public schools respond to these challenges in the coming years will determine not only how well they are able to help children to succeed personally and academically, but also whether the communities and public policy makers begin to recover their confidence in public the State's public schools. These challenges need to be met, not with harsh rhetoric or a frenzied search for some "silver bullet" of reform, but by careful delineation of problems, systematic collection and analysis of data, and public documentation of the effects of specific changes in school programs and policies. CERC is dedicated to this kind of documentation of policy, program and professional practice improvement. By linking the research and analysis capabilities of the University with the practical and professional wisdom of local educators, we are laying the foundations for a public school system that will not only perform well, but will be recognized for its critical role in assuring future opportunities for all children.

Toward that end, the last year has been a great success. CERC has been recognized as an agency that can document the performance of such policies as the Beginning Teacher Support and Assessment program and can help identify the effects of alternative approaches to such fundamental issues as English language development, class size reduction, special education costs, or tobacco use prevention. While we can take pride in our record of accomplishment, new policies and changing school conditions are giving renewed urgency to our mission of informing local school district program and policy making with high quality research and analysis.

Douglas E. Mitchell
Professor of Education
CERC Director
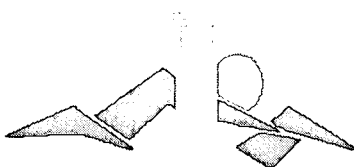
CERC Online

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WELCOME TO THE

California
Educational
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Riverside
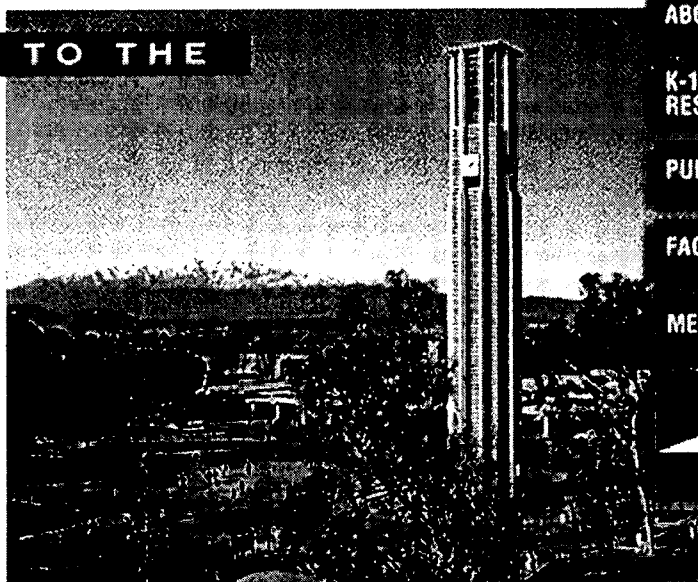
ABOUT CERC

K-12 EDUCATIONAL
RESEARCH PROJECT

PUBLICATIONS

FACULTY & STAFF

MEMBERS

The CERC Web Site provides members access to current research on persistent problems of practice facing K-12 educators. It joins cutting edge research with cutting edge technology. CERC Online links research with program and policy implications for both public and private school organizations. The CERC Web Site contains:

- CERC Publications

- K-12 Research Findings

- Links to the World Wide Web

- Links to INFOMINE—the research search engine

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Mission and Goals

CERC: The Link Between Research and Practice

County Office School District Support
Data Collection, Analysis and Training

UNIVERSITY PROVIDES
Core Staff
&
Data Management

CERC RESEARCH PLANNING COUNCIL (RPC)
Establishes program priorities

RESEARCH & DEVELOPMENT TEAMS
Design and implement projects

POLICY LEADERSHIP
Issue interpretation to members, researchers, & others

TRAINING & FOLLOW-UP
Services provided to CERC Members
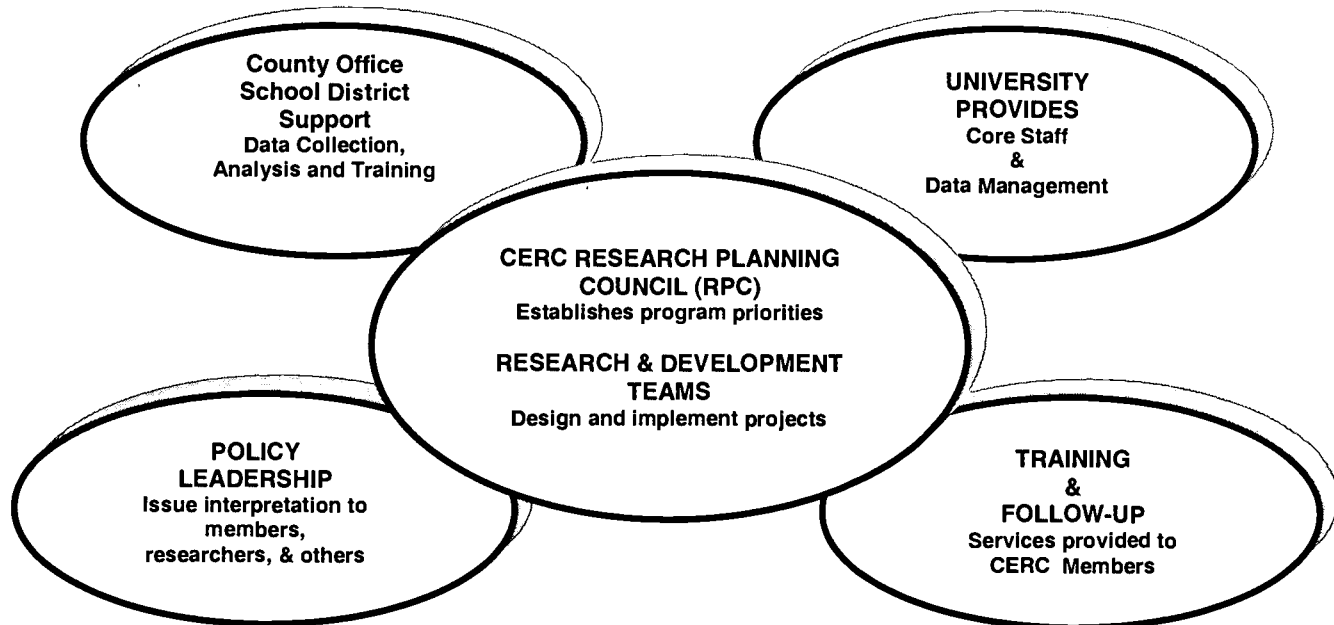
The California Educational Research Cooperative (CERC) was established in 1988 by the University of California, Riverside, School of Education. CERC is a joint venture aimed at bringing educational professionals and research scholars together. It is a unique partnership between the Riverside and San Bernardino County Offices of Education, 26 local school districts, and the University. Cooperative membership represents approximately 500,000 students or 5% of California's school population. Organized around representatives from each member district and county offices of education, the Research Planning Council (RPC) is the Cooperative's primary structure for setting its research agenda in the pursuit of five major goals:

- Collaborative identification of research, planning, and development.

- Educational decision making through data-based problem solving.

- Training for professional leadership.

- Direct support for school systems.

- Creation of a regional data system.

Research Cycle

The Research Cycle

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                        ┌─────────────────────┐
                        │   Concept Paper     │
                        └─────────────────────┘
     ╭──────────────╮                        ╭──────────────────╮
     │ Dissemination│                        │ Literature Review│
     ╰──────────────╯                        ╰──────────────────╯
            ↑                                        ↓
     ╭──────────────╮                        ╭──────────────────╮
     │ Final Report │                        │      Design      │
     ╰──────────────╯                        ╰──────────────────╯
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     ╭──────────────╮          ╭──────────────────╮
     │Data Collection│ ←────── │ Instrumentation  │
     │ Data Analysis │         ╰──────────────────╯
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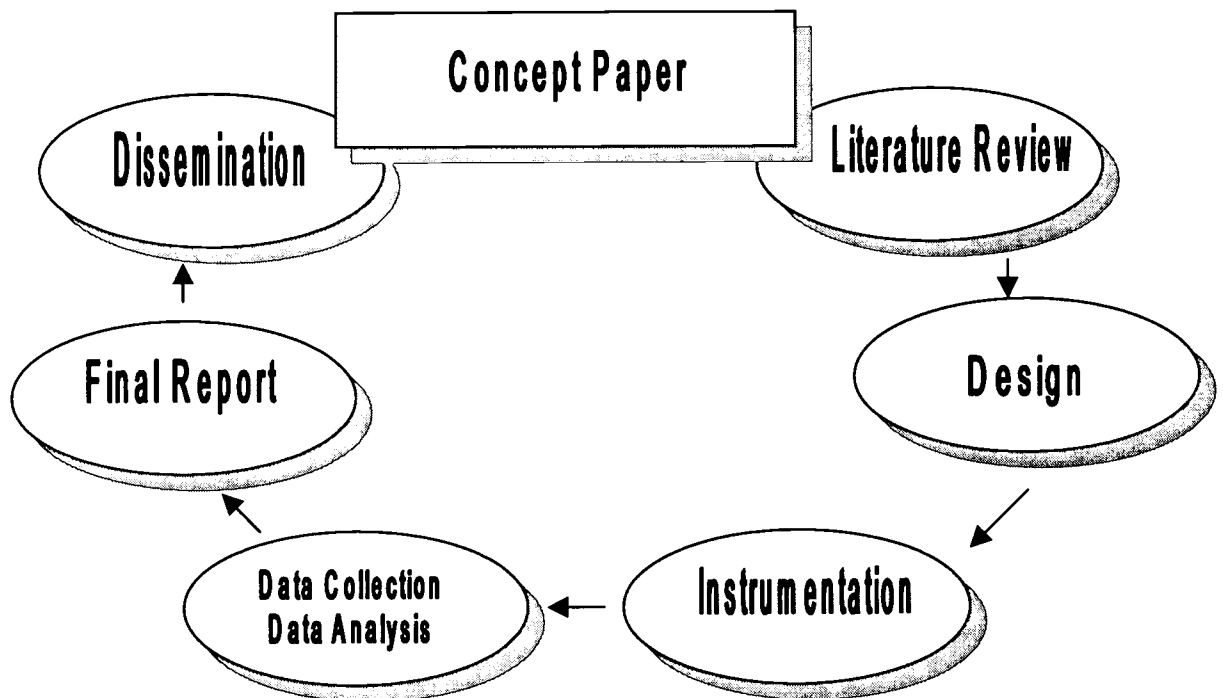
CORE Research Projects evolve through a series of steps graphically depicted in the figure above. Each Step engages **CERC's Research Planning Council (RPC) and CERC Faculty and Staff** in a variety of collaborative activities. These activities include:

- Brainstorming activities resulting in research concept papers.

- Monitoring, refining, and implementing research designs.

- Advisory reading of draft reports.

- Quarterly review of reports on the progress of research.

- Disseminating research findings.

Research Agenda

Types of Projects Undertaken by CERC

CORE PROJECTS
Selected by RPC
Funded by CERC
District
Membership Fees and
University
Contributions

Special Projects
Contracted by
Non-Member
Organizations

Member Projects
Contracted by
Member
Organizations
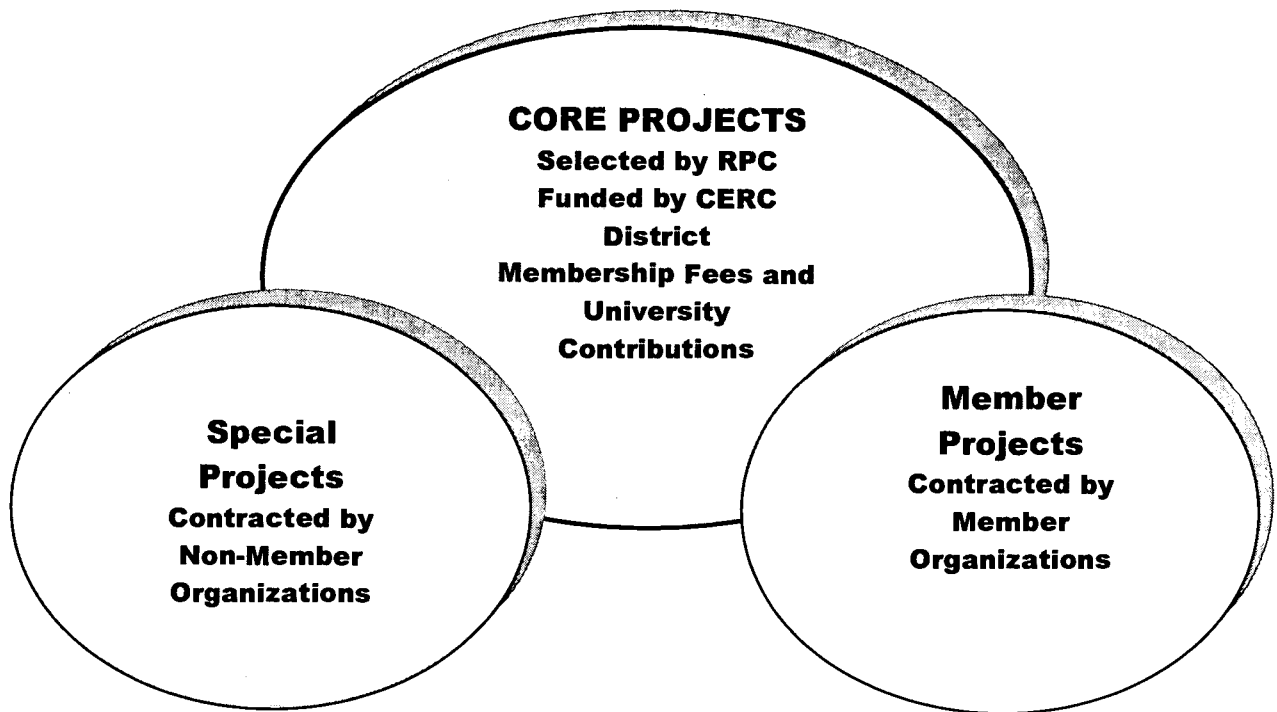
CERC's research agenda focuses on its CORE Research Projects. CORE Research Projects are those chosen by consensus of CERC's Research Planning Council (RPC). CORE Projects for 1998-1999 are:

- The Effects of California's Class Size Reduction on Students

- Cultural Diversity and the Teacher Labor Market

- Educational Indicators Systems (EIS)

- Multiple Assessments and Student Achievement

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Organizational Capacity

Program Policy Evaluation

Survey Technology

Student and Professional Assessment

CORE RESEARCH

School Finance and Scheduling

Management Information Systems

Performance Indicators
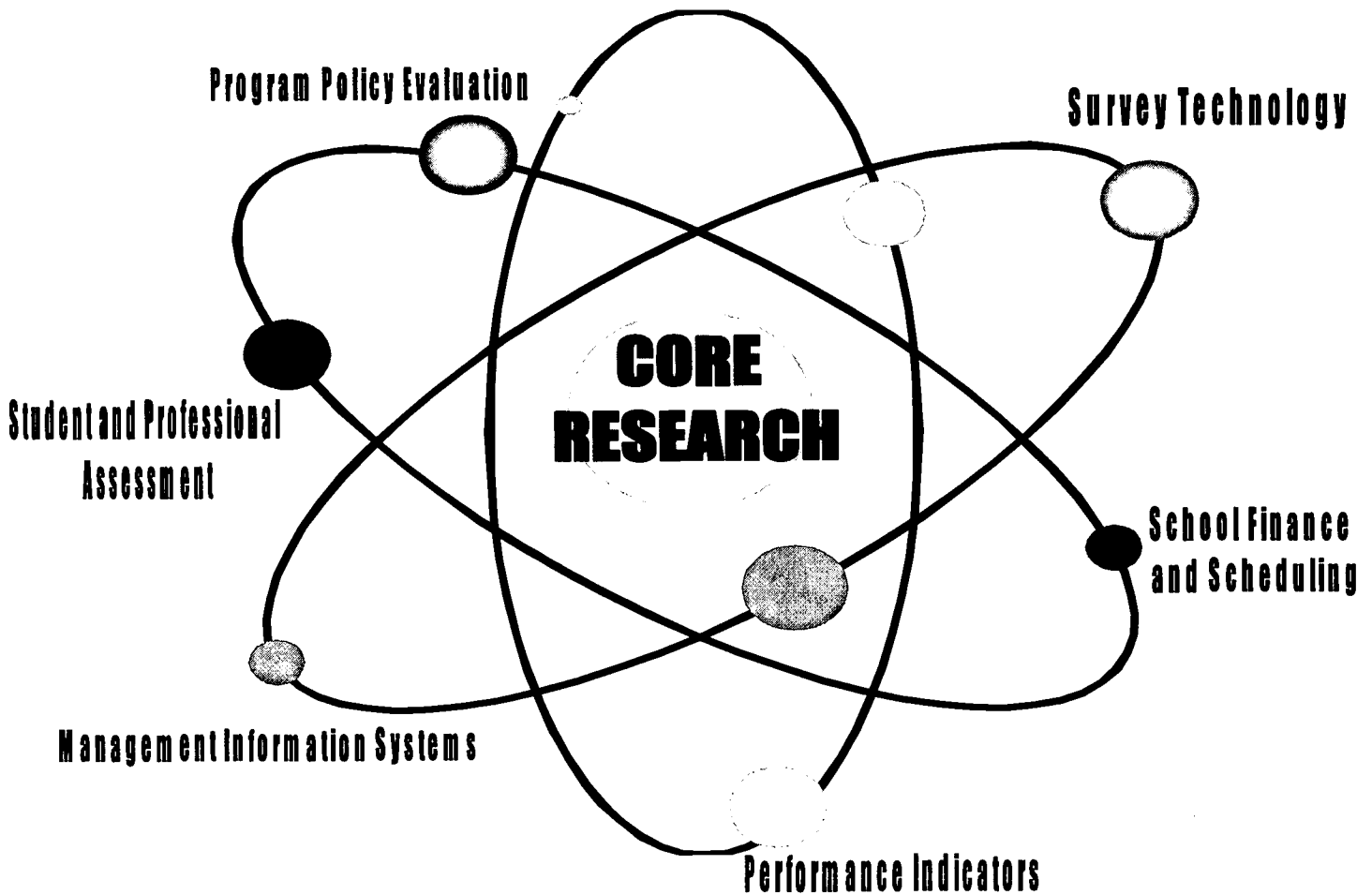
CERC's CORE Research Projects form the nucleus of the organization. Member and Special Research Projects have contributed to producing multifaceted benefits over the past 11 years, as demonstrated by the successful completion of more than 210 research, evaluation, planning, and development projects. CERC has developed capacity and expertise in the following areas:

- Community, Staff, and Student Survey Technology

- Program and Policy Evaluation

- Management Information Systems and Performance Indicators

- School Finance and Scheduling

- Student and Professional Assessment

CERC Core Research

- ## Class-Size Reduction (CSR) Study
  ## Phase Two: Student Achievement as a Function of Class-Size

  ### Research Team

  Principal Investigator: *Douglas E. Mitchell*
  CERC Research Fellow: *Ross Mitchell*

Introduction

Assessing the impacts of class size reduction (CSR) on student achievement is quite difficult. The impact of interest is embedded in a complex and diverse environment. It's a little like trying to figure out whether a new fish farming program has improved the productivity of our hatcheries. In a carefully controlled environment (like the aquarium in our family room) it is pretty easy to calculate the impact of some new type of fish food. But when the fish are swimming in the wild, we have to track changes in the weather, the availability of other nutrients, possible predators, inflows of pesticides and dozens of other factors that could enhance or defeat our efforts to improve performance.

In the case of Class Size Reduction, schools find themselves in a turbulent and rapidly changing environment. California schools had to implement CSR with very little time to plan for space needs or hire new staff. Additionally, the state has a new student testing program, a new teacher accountability policy, a new approach to teacher education and induction, referendum mandated changes in bilingual education, continuing space problems and a number of other important factors altering the educational environment in important ways. Even the character of the students attending our schools is undergoing ongoing change due to immigration, socio-economic change and alterations in eligibility for various categorical program services. None of these dynamic conditions of the environment has reached a steady state. Adjustments, and responses to adjustments, are still introducing disturbances and uncertainty into the river.

Evaluation of CSR impacts on student achievement is formative and on-going activity. The threat to its identifiable impacts is large. Other conditions of the environment are sure to have large and potentially offsetting impacts on student achievement. Serious study is required to separate the contributions of the various and simultaneous influences on student achievement. Thus, any findings at this point may not predict the outcome of continuing evaluation studies.

Data Collection and Analysis

With the above caveat firmly in mind, we are in a position to make an annual report of the progress of the second phase of the California Educational Research Cooperative's (CERC) CSR Study. For a little over a year now, twelve CERC member districts have been providing SAT-9, CBEDS PAIF, and year-round education (YRE) data for inclusion in the study: Apple Valley Unified, Beaumont Unified, Etiwanda Elementary, Helendale Elementary, Moreno Valley Unified, Ontario-Montclair Elementary, Palos Verdes Peninsula Unified, Redlands Unified, Rialto Unified, Riverside Unified, San Jacinto Unified, Val Verde Unified, and Victor

Elementary. Other non-member districts have provided data for our study: Barstow Unified, and Walnut Valley Unified. When available, archival data has been provided to permit estimating a pre-CSR baseline, examination of the equivalency of standardized tests with SAT-9, and to begin construction of a longitudinal database. From the multiple datasets, a database is continuing to be constructed, including pursuing missing data, that links student level data with teacher level data at the classroom level. This allows for analysis of factors associated with student achievement at the individual student, classroom, school, and district levels. Since CSR is a classroom level policy (ideally), the achievement analysis is focused on the impacts on students' performance within classrooms and the level and distribution of achievement of the classroom population as a unit.

A student level analysis requires examination of the dependence of individual students' achievement on student, teacher, whole classroom, and whole school level factors across the several districts (currently, eight are sufficiently well assembled to carryout analysis). Total language, mathematics, and reading subject NCE scores are used as dependent variables at this level of analysis. The NCE score has been chosen because it is defined to be normally distributed, based upon a national sample, about an expected mean of 50 with a standard deviation of 20, ranging from 1 to 99, for all grades. Therefore, it is an appropriate metric for assessing impacts across all grades and districts.

The method currently employed for analysis is a general linear model (GLM) with unbalanced, non-experimental design (not all groups have the equal numerical representation and some combinations are known not to be possible). This is a typical design for policy analysis. Policies are rarely applied in a random fashion with a strict experimental control protocol. As such, control for factors influencing achievement is accomplished, to the extent possible, statistically. Since these factors are related hierarchically, i.e., students are within classrooms with teachers who are within schools, which are within districts, the analysis of variance is decomposed in a hierarchical fashion. In particular, the variance accounted for (explained) by student level demographic or intake factors (ethnicity, gender, home language, mobility, and poverty) is removed from the total variance in individual level student achievement first. Student level programmatic and classroom assignment factors (grade, GATE, special education, English language proficiency, being overage for grade, and being in the high or low grade of a combination grade classroom or not being in one) are removed second. Whole classroom level factors (proportions of representation of each student level factor in the classroom, the classroom being identified as a combination grade classroom, and the attendance calendar – traditional or particular YRE track) are then removed before the teacher level factors (age, experience, education, ethnicity, gender, and contract status). Teacher level factors follow in order to examine what explanatory power remains to be attributed to teachers once the particular individual and classroom mix of students presented to the teacher has been accounted for statistically. Finally, the schools are "nested" within districts to remove any variance attributable to institutional and organizational characteristics not already entered. This analysis is carried out by analyzing the residuals saved from the previous level without CSR entered. At each level of analysis, the adjustments to the differential impact of CSR are also assessed.

The classroom level analysis offers the opportunity to examine the possibility that CSR will influence the distribution of achievement in a classroom simultaneously with the (mean) level of

achievement. This is done by examining the dependence of the higher level moments: standard deviation, skewness, and kurtosis. That is, after controlling for the same factors listed above that are known to be associated with student achievement, the analysis provides a look at the impact of CSR on the classroom as a whole. For example, it may be observed that there is a narrowing of the spread of achievement (lowering the standard deviation), a bringing up of the low achievers (making skewness more positive), or a drawing in of the lowest and highest achievers (making the kurtosis) more positive) as a result of teaching in a classroom with substantially fewer students. This analysis begins at the classroom level, then proceeds to the teacher and schools within districts levels. Similarly, the impact of CSR is also examined at each level.

Substantive Findings

Due to the extreme local variability of CSR implementation strategies employed by the various districts, the "creature" of interest remains elusive. In other words, it is premature to numerically specify the effect of CSR on student achievement until more complicated interactions are fully understood. For example, as was found in Tennessee, it appears that different groups may benefit differentially under different circumstances. This analysis is not complete. Nonetheless, certain realities of the environment are readily determined and their importance relative to CSR can be roughly assessed. In particular, estimates of the effect sizes of the factors investigated on student achievement are available from the hierarchical analysis employed.

Based upon prior research and preliminary analyses previously reported (CSA Annual Meeting), the overall impact of CSR is not likely to exceed an effect size of .2 or one-fifth of a standard deviation (4 NCE points). This is an important, but not tremendous effect size. If it were to fall as low as .1 or one-tenth of a standard deviation (2 NCE points), the susceptibility of the impacts to other disturbances could easily be overwhelming. As such, it is important to put it in the context of other effect sizes. Student demographics have effect size comparable to or greater than CSR. Student mobility and gender are comparable. Home language is comparable or slightly greater. Student ethnicity and poverty effects are two to three times greater than those likely from CSR. Student programmatic and classroom assignment effects range from comparable to much larger than CSR, keeping in mind that these effects are determined after controlling for student level demographics. Combination grade classroom assignment and being overage for grade are comparable. English language proficiency is slightly greater. GATE and RSP identified students are associated with effect sizes four to five times greater.

Once accounting for student differences, classroom composition, teacher education, and teacher ethnicity have significant effect sizes. Teacher factors are no more than comparable to CSR, while compositional effects range from comparable to much larger than that of CSR. In particular, the ethnic composition influence is at least comparable, while the non-English language and special education influences may be larger. After controlling for student and classroom level factors, there is little additional explanation remaining at the schools within districts level.

Conclusion

Given the power of student programmatic and classroom assignment (both individual student assignment and classroom composition), as well as the non-negligible impact of teacher characteristics, above and beyond the substantial student level demographics we are left with complicated prospects. The legacy of segregation (and its continued existence) still requires serious attention. The consequences of poverty are great. These are enduring and challenging social policy issues that the schools have typically only affected at the margins. But much is left to be managed by schools. The quality and accuracy of program delivery can have profound effects. The management of the student population and its distribution among schools, classrooms, and programs may have serious consequences. The availability and distribution of teachers, and their appropriate assignment, may make important differences. Class size reduction is but one instrument to affect change in student performance outcomes. And with the rapidly changing policy environment as a result of action in Sacramento and on the state ballot, the ability to manage and deliver programs, services, and teachers to students when and where they are needed is constantly being affected. Though CSR has been held up with great promise, it is its simplicity and relative ease of implementation that has seduced policymakers to inflate its power. Unless serious surprises are to be found from the more careful and extended analysis of the impacts of CSR on student achievement, other policies and programs are likely to deserve more time, energy, resources, and attention than the continued dedication to class size reduction.

• Cultural Diversity and the Teacher Labor Market

Research Team
Principal Investigator: *Douglas E. Mitchell*
CERC Research Fellow: *Louisa Ng*

Project Overview

The Cultural Diversity and Teacher Labor Market research team has invested much of our time in developing and inciting interest in an electronic database that manages applications for teaching positions. The Teacher Application Tracking System (TATS) has been evolved into a fully functioning application managing system.

Districts regularly employing the database include Chaffey Joint Union High School District, Redlands Unified School District, Riverside Unified School District, San Jacinto Unified School District, Victor Elementary School District, and Riverside County Office of Education. Over the years, our beta-test sites have served as a testing and advisory group to improve the system. From them, we have learned valuable lessons about the obstacles to fully normalizing the use of the database.

Information Access

Accessing information on a district's teacher applicant pool is not an easy task. The research team found that retrieving data on previous applicants meant sorting through files accumulated over the years. We realized that this task was as daunting for the school districts as it was for the researchers. Our purpose in developing the database was to facilitate information gathering and

dissemination in the application processing process. If the information were consistently entered into the database, the district would have access to information on their pre-hire pool. Our research team would also be able to collect information that would address the question of diversity in the teacher labor market.

There is a continuing difficulty in getting regular data entry. The database requires transferring a good deal of information from paper applications into the electronic dataset. Although we have tried to facilitate data entry with mouse driven point and click operations, the task of entering information into the system remains cumbersome and time consuming compared to simply filing the paper applications. The resources needed for data entry mean that the database must prove its worth. We believe that payoffs in the ability to easily sort, analyze, and report information about the teacher applicant pool will outweigh data entry costs.

Previously, we introduced the data analysis capacity of TATS with a preliminary analysis of the beta-testing dataset. An analysis of the information collected during our pilot test period shows the teacher labor market even more local than we anticipated. Using the teacher applicants' home zip codes, pilot data applications were sorted into regions. Figure 1 shows nearly 65% of all applicants applied to a district with the same three-digit zip code as their home address. This dramatic "localness" of the teacher labor market indicates that two out of every three applicants live within a half-hour's drive from where they are seeking employment. This has significant implications for teacher recruitment practices.

Figure 1: Localness of Teacher Applicants

Region	Count	Percent
Local	236	64.84%
LA Basin	47	12.91%
Inland Empire	47	12.91%
USA	25	6.87%
Southern CA	4	1.10%
Northern CA	3	0.82%
Unknown	2	0.55%

Information Analysis

Analysis of information from the database is easily accessible for generating charts or graphs for presentations. Our current release, TATS version 1.0, has been redesigned to include reporting abilities. These include general in-house reports of applicants and reports specifying particular applicant characteristics. In addition, the database produces regular reports to the School Board

showing basic statistics of application activities. Figure 2 shows the number of applications received by month in 1998. Listed are the numbers and the percentage of applicants screened as qualified, interviewed, jobs offered, and hired from this group. The average of years taught is indicated along with information on ethnicity and locality of the applicants. These types of reports are easily produced with the information entered into the database.

In addition, many of the districts are already working with district and county data information systems such as the San Bernardino MAGIC system. This requires the transferring of specific information about applicants who have been hired into the countywide database. The database, which was developed in Microsoft Access, allows for interface between programs. In the effort to reduce duplication of data entry, the database has the ability to transfer current information into the county system.

Figure 2: TATS Database Report Summary

Board Report:
Summary of Active Teacher Applications

Applications Received During: January 1998

	Number of Applicants	Com-plete	Quali-fied	Inter viewed	Offered	Hired	Avg. Years Taught	Non-Eng Language	Applic Lives: Local	SoCA	(Pcts for Reported Ethnicities) White	Hisp	Black	Asian+
Num:	43	0	40	40	39	39	0	10	43	43	34	5	3	0
Pct:		0%	93%	93%	91%	91%		23%	100%	100%	81%	12%	7%	0%

Applications Received During: March 1998

	Number of Applicants	Com-plete	Quali-fied	Inter viewed	Offered	Hired	Avg. Years Taught	Non-Eng Language	Applic Lives: Local	SoCA	(Pcts for Reported Ethnicities) White	Hisp	Black	Asian+
Num:	1	1	0	0	0	0	0.7	0	0	1	0	0	0	0
Pct:		100%	0%	0%	0%	0%		0%	0%	100%	0%	0%	0%	0%

Grand Totals:

Num:	44	1	40	40	39	39	0.3	10	43	44	34	5	3	0
Pct:		2%	91%	91%	89%	89%		23%	98%	100%	81%	12%	7%	0%

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Next Steps

Our next step will be to develop the ability for Internet applications. Many school districts have developed web pages with general information about the district and its schools. Employment opportunities are also announced on these sites, as Internet job searches are new avenues for recruiting potential applicant. The current Internet applications process asks some general information about the applicant. After the district receives this information, a paper application is mailed to the person, requiring duplication of some information with additional paperwork. A comprehensive, easy to use Internet application that "captures" data entered into Access fields will best eliminate application repetition and make the application process a little less intimidating and overwhelming.

• Educational Indicators

Research Team
Project Investigator: *Rodney Ogawa*
CERC Research Fellow: *Edward Collom*

Project Need

For more than a decade the United States has been engaged in a prolonged campaign of educational reform. One reform strategy that has attracted the attention of many policy makers and academics uses "educational indicators" to guide the improvement of educational systems. Indicators have been used to compare the academic performance of students in different nations and between states in the U.S.. More recently, policy makers have enacted programs that use indicators to monitor local districts and schools. For example, California is now implementing its Standards-Based Accountability system, which requires districts to use multiple classroom-based and standardized measures to determine the academic performance of students and thus identify sub-standard schools.

In response to these developments, the members of the California Educational Research Cooperative commissioned a study of educational indicators and their use. The research team began by conducting a literature review to determine what is already known about the topic. Here we summarize the literature review that was presented to the Cooperative's Research Planning Council on November 20, 1998 and is available through the Cooperative's business office.

A Brief History

American policy makers have turned to indicators for guidance when the nation has found itself grappling with ambiguous problems and struggling with basic values. This reliance on indicators stems from the success that policy makers enjoyed in using economic indicators to recommend tax cuts which successfully stimulated the nation's economy. This contributed to the development and use of social indicators to shape and evaluates the many social programs that were initiated during the 1960's. However, enthusiasm for social indicators quickly waned when with the failure of government programs to curb widespread and growing social problems.

Despite these earlier disappointments, in the 1980's indicators became prominent fixtures on the educational reform landscape. Beginning with the use of statistics to document the failings of American public education by *A Nation at Risk* in 1983 and the publication of the "Wall Chart", government agencies and policy organizations--including the Council of Chief State School Officers, the U.S. Department of Education's Center on Statistics and the National Science Foundation--coalesced around the development and use of educational indicators to improve public education.

History reveals a tension that policy makers and educators confront in considering how to use educational indicators. On the one hand, driven by government and policy organizations, expectations run high for the use of educational indicators as tools to improve the performance of public education systems. On the other hand, the earlier failure of policy makers to use indicators to eradicate social problems reveals just how difficult it will be to meet the lofty and perhaps unrealistic expectations. Clearly, this calls for a careful consideration of what educational indicators are and what they might realistically be expected to accomplish.

What Are Educational Indicators and Indicator Systems?

The literature offers a variety of definitions of educational indicators, focusing on five components: 1) description, 2) evaluation, 3) monitoring, 4) value judgments, and 5) policy-relevance. By integrating these components we arrive at the following definition: *an educational indicator is a statistic that describes a key aspect of schooling which permits the evaluation and monitoring of schools, programs and students. From these activities general assessments, or value judgments, of the health of educational systems can be derived and policy-relevant information provided.*

Indicators are not arbitrary, isolated measures. They are typically found in sets and comprise what is referred to as an indicator system. Like indicators, indicator systems are defined in a variety of ways in the literature. The many definitions focus on four functions of indicator systems: 1) presentation, 2) representation, 3) monitoring, and 4) policy usage. Combining these functions, we offer the following definition: *an indicator system is a representation of educational systems that enables data presentation, the monitoring of key components, and recommendations for policy modifications.*

How Can Indicators and Indicator Systems Be Used?

It is apparent that definitions of indicators and indicator systems focus on their use. The literature discusses 5 uses of educational indicators. Each use provides a particular type of control over educational systems.

First, indicator systems can be used to **inform public discourse** about educational issues by describing key elements of educational systems, charting trends over time and attempting to predict future problems and issues. Public discussion could lead stakeholders to develop shared values, norms and beliefs about educational systems and thus contribute to establishing **normative controls**, much like those that bind together communities.

Second, indicator systems can be used to **hold educational systems accountable** by monitoring whether or not they meets standards for the quality of inputs, conditions and instructional processes and/or outcomes. This provides regulatory control over educational systems, rewarding schools and districts that meet standards and punishing those that do not.

Third, indicator systems can **evaluate programs and policies** by assessing their impact while taking into account other factors that may affect outcomes. Evaluation provides **technical-rational control** over educational systems because it provides feedback to policy makers regarding the contribution of particular programs or policies to intended outcomes.

Fourth, indicator systems can serve as **information management systems**, which provide policy makers with ongoing, comprehensive feedback on the functioning of an educational system, indicating the degree to which the system's many elements are contributing to its outcomes. This use of indicator systems is said to provide policy makers with "levers" that can be pulled to "ratchet-up" system performance. Like evaluation, information management systems provide **technical-rational control**.

Fifth, indicator systems can be used to **advance policy agendas** either by providing policy makers with data that reinforce predetermined claims or by focusing public attention on certain outcomes and educational issues. This use of indicators provides policy makers with political control or, at the very least, influence on educational systems.

How Do You Design An Indicator System?

Once the decision to operate an indicator system is made, policy makers will have to determine which indicators to include. The literature indicates that there are two basic approaches to designing indicator systems and selecting indicators. The appropriateness of using one approach over another depends to some extent on the type of control that policy makers seek to exert over the educational system.

The first approach to designing indicator systems is to use a theoretical model that specifies the factors in the schooling process that produce particular outcomes. Such models are developed by social scientists based on theory and the results of research. A research team from the RAND Corporation proposed the theoretical model that has gained the most attention. This model identifies 3 stages, which incorporate 10 components, including fiscal and other resources, teacher quality, instructional quality and achievement (a full description of the model is included in the literature review). Using a theoretical model to guide the development of an indicator system is most appropriate when policy makers seek to use the system to exert technical-rational control over an educational system; that is when they wish to use evaluation or an information management system to provide feedback on system operations and their impact on outcomes.

A second approach to designing indicator systems is to use a general "framework". A framework is simply a structure for organizing educational domains of interest. Unlike theoretical models, frameworks do not imply that components of the educational system "cause" outcomes. A widely cited framework was proposed by the Special Study Panel on Education

Indicators. It provides 6 issue areas--including, learning outcomes and equity--and main concepts associated with each area--including core content and attitudes under learner outcomes and student demographics and educational services under equity (a full description of the framework is included in the literature review).

A framework is an appropriate guide to designing indicator systems that will be used to inform public discourse, hold schools and districts accountable or advance policy agendas. All of these uses require the identification of key components and outcomes of educational systems without specifying causal relationships between the components and outcomes.

Information Demands and System Feasibility

The varying uses of indicators place different information demands on indicator systems. Generally, uses that provide technical-rational control place the greatest information demands on indicator systems, while uses that provide normative and political control place the least. Information demand is linked to the feasibility of operating an indicator system. Information comes at a cost, making high demand systems less feasible than those with low demands do.

Indicator systems used for accountability have relatively low information demands. They focus on a few input, process or outcome indicators and do not require the analysis of relationships between indicators. However, accountability systems are "corruptible"; data can be manipulated to produce invalid or misleading measures. This is particularly true if narrow outcome indicators, such as standardized achievement tests, are used, and educators can corrupt such indicators by "teaching to the test." This means that accountability systems must bear the cost of oversight to reduce indicator corruption.

Evaluation places relatively high information demands on indicator systems. A large number of indicators must be included in order to control for the potential influence of key components of an educational system in assessing the impact of a certain program or policy. In addition, analysis must examine relationships among components, the program or policy and outcomes. These information demands require technical and human resource support, which may make this use of indicator systems less than feasible, particularly for small and/or low wealth districts. The highest information demand is associated with using an indicator system as an information management system. Again, a large number of indicators must be used to chart the operation of an educational system, and relations among the many indicators must be analyzed. Another concern about the feasibility of using an indicator system for evaluation or as an information management system lies in their reliance on theoretical models. Experts cannot agree on a single model, raising questions about the usefulness of information generated by such an information system to policy makers.

This leaves two additional uses of indicator systems: informing pubic discourse and advancing policy agendas. Neither places a great information demand on an indicator system. Both would focus on a small number of indicators in order to inform but not overwhelm the public or policy makers. The real issue of feasibility here is whether or not policy makers and educators would be willing to place such limits on the use of an indicator system. History suggests and the literature indicates that government agencies and analysts, alike, have more ambitious plans for

the use of indicators. The question that local policy makers and educators must ask themselves is if the more ambitious uses of indicators are feasible, can they actually be used to enhance local systems?

• Multiple Assessment and Student Achievement
Research Team
Principal Investigator:	*Melanie Sperling*
CERC Research Fellow:	*Kevin McNeill*

Background and Rationale

An expansive research literature emanating especially from the field of educational psychology documents a positive relationship between student motivation and student achievement. Briefly put, students who are motivated in the classroom (and, by definition are in some way engaged in what they are doing), learn better than students who are not so motivated. The equation, however, is not as simple as it appears, for "motivation" and "achievement" are not concepts to be taken as absolutes. For example, students may be motivated by grades, interest in subject matter, a general love of learning, involvement in the school culture, admiration for a particular teacher; motivation may be temporary or long-term, incipient or long-lived, context-specific or nonspecific. Achievement may be seen in student test scores, change in student attitudes, progress on particular types of assignments, increasing willingness to learn or to undertake classroom work, development of isolated skills or general concepts or facts. Indeed, achievement may be seen even in students' "errors" as they experiment tentatively with new ideas or strategies instead of relying on already-mastered yet limiting habits. How motivation and achievement are born out, it would seem, would depend on the sociocultural contexts in which instruction and learning take place, as well as on the subject matter at hand. Furthermore, how real teachers, working in "real" classrooms, with "real" students, come to understand what constitutes student motivation and achievement in their particular situations, how students themselves perceive such characteristics in themselves and in their peers, may not always square with the carefully yet often-differentially operationalized perceptions conveyed by large-scale correlational research. Such issues are the focus of this study. The study puts particular focus on student motivation and achievement in the area of literacy (reading and writing).

Literacy

Today, more than at any other time in our history, the demographic range of students whose literacy achievement is at stake in our schools has never been greater. With the challenge to help all students achieve as readers and writers, and to develop ways to document such achievement that are useful for both policy makers and teachers, we must know literacy achievement when we see it, and we must know how to engage students in literacy so that they in fact achieve.

As a project based in questions about students' literacy, this study builds on a substantial literature in the domains of reading and writing addressing issues of engagement and achievement. This literature includes research that points to student engagement (for example through whole language approaches to reading, reader response approaches to literature learning, and process approaches to writing) as a critical factor in learning, as well as to a growing

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research literature that understands engagement to be a necessary but not a sufficient factor in literacy learning. (For the purposes of this project, the notion of engagement will not replace but will encompass that of motivation.) It also includes a number of informal observations made especially by language and cultural minority scholars that engagement does *not* predict literacy achievement or mastery, and that an engagement-achievement gap is greatest for students from minority linguistic, cultural, and social backgrounds, in particular in low-income contexts. These latter observations are both compelling (as research issue) and disturbing (as social issue), and deserve exploration. Yet literacy researchers can point to little in the way of empirical studies to offer solid information on this gap for the range of students in our schools. At best, in the area of literacy, the relationship between engagement and measured achievement is under-theorized for lack of empirical study.

The study described here will attempt to shed light on the engagement-achievement relationship in the domains of reading and writing, focusing on the achievement of students from diverse linguistic, cultural, and social back grounds.

Questions Guiding the Study

The following broad question guides the study:

What is the nature of the relationship between students' engagement with reading and writing in the class room and their reading and writing achievement?

This question, and the sub-questions that follow, will be addressed from both teachers' and students' perspectives, focusing on the critical years spanning middle and high school, and on diverse groups within low income contexts.

How do teachers and students define "engagement" and "achievement" generally in school and specifically in the contexts of reading and writing instruction? In other words, how do they know them when they see them?

How do teachers and students think about and understand an engagement-achievement relationship? An engagement-achievement gap?

In the face of multiple measures or indicators of engagement and achievement, how do teachers and students prioritize which one(s) to attend to, for what purposes, and under what circumstances? How do teachers and students perceive the relationship (or lack of relationship) between different measures of engagement and achievement?

Regarding the questions above:

What similarities and differences exist between perceptions of teachers and their students? Across diverse groups? Across the grade levels of interest?

Methods

Because I am interested in part in complicating existing notions of literacy engagement and achievement and in part in understanding these notions in domain-specific ways, I plan to conduct in-depth interviews that will result in inductive analytic procedures for elucidating teachers' and students' perspectives on engagement and achievement. The interviews will be held with up to ten local teachers (core informants) identified by administrators and peers as outstanding teachers of reading and writing, and selected students from their classrooms representing the range of student abilities and achievements in these classrooms. The interview data will serve as a kind of fulcrum, leading me later to develop a survey to be distributed to teachers and students broadly and, at the other end of the spectrum, to develop classroom-based case studies for more in-depth exploration. The main focus of the CERC study is the interviews.

We are now in the beginning phases of this study. We are reading and reviewing key literature in both educational psychology and language and literacy education regarding past and contemporary definitions of engagement (motivation), and achievement, and regarding the nature of existing studies and their findings. For background, we are also gathering information on commonly used standardized achievement tests, in particular the Stanford Achievement Tests, 9th edition (SAT-9). We have also begun to identify teachers to form the group of core informants for our interviews, gathering recommendations of outstanding teachers from the Riverside School District and the Inland Area Writing Project. The Project Investigation (P.I.) has begun to contact these teachers to probe their interest in participating in the study.

We intend to develop and carry out the interviews by the end of spring semester.

CERC Member and Special Research

- **Evaluation Study of theBeginning Teacher Support and Assessment (BTSA)Training for Principals and School-Site Administrators Evaluation**

    Research Team

Project Investigator:	*Linda D. Scott*
Co-Investigator:	*Irving G. Hendrick*
Co-Investigator:	*Douglas E. Mitchell*
Research Assistant:	*Tedi K. Mitchell*

Introduction

The California Commission on Teacher Credentialing (CTC) and the California Department of Education (CDE) have funded an evaluation study of the Beginning Teacher Support and Assessment Training for Principals and School-Site Administrators. Now in its second year of operation, the purposes of the training for principals and School-Site Administrators are: to teach an overview of BTSA goals, objectives and participant roles, to identify the needs of beginning teachers, to examine two core state documents that inform the program, and to understand the BTSA support and assessment system.

The **BTSA – North South Leadership Collaborative (BTSA – NSLC)** is responsible for conducting the training. The collaborative is represented by the Riverside County Office of Education, San Bernardino County Superintendent of Schools Office, Contra Costa County Office of Education, the California School Leadership Academy (CSLA), and the California Educational Research Cooperative (CERC) in the School of Education at the University of California, Riverside. This is a "trainer of trainers" model in which the BTSA Specialists, once trained, go on to train School-Site Administrators at regional locations across the state. Empirical evidence from the recently completed *1998 Statewide Beginning Teacher Support and Assessment Program* (Mitchell, Scott, Hendrick & Boyns, 1998), makes a compelling argument for the critical importance of school-site context—shaped and defined by principal and School-Site Administrator leadership-- in the successful induction of beginning teachers. A review of the beginning teacher induction literature, completed for this evaluation report, affirms the positive impact the principal exerts on the BTSA program.

Design of the BTSA Principal and School-Site Administrator Training

The goals of the training are the successful expansion of BTSA in general, and in particular securing principal/School-Site Administrators support for BTSA in a manner that is consistent with the *California Standards for the Teaching Profession* (CSTP) and the *California Standards of Quality and Effectiveness for BTSA*. These documents set the expectations and criteria for high quality materials development and effective training. The NSBLC training program is specific to school site principals/School-Site Administrators who have or expect to have BTSA programs or elements of BTSA programs on their school sites.

Design of the Evaluation Study

This evaluation study was designed to assess the outcomes of three BTSA pilot Principal and School-School-Site Administrator trainings held during 1997, in order to assist BTSA Specialists in the revision and refinement of training materials. Four evaluation tools were used: a) session feedback forms completed by participants that permitted immediate formative feedback to the trainers for revision and refinement of materials; b) a participant survey instrument conceptualized and designed by CERC research staff, based on a review of the literature, formative assessment of the early stages of training, two core BTSA documents and established BTSA criteria; c) observations of the actual trainings, and d) an interview with the BTSA Principal and School-Site Administrator Training Program Director. The survey was administered three times during the training year to three different groups - once after the first training had been completed and twice again approximately two months after the materials had been revised. By using these tools, both quantitative and qualitative data were gathered on the effectiveness of the training program

Feedback and Survey Results

Immediately following the pilot sessions, each group's participants were given feedback sheets to complete. These data indicate the success of the training, which was rated effective to very effective 100 per cent of the time on a scale that asks for a rating of ineffective, effective or very effective. One hundred fourteen of the total 116 participants completed a two-part evaluation survey form. Part I provided personal background. The first section of Part II asked each respondent to rate the effectiveness of the training on a scale of 1(not at all) to 5 (a lot) and the value of the training on a scale of 1 (not valuable) to 3 (very valuable). Eleven statements, which described each activity presented during the training, were being rated. On each item over 90% gave a rating of 4 or 5. At least 90% rated the training very valuable.

The second section of Part II of the survey was a *Comments* section which asked attendees to write responses to three questions asking about the effectiveness of the training, its strengths and needed changes, and important training outcomes. Both the scales indicating the effectiveness and value of the leadership training and the written comments clearly state that the participants found the seminars a worthwhile investment of their time and energy. The analysis of the written comments reveals that the presentation of the BTSA, CSTP, and CFASST standards materials has prompted respondents to consider reconstructing their responsibility to serve their entire teaching staff.

Observation of the Trainings

CERC's research staff engaged as evaluator participants in both pilot trainings, one in the northern and one in the southern part of the state, in late summer and early fall of 1997. In general, the CSLA training appeared to be an excellent, well-planned, well-prepared and well-conducted program. Nevertheless, there were several suggestions for improvement offered. It was the evaluators' sense that all of the formative evaluation suggestions and recommendations were well received by the training team. In conjunction with this feedback and their own training expertise, self-critiques and attention to the feedback from the participants, the training

was streamlined and revised by the BTSA-NSLC training team on a continuous basis to increase the impact and success of the training.

Interview with the BTSA Principal and School-Site Administrator Training Program Director

A personal interview was conducted with the BTSA Principal and School-Site Administrator Training Program Director, Mrs. Linda Childress of the Riverside County Office of Education, in the winter of 1998. The purpose of the interview was to capture the changes in the training and to assess the impact it has had on principals and School-Site Administrators. In general, the level of principal and School-Site Administrator knowledge regarding BTSA varies, but most know little about the program. Nevertheless, they accept it well, and see it as a benefit for all participants. Since the pilot phase, the training has become more concrete and specific in the issues it addresses, namely, the CFASST system, the Descriptions of Practice found in CFASST and the needs of Beginning Teachers.

Discussion and Recommendations

Principals and administrators need the understanding and opportunities offered by the training in order to offer in-kind support to the BTSA Directors, support providers and new teachers. Remembering the critical role principals play in establishing a nurturing and supportive context for beginning teachers, we offer the following recommendations. It is recommended that the California BTSA program continue to reach out to principals, and to offer them training, in the expectation that doing so will enhance the quality of the BTSA program, and, more importantly, enhance the development of proficiency by beginning teachers. Without such training, there is a real danger that principals and School-Site Administrators--sure to be key players in BTSA statewide expansion efforts--will mis-perceive the need for systemic change at the site level that BTSA programs augur, and come to view BTSA efforts as mere attempts at programmatic change.

- # California Beginning Teacher Support and Assessment Program: The 1998 Statewide Evaluation

    ### Research Team

Project Investigator:	*Douglas E. Mitchell*
Co-Project Investigator:	*Linda D. Scott*
Co-Project Investigator:	*Irving G. Hendrick*
CERC Research Fellow:	*David E. Boyns*
Research Support:	*Monishia-Denee' Miller*

Introduction

The preparation and induction of new teachers into their professional roles has become an important focus of both policy making and scholarly research in recent years. The reasons for

this concern include recognition that new teachers, even those with the best available pre-service training, find themselves challenged by the rigors of daily classroom life. Changing demographic and economic conditions often bring large numbers of novice teachers into the nation's classrooms each year. Periodic regional teacher shortages and policy changes, like California's 1996 decision to substantially lower class size in the early elementary grades, place additional demands on public schools to create meaningful induction programs to assist teachers through their first year or two of teaching.

The stress on new teachers is well documented. From their first day, most beginning teachers are overwhelmed with the workload, difficulties of management and discipline, unenthusiastic children, and insufficient pre-service training. In addition, new teachers often lack support and feel professionally isolated. A California study estimated that over fifty percent of classroom teachers quit the profession within two years. The human anguish of new teachers is accompanied by a substantial loss of the resources, manpower and planning invested in teacher pre-service and in-service training programs.

Beginning Teacher Support and Assessment Program

The California Beginning Teacher Support and Assessment program (BTSA) was designed to meet the needs of new teachers during their first two years of teaching. The program has grown each year since its inception in 1992, and dramatically so since 1995. Thus, program growth itself has become an issue in evaluating the quality of BTSA programs. Notwithstanding the program's apparent success in its early years, did the more than doubling of local BTSA grants between 1996-97 and 1997-98 (from $7.5 million to $17.5 million) result in a compromise of quality?

The evaluation study described below attempts to answer this question. The <u>BTSA Statewide Evaluation Report</u> provides strong empirical evidence regarding the extent to which beginning teachers, support providers, and school-site administrators recognize specific induction support needs, and the extent to which various mixtures of support lead beginning teachers to function more comfortably and effectively in their teaching assignments. This evidence, in combination with comparisons of selected survey results against data and findings of the two previous years of evaluation study, compels the report's policy recommendations for BTSA maintenance and improvement in light of legislative intent.

Statewide Evaluation Process

Results of a statewide evaluation survey of all beginning teachers, support providers and school site administrators in the 34 local BTSA projects summarizes the policy framework for operating the California Beginning Teacher Support and Assessment (BTSA) program and interprets information obtained from the survey. Three years of data are reviewed with primary emphasis given to the spring 1998 administration of the survey. BTSA program success is measured against three outcome criteria. These criteria are: a) whether beginning teachers are attaining expertise in six professional teaching skills outlined in the *California Standards for the Teaching Profession*, b) whether beginning teachers are becoming confident and comfortable in executing their teaching responsibilities, and c) whether beginning teachers are developing a level of career

satisfaction and commitment likely to keep them teaching in the public schools (See Figure 1: The BTSA Program Model).

Figure 1: The BTSA Program Model

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                            │             2            │
                            │   BTSA Assessment System │
                            │     Skills and Abilities │
                            │  Professional Development│
                            └─────────────┬────────────┘
                                          │
                                          ▼
┌──────────────────────┐   ┌──────────────────────────┐   ┌──────────────────────────────┐
│           1          │   │            3             │   │              5               │
│ BTSA Support Context │ → │  BTSA Program Operations │ ► │    Overall BTSA Evaluation   │
│   Program Priority   │   │     Help Frequency       │   │         Clear Goals          │
│   Support Systems    │   │       Help Value         │   │      Valuable Activities     │
│                      │   │   Organized Activities   │   │  Improving Teaching Quality  │
│                      │   │     Meeting Needs        │   │      Smooth Operations       │
└──────────────────────┘   └─────────────┬────────────┘   │    Timely in Meeting Needs   │
              ＼                          │               └──────────────────────────────┘
               ＼                         ▼                              ↗
                ＼          ┌──────────────────────────┐               ╱
                 ↘         │            4             │             ╱
                            │   BTSA Program Outcomes  │
                            │      Skill & Ability     │
                            │   Confidence & Comfort   │
                            │    Career Satisfaction   │
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Survey Results

Scales measuring each of these criteria were included in survey questions. Data analysis reveals a generally positive appraisal of BTSA's impact on all of the targeted outcomes. In giving especially high estimates of their career satisfaction, BTSA beginning teachers express a strong belief that they made the right decision to become teachers. Overall evaluation of local BTSA program performance is characterized by substantial variation, but there was general agreement that BTSA program goals are clear and that participation in organized BTSA activities is valuable for beginning teachers.

Survey demographic data reveal that more than 42 percent of all 1998 BTSA beginning teachers were employed on emergency permits or provisional certificates, or were in training in district or university intern programs. More than 8 of every 10 beginning teachers served by BTSA programs in 1998 were in their first year of BTSA participation. Longitudinal data reveals that beginning teacher participants teaching in the elementary grades increased from nearly 48 % in 1996 to 76.3% in 1998, and the number of teachers using provisional or emergency permits has

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nearly doubled from 22.6% to 39.6%. These changes reflect both the impact of California's class size reduction initiative and the rapid growth of the state's school age population.

Beginning teachers, support providers and school-site administrators recognize the crucial importance of "context variables" that substantially influence the operation and impact of seven dimensions of their BTSA program experience. Regardless of how local BTSA programs are designed, where beginning teachers are working in a context of positive support for themselves and their BTSA programs, respondents agree that they develop substantially higher levels of ability, confidence and career satisfaction. Where the environment lacks support, BTSA program experiences are much less positive. An important and satisfying finding for policy planners and program implementers is that beginning teachers gave highest marks to BTSA when they felt they had achieved the targeted outcomes of high ability and confidence. Equally satisfying to BTSA designers is the recognition that the second most powerful factor influencing overall BTSA program evaluation was the quality of the local BTSA assessment system.

Policy Implications

The BTSA Evaluation Team suggests six policy options for maintaining and improving BTSA programs. These options are:

> *1. Recovering and analyzing CFASST data.* In the course of implementation, local BTSA projects are modifying and adapting a common statewide framework for guiding new teacher support and assessment embedded in the California Formative Assessment and Support System for Teachers (CFASST) in a variety of ways. Additionally, some local programs are continuing to use alternative systems for providing these services to their new teachers. In order to adequately interpret the extent to which CFASST is succeeding in directing new teacher assessment and support activities in important and effective ways, it will be necessary to recover and analyze the data being generated during the implementation of this complex and highly structured process. To some extent this can be done through additional survey data collection, but is likely to be much more effectively done by collecting artifacts from actual CFASST implementation and examining the nature and extent of use, and comparing this with the attainment of professional standards and other targeted BTSA outcomes.

> *2. Strengthening local BTSA program contextual support.* Given the extraordinary power of the context variables of broad-based new teacher support and high priority attention to BTSA program implementation to predict local BTSA program operations and outcomes, significant attention should be given to developing policies that enhance these elements. Using technical support and training processes to make all local program leaders aware of this contextual influence is a first step, but additional steps could also be taken. It would be appropriate to ask local agencies seeking to participate in BTSA how these contextual issues will be addressed, and to require that success in improving contextual support be reviewed as a part of each local program's evaluation design.

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3. Validating new teacher ability, confidence and career satisfaction outcomes.
While the targeted outcomes for BTSA have been widely agreed to by program
participants and policy makers, important questions remain regarding the extent to
which the existing survey questions are tapping the most important dimensions of
each targeted outcome, and whether the measured outcomes are predictive of
continued new teacher professional development. It would be appropriate to
devote BTSA resources to the validation of the measures being used in this
evaluation survey. This could be accomplished by linking beginning teacher
assessment and local program evaluation data to longer term beginning teacher
development through follow-up surveys of school site administrators and
beginning teachers.

**4. Acknowledging and accommodating the tendency of Beginning Teachers to
hold a low estimate of their professional abilities.** One of the most poignant
findings of this evaluation study is that attempts to assist new teachers with their
professional development may be causing them to become more self-conscious
and less comfortable with their abilities. To the extent that this is an important
unintended consequence of implementing systematic, assessment-driven
professional induction, steps need to be taken to both acknowledge this side effect
and assist beginning teachers in overcoming it. Knowledge that well designed
and implemented BTSA programs are producing highly skilled professionals will
help, but BTSA programs need to elicit the support of school site and district staff
in assuring that beginning teachers understand the value of undergoing rigorous
programs of professional development, and that their participation in BTSA will
be valued.

**5. Helping local BTSA projects to monitor and document the success of
teachers who have participated in their induction programs.** Since BTSA
programs serve new teachers for only one or two years and have no further
responsibility for contact with them, it will be hard for local program
administrators to track the long term success of the new teachers they have helped
to induct. It would be appropriate for the California Basic Education Data System
to be asked to track BTSA participation for the next several years to see whether
these teachers have successful and long careers. Currently, however, there is a
problem with expecting CBEDS to do this tracking because this unit is not
authorized to have or to release confidential data on the educators whom they
survey each year. Absent the ability to identify individual teachers for tracking,
CBEDS data cannot be used for this vital long-term evaluation purpose.

**6. Strengthening the linkage between BTSA programs and the pre-service
training of new teachers.** With the enactment of substantial reforms in pre-
service teacher education, it is more important than ever to link the induction
process supported by BTSA to other training and professional development
efforts. Since, however, BTSA programs are structurally independent of both
school districts and the colleges and universities traditionally responsible for

teacher education, much needs to be done to assure broad agreement on the sequence of new teacher development and the assignment of responsibility for various aspects of professional development. BTSA programs need to know what they can expect in the way of entry level skill and knowledge when new teachers enter this induction program, and other pre-service training partners need to know that they can rely on BTSA programs for the continued development of the new teachers they are preparing.

• Documenting Language Development in the Ontario Montclair School District

Research Team
Project Investigator: *Douglas E. Mitchell*
CERC Research Fellow: *Rita Karam*
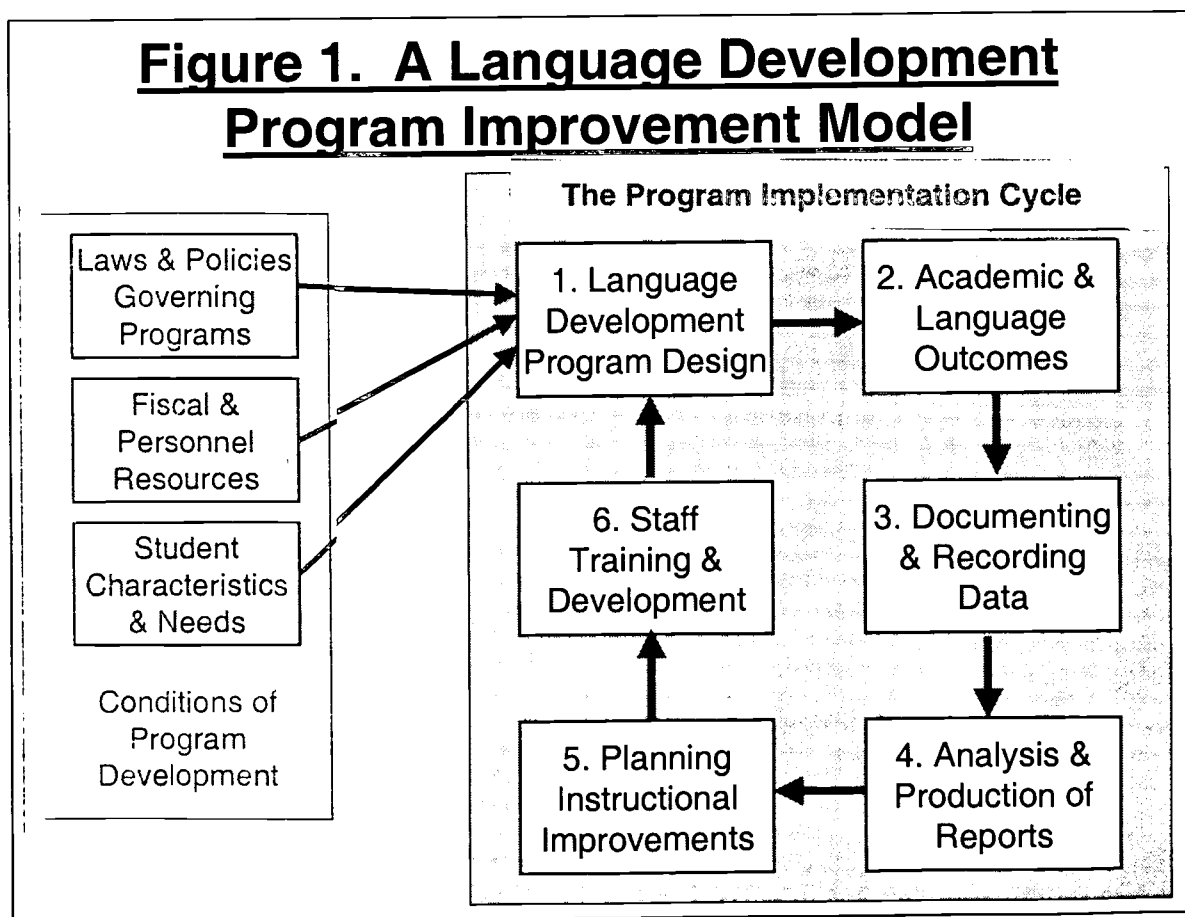
Improving Language Development

CERC researchers and administrators from the Ontario Montclair School District have developed a model for the improvement of language development for all students in the district. The six components of the model, the roles they play, and how they are interrelated to create a program implementation cycle capable of guiding continuous review and improvement are graphically illustrated in Figure 1 below. A detailed description of the model's six program improvement components include the following:

1. **Program Design**: The model begins with characterizing language development programs currently implemented in the district highly influenced by the laws and policies, resources, and student needs.

2. **Identification of Target Outcomes**: Targeted outcomes such as academic achievement and language fluency over a period of time need to be identified and tracked.

3. **Documenting and Recording Data**: Documenting how progams are implemented and how well students reach the targeted outcomes is critical baseline information.

4. **Analyzing and Reporting**: Making sense of the data and organized reporting of student performance toward targeted outcomes is key to the evaluation of the peformance of various language programs.

5. **Planning Instructional Improvement**: Reported findings enable district and school staffs to distinguish effective programs from ineffective ones and consequently plan for instructional improvement.

6. **Staff Training and Development**: Finally, the district needs to provide staff with appropriate training and development to support this program

improvement cycle . Training needs to cover program design and how data can be used to guide instructional practice. The trained staff will then be able to redesign programs and implement changes.

Tracking Program Improvement

This program improvement model lays the groundwork for building a comprehensive electronic data system capable of monitoring program performance and guiding improvement. Although the District's existing computer system performs many important functions, it is not currently able to support all elements in the program improvement cycle. As detailed in earlier CERC reports the current district data system is not designed to maintain longitudinal information on language development data or to provide for the collection and recording of language development service delivery data. Until modified in ways that permit managing this information, it will not be possible to determine which program elements are most powerful in facilitating students' linguistic and academic success.

Figure 1. A Language Development Program Improvement Model

The Program Implementation Cycle

Laws & Policies Governing Programs

Fiscal & Personnel Resources

Student Characteristics & Needs

Conditions of Program Development

1. Language Development Program Design

2. Academic & Language Outcomes

6. Staff Training & Development

3. Documenting & Recording Data

5. Planning Instructional Improvements

4. Analysis & Production of Reports

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A Five-Step Action Plan

Five important steps need to be taken to create a complete system that plays a central role in decision making for program improvement.

Step 1: Identify options, secure prices and decide the nature for and the extent of upgrading the existing computer data management system.

How best to overcome the limitations of the existing district hardware and software for data management will, of course, depend substantially on cost and the availability of resources. Within the framework laid out in the district's 1998 District Master Plan Technology and Information Services, however, it is important for new data management capacity to address three issues: a) enable longitudinal tracking of student language development and achievement for their entire school experience, b) create storage capacity for longitudinal record of student program services, and c) provide and open data base connectivity which allows school sites to link local and short term data tables to the longitudinal district wide data needed for overall program management. Whether resolving these issues is best done by marginal improvements on existing systems or acquisition of a complete new system can only be determined through consultation with hardware and software vendors. Before proceeding with other changes it would be prudent to consult with QSS (the private company that owns the software rights for the district's current system) and other software developers to determine the feasibility of incorporating the following changes into the existing system:

- Modification of the modules and screens that track language development and achievement data so that they are linked together and are able to maintain longitudinal data. This change mostly pertains to the Client screen. Although this screen was adapted to provide a place to record language progress data it neither stores this information over a period of time nor is it connected to other types of student information needed for program improvement.

- Providing additional storage space in order to document and track instructional service data, teachers' professional judgement regarding students' English and Primary language development levels and report card information for elementary school students. This can be done by modifying existing modules that have space to include this information or/and by developing new modules designed specifically for storing this information. If new modules were developed, it becomes essential to incorporate them into the overall student data and link them to modules and screens already in use.

- Modification of the computer system so that it can be linked to other databases found at both the district and school levels. This can be done by creating standards (that are compatible with the type of hardware and software used) to make remote linking and querying of databases feasible. Standards such as Java Scripts ®, Oracle ® or Microsoft Open Data Base Connectivity (ODBC) will make it possible for short term links to be established between two databases so that querying information provided from two separate databases simultaneously

can be possible without compromising the integrity of either data system. Another way to achieve linkages between the main district database and other databases is through the development of Internet connectivity which would add speed and better integration of the various databases.

Step 2: Develop an electronic survey similar to the one presented in the body of this report for documenting student language development levels and tracking the language development and instructional services they receive.

The Language Development Services Survey developed by project staff will need review and validation by a task force of educators and database managers in order to clarify procedures and standardize data elements. It is suggested that the validation process should cover survey design, staff responsibility for collecting data, time of data collection, and staff responsible for entering, storing and analyzing the data for program improvement.

Step 3: Establish standard procedures for reporting results.
The task force mentioned above can accomplish this action by identifying the essential information that should be reported for the various stake holders and by developing acceptable, user friendly report formats. Review and analysis of these reports will be a central element in the program improvement cycle. Once reports are defined, however, they be added to the report generation options of the district computer system and thus, generated automatically.

Step 4: Conduct on-going formal and informal training sessions on data management, program analysis, and program improvement planning.

These trainings could begin by expanding staff knowledge of the capability of the district's computer system, and how to use it for data entry, storage, maintenance, and report generation. Additionally, it is suggested that staff should be trained on how to complete the surveys used for additional data collection such as the Language Program Delivery Survey and why it is important to collect this data. Clarifying terminology used in those surveys should be included in the trainings so staff can reach a common understanding of what each term means and consequently complete the surveys consistently. Finally, using training sessions to help staff define and plan for program changes will assure a more consistent approach to improvement.

Step 5: The district should develop a system of ongoing commitment to program improvement.

This can be achieved by establishing a regular review cycle for examining report results and analyzing their implications for program improvement and changes. This function needs both strong executive leadership and broad participation by classroom teachers and language program specialists.

Taken together, these five action steps will produce a solid basis for informed, rigorous and systematic language development program improvement.

- ## The Inland Empire Evaluation Consortium (TUPE) Tobacco-Use Prevention Education Program

Program Evaluation Team

Project Investigator:	*Jane L. Zykowski*
Project Co-Investigator:	*Douglas E. Mitchell*
Project Co-Investigators:	*Joseph Lovett, Kim Clark, Robert LaChausse, California State University, San Bernardino*
Research Support:	*Monishia-Denee' Miller*

Background

In November 1988, California voters approved proposition 99 that added a surtax of 25¢ to every package of cigarettes sold. Twenty percent (20%) of these tax revenues (AB 3487) are allocated for school and community-based tobacco education and prevention programs and a statewide media campaign. AB 75 of the Health and Safety Code established a state-level Tobacco Education and Research Oversight Committee to develop, implement, monitor, and evaluate a biennial master plan--*Toward a Tobacco Free California: Renewing the Commitment, 1997-2000.* The goal of the Master Plan is to reduce tobacco consumption in California by 75% in 1999. The California Department of Education (CDE) and the California Department of Health Services (CDHS) have major responsibilities for school and community-based tobacco education and prevention programs.

In fulfilling their legislated responsibility CDE envisions districts and schools in which tobacco-use prevention is institutionalized in the instructional programs for all students. To achieve this vision CDE provided entitlements grants in grades 4-8 to all districts meeting the legislative requirement for a tobacco free school district. Additionally, it released Competitive Grants for grades 9-12. These funds were distributed in two distinct funding periods. Category I funds were released to districts in July 1998 for the grant period of July 1, 1998-June 30, 2000 and Category II (previously funded districts) for the grant period of March 16, 1999-June 30, 2000.

The intent of these grant awards is to enable schools to develop prevention education, cessation, and youth development programs directed at the reduction of tobacco among the high school population. Funds were distributed to districts whose programs competed successfully. Twelve school districts in Riverside and San Bernardino counties received Category I and/or Category II TUPE funding for grades 9-12.

TUPE Consortium Mission

The TUPE Evaluation Consortium is being established as a joint venture. It pools institutional resources and expertise from the University of California, Riverside; the California State University, San Bernardino; Riverside and San Bernardino County Superintendent of Schools

Offices; and, 10 local school districts from the Inland Empire. The Consortium will provide meaningful and timely program evaluations by documenting effective tobacco-use, prevention, intervention, and cessation strategies designed and implemented by TUPE 9-12 school districts.

TUPE Consortium Organization

Organizationally, the Consortium is composed of representatives from 10 TUPE (9-12) School Districts, TUPE Coordinators from the Riverside County Office of Education (RCOE) and San Bernardino Superintendent of Schools Offices (SBCSSO); and program evaluators from the California State University, San Bernardino (CSUSB), Department of Health Services, and the University of California, Riverside, California Educational Research Cooperative (CERC). Its function is to advise the program evaluators on matters of evaluation design and policy and programmatic guidance focused on relevant and meaningful applications of evaluation results. The Consortium reports on a regular basis to the RCSSO TUPE and the Safe and Drug Free Schools Roundtable and SBCSSO Drug, Alcohol, Tobacco Committee (DAT) for recommended actions. The relationship among these agencies is graphically depicted in Figure 1 below.

Figure 1: TUPE Evaluation Consortium

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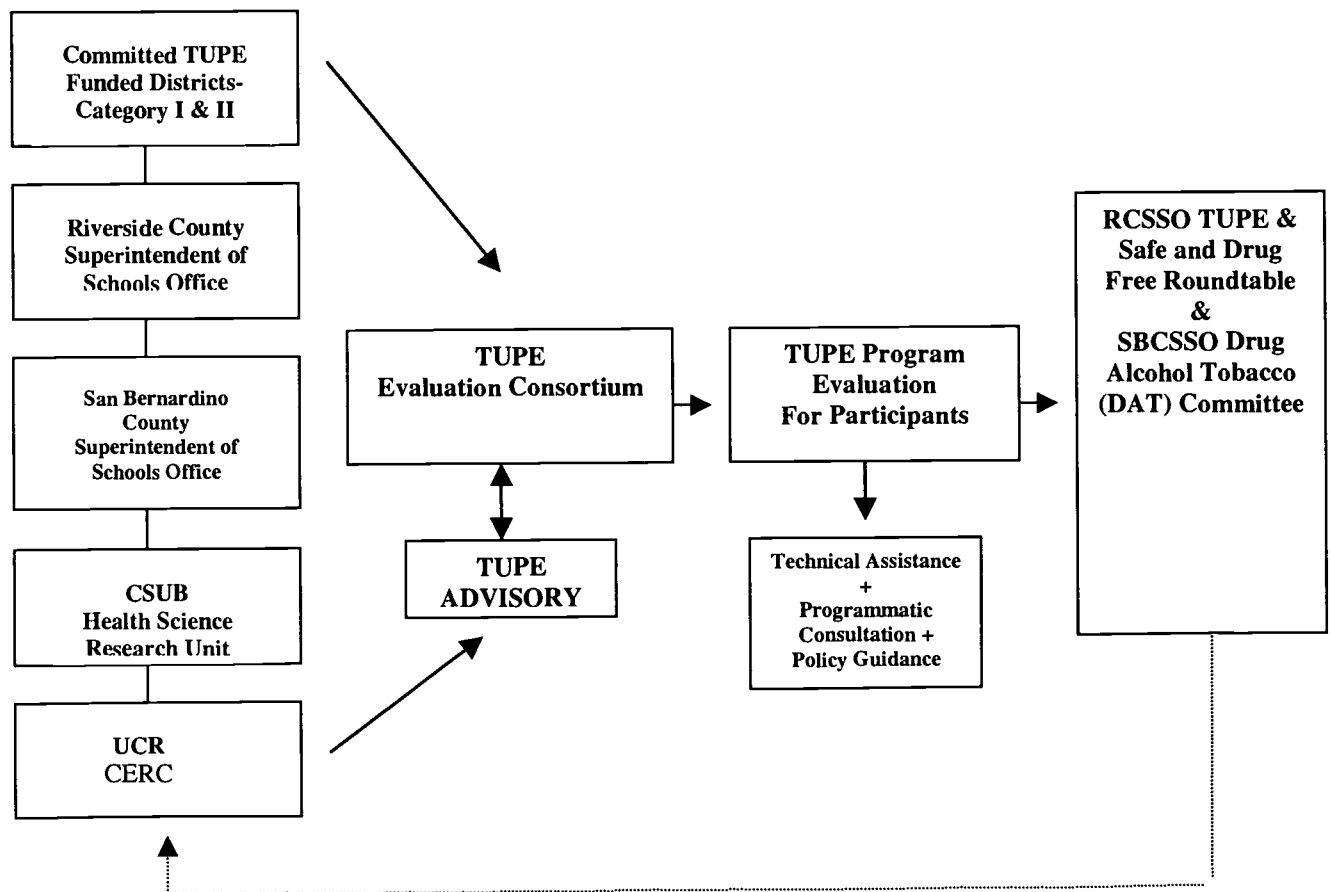
Each Consortium member will receive program evaluation services to include the following:

- **Comprehensive Research and Data-Based Program Evaluation:** Consortium Membership entitles the school district to a full range of program evaluation and research based services to include:
  1. Technical assistance with conceptual design and research based instrumentation.
  2. Data collection.
  3. District and school-site analysis.
  4. Technical reporting to the CDE, District and School-Site Administrators, School Board Members.

- **Policy and Programmatic Interpretation and Intervention Strategies:** Consortium membership entitles the school district to research and technical support focused on the following:
  1. Development of policy frameworks for the interpretation of findings
  2. Development of programmatic frameworks for the implementation of policy findings, and
  3. Recommendations of policy and programmatic revisions are a strategic part of the program evaluation activities.

- **Technical Assistance and Reporting:** Consortium membership entitles the school district to research and technical support focused on the following:
  1. Technical support in the administration and data collection of the HKS
  2. District and school-site analysis, and
  3. Technical reporting to the CDE, District and School-Site Administrators, School Board Members.

TUPE Consortium Goals

Organized around representatives from each member district the TUPE Design and Evaluation Consortium is the Consortium's primary structure for design development, program evaluation, and policy and program guidance through the pursuit of five broad goals.

1. **Collaborative Program Evaluation Design Planning:** The first goal of the Consortium is the collaborative identification of research design elements which can be used to document the effects of TUPE 9-12 program prevention, intervention, and cessation strategies implemented by Consortium members.

2. **Improved Data Based Decision-Making:** The second goal of the Consortium is improved decision making through data problem solving. By linking program evaluation findings of university program evaluators to the practical wisdom of school district TUPE leadership the Consortium provides members with:

3. **Effective and Meaningful Program Evaluation Results**
   - Policy Formation and Programmatic Guidance
   - Efficient Responses to CDE Requirements
   - Models for Future Evaluation Programs
   - Substantiation for Additional Funding.

4. **Enhanced Networking and Communication:** The third goal of the Consortium is to provide a common communication forum for sharing of program and policy issues and suggested policy implementation concerns with all members. It is proposed that the TUPE 9-12 Evaluation Consortium serve as a subset of the TUPE and Safe and Drug Free Schools and Community and the Drug, Alcohol, and Tobacco (DAT) Committees and meet as a subset of that group on a regular basis.

5. **Direct Support for School Systems:** The fourth goal is focused on strengthening the impact of the Riverside and San Bernardino County Superintedent of Schools Offices and local school systems. Through relevant and meaningful program evaluation, technical assistance, technical reports, consulting services, and policy and programmatic guidance aimed at bringing evaluation findings to the attention of state and local school and community policymakers, while simultaneously applying program evaluation findings to school district needs. These services help create a collegial climate of shared concern for the youth of our communities.

6. **Supplementing the Student Indicators Regional Data System:** The fifth goal is to serve as a center for the collection and analysis of educational indicators contributing to the achievement and performance of students throughout the Inland Empire. The Consortium will add to data on community, school, and student characteristics available from the state's Healthy Kids, CBEDS and STAR databases. Such data maintained by the California Educational Research Cooperative (CERC) at the University of California, Riverside, School of Education and the Health Services Evaluation Unit of the California State University, San Bernardino will enhance the study of a broad range of conditions affecting student performance.

• RIMS Beginning Teacher Support and Assessment Program

Research Team

Project Investigator:	*Linda D. Scott*
Co-Investigator:	*Douglas E. Mitchell*
CERC Research Fellow:	*Laurie Riggs*
Research Associate:	*Cindy McVay*
Programmer Analyst:	*Linda Mizuhara*
Data Manager:	*Deborah Huston*
Research Support:	*Raylenne Jensen*

Overview

The statewide Beginning Teacher Support and Assessment Programs (BTSA) are jointly sponsored by the Commission on Teacher Credentialing (CTC) and the California Department of Education (CDE). BTSA is part of the state reform effort to shape the contours of a coherent *Learning to Teach System* for as many as 50,000 first and second year teachers in California schools. Two other programs, one to serve pre-interns and the other to serve interns, provide a continuum of services to different groups of teachers who are at different stages of progress in becoming fully prepared and certificated to teach.

Two core documents are fundamental to BTSA design and implementation: The *Standards of Quality and Effectiveness for BTSA Programs*, and the *California Standards for the Teaching Profession (CSTP)*. Over the past two years, a new formative assessment system for first and second year teachers in BTSA has been designed and is now being field tested by over 60 BTSA programs. This system is known as the *California Formative Assessment and Support System for Teachers* (CFASST). Five assumptions about teacher professionalism ground the BTSA program: 1) sequenced career development, 2) close collegial interaction, 3) enhanced skills and abilities, 4) assessment based development, and, 5) locally based and globally organized BTSA programs. When all the BTSA parts are working together, we expect Beginning Teachers to:

a) develop a *professional consciousness* of shared values and a common commitment to meeting CSTP standards;

b) recognize that *professional reflection* is grounded in complex, cognitive wrestling with the elements of CFASST; and

c) understand that RIMS BTSA is accountable for *documented implementation* of *both* support and assessment of our Beginning Teachers.

From 1993 to the present funding cycle, statewide BTSA funding has increased from $5 million to $72 million.

The RIMS-BTSA region, consisting of Riverside, Inyo, Mono and San Bernardino counties (RIMS) is home to about 12 percent of California's public school students, and an even larger proportion of California's new teachers. The region's population closely parallels statewide averages in student diversity, levels of poverty and other conditions challenging educational

excellence. The region contains intensely urbanized areas as well as some of California's most isolated rural areas. Educational leaders throughout the region have demonstrated a commitment to the statewide Beginning Teacher Support and Assessment System (BTSA), a concept of professional development for teachers. They have not only joined in supporting Rims BTSA program design and operation; they have committed their own resources to expanding RIMS BTSA support services to schools and teachers not supported by state funds.

RIMS-BTSA Collaborative Partnership

Until spring of this year, the BTSA program that served our area was known as the IE-BTSA program, but due to expansion is now the **RIMS BTSA** program. RIMS BTSA is operated by a collaborative partnership including the Riverside County Office of Education and the Office of the San Bernardino County Superintendent of Schools; the University of California, Riverside, School of Education, California Educational Research Cooperative (CERC) and California State University, San Bernardino, School of Education. Now in its seventh year of operation, 33 school districts and approximately 350 mentors and 700 Beginning Teachers are participating in RIMS BTSA. In 1999-2000 two new co-sponsors, the Inyo and Mono County Offices of Education joined the collaborative along with six new school districts. Geographically, the project spans an area roughly the size of Ohio. In the coming year, RIMS BTSA will be expanding to serve more districts, bringing the total number of Beginning Teachers served by RIMS BTSA to nearly 2,000. CERC's operating RIMS BTSA budget for 1999-2000 will be over $1million.

The CERC Information Management System for RIMS BTSA

Although CERC staff is engaged in the design and implementation of RIMS BTSA training for Beginning Teachers and Support Providers, CERC's primary responsibility is in the formative assessment of beginning teacher professional development, and in accountability reporting to participating districts. A systematic method for gathering and analyzing program and participant data, *the RIMS BTSA Information Management System,* (IMS) has been developed and revised over the past six years, using a custom designed ACCESS database to produce the database and reports. The IMS has two evaluation components: 1) formative assessment of Beginning Teachers' professional development based on the state's CFASST system, and 2) accountability measures for Support Providers/Mentors -- based on project goals and the CFASST system as well as *BTSA Program Quality Standards.* Within the IMS, the *BTSA Record of Success* information system for formative assessment of Beginning Teachers includes:

- Classroom, Schools, District, Community Culture Profiles
- Classroom Observation Record and Feedback
- Profile of Performance
- Profile of Practice
- Instruction Plan
- Individual Induction Plan

The *BTSA Record of Success* accountability measures include:

- Log of Mentor Services to Beginning Teachers
- Inventory Report of Assessment Instruments Completed by Support Providers/Mentors
- Year-end Summary District Report of Mentor Services to Beginning Teachers

CERC research staff generates Professional Profile reports for Beginning Teachers throughout the year, based on the data sent to us by new teachers. Each profile is a valuable information tool, tightly linked to CFASST and used in professional collaboration with the Beginning Teacher's Support Provider. No one other than the Beginning Teacher and the Support Provider for that teacher has access to this information —*it is strictly confidential.* The profiles also provide an overview of how other Beginning Teachers in the RIMS BTSA project are working with CFASST. For example, we can display what goals RIMS BTSA Beginning Teachers, as a group and by grade level and subject area are setting for themselves over the *California Standards for the Teaching Profession* (CSTP). We describe their instructional strategies and their reflections on why students are or are not successful in meeting teachers' instructional goals. The accountability measures provided to district representatives as noted above provide administration with appropriate tools with which to judge the levels of implementation of their BTSA program. Additionally, CERC continues to accept responsibility for providing each operational cluster with formative program evaluation data drawn from quantitative and qualitative data collected from all RIMS-BTSA program participants.

Planning for the Future

The central challenge facing the RIMS BTSA program in fiscal year 1999-2000 and beyond is how to *expand* the program, while maintaining the quality and effectiveness that has marked its existence since 1993. In addition to adding new sponsors and serving a larger number of new teachers during 1999-2000, RIMS-BTSA is implementing a reconfiguration of program sponsorship and operations that are being phased in over the next two years. Building on existing service clusters, RIMS BTSA is transforming itself into a number of operational programs. The program clusters are drawing adjacent school districts together to select Support Providers and organize new teacher support and assessment, while retaining the perspective of a coordinated region-wide service delivery system. Each program cluster relies on a District Liaison to provide leadership and management for the cluster. It utilizes the services of a Project Teacher to provide technical support, handle administrative details, and assure completion of needed reports and forms. All of the clusters continue to rely on the Riverside and San Bernardino County Offices of Education for management, Support Provider training and supplemental Beginning Teacher support and training. Training of district liaisons and Support Providers follows a curriculum and training format developed by RIMS-BTSA and led by California State University, San Bernardino professors.

During 1998-99, RIMS-BTSA worked closely with local districts throughout the region to provide guidance in cluster organization and program development Bernardino County Offices of Education will continue to work with local district leaders to plan for full implementation of

induction programs for all Beginning Teacher in the coming year. They will provide technical support for planning and program development, and offer resources for coordination of assessment services and Support Provider training.

Research Methods

In addition to refining the RIMS-BTSA information management system, we are currently working to gather 1997 and 1998 CBEDS and 1997 SAT 9 data to design and undertake a study to examine teacher retention and its relationship to student achievement. To that end, we are working with districts to obtain electronic copies of this data. To answer our research inquiries we will construct appropriate databases with the ACCESS data management program, using the past ten years of CBEDS data and available SAT 9 data. In addition, longitudinal statewide BTSA Program Evaluation data, now in its fourth year of implementation, is a powerful part of our research methods.

Implications

The California BTSA program is attracting national attention as a model for teacher induction. We have learned from the *California Mentor Teacher Evaluation Study* (Mitchell, Scott & Hendrick, 1996) that accountability, perceived legitimacy, comprehensive formative assessment and summative evaluation of teacher support programs is a necessary condition for the success of teacher support and assessment programs, and their continued existence. The implications of this research could have significant impact on how local new teacher support projects assess, monitor and adjust their programs for successful, effective developmental teacher induction programs.

• Student Success and School to Career

Research Team
Project Investigator: *Rita Hemsley*
Data Manager: *Deborah Huston*
CERC Research Fellow: *Mark Riddle*

Overview

Educational reform and systemic change seek to improve the life outcomes of students. School to Career Programs are aimed at just that. By networking educators, business, parents, community and government agencies, the goal of school to career is to prepare all students for higher education, the world of work, and lifelong learning.

In our effort to study how schools can impact student outcomes, CERC continues to evaluate and gather data in ESGVROP, Riverside and San Bernardino Counties. Each project evaluation not only contributes to the greater research knowledge on school systems working toward student outcomes, but also is aligned with the reporting requirements of the National School to Work Office. The evaluation of School-to-Work on a national level examines how systems create

change in the ways students are educated and prepared for careers by identifying promising practices and barriers to the development of such systems. Specifically, the national evaluation design seeks to document the extent and nature of participation in School-to-Work partnerships and programs by employers, schools, students, and other groups. Three specific questions of the national School-to-Work evaluation are:

- What partnership activities and program elements create coherent School-to-Work systems of connected, sustainable practices and programs?
- What elements of a School-to-Work system have the most significant impact on specified student outcomes at the secondary education levels?
- How does the partnership impact staff development, curriculum and student outcomes?

CERC's school to career team has sought to address these issues as well. Figure one provides a visual depiction of the research hypotheses guiding the multiple data gathering activities. The student success model examines the relative impact of Staff Development, Governance and Curriculum on student outcomes. All of the data gathering activities and instruments are designed to contribute to knowledge in one of the three contributing constructs or the student outcomes. To account for school and student differences, School and Student demographics are included. This first year of research has allowed us to gather relevant data from 1,100 students and 22 districts, with district being the common denominator. The ensuing report is organized around the constructs of the model.

Governance, Curriculum and Staff Development

Data at the district level were gathered using the Key Indicators, an instrument originally designed by ESGVROP and modified by CERC to address the issues of interest. The instrument's questions range from collecting basic system-wide demographics to more specific information about the implementation of career paths and articulated four-year (two years of high school, two years of college) plans.
Year one data gathering experiences have led to major revisions of the Key Indicators instrument for year two. The primary change is to include the responses of a random sample of teachers in each partner district. This strategy is thought to not only lighten the load of district administration in completing the instrument, but also more accurately portray the actual activities in the classroom.

A related trial effort is underway to identify teacher perceptions and implementation of school to career tenets (informing the Staff Development and Curriculum aspects of the research model). All teachers in a STC partnership district were surveyed on their receptiveness to the various methods, approaches, and mindsets which are represented within the broadly defined school to career agenda. This important teacher-attitude dimension of the research seeks to determine the extent to which the interests of school to career programs (including 'integration of the curriculum,' 'hands-on', 'contextual' and 'life-long' learning) are shared by educators, and will provide a link between student-level and district-level data. The data are just arriving for inclusion into the model. CERC is assisting researcher/RUSD STC partner Marsha Locke in this endeavor.
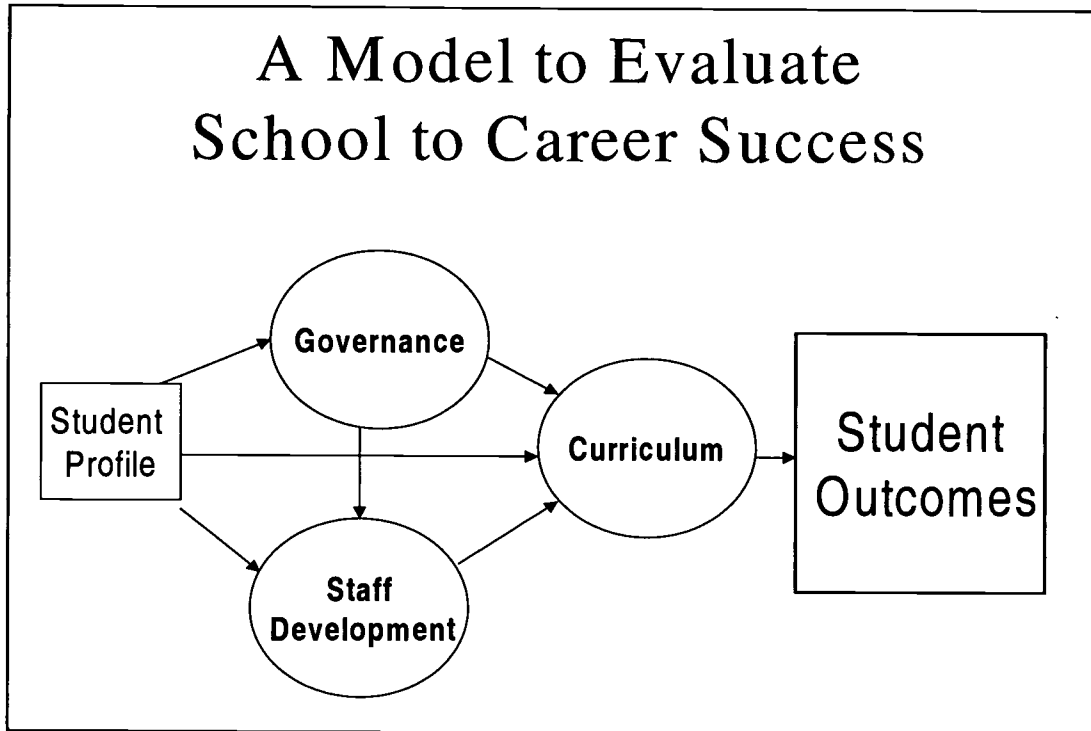
Student Outcome Data

Student level data were gathered from twenty-three high schools using the Student Expectations Survey. This instrument, designed to measure student attitudes towards their current and future education, was administered to 1,100 students last Spring. The survey results contribute to the research model by providing student level affective outcomes such as sense of relevance of school, personal ambitions and goals, parental expectations, and student sense of efficacy. This second year, the survey will be administered to all eleventh graders in the San Bernardino and Riverside County partnerships and three thousand students in the ESGVROP program. Inclusion of several programmatic questions on the survey will allow CERC to classify the respondents into "levels of exposure" to specific STC activities/programs/goals. In so doing, we will reduce the common denominator of the model to the student level, allowing us to ask student-outcome oriented questions in addition to the system-building questions afforded at the reduced, district level.

The Student Expectations Survey has also been administered to the AmeriCorps program participants in ESGVROP before and after their semester-long experience. These pre/post AmeriCorps data are currently being prepared for scanning and data analysis.

Passport To College

While not directly related to a School to Career funding source, the basic goal of getting students through school and on to postsecondary success is shared by the Passport to College (PTC) initiative at Riverside Community College. PTC provides the support, information and experience students and their families need to understand that college is a viable and desirable option and to set appropriate goals for the future. Through its completion in 2004, CERC is serving as the evaluation team for Passport to College, and is incorporating the knowledge gained from the data and evaluation of this program into the overall Student Success research model in Figure 1.

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Figure 1: A Model to Evaluate School to Career Success

A Model to Evaluate School to Career Success

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                    ┌───────────┐
                    │ Governance │
                    └───────────┘
   ┌─────────┐           │              ┌───────────┐    ┌──────────┐
   │ Student │──────────┼─────────────▶│ Curriculum │───▶│ Student  │
   │ Profile │           ▼              └───────────┘    │ Outcomes │
   └─────────┘     ┌───────────┐                         └──────────┘
                   │   Staff    │
                   │Development │
                   └───────────┘
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CERC, in partnership with the RCC Institutional Research Department, designed an instrument to measure student attitudes and expectations about current and future educational goals. All seventh and eighth graders in the six PTC participating districts will be first surveyed this spring, and every other year of the program. Parents and educators will be surveyed periodically throughout the life of the program as well. It is expected that the data generated from the evaluation will allow for further support to the Curriculum, Staff Development and most obviously Student Outcomes elements within the Student Success research model.

While the activities of this research team are multiple, they are woven together with the common thread of linking student motivation, engagement and achievement to post-secondary life.

CERC
Statement of Operations
July 1, 1997 through June 30, 1998

Fund Balance, July 1, 1997   **$156,999**

Revenue	
UC Contribution	146,107
Member Fees	260,531
Publications	1,200
Computer Expense Recovery	26,268
BTSA	323,719
School to Career Projects	121,625
Other Special Projects	287,712
Total Revenue	$1,167,162

Expenditures	
Personnel Salaries & Benefits	739,769
Travel	30,480
Meetings	14,555
Printing/Publications	40,710
Other Services	179,955
Office & Research Supplies	92,998
Computer Software/Hardware	38,760
Subtotal:	$1,137,227

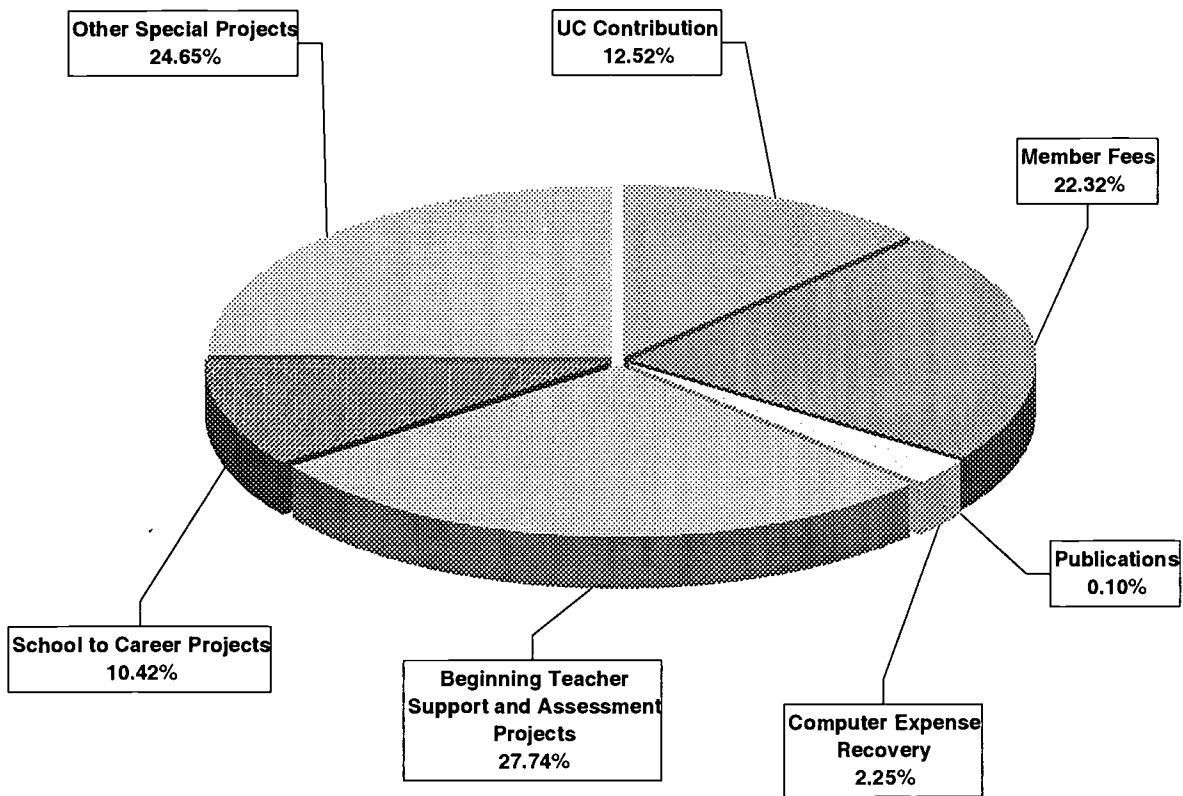|	
Total Expenditures	$1,137,227
Net Revenue*	$29,935

Fund Balance, June 30, 1998   **$186,934**

*Does not include revenue or expenditures for indirect costs.

CERC Revenue 1997-98

Other Special Projects
24.65%

UC Contribution
12.52%

Member Fees
22.32%

Publications
0.10%

School to Career Projects
10.42%

Beginning Teacher Support and Assessment Projects
27.74%

Computer Expense Recovery
2.25%

Membership contributions totalling $260,531 have been leveraged to generate a total of $1.16 million. This means that every school district dollar has been matched by $3.42 from other sources.

CERC Expenditures 1997-1998

Other Services
0.19%

**Office & Research Supplies**
9.70%

Computer Software/Hardware
4%

Printing/Publications
4.24%

Meetings
1.52%

Travel
3.18%

Personnel Salaries & Benefits
77.13%
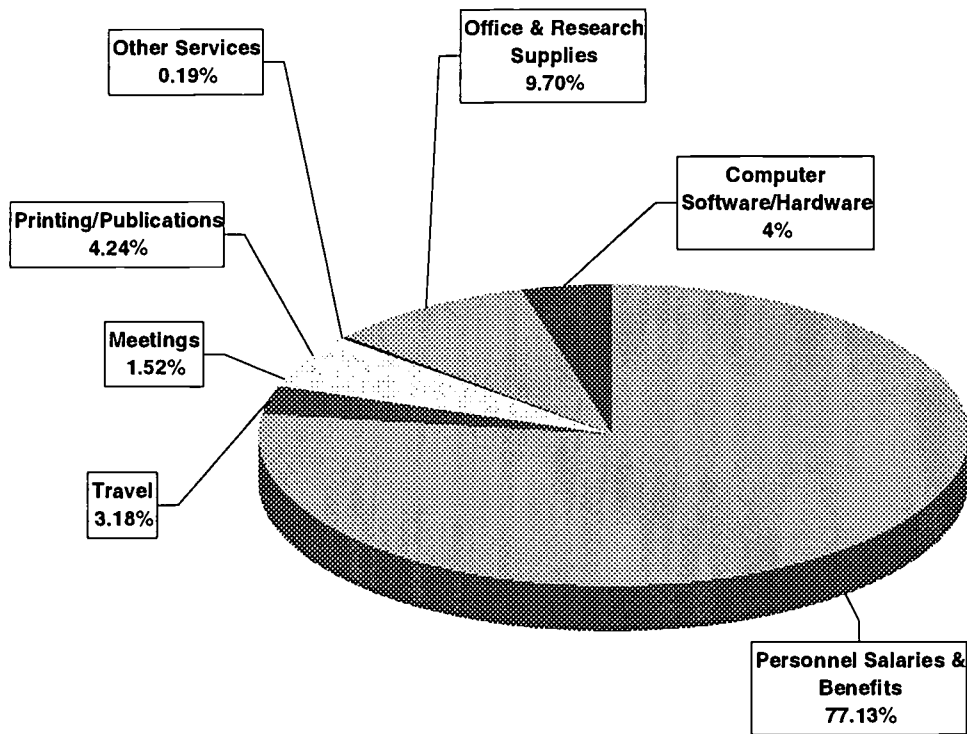
As in school districts, personnel salaries and fringe benefits take the lion's share of the CERC budget 77.13 percent. The staff time purchase with these dollars enable CERC to pursue four core research projects and separately funded special projects.

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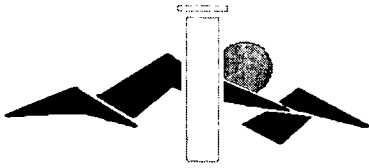
CERC Publications

ANNUAL REPORTS

- **CERC Annual Reports** By Jane L. Zykowski

An annual publication distributed to member district superintendents and school boards reports on the status of the California Educational Research Cooperative. Includes information about the Cooperative such as its organizational, fiscal and research capabilities.

ASSESSMENT AND REMEDIATION

- **Implementing Assessment Alternatives: Leadership Views and Works-in-Progress at the California Assessment Collaborative Pilot Project: Second Year Evaluation Report** by Douglas E. Mitchell, Jean Treiman, and Mahna Schwager

This evaluation report identifies effective elements of alternative assessment programs implemented throughout the state of California. It is the second in a series of two evaluation reports.

December 1994, 38 pages   No. AS-005

- **Conceptualizing Assessment Alternatives: First Year Evaluation Report for The Alternative Assessment Pilot Project** by Douglas E. Mitchell and Mahna Schwager

This evaluation report identifies effective elements of alternative assessment programs

implemented throughout the state of California. It is the first in a series of two evaluation reports.

February 1994, 14 pages   No. AS-004

- **Assessment in the Schools: Paradigms, Promises and Realities** By Mahna T. Schwager, Jerry S. Carlson and Douglas E. Mitchell

This report identifies teacher perceptions of the classroom assessment process. Additionally, it discusses important school environment issues supportive of assessment reform and the restructuring of teachers' attitudes and beliefs regarding classroom practices.

February 1994, 140 pages   No. AS-003

- **A District Implementation of Performance - based and Portfolio Assessment for Compensatory Education Students** By Catherine D. Colwell and Douglas E. Mitchell

The advantages and disadvantages of a portfolio's use as an individualized assessment tool are discussed in detail.

January 1993, 39 pages   No. AS-002

- **The Cognitive Assessment and Reading Remediation of Chapter 1 Students** By Jerry Carlson and J. P. Das

This report discusses the pilot of a new assessment instrument and remediation materials. It relates the impact of remediation strategies geared to the remediation of cognitive deficits of Chapter 1 students.

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Subjects were third graders in Hemet Unified School District. Their gain in word attack skills was approximately two years or more higher than that of their peers.

October 1992, 102 pages   No. AS-001

AT-RISK YOUTH

- **Increasing the Educational Gains of At-Risk Children Through a Family Literacy Approach: Evaluation of Three Early Intervention Programs** by Colleen M. McMahon and Judith A. Sylva

This evaluation report discusses the overall efficacy of three early intervention programs for at-risk children. These programs are focused on enhancing student development, parent involvement, and parent-school partnerships. Significant findings are summarized and their programmatic implications presented.

June 1997, 88 pages No.   AY-009

- **School Dropouts--A Staff Development Video** By Rita Hemsley, Irving Hendrick, and James Brown

A video tape describing the characteristics of students who do not complete high school. This staff development video provides ideas for intervention strategies for at-risk youth.

December 1993, 30 minutes   No. AY-008

- **Promotion versus Retention--A Staff Development Video** By Beth Higbee, James Brown, Jane Zykowski, and Irving Balow

A video tape review of the detrimental effects of retention of children in grade. Intervention strategies focused on promoting rather than retaining are described.

December 1993, 30 minutes   No. AY-007

- **Evaluation of the Riverside County Office of Education Tobacco Prevention Among In-School Youth Project** By Douglas E. Mitchell and Jake Zhu

Students' perceptions about the use of tobacco are reported. Findings are discussed in detail. Among the most significant of these is the fact that fourth and fifth grade students are well aware of the social norms associated with tobacco use. As might be expected, boys and girls hold significantly different views about whether friends will be upset if they smoke.

October 1992, 163 pages   No. AY-006

- **College-Going Decisions by Chicanos: The Politics of Misinformation** By David Post

Provides answers for the practitioner to the following questions:
1. Why are the rates for college-going Chicanos so low today?
2. Why are they failing?
3. How can educators reduce attrition of high school students as they make the transition to college?

March 1990, 32 pages   No. AY-005

- **A Model of Analysis for District Retention Policies- -Research Brief** By Mahna Schwager

Research indicates that requiring students to repeat a grade level fails to raise achievement

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or enhance social and personal adjustment. Moreover, it is significantly linked to dropping out. Retention continues, however, supported by public belief and sanctioned by district policy. This paper presents a model to clarify the practice of retention.

Spring 1990, *Newsletter*, VII, 3   No. AY-004

- **Retention in Grade: A Staff Development Unit** By Jane L. Zykowski, Beth Higbee, et.al.

This is a CERC staff development package for teachers, parents, administrators, and policy makers. It includes a "user friendly" summary of key issues and several overheads relating to research on the retention of students in grade, conclusions, and alternative intervention strategies. Includes video.

February 1994,Staff Dev. Pkg.   No. AY-003

- **Early School Leaving in America: A Review of the Literature** By Irving G. Hendrick, Donald L. MacMillan, Irving H. Balow and David Hough

A state-of-the-art look at the "dropout" problem in America between 1940 and 1980.

June 1989, 150 pages   No. AY-002

- **Retention in Grade: A Failed Procedure** By Irving H. Balow and Mahna Schwager

A review of the literature focusing on important issues regarding the practice of retaining students in grade. Research to date shows that retention is not effective and supports promotion with remediation as a more effective alternative.

February 1989, 41 pages   No. AY-001

CLASS SIZE

- **Modeling the Relationship Between Achievement and Class Size** By Douglas E. Mitchell, Sara A. Beach, and Gary Badarak

A re-analysis of the Tennessee Project STAR data collected on students in grades 1, 2, and 3 over a period of four years. This report focuses on the interaction of six major forces on achievement when class size is considered.

October 1991, 48 pages   No. CS-004

- **How Changing Class Size Affects Classrooms and Students--Research Brief** By Sara A. Beach

A summary of CERC's comprehensive review and analysis of research on class size.

Winter, 1990, *Newsletter*, VII, 2   No. CS-003

- **How Changing Class Size Affects Classrooms and Students** By Douglas E. Mitchell, Cristi Carson and Gary Badarak

A comprehensive review and analysis of research on class size. Provides answers to four policy questions:

1. How much and how reliably do class size reductions lead to increased achievement?
2. Exactly how does changing the student/teacher ratio influence student learning?
3. What are the organizational and fiscal implications of class size and student achievement?

4. What alternative strategies can be found for reducing instructional group size?

May 1989, 95 pages   No. CS-002

- **Class Sizes of Selected Courses in Riverside and San Bernardino Counties** By Jeffrey B. Hecht

A review of student instructional load by gender for each subject and/or single-subject grade taught in California school districts in Riverside and San Bernardino Counties.

March 1989, 13 pages   No. CS-001

CAREER TRAINING

- **Long-Term Impact of Tech Prep Programs** by Rita Hemsley

This document represents the final evaluation report of the East San Gabriel Valley ROP Tech Prep Program. It summarizes in detail a successful technical training intervention program for high school students.

November 1996, 31 pages   No. CT-007

- **Evaluation of East San Gabriel Valley Regional Occupational Program's (ROP) Marketing/Merchandising/ Apparel Program Data** By James C. Dick and Douglas E. Mitchell

An evaluation report on the effective implementation of a vocational education program in Marketing and Merchandising by the East San Gabriel Valley Regional Occupational Program.

January 1993, 21 pages   No. CT-006

- **ROC/P MIS--Research Brief** By James C. Dick

A summary of findings from the ROC/P MIS pilot study.

Fall 1991, *Newsletter*, V. IV, 1   No. CT-005

- **MIS Supporting Documents** By James C. Dick and Jeffrey B. Hecht

A technical description of the MIS Software developed and piloted for California's ROC/P.

October 1991, 51 pages   No. CT-004

- **Design of a Model MIS for California's Regional Occupational Centers and Programs (ROC/P): Final Report** By James C. Dick, Douglas E. Mitchell, and Jeffrey B. Hecht

This report describes the development, piloting and application of a Management Information System which can aid in decision making for course quality analysis.

October 1991, 109 pages   No. CT-003

- **A Study of California's Regional Occupational Centers and Programs-- Research Brief** By Jeffrey B. Hecht

An executive summary of the findings of the study on the quality and effectiveness of California's ROC/P.

Fall 1989 *Newsletter*, VII, 1   No. CT-002

- **Quality and Effectiveness of California's Regional Occupational Centers and Programs** By Douglas E. Mitchell and Jeffrey B. Hecht

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A study of California's Regional Occupational Centers and Programs (ROC/P) focusing on the operation of these programs in the context of dynamic change.

June 1989, 150 pages   No. CT-001

CULTURAL DIVERSITY

- **Cultural Diversity and the Teacher Labor Market: A Synopsis of a Special CERC Report** By Douglas E. Mitchell, Linda D. Scott, Duane Covrig, Joel Carbonel

Highlights four main concepts important in the dimensions of the overall process of preparing, recruiting, employing and retaining teachers. Reveals an important aspect of how the teacher labor market has created a persistent cultural imbalance in the teaching workforce.

Winter 1996, *Newsletter*, VIII, 2 No. CD-002

- **Cultural Diversity and the Teacher Labor Market** By Douglas E. Mitchell, Linda D. Scott, Duane Covrig

A literature review on the teacher labor markets, the demographic composition of the teaching workforce and the occupational character of teaching work. Identifies theoretical models for interpreting the problem of ethnic representation and developing appropriate guidelines for securing better representation of diverse groups.

November 1995, 106 pages No. CD-001

DEMOGRAPHICS

- **Inland Empire Education Summit Notes** By Douglas E. Mitchell and Duane M. Covrig

Demographic characteristics of the Inland Empire depicting major stress factors attributed to rapid population growth. These stress factors include: student and family transience, health risks, family and community pressures, health risks, crime and violence, and the erosion of real resources.

March 1994, 17 pages   No. DE-001

MIDDLE LEVEL EDUCATION

- **Middle Level Education: Educationally Sound--Administratively Possible-- Research Brief** By David Hough

A two-page summary highlighting the middle school movement and providing a brief description of a survey of middle level programs in California.

Summer 1989, *Nwstlr*, VI, 3   No. MLE-003

- **Middle Level Education in California: A Survey of Programs and Organization** By David Hough

A survey of the grade-level organizational structure and programs focused on grades 5 to 10. Provides school practitioners with a myriad of organizational structures for the middle grades. Identifies effective practices

and programs and makes recommendations founded on current practice in California school districts.

February 1989, 43 pages   No. MLE-002

PARENTS AND FAMILIES

- **A Review of Research on Parental Choice in Education** By Rodney T. Ogawa and Jo Sargent Dutton

This report reviews the findings of research that shed light on the assumptions that serve as the bases for current educational choice proposals.

September 1993, 33 pages   No. PF-003

- **Vertical Articulation for the Middle Grades** By David Hough

A review of research literature on middle grade education. Provides a historical perspective and describes the efforts of middle school reformers focusing on curriculum improvement.

February 1989, 53 pages   No. MLE-001

NEWSLETTERS

- **CERC Newsletters** By Jane L. Zykowski and Douglas E. Mitchell

CERC Newsletters are periodic publications of the California Educational Research Cooperative (CERC) updating research

conducted for members of the Cooperative and other interested sponsors.

NEW SCHOOLS

- **School Housing for the Schooling of Children** By Flora Ida Ortiz

A detailed review of the school building process in California. This report reviews the literature on school construction and identifies key roles and agencies in the building of a new school in California.

June 1991, 99 pages   No. NS-001

- **A Review of Research on Parental Choice in Education** By Rodney T. Ogawa and Jo Sargent Dutton

This review of literature identifies the most prominent types of parental choice programs that have been proposed, adopted, and implemented throughout the nation. Additionally, it reviews the assumptions serving as the bases for educational choice proposals espoused by parents, the community, and state and local policymakers.

September 1993, 33 pages   No. PF-001

SCHOOL ACHIEVEMENT

- **A Comprehensive Inventory of Language Development Documentation Data in the Ontario-Montclair School District** By Douglas E. Mitchell and Rita Karam

A summary of the findings from the technical report on the development of centralized data system that keeps track of services, language development programs an instructional services provided to LEP students.

July 1998, 19 pages   No. SA-010

- **Ontario-Montclair School District's Language Development Program Design and Implementation Characteristics** By Douglas E. Mitchell and Rita Karam

This report reviews the characteristics and key elements of various approaches to language development and instructional program delivery for English learning students. A classification system for these programs and approaches described.

October 1998, 27 pages   No. SA-011

- **Evaluation of English Language Development Programs in the Santa Ana Unified School District** By Douglas E. Mitchell, Thomas Destino, and Rita Karam

A report on the acheivement of non-English speakers in the Santa Ana school district.

August 1997, 102 pages   No. SA-008

- **Principal's Views About Combination Classes** by DeWayne A. Mason, Roland W. Doepner, and Joan Black

A report on combination class (more than one grade level in a classroom) structures in the elementary school. Views of school principals, strategies for assigning students and teachers to these classes and recommendations for managing the delivery of curriculum and

instruction in combination classes are discussed.

March 1995, 43 pages   No. SA-007

- **Toward Restructuring and the Improvement of Student's Attitudes and Academic Outcomes: Executive Report** by DeWayne A. Mason, Douglas E. Mitchell, Shannon L. Husted and Jane L. Zykowski

A summary report discussing the attitudes of students, staff, and parents during the restructuring efforts of a California High School.

May 1994, 19 pages   No. SA-006

- **National Survery of Combination and Nongraded Classes** By DeWayne A. Mason and Janet Stimson

A report on the frequency with which elementary students are assigned to traditional single-grade and non-traditional combination and nongraded classes in states throughout the nation.

July 1994, 27 pages   No. SA-005

- **Review of Literature on Combination Classes** By DeWayne A Mason and Robert B. Burns

This report reviews the literature on combination classes. It distinguishes between two types of combination classes (administrative and developmental) and identifies studies that have examined this or-ganizational structure. Findings are synthesized. Results and conclusions are presented as implications for policymakers, practitioners and researchers.

June 1994, 118 pages   No. SA-004

- **How Elementary Principals Assign Teachers and Students to Combination Classes** By Robert R. Burns and DeWayne A. Mason

A description of administrative and management strategies used by school principals to assign teachers to combination-grade classrooms.

September 1993, 21 pages   No. SA-003

- **Teachers' Views about Combination Classes** by DeWayne A. Mason, Robert Burns, and Jorge Armesto

This study describes the assignment of students to, teachers' feelings about, and instructional approaches used by teachers in combination classes (two grade levels in one class.)

June 1993, 56 pages   No. SA-002

- **CAP: 4-Year Achievement Scores and 2-Year Projection** By Jeffrey B. Hecht and Jane L. Zykowski

A longitudinal summary of member school districts' performance on the California Assessment Program (CAP) over a four-year period from 1983-84 through 1986-87 with a two-year projection for 1987 through 1989.

September 1989, 8 pages   No. SA-001

- **Community Satisfaction Survey - Val Verde Unified School District** By Rita Hemsley and Duane Covrig

A technical report on a broad-based survey of community interest and satisfaction undertaken for the Val Verde Unified School District. Results are reported in terms of: demography, community involvement, school management,

technology, curriculum and instructional climate and school facilities.

Winter 1994, 125 pages   No. SM-006

- **Parenting Perceptions and Expectations of School-Community Communications** By E. Mark Hanson and Walter A. Henry

Parent perceptions and expectations of school-community communications in three school districts are presented. A detailed description of the characteristics of school-community communications is included.

February 1994, 39 pages   No. SM-005

- **Parent and Community Satisfaction with Public Education: A Survey of Parents and Citizens in Three CERC School Districts** By Douglas E. Mitchell, Kannanayakal Rajan with E. Mark Hanson and Walter A. Henry

A report of the degree to which parents are satisfied with issues of schooling. Overall, parents and citizens are satisfied with schools. Differences in satisfaction with the schools are focused on specific issues, ethnicity, socio-economic status, and voter status.

September 1992, 23 pages   SM-004

SCHOOL MARKETING

- **Educational Marketing and the Public Schools: Policies, Practices and Problems** By E. Mark Hanson and Walter A. Henry

A paper focused on analyzing the marketing concept and illustrating its application to

public educational systems. Provides answers to the following questions:

1. What is marketing?
2. What market forces exist in education to create bridges or barriers between schools and communities they serve?
3. Why apply marketing techniques to schools?
4. How do marketers contact various segments of the community?
5. How do schools attempt to communicate with communities and vice versa?

Special focus is placed on the communication needs of bilingual parents.

July 1991, 38 pages   No. SM-003

• **Written Communication and the Marketing of Public Schools** By E. Mark Hanson, Walter A. Henry and David Hough

Applies a Marketing Rating Instrument (MRI) to written communications from public schools to parents and community members. Identifies problems with written communication and provides basic strategies for teachers, administrators and school staff members to improve written communications.

February 1991, 31 pages   No. SM-002

• **A Plan for Educational Marketing of Val Verde School District** By Tedi K. Mitchell, Douglas E. Mitchell, E. Mark Hanson and Walter A. Henry

A case study analysis of the communications process in a small school district in the process of unification. This paper discusses one district's attempt to identify and isolate communication problems at the district level. Communication problems similar to those of

many districts are identified. A plan for remediation is proposed.

January 1989, 36 pages   No. SM-001

SCHOOL ORGANIZATION

• **Educational Indicators: What are They? How Can Schools and School Districts Use Them?** By Douglas E. Mitchell and Rita Karam

The purpose of this report is to provide local educators and policy makers with information about educational indicators and their use. It describes indicators and discusses how they can be used to make decisions in school organizations.

November 1998, 30 pages   No. SO-004

• **Local Educational Administration In the United States of America: A Brief Description of Principal Organizational Features** By Ronald E. Franklin

This paper comments on federal, state and county organization of education in the public sector, and describes in greater detail the local organizational features in American Education in a federal system where executive responsibility for education lies primarily with the state.

July 1995, 6 pages   No. SO-001

• **Professional and Institutional Perspectives on Interagency Collaboration** by Douglas E. Mitchell and Linda D. Scott

This article discusses a number of policy and programmatic issues related to the implementation of the school as the provider of educational and social services.

May 1993, 35 pages   No. SO-000

SCHOOL RESTRUCTURING

- **School District System Reform** By Douglas E. Mitchell and Jean E. Treiman

A Case Study of Strategic Planning, Site-Based Management, and Outcome Based Education in Victor Elementary School District

September 1993, 27 pages   No. SR-004

- **A Review of Research on Parental Choice in Education** By Rodney T. Ogawa and Jo Sargent Dutton

This review describes the assumptions parents and educators make when making choices about schools their children should attend. Describes parents who choose.

September 1993, 13 pages   No. SR-003

- **If Restructuring is the Solution, What is the Problem?** By Thomas Timar

A treatise on the ambiguity of the "restructuring" of the public school and the present catch-all use of the term. It examines prevailing conceptions of school restructuring and their implications for improvement. Dr. Timar argues that current calls for restructuring echo past reform efforts and that restructuring can only succeed as a reform strategy if it

addresses the social, political, and ideological contexts that shape educational policy.

May 1992, 41 pages   No. SR-002

- **School Restructuring: The Superintendent's View** By Douglas E. Mitchell and Sara A. Beach

An analysis of the meanings of school restructuring to 43 school superintendents. Details organizational and political issues considered by school superintendents faced with new reform language.

March 1991, 37 pages   No. SR-001

SPECIAL EDUCATION

- **Impact of Special Education Pre-Referral Intervention Activities and Alternative Assessments on Ethno-Linguistically Diverse Students**

By Douglas E. Mitchell, Ronald J. Powell, Linda D. Scott and Janet L. McDaid.

A technical report prepared for the California State Department of Education describing the findings of a study of the Special Education Pre-Referral Process in several elementary schools in California. Conclusions are discussed in terms of educational significance and policy implications.

September 1994, 4 pages   No. SE-006

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- **Impact of Special Education Pre-Referral Intervention Activities and Alternative Assessments on Ethno-Linguistically Diver Students -- Research Brief** By Douglas E. Mitchell, Ronald J. Powell, Linda D. Scott and Janet L. McDaid

A summary of findings of a study of the Special Education Pre-Referral Process in several Elementary schools in California. conclusions are set forth in terms of educational significance and policy implications for the practitioner.

September 1994, Nwsltr VI, I   No. SE-005

- **The Impact of California's Special Education Pre-Referral Interventions and Alternative Assessments on Ethno-Linguistically Diverse Students: A Technical Report of the Feasibility Study** By Ronald Powell, Kannanayakal Rajan, Donald Reed, and Linda Scott

A report of the validation on effective elements of the special education pre-referral and alternative assessment procedures for ethno-linguistically diverse elementary students in California.

February 1991, 105 pages   No. SE-004

- **Report on the Methodology for the West End Special Education Transition Program Evaluation** By Daniel Morgan and Jeffrey B. Hecht

A report on the development of a Management Information System to assess the quality of life experienced by special need students as they leave high school.

April 1990, 120 pages   No. SE-003

- **California's Resource Specialist Programs: School Staff and Parent Evaluations--Research Brief** By Jeffrey B. Hecht and Daniel Morgan

An executive summary of the evaluation of California's Resource Specialist Programs by parents and educators.

Summer 1990, Newsletter,VII, 4   No. SE-002

- **School Staff and Parent Evaluation of California's Resource Specialist Programs** By Jeffrey Hecht, Gary Badarak, and Douglas E. Mitchell

This report details the results of an evaluation of the Resource Specialist Program by more than 23,000 parents and educators in 429 schools in California.

April 1990, 151 pages   No. SE-001

TEACHER TRAINING

- **California Mentor Teacher Program Evaluation** by Douglas E. Mitchell, Linda D. Scott, and Irving G. Hendrick

This evaluation report details the effectiveness of California's Mentor Teacher Program. It discusses the findings and presents them in light of programmatic and policy implications.

June 1996, 113 pages   No. TT-002

- **California's New Teacher Project: A Policy Perspective Summary--Research Brief** By Douglas E. Mitchell and David L. Hough

An executive summary of the project from a policy perspective which discusses and defines support for beginning teachers. Gives specific intervention strategies which school organizations and teacher training institutions could implement to support new teachers.

Fall 1990, *Newsletter*, VIII, 1   No. TT-001

YEAR -ROUND EDUCATION

- **Implementation of Year-Round Operations in the Middle School** By Jane L. Zykowski, Rita Hemsley and Jake Zhu

A technical report detailing the assessment of parent, staff, and student concerns with year-round scheduling at the middle school. Describes and implementation plan for addressing these concerns and a Master Scheduling Plan to equalize attendance tracks. Achievement effects are discussed.

January 1995, 30 pages   No. YRE-004

- **Year-Round Education: A California Phenomenon--Research Brief** By Jane Zykowski, David Hough, and Douglas Mitchell

A summary of the year-round school movement in California over the past three decades.

Spring 1991, Nwsltr. VIII, 3   No. YRE-003

- **A Review of Year-Round Education Research** By Jane L. Zykowski, Douglas E. Mitchell, David Hough and Sandra E. Gavin

This state-of-the-art review of literature focuses on the fiscal, social, and achievement impact of multi-track year-round school operations. The most comprehensive review of year-round education literature since the early 1970's.

February 1991, 73 pages   No. YRE-002

- **Year-Round Education Feasibility Guidelines** By Patricia Matthews, Jane L. Zykowski and David Hough

A series of worksheets developed to assist districts in assessing the capital, operational and transition costs of conversion to year-round school operations.

October 1989, 117 pages   No. YRE-001

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There is a minimal fee for non-members.

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Dr. Fred Workman, Superintendent

Board Members
Robert Givens
Janice Dotson
Jo Ann McAnlis
Marla Kirkland
Virginia (Wyatt) Denney

Victor Elementary School District

Mr. Ralph H. Baker, Superintendent

Board Members
Sharon Bowers
Jeanne Kennedy
Ernie Moan
Willie Davis Pringle
Monte Worle

Victor Valley Union High

Dr. Patricia Mark, Superintendent
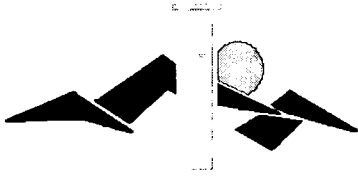
Board Members
Patricia J. Ceska
Michael A. Davis
Barbara j. Dew
Debra A. Lilly
Jack L. Wedgewood

Yucaipa-Calimesa Joint Unified

Dr. Dan Steele, Superintendent

Board Members
Sue Brown
Bill Carlson
Patty Moore
Bob Stranger
BethWatson

Douglas E. Mitchell
Director
Education:
B.A., Mechanical Engineering,
Rensselaer Polytechnic Institute, Troy,
New York, 1959.
B.A., Divinity, Chicago Theological
Seminary, Chicago, Illinois, 1963.
Ph.D., Political Science, Claremont
Graduate School, Claremont, CA 1973.
Work Experience:
Counselor, Indiana State Prison,
Michigan City, Indiana, 1961-1962.
Minister, Coloma United Church of
Christ, Coloma, Michigan, 1962-1965.
University Pastor, Gunsaulus Foundation,
Illinois, 1965-1967.
Assistant Chaplain, The Claremont
Colleges, Claremont, CA 1967-1969.
Assistant then Associate Director, and
Acting Instructor, Administrator
Preparation Program. Claremont
Graduate School, Claremont, CA
1970-1972.
Lecturer, School of Education University
of California, Riverside, Riverside, CA
1972-1973.
Assistant Professor, School of Education,
University of California, Riverside,
Riverside, CA 1973-1979.
Associate Professor, School of Education
University of California, Riverside,
Riverside, CA 1979-1983.
Professor and Associate Dean, School of
Education, University of California,
Riverside, Riverside, CA 1983-1985.
Professor, School of Education,
University of California, Riverside,
Riverside, CA 1985-Present.

Director, CERC, University of
California, Riverside, Riverside, CA,
1988-Present.
Research Interests:
Education policy formation and
implementation; organization and control
of school systems; labor relations and
teacher incentives; citizen influence and
school politics.
Teaching Areas:
Educational policy; social science theory;
and school politics.
Public Services and Awards:
Stephen K. Bailey Award, Politics of
Education Association, Intellectual
Contributions to the Field of Politics and
Policy Analysis, 1996.
Sociology of Education Association
President 1990-1991.
Politics of Education President, 1982-
1984.
National Society for the Study of
Education American Political Science
Association

Roseanna Barrón-López
Chief Administrative Officer
Education:
Loyola Marymount University Los
Angeles, CA 1977-1979
Major Emphasis: History
Work Experience:
Administrative Assistant, Chicano
Student Programs 1981-82
Secretary II, Political Science
Department 1984-86
Administrative Assistant, UCR's
California Museum of Photography
1986-88
Administrative Assistant, College of
Humanities & Social Science 1987

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Assistant to the Assistant Vice
Chancellor, Student Services 1988-1995
Chief Administrative Officer, CERC
1995-Present

John A. Al-Amin
Research Fellow
Education:
B.A., Economics, University of
California, Riverside, 1998
Experience:
Summer Sports Program
Director/Instructor, University of
California, Berkeley 1994-97
Economic Consultant, Fair Housing
Council of Riverside, 1996-96
Vice-Chairman, Finance Committee,
University of California, Riverside 1996-
98
Member, Chancellor's Registration Fee
Advisory Committee, University of
California, Riverside 1996-1997
MURAP Fellow, University of North
Carolina, Chapel Hill, 1997-98
American Economics Association Fellow
1997-98
Member, University of California
Council on Student Fees, 1997-99
Chairman, Chancellor's Registration Fee
Advisory Committee, University of
California, Riverside 1997-99
Research Fellow, CERC, 1999-Present
Research Interest:
Educational Administrative Policy;
Economic and Educational Development
in Urban America; Educational Quality
and its effects on Human Capital and
GNP growth; Discrimination in Lender
Markets; Econometric Research
Methods.

David Boyns
Research Fellow
Education:
BA (Anthropology) University of
California, Irvine, 1990.
BA (Psychology) University of
California, Irvine, 1990.
BA (Sociology) University of California,
Irvine, 1990.
MA (Sociology) University of California,
Riverside, 1997.
Ph.D. expected (Sociology) University of
California, Riverside, 1999
Work Experience:
Lecturer, San Bernardino Community
College, 1997-98.
Lecturer, Crafton Hills Community
College, 1997-98.
Research Assistant, Religions of Asia,
1997.
Committee Member, Human Subjects
Committee, University of California,
Riverside, 1996-present.
Research Assistant, Sociology of
Education, 1996.
Teaching Assistant, University of
California, Riverside, 1995-97.
Lecturer, San Diego City Community
College, 1995.
Research Assistant, Sociology of Mass
Media and Advertising, 1994-96.
Lecturer, San Diego State University,
1992-93.
Teaching Assistant, San Diego State
University, 1992.
Research Assistant, Sociology of Dating
Violence, 1992.
Archaeologist, 1990-94.
Research Interest:
Sociological Theory; Social Psychology;
Applied Sociology; Sociological
Research Methods; Sociology of
Education; Sociology of Religion;
Sociology of Emotions; Dynamics of

Social Interaction and Self-Formation;
Mass Media and Communications
Studies.

Ed Collom
Research Fellow
Education:
M.A., Sociology University of California
Riverside, 1996 Certificate, Global
Peace and Security University of
California Santa Barbara, 1993
B.S., Business Administration University
of California Riverside, 1992
Work Experience:
Research Fellow, CERC University of
California Riverside, 1/98 - Present
Teaching Assistant, Department of
Ethnic Studies University of California
Riverside, 9/97 - 12/97
Teaching Assistant, Department of
Sociology University of California
Riverside, 9/95 - 6/97
Research Interests:
Social Inequality: Race, Class, and
Gender Political Sociology

J. Matthew Gaskill
Programmer/ Analyst
Research Interest:
Multimedia network communications;
archival, categoring, retrieval, and
analysis of large data sets; internet-based
data collection; and strategic studies.
Education:
B.S. Aerospace Engineering, University
of Southern California, 1997
Vocational Teaching Credential,
California State University, Long Beach,
1995
Work Experience:
General Manager, Cobalt Horizons,
Beverly Hills, CA 1994
Computer Technician, University of
Southern California, 1995

Executive Assistant, Central Medical
Center, Los Angeles, 1996
MIS Consultant, ASSETS Team
Management, Irvine, 1997
Programmer/Analyst, CERC 1998-
Present

Janet Harshman
Administrative Assistant II
Work Experience:
Sales/Rental Gallery Manager
Riverside Art Museum, 1986-1988
Financial Services Representative, Bank
of America, 1990-1995
Member Services, Riverside Campus
Federal Credit Union, 1995-1996
Senior Clerk, Commons-UCR, 1997
Administrative Assistant, CERC,
1997-Present

Rita Hemsley
Assistant Research Educationist
Education:
B.A., University of California, Riverside,
Liberal Studies.
French Major and Education Minor.
M.A., University of California,
Riverside.
Educational Psychology --emphasis in
Special Education and Research
Methodology.
Teaching Credentials, University of
California, Riverside, 1988.
Multiple-Subject and Special Education.
Ph.D., University of California,
Riverside, 1991. Exceptional Children--
minors in Research Methodology and
Educational Theory.
Work Experience:
Teacher, Valley Preparatory School,
Redlands, CA 1980-1984. Evaluation
Consultant, Integrated School-Linked
Services (Healthy Start) SRI,
International. 1992-present.

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Research, MacMillan Research Group,
University of California, Riverside.
1985-1993.
Lecturer, Guidance in Special Education,
University of California,
Riverside, 1993-present.
Assistant Research Educationist,
CERC,1993-present.
Teaching Interests:
Research, Teachers as researchers.
Research Interests:
Adolescent Dis-Engagement;
Issues in Special Education; At-Risk
Students, Self-Concept, Measuring
Achievement, Transition Training
Career/Alternative Education; Program
Evaluation Psychometrics

Deborah Huston
Staff Research Associate III
Education:
BS, University of California, Riverside
MS, University of California, Riverside
Work Experience:
Teacher, Riverside Community College,
1993-Present.
Researcher, MacMillan Research Group,
UC Riverside, 1991-1993.
Staff Research Associate, Life Span
Project, 1991-1997.
Staff Research Associate,
CERC, 1997-Present
Teaching Areas:
Math and Statistics
Research Interests:
Lifespan development of people with
mental retardation, East San Gabriel
Valley Regional Occupational Program
(ESGVROP): Studying the effects of this
program on high school graduates,
Archaeology: The preservation of
prehistoric and historic archaeological
resources of western U.S.

Raylenne Jensen
Administrative Assistant II
Education:
B.S. Urban Regional Planning, California
State University, Pomona, 1998.
Statistics Minor.
Work Experience:
Counselor/Adolescent Facilitator, Jenny
Craig Weight Management Center, 1989-
1994.
Demographic Researcher, Jensen &
Associate, 1994-1997.
Planning Intern, City of Yorba Linda,
1997-1998.
Research Assistant, CERC, 1998-present.
Research Interests:
Educational Policy.

Rita Karam
Research Fellow
Education:
B.A., Sociology, American University of
Beirut, 1990.
M.A., Sociology, California State
University, Fullerton, 1994.
Work Experience:
Research Consultant, California State
University, Fullerton 1992-1993.
Research Assistant, Southwest Regional
Laboratory (SWRL) 1992-1994.
Parent Institute Coordinator, Southwest
Regional Laboratory (SWRL) 1994.
Statistician, House Ear Institute (HEI),
1994-1995.
Research Associate, University of
California, Riverside 1995-1996.
Research Fellow, University of
California, Riverside 1996-present.
Research Interests:
Program Evaluation in Education, Social
Sciences and Medical Fields Clinical
Outcomes

Anthony J. Lardieri
Executive Program Manager
Education:
    B.S., Montclair State Teachers College
    1959.
    Upper Montclair Social Studies-
    Economics.
    M.A., Newark State College 1972,
Work Experience:
    Classroom Teacher, Irvington, N.J. 1960-
    1971.
    Administrative Assistant, Irvington, N.J.
    1972-1975. Federal Programs
    Administrator, Irvington, N.J. 1975-1976.
    Assistant Principle, Fontana High School,
    1976-1978. Principle, Fontana High
    School, 1978-1984. Director of Special
    Services, Fontana, 1984-1986.
    Superintendent of Schools, Fontana,
    1986-1994. Superintendent of Schools,
    Riverside, 1994-1998. Executive
    Program Manager, CERC, University of
    California, Riverside, 1998-Present.
Public Service and Awards:
    California Superintendent of the Year,
    1993. Gary Anderson School of
    Management, Management Leader of
    the Year 1995-1996. Los Padrinos,
    Man of the Year, 1991-1992.
Research Interest:
    Special Educational Funding Models,
    Educational Indicators, Promotion
    Retention and Policy Legislation.

Kevin McNeill
Research Fellow
Education:
    A.A., Liberal Arts, Bakersfield College,
    1994.
    A.S., Human Services, Bakersfield
    College, 1994.
    B.A., Psychology, California State
    University, Bakersfield 1996.
    M.A., Psychology, California State
    University, Bakersfield, 1998.
    M.A., Sociology, University of
    California, Riverside, 1998.
Experience:
    Research Fellow, CERC, University of
    California, Riverside, 1999-Present.
    Instructor, Department of Behavioral
    Sciences, Bakersfield College, 1998.
    Teaching Assistant, Sociology,
    University of California, Riverside, 1996-
    99. Consultant to United Way of Kern
    County (Methods and Data Analysis),
    1996-99. Research Assistant, Center for
    Criminal Justice Research, California
    State University, San Bernardino, 1998.
    Consultant to Inland Agency of Riverside
    County (Grant Proposal Writing), 1997-
    98. Research Assistant, Sociology
    Department, University of California,
    Riverside, 1997. Research Assistant,
    Applied Research Center, California
    State University, Bakersfield, 1995-96.
Research Interest:
    Social Inequality, Social Psychology, and
    Human Services.

Cindy McVay
Staff Research Associate
Education:
    B.A. Education Augustana Collage,
    Sioux Falls, South Dakota 1981.
    M.Ed Curriculum: Lesley College,
    Cambridge, Massachusetts 1988
    Administrative Credential-University of
    California, Riverside, 1998
Work Experience:
    Elementary Math and Reading Specialist
    Cole Elementary School Cheyenne,
    Wyoming 1981-1984
    6th grade teacher Cole Elementary School
    Cheyenne, Wyoming 1984-1988
    4th grade teacher Cole Elementary School
    Cheyenne, Wyoming 1988-1990

77

6th grade Language Arts/Social Studies Gifted and Talented teacher Nellie Coffman Middle School Cathedral City, CA 1990-1995
6th grade Language Arts/Social Studies/Inclusion teacher, James Workman Middle School Cathedral City, CA 1995-1998
Staff Research Associate working with BTSA/CFASST at CERC, University of California, Riverside 1998-Present.

Research Interest:
Beginning Teachers, Teacher Education, Staff Development.

Marisol Mendoza
Administrative Assistant I
Education:
B.A. Sociology/Administrative Studies, University of California, Riverside, 1998. Spanish Minor.

Work Experience:
Office/Dental Assistant, Manuela G. Sosa DDS, 1994-1995.
Counter Clerk, University of California, Riverside Recreation Department, 1995-1998.
Clerk, CERC, 1998-present.

Monishia-Deneé "Moe" Miller
Administrative Assistant II
Education:
B.A., Sociology, University of California, Irvine, 1994.
M.S., Criminal Justice, University of California, Los Angeles, 1999.

Work Experience:
Library Assistant II, UCI Libraries, 1989-1990.
Teaching Assistant, California State University, Los Angeles, 1997-1998.
Probation Corrections Officer, San Bernardino County, 1989.
Administrative Assistant, CERC, 1999.

Public Service and Awards:
UCI School of Social Science Special Recognition Award, 1994.
UCI Early Outreach Program, U Can Counselor, 1989-1991.
Los Angeles Superior Court Intern, Juvenile Division, 1996-1997.

Research Interest:
Juvenile Delinquency, Violence in the School, Judicial Wavier, Early Childhood Development and its Implications on Anti-Social Behavior, Interaction of Police and Juveniles.

Ross E. Mitchell
Research Fellow
Education:
Currently pursuing the degree of Doctor of Philosophy, Education University of California, Riverside, TBA
Single Subject Credential, Physical Sciences, State of California University of California, Riverside, 1993.
Master of Science, Physical Chemistry The University of Chicago, 1989.
Bachelor of Science, Chemistry University of California, Riverside, 1986.

Work Experience:
Research Fellow, CERC, School of Education, University of California, Riverside, 1997-Present.
Science Teacher, Pacific High School, San Bernardino, California, 1992-1994 & 1995-1997.
Water Safety Instructor, Owner Ross E. Mitchell Swimming & Home Pool Safety Lessons, San Bernardino, California, 1995-1996.
Science Teacher, Serrano Middle School, San Bernardino, California, 1994-1995.
Water Safety Instructor, Lifeguard & Pool Manager, City of San Bernardino Department of Parks, Recreation & Community Services, 1994-1996.
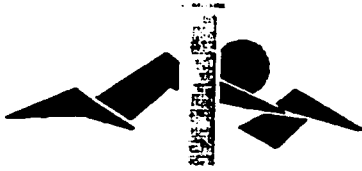
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Anthony J. Lardieri
Executive Program Manager
Assistant *Principle*, Fontana High School, 1976-1978
Principle, Fontana High School, 1978-1984.
Correction:
Assistant Principal, Fontana High School, 1976-1978
Principal, Fontana High School, 1978-1984.

Page 66

Monishia-Denee' "Moe" Miller
Administrative Assistant II
Library Assistant II, UCI Libraries,
1989-1990.
Probation Corrections Officer, San
Bernardino County, *1989.*
Correction:
Library Assistant II, UCI Libraries,
1990-1998.
Probation Corrections Officer, San
Bernardino County, 1998.

Science Teacher, Westbury Senior High School, Houston, Texas, 1991-1992.
Graduate Teaching Assistant, Department of Chemistry, University of Minnesota, Twin Cities, 1990-1991.
Research Assistant, Department of Chemistry, University of Minnesota, Twin Cities, 1990.
Teaching Assistant, Department of Chemistry, The University of Chicago, 1989.
Research Associate, Physics Division, Argonne National Laboratory, 1988-1989.
Research Assistant, Department of Biochemistry and Molecular Biology, The University of Chicago, 1987.
Laboratory Assistant, Departments of Chemistry and Physics, The University of Chicago, 1986-1987.
Teaching Assistant, Department of Chemistry, University of California, Riverside, 1986.

Research Interests:
Factors Influencing High Level Mathematics & Science Participation at the Secondary Level, Science Curriculum & Instruction Policy, Scientific Career Development

Linda C. Mizuhara
Programmer/Analyst II
Education:
San Jose State University, San Jose, CA 1985-1987
Major Emphasis: Nursing
Foothill College, Los Altos Hills 1988-1990 Major: Advertising
Work Experience:
Human Resource Assistant/Receptionist, Monoclonal Antibodies, Inc. 1988-1990
Administrative Assistant, Chomerics, Inc. 1990-1992

Administrative Assistant, Pavement Recycling Systems, Inc. 1993-1994
Administrative Assistant, Harber Companies, Inc. 1994-1997
Administrative Assistant, CERC, 1997-1998. Programmer/Analyst II, CERC, 1998-Present.

Louisa J. Ng
Research Fellow
Education:
B.A., English, University of California, Irvine 1996. M.A., Education Administration, University of California, Riverside, 1997.
Experience:
Coordinator, Walk for Ethnic Studies 1994 Asian Pacific American Awareness Planning Committee, 1994
Facilitator, Asian Pacific Student Association High School Outreach Conference, 1994
Chair, Student Asian Pacific Americans in Higher Education at UC1994-1995 National APAHE Planning Committee, 1995
Vice-Chair, Asian Pacific Student Association at UCI 1995-1996
Cross Cultural Center Fellow 1995-1996
ASUCI Unity Fest Planning Committee, 1996
Research Fellow, CERC, 1996-present
Research Interests:
Organization and Institutional theory; Higher Education; Issues of Race; Asian American Studies; Education and Administration Policy; Asian Pacific American Community Issues; Cultural Diversity in the Teaching Workforce

Mark Riddle
Research Fellow
    Education:
        B.B. Music Theory & Composition,
        Occidental College, Los Angeles, 1978.
        Mdiv, Garrett-Evangelical Theological
        Seminary, Evanston, IL, 1983.
    Work Experience:
        California-Pacific Annual Conference,
        United Methodist Church, 1983-1993.
        Ischemia Research & Education
        Foundation, 1994-1996.
        Teaching Assistant, 1996-1998.
    Research Interests:
        Gender & Institutions; Social Networks;
        the life-course of 'Educational Agendas'

Laurie Riggs
Research Fellow
    Education:
        BA-Mathematics: California State
        University, San Bernardino 1994
        MA-Mathematics: California State
        University, San Bernardino 1996
    Work Experience:
        Math Teacher: Christian Center Academy
        1985-1993
        Graduate Teaching Assistant: California
        State University, San Bernardino1994-
        1996 Lecturer: California State
        University, San Bernardino 1994-1996
        Research Fellow: University of
        California, Riverside 1996-present
    Research Interests:
        Math Education, Technology in the
        Classroom, Teacher Education

Sandee Sage
Administrative Assistant II
    Education:
        Citrus College, 1974, Foothill College,
        1979, Rogers State University, 1992,
        Reedley College, 1998. CSU, Fresno,
        1998.

    Work Experience:
        NavTime Instruments, 1986-1991,
        Secretary.
        University of California, Davis 1987-90.
        Dept. Clerk, Neurology Dept.
        Rogers State University, 1991-92,
        Secretary, Environmental Science and
        Mathematics Department.
        Beq's Mall, Office Manager 1992-94
        Seminis Vegetable Seeds, Inc. 1996-97.
        Secretary, Director of Pathology Dept.

Linda D. Scott
Associate Research Educationist
    Education:
        B.A., City University of New York. 1969
        M.A., State University of New York,
        Albany. 1971
        Ph.D., University of California,
        Riverside. 1990
        Major emphasis: Curriculum and
        Instruction; Teacher Education.
    Work Experience:
        Secondary Teacher and English as a
        Second Language Resource
        Specialist.1969-1981.
        Academic Program Coordinator,
        Language Center of the Pacific. 1981-
        1986.
        Supervisor of Teacher Education,
        Lecturer, University of California,
        Riverside. 1986-1989.
        Program Coordinator, California New
        Teacher Project. 1989-1991.
        CAPP Grant Director, U.C.
        Irvine/Sherman Indian High School
        Partnership. 1991-1993.
        Assistant Research Educationist, CERC.
        1991-present.

Research Interest:
    Teacher Education; Multicultural
    Education; Literacy and At-Risk Students

Jane Zykowski
Publications Editor, Project Director,
Lecturer and Specialist in Education
    Education:
        BS University of Pittsburgh, 1967
        M.Ed. University of Pittsburgh, 1968
        Ph.D. University of California, Riverside,
        1983
    Work Experience:
        Elementary, Middle School and Special
        Education Teacher, 1968-1972. Teacher
        on Special Assignment, 1972-1975.
        Elementary and Middle School Principal,
        1975-1985.
        Superintendent of Schools, 1985-1988.
        CERC Manager, 1988-1994.
        Lecturer and Coordinator, School of
        Education,
        University of California, Riverside
        Administrative Services Credential
        Coordinator, 1994-Present.
        CERC Publications Editor 1985-Present
        CERC Liaison 1997-Present
    Research Interest:
        School leadership; organizational change;
        consensus management; year-round
        education; and retention in grade.
    Teaching Areas:
        Educational administration;
        organizational theory; school careers,
        instructional systems and school district
        management and administration.
    Public Service & Awards:
        USOE Graduate Fellow, Edith M. Bates
        Doctoral Scholarship, Cum Laude –
        University of Pittsburgh, Life Member
        Parent Teacher Association, Teacher of
        the Year 1972, Successful Urban Practice

Award 1982, USOE Exemplary School
Least Restrictive Environment 1983 Phi
Delta Kappa Outstanding Service to
Public Education Key 1993,
Consultant and Program Evaluator for
numerous CERC Districts and County
Offices of Education, Vice President and
President of Riverside Chapter Phi Delta
Kappa 1990-1995.

Robert C. Calfee
Dean, Professor of Education

Education:

B.A., University of California, Los Angeles, Los Angeles, CA, 1951-1959.

M.A., University of California, Los Angeles, Los Angeles, CA, 1959-1960.

Ph.D., University of California, Los Angeles, Los Angeles, CA, 1959-1963.

Work Experience:

Research Associate, Department of Psychology, Stanford University, Palo Alto, CA, 1963-1964.

Assistant Professor, Department of Psychology, University of Wisconsin, Madison, Wisconsin, 1964-1966.

Associate Professor, Department of Psychology, University of Wisconsin, Madison, Wisconsin, 1966-1969.

Associate Professor, School of Education, Stanford University, Palo Alto, CA, 1969-1971.

Associate Dean, Research and Development, School of Education, Stanford University Director, Center for Educational Research at Stanford (CERAS), Palo Alto, CA, 1976-1980.

Director, Stanford Teacher Education Program, Stanford University, Palo Alto, CA, 1980-1981.

Professor of Education and Psychology, School of Education, Stanford University, Palo Alto, CA, 1971-1998.

Dean, Professor of Education, University of Riverside, Riverside, CA, 1998-Present.

Research Interest:

Major interests have evolved over the past two decades from a focus on assessment of beginning literacy skills to a concern with the broader reach of the school as a literate environment. Theoretical efforts are directed toward the nature of human thought processes, and the influence of language and literacy in the development of problem-solving and communication. Research activities include Project READ – Plus, Word Work, Text Analysis Project, Methods for Alternative Assessment. These projects all combine theoretical and practical facets directed toward understanding and facilitating school change.

Teaching Areas:

Education psychology; educational research methods; language, literature and culture.

Public Service & Awards:

Guggenheim Memorial Fellowship, 1972; Fellow, Division 15 (Education Psychology) of American Psychological Association (Elected 1976); Fellow, Division 3 (Experimental Psychology) of American Psychological Association (Elected 1986); Fellow, Center for Advanced Study in the Behavioral Sciences, 1981/82; Fellow, American Association for the Advancement of Science (Elected 1990);

Member, California Reading
Association Hall of Fame, (1992);
Member, International Reading
Association Hall of Fame, (1993).

Rodney Ogawa
Associate Dean, Professor of Education
Education:
B.A., History, University of
California, Los Angeles, Los
Angeles, CA, 1970.
M.A., Education, Occidental
College, Los Angeles, CA , 1971.
M.A., Educational Administration,
California State University, Los
Angeles, CA, 1976.
Ph.D., Educational Administration,
Ohio State University, OH, 1979.
Work Experience:
Social Science Teacher, John Muir
High School, Pasadena Unified
School District, Pasadena, CA 1971-
1974.
Curriculum Specialist, Pasadena
Unified School District, Pasadena,
CA, 1972-1974.
Associate Director, Emergency
School Aid Act Project, Pasadena
Unified School District, Pasadena,
CA, 1974-1977.
Post-Doctoral Trainee, Organizations
Research Training Program, Stanford
University, Stanford, CA, 1979-
1980.
Assistant Professor, Department of
Educational Administration,
University of Utah, Salt Lake City,
UT 1980-1986.
Associate Professor, of Educational
Administration, University of Utah,
Salt Lake City, UT, 1986-1992.
Associate Professor, School of
Education, University of California,

Riverside, Riverside, CA,1992-1994.
Associate Director, CERC,
University of California, Riverside,
Riverside, CA, 1993-1995
Professor, School of Education,
University of California, Riverside,
Riverside, CA, 1994-Present.
Co-Director, CERC, University of
California, Riverside, Riverside, CA,
1995-1998.
Associate Dean, School of
Education, University of California,
Riverside, Riverside, CA, 1998-
Present.
Research Interests:
Theories of organization and
leadership applied to studying
schools; school-family relations.
Teaching Areas: Organizations theory and
leadership.
Public Service & Awards:
William Davis Award, University
Council for Educational
Administration Most Outstanding
Article of the 1995 Volume of
Educational Administration
Quarterly, Spring, 1996.
Student's Choice Award for
Teaching, The Associated Students
of the University of Utah, 1992.
Outstanding Teaching Award,
Graduate School of Education,
University of Utah, 1992.
Visiting Scholar, Stanford Center for
Organizations Research, Stanford
University, 1991.

Jan Blacher
Research Interests:
Principal Investigator for 16-year
study funded by the National
Institute on Child Health and Human
Development pertaining to the

correlates and consequences out-of-home placement of children with severe handicaps. Study populations include Anglo, Latino, and African-American samples. Co-Principal Investigator on the Collaborative Family Study (Also NICHD), a multi-site project focusing on young children's developing emotional control and behavior, and the role of their families. (UC Riverside, UCLA, Penn State University) Specific research topics in mental retardation include: family involvement with children in out-of-home placement settings; family stress and adjustment to a child with handicaps and dual-diagnosis; parent-child attachment; severe mental retardation; appropriate educational programming for children with autism.

Teaching Areas:
Mental retardation (severe handicaps; autism); family influences on development; early childhood/special education; dimensions of exceptionality.

Public Service & Awards:
Recipient of Research Award, American Association on Mental Retardation (Region II); Fellow, American Association on Mental Retardation; Fellow, American Psychological Association; Publications Committee, American Association on Mental Retardation; Distinguished Visitor, Faculty of Education, University of Alberta at Edmonton, Fall, 1984; Recipient of the Margaret Bancroft Award (1993) for "pioneering work and dedication to improve the quality of life for children and adults with disabilities."

Jerry Carlson
Research Interests:
Processes of cognitive development; assessment of intellectual functioning; and international educational exchange.

Teaching Areas:
Cognitive development; individual differences.

Public Service & Awards:
Fulbright Hayes Award, 1970-71; Alexander Von Humboldt-Stiftung Award, 1974-76 (by government of West Germany); 1987 Outstanding Research Award, Council on International Exchange; Listed in Who's Who in the West; President, International Association for Cognitive Education.

Pamela Clute
Research Interests:
Teaching teachers how to teach contemporary mathematical ideas through an integrated curriculum; women, minorities and mathematics; techniques for developing critical thinking through mathematics instruction.

Teaching Areas:
Mathematics and education.

Public Awards:
1998 the Georgia Snook Memorial Award; 1997 Instructor of the Year, U.C. Extension; 1993 Woman of the Year, California State Legislature 80th A.D.; 1992 Non-Senate Distinguished Teaching Award University of California, Riverside; Riverside County Woman of Achievement, 1988; and Outstanding

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Service Award, California Math
Council, 1991.
Current Grants:
Community Teaching Fellowship
Program; Inland Area Mathematics
Project; California Alliance for
Minority Participation (NSF),
ATHENA (NSF); and California
University Partnerships.

Thomas Destino
Research Interests:
Second language teaching and
learning in the classroom setting,
immersion classrooms to various
second language settings including
ELD and other settings, applied
linguistics, bilingual studies, and
second language literacy
development.
Teaching Areas:
Foreign Language Education,
specifically in second language
teaching and learning. Native and
second language literacy
development and discourse analysis
in schools. Applied linguistics,
teacher education for multilingual
settings, literacy and language
development.

James Dillon
Research Interests:
Question-answer processes;
conceptions of Teaching; group
discussion and deliberation.
Teaching Areas:
Curriculum and instruction.

Dan Donlan
Research Interests:
Curriculum and instruction; reading,
written composition, reading and

writing in the content areas; response
to literature; teachers as researchers;
the effect of classical music on the
spontaneous writing of junior and
senior high school students.
Teaching Areas:
English education, literacy and
reading, multicultural literature
programs.
Public Service & Awards:
Chair, Conference on English
Education Commission to investigate
graduate programs in English
education; member, NCTE Standing
Committee on Research; editor of
research column for English Journal;
referee for Research in the Teaching
of English.

Sharon Duffy
Research Interests:
Lifespan development; residential
and school placement; family and
school influences on development of
individuals with mental retardation;
quality of life measurement; mental
health and mental retardation.
Teaching Area:
Mental retardation; Special
Education issues.

Richard Eyman
Research Interests:
Research on mental retardation.
Teaching Areas:
Psychometrics and statistics.
Public Service & Awards:
American Association on Mental
Deficiency National Award for
Research in Mental Retardation,
1987; American Academy on Mental
Retardation Career Research Award,
1989.

Paul Green

Research Interests:
Politics and governance of Educational Reform; judicial policymaking and social justice; institutional and organizational decision making; educational and social opportunity (housing, poverty, employment, juvenile justice, and public health); and equal access and equal educational opportunity in elementary, secondary and post-secondary schooling.

Teaching Area:
Introduction to Educational Policy and Politics, Urban/Suburban Educational Policy and Politics School Law.

Frank Gresham

Research Interests:
Social skills assessment and training with children; behavioral consultation; applied behavior analysis.

Teaching Areas:
School psychology; consultation; applied psychological measurement; ecological behavioral analysis; behavior disorders.

Grant Activity:
MacMillan, D., Gresham, F., & Swanson, L. Utility of Alternative Assessment Models for Identification of Mildly Handicapped Children. U. S. Department of Education, Office of Special Education, funded in the amount of $785,000 for 5 years; Gresham, F., & MacMillan, D. Social and Affective Outcomes of Special Education Placement Options. U. S.

Department of Education, Office of Special Education, funded in the amount of $850,000 over 5 years.

Professional Association Elections:
Elected Fellow of Division 5 of the American Psychological Association (Division of Evaluation, Measurement, and Statistics)

E. Mark Hanson

Research Interests &
Professional Activity:
Organization and governance in American education; management reform in Latin American Educational Systems.

Teaching Areas:
Organization and management of schools, international education, and educational marketing.

Public Service & Awards:
Fulbright Scholar 1992-1993, Fulbright Senior Scholar Advisory Committee, 1983-1986; Fulbright Research Award, Colombia & Venezuela, 1980; Consultant to the World Bank, the Agency for International Development, UNDP and UNESCO on Administrative Reform in Developing Nations; Board of Governors, Comparative & International Education Society, 1990-1993.

Dorothy Hartley

Research Interests:
Education Equity and Excellence, Management of Multicultural Work Force, Intercultural and Crosscultural Communication. Bilingualism and Multicultural Education, Second Language Acquisition, Language and Cultural Studies, Non- Verbal

Communication and Teacher
Preparation.
Teaching Areas:
Multicultural Education in the
American Schools.

Rita Hemsley
Research Interests:
Adolescent Dis-Engagement, Issues
in Special Education: At-Risk
Students, Self-Concept, and
Measuring
Achievement, Transition Training
Career/Alternative Education;
Program Evaluation Psychometrics
Teaching Interests:
Research and Teachers as
researchers.

Irving G. Hendrick
Professor and Dean Emeritus, School of
Education
Currently serving the campus as the
Assistant Vice Chancellor for
Development. Professor Hendrick
remains active with California Teacher
Education and credentialing issues
through his service to the California
Commission on Teacher Education in
the definition of credential reciprocity
standards between the other forty-nine
states and California. An Historian of
Education, Professor Hendrick is author
of the Sequacentennial chapter on the
history of California education for the
California Historical Quarterly to be
published later this year by the
University of California press.
Research Interests:
History of education in California;
history of educational opportunities
provided for non-white minority
groups in the United States; history

of special education; history of
teacher education.
Teaching Area:
History of American education.

Donald MacMillan
Research Interests:
Factors related to academic and
social status of mildly retarded,
behaviorally disordered, learning
disabled and environmentally at-risk
children, taxonomies for
classification of children with
disabilities.
Teaching Area:
Mental retardation and behavior
disorders and students at-risk.
Public Service & Awards:
Edgar A. Doll Award, Division 33 of
American Psychological
Association; Associate Editor:
American Journal of Mental
Deficiency, Exceptional Children;
Consulting Editor: Journal of
Educational Psychology, American
Journal of Mental Deficiency;
Member, Advisory Committee to the
U.S. Commissioner of Education on
Intramural Research Program;
Member, Human Development and
Aging Study Section, NICHD, NIH
1983-1986; Expert Witness in Merry
et al. v. Parkway et al., National
Disabilities Research Task Force:
Part E of I.D.E.A.; 1990 Education
Award, American Association on
Mental Retardation; 1998 Research
Award, Council for Exceptional
Children; Distinguished Researcher
Award-Special Education SIG,
AERA, 1998.

Kathleen Metz
> Research Interests:
>> Development of children's problem solving and understanding in the domains of science and mathematics; the architecture of children's science and mathematics knowledge; and effective mathematics and science instruction.
> Teaching Areas:
>> Cognition and instruction, especially in science and mathematics.
> Public Service & Awards:
>> Membership in American Educational Research Association, Cognitive Science Society, and Society for Research in Child Development; National Council of Teachers of Mathematics; National Association for Research in Science Teaching.

Douglas E. Mitchell
> Research Interests:
>> Education policy formation and implementation; organization and control of school systems; labor relations and teacher incentives; citizen influence and school politics.
> Teaching Areas:
>> Educational policy; social science theory; and school politics.
> Public Services and Awards:
>> Stephen K. Bailey Award, Politics of Education Association, Intellectual Contributions to the Field of Politics and Policy Analysis, 1996, Sociology of Education Association President1990-1991, Politics of Education President, 1982-1984, National Society For the Study of Education American Political Science Association.

Richard Newman
> Research Interests:
>> Children's learning and cognitive development, achievement motivation, interplay between socialization and cognitive development.
> Teaching Areas:
>> Cognitive development and Educational psychology.
> Public Service & Awards:
>> Membership in American Educational Research Association (Special Interest Group: Motivation in Education), Society for Research in Child Development, and American Psychological Association. Editorial consultation: Child Development, Journal of Educational Psychology.

Flora Ida Ortiz
> Research Interests:
>> School careers; socialization processes; and instructional systems and school superintendency; succession processes; school housing; educational administration practices in English speaking countries.
> Teaching Areas:
>> Qualitative research methods; the school as a social system; role formation in school organizations; the school superintendent; planning and Online course: The planning and Designing of Educational Facilities.
> Public Service & Awards:
>> Advisory Council for the National Center for Educational Leadership; Advisory Council for the Center for Creative Leadership; American

Educational Research Association Division A Secretary; Association for Supervision and Curriculum Development; Council for Educational Facility Planning, numerous civic and campus committees; International; YWCA Women of Achievement Award; Women Who Make a Difference Award.

Reba Page
Research Interests:
Curriculum differentiation in classrooms and schools, particularly as manifested in tracking, and the relation of curriculum to cultural differentiation (e.g., by age, race, social class, etc.).
Teaching Areas:
Curriculum theory, practice, and history; interpretive research methods; secondary education; organizational cultures
Public Service & Awards:
Spencer Fellow, National Academy of Education, 1986-1987; Program Chair, Division B (Curriculum Studies), 1989-1990, and Division G (Education in Social Context), 1992-1993,
AERA; U.S. Editor, Journal of Curriculum Studies, 1990-1993; 1994 Outstanding Recent Graduate Award, University of Wisconsin-Madison.

Judith Sandholtz
Research Interests:
Teacher development; collaborative teacher education; professional development schools; and technology in education.

Teaching Areas:
Curriculum and instruction; teacher education.
Public Service and Awards:
Distinguished Program in Teacher Education Award, Association of Teacher Educators, 1997; Exemplary Teacher Education Program, national Education Association, 1994; Quality of Education Award, California Council on the Education of Teachers, 1991. Membership in AERA, ATE, ASCD, CCET, SCATE.

Linda D. Scott
Research Interests:
Teacher Education; Multicultural Education; Literacy and At-Risk Students, Development of curriculum, instruction and assessment for teacher induction and education, Retention of students at risk of early school leaving, Cultural Diversity, Literacy
Teaching Areas:
New Teacher Support
Teacher Education:
Curriculum and Instruction, Teaching Literature, Writing and Reading; Beginning Teacher Support and Assessment
Grant Awards:
California New Teacher Project. 1989-1991. CAPP Grant Director, U.C. Irvine/Sherman Indian High School Partnership. 1991-1993. Principal Investigator, CPEC Mathematics and Science for American Indian Students/Sherman Indian High School. 1994-1998; Beginning Teacher Support and Assessment, 1994-present; Beginning Teacher Support

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and Assessment Statewide Evaluation, 1995-present.

Melanie Sperling
Research Interests:
The relationship between student achievement and engagement in literacy learning; teaching and learning of writing in secondary classrooms; and the relationship between oral and written language as played out in the classroom context.
Teaching Areas:
Language and literacy and English education.
Awards and Honors:
National Academy of Education Spencer Postdoctoral Fellowship Promising Researcher Award; National Council of Teachers of English Steve Cahir Award for research in writing; American Educational Research Association Special Interest Group in Writing and Literacies; Outstanding Dissertation Award, University of California, Berkeley, Graduate School of Education.

Lee Swanson
Research Interests:
Information processing and individual differences; learning disabilities.
Teaching Areas:
Assessment, tests and measurement; learning disabilities.

Thomas Timar
Research Interests:
Educational policy and political institutions; politics and policy of school reform and educational

change; comparative institutional contexts of education.
Teaching Areas:
Educational policy and politics; policy and program evaluation; educational policy formulation and implementation; educational finance and policy.

Jane Zykowski
Research Interests:
School leadership; organizational change; consensus management; year-round education; and retention in grade.
Teaching Areas:
Educational administration; organizational theory; school careers, instructional systems and school district management and administration.
Public Service & Awards:
USOE Graduate Fellow, Edith M. Bates Doctoral Scholarship, Cum Laude –University of Pittsburgh, Life Member Parent Teacher Association, Teacher of the Year 1972, Successful Urban Practice Recipient 1980, CSBA Golden Bell Award 1982, USOE Exemplary School Least Restrictive Environment 1983, Phi Delta Kappa Outstanding Service to Public Education Key 1993, Consultant and Program Evaluator for numerous CERC Districts and County Offices of Education, Vice President and President of Riverside Chapter Phi Delta Kappa 1990-1995.

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