

April 2021 Status Report

The UC/CSU California Collaborative for Neurodiversity and Learning



UCLA School of Education & Information Studies





The UC/CSU California Collaborative for Neurodiversity and Learning represents a historic and critical investment in our state’s children with dyslexia and other literacy challenges. The California Collaborative was launched in January 2020 aimed at improving literacy in California over the next four years through strategic work. Established by legislation in June 2019 through AB 1703, and then funded in the June 2019 state budget, the California Collaborative’s goal is to carry out five sectors of work as outlined in AB 1703. The legislation declared the following as the reasons for pursuing this work:

- ▶ About 20 percent of children in every classroom have some type of learning difference that is not adequately being identified and/or supported.
- ▶ New research in the neurosciences informs us that diversity of learning types represents natural and important brain wiring variation and that each learner’s brain is both uniquely wired and shaped by educational practice.
- ▶ Without early identification and effective intervention, the impact of learning issues can be significant and long-lasting not only for the learner, but for California at large. The long-term effects include school failure, depression, and an increased risk of suicide, delinquency and reoffending.
- ▶ A true diversity of brains is needed in California’s innovation economy. Therefore, California has an inherent need to work together toward improving the ways it supports neurodiversity in K-12 classrooms.
- ▶ The Legislature believes this to be one of the civil rights issues of this generation and that Californians must work together to secure equal access to quality learning for neurodiverse children.

By setting aside \$6 million to establish the UC/CSU California Collaborative for Neurodiversity and Learning, California’s leaders are creating the foundation for cutting-edge teaching and learning that will prepare our next generation for successful lives.

This Collaborative is unique in bringing together top experts from the University of California and the California State University to re-imagine teacher education to better focus on the science of reading, with the shared goal of exponentially increasing literacy for our next generation.

THE CHALLENGE:

To Improve Literacy in California

California urgently needs to change our teaching methods if only 1/3 of our future citizens are prepared to be full participants in our democratic society.

This loss of a generation's literacy will significantly affect the intellectual, social, emotional, ethical, and economic potential of our state and nation.

Why has this happened?

Despite the fact that research provides knowledge on how children learn to read and on how best to teach them to do so – this research knowledge, which involves the Comprehensive Systematic Teaching of Reading (CSTOR), has not made its way into classroom practice. It includes both the most recent research from neuroscience on processes in the reading brain as well as from evidence-based practice.

The Solution

The urgent key to improving reading outcomes is improving the preparation of our state's teachers, developing new pre-service models based on the science of reading and concurrently providing in-service professional development to current teachers.

The UC/CSU California Collaborative for Neurodiversity and Learning is currently creating California's foundation for this new and critical approach to the Comprehensive Systematic Teaching of Reading.

- ▶ **Nationally, 2/3 of our nation's students do not read at proficient levels in 4th and 8th grades.**
- ▶ **In California, only 32% of our fourth graders are reading proficiently (2019 National Assessment of Educational Progress).**

THE WORK PLAN

The following five sectors of work for the UC/CSU California Collaborative for Neurodiversity and Learning were outlined in the June 2019 AB 1703 legislation:

1. Develop and Share New Knowledge and Innovations in Mind, Brain and Education
2. Create and Implement Pre-Service Teacher Education Programs
3. Create and Implement In-Service Professional Development Programs
4. Perform Diagnostic Model Testing
5. Develop an Evaluation Framework

While some of this first year's work was forced to be delayed due to the pandemic, it is inspiring how much progress has been achieved over the past year, mostly via virtual meetings.

Experts from throughout the UC and CSU systems have been dedicated to bringing together their knowledge and ideas toward the shared goal of improving literacy for the children of California. We will outline the progress in this report.



CALIFORNIA COLLABORATIVE LEADERSHIP TEAM

A team of four leaders, two from the University of California and two from the California State University, were named as the Leadership Team for this project:

Tina Christie, Wasserman Dean, UCLA School of Education and Information Studies and UCLA Education Professor of Social Research Methodology. Previously served as Chair of the UCLA Department of Education.

Marquita Grenot-Scheyer, Assistant Vice Chancellor, Educator Preparation and Public School Programs for the California State University Chancellor's Office. Previously served as Dean of the College of Education at CSU Long Beach.

Jody Priselac, Associate Dean of Community Programs, UCLA School of Education and Information Studies. Previously served as the Executive Director of UCLA Center X, which focuses on bringing together research and practice to improve K-12 education outcomes.

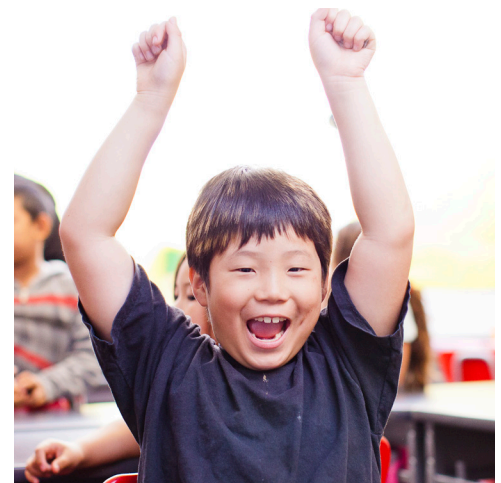
Michael Spagna, Provost and Vice President for Academic Affairs at Cal State Dominguez Hills. Previously served as Dean of the Michael D. Eisner School of Education at Cal State Northridge.

The Co-Directors of the UC/CSU California Collaborative for Neurodiversity and Learning:

Maryanne Wolf, Director of the Center for Dyslexia, Diverse Learners, and Social Justice at the UCLA School of Education and Information Studies.

Dr. Wolf is one of the leading global experts on the Science of Reading and the links between emerging brain science and classroom practice. Previously she was the John DiBiaggio Professor of Citizenship and Public Service and Director of the Center for Reading and Language Research at Tufts University. She is the author of *Proust and the Squid: The Story and Science of the Reading Brain*, *Dyslexia, Fluency, and the Brain*, *Tales of Literacy for the 21st Century*, and *Reader, Come Home: The Reading Brain in a Digital World*. She is the recipient of multiple multi-million dollar federal grants from the National Institute of Health and the Office of Special Education. Most recently, she was elected to the Pontifical Academy of Science.

Sue Sears, Professor in the Michael D. Eisner College of Education at California State University, Northridge. Dr. Sears's research and writing focus on areas of teacher education and literacy, and she presents extensively on these topics. Dr. Sears has taught and supervised teachers who work with students with learning disabilities, behavioral challenges, and developmental differences and has managed several state and federally funded projects, including a large Teacher Quality Partnership Grant (2010-2015, \$8,454,548) and a model/demonstration project (2015-2020, \$1,600,000). Dr. Sears coordinates services in the Teaching, Learning, & Counseling Consortium, a multi-disciplinary group of college faculty, and in this role oversees literacy-tutoring activities.



COLLABORATIVE ONE-YEAR PROGRESS REPORT—January 2020 to December 2020

Utilizing Research on the Comprehensive Systematic Teaching of Reading as a Means to Expand our California State University Pre-service Teacher Education Programs and the UCLA Pre-Service Model Toward Increased Literacy

Launched in January of 2020, the UC/CSU California Collaborative Project has been working for the past year toward the goal of incorporating the science of reading into teacher education programs in the UC and CSU systems as we urgently address the literacy challenge in California. Various models for this work are currently under preparation.

The decision was made to focus in the first few years of the California Collaborative on Southern California campuses as Phase 1 of this work.

The Phase 1 campuses are:

- ▶ UCLA (UCLA serves as the fiscal agent for this funding)
- ▶ California State University, Northridge
- ▶ California State University, Dominguez Hills
- ▶ California State University, Los Angeles

In consultation with the CSU Chancellor's Office and the CSU Center for the Advancement of Reading and Writing (CARS/W), products will be shared with and other campuses added once progress is being made at Phase 1 campuses.

It is important to note that the level of thought sharing between all of the leaders at these campuses has been remarkable, especially given the challenges of the pandemic. Leaders from each campus meet bi-monthly via Zoom to share ideas on their programs and needs, to share possible teacher education curriculum, to develop new coursework opportunities, and to create a new vision for the comprehensive, systematic teaching of reading as a framework for 21st Century teaching and learning.

Currently eleven faculty members from three CSU campuses, and UCLA are members of the UC/CSU Task Force. This group of accomplished teacher educators, in both elementary and special education are working collaboratively both within and across CSUs and UCLA to develop a model postsecondary teaching reading curriculum and accompanying professional development materials for teacher educators, focused on dyslexia.

California State University Progress Update

Within the CSU system, there has been consultation with California State University Assistant Vice Chancellor for Educator Preparation and Public School Programs, Dr. Marquita Grenot-Scheyer and with CSU Dominguez Hills Provost Michael Spagna. Initial activities have also involved the campus Deans of Education: Shari Tarver Behring (CSUN), Cheryl Ney (CSULA), and then Dean John Davis (CSUDH), and respective Department Chairs.

Summer meetings of the UC/CSU Task Force resulted in a presentation at the California Council on Teacher Education (CCTE) and a paper in the CCTE Fall 2020 Research Monograph. This fall, as a result of summer discussions, CSUN faculty from elementary and special education participated in on-going collaboration, and the co-construction and implementation of reading courses, to include the science of reading and greater support for students with dyslexia. At CSUDH, faculty in Teacher Education began meeting summer and have continued meeting regularly this past fall. This group, led by the Chair of Teacher Education, Pablo Ramirez, is investigating the intersections among language, literacy and content area instruction and bringing discussions of these conversations back to the Task Force. Complementing the work of the Task Force are efforts on all three CSU campuses to revise course-work to align with the CTC, new Teacher Performance Expectations Addressing Teaching Reading and Developing Literacy, and the new Preliminary Education Specialist Teaching Credential Program Standards and Teacher Performance Expectations.

With the goal to design model coursework, CSU faculty are currently engaged in intensive work to revise courses and credential programs. Task Force products will include model course syllabi reflecting the science of teaching reading and addressing dyslexia, explicitly. The California Dyslexia Guidelines are providing a foundation for this content, which will also include assignments for, and with application, student readings and resources. Accompanying syllabi will be a series of professional development materials to supplement and support this content. Materials will be developed for both general and special education teacher educators and designed for wide dissemination.

UCLA Progress Update

Within the UCLA context, two large goals converge:

- 1) the dissemination of knowledge from research and evidence-based practice about the Comprehensive, Systematic Teaching of Reading and dyslexia at the local, state, national, and international levels; and
- 2) the incorporation of this body of knowledge within pre-service education in the UCLA School of Education and Information Studies.

With regard to the second goal, meetings with the UCLA Center X leaders and educators have transpired regularly to develop a model that is consistent with preservice preparation in the UCLA School of Education and Information Studies. Before the COVID-19 virus shutdown, the proposed model, which was fully supported by the Dean, was to add a new course to the curricular offerings that would require students to come to campus four weeks earlier than opening of other classes. This course would combine the neuroscience research on reading and evidence-based practice and their application to the teaching of neurodiverse learners.

Because the shutdown of normal classes has prevented this model during the current year, an alternative approach has been selected. The normally offered methods course in the UCLA Teacher Education Program will be expanded to include this material and will be taught in two sections by UCLA Center X teachers Sarah Kersey and Shevaughnna Anderson-Byrd.

UCLA Education Professor Maryanne Wolf and UCLA Education Assistant Researcher Laura Rhinehart (who is working closely with Dr. Wolf on the California Collaborative work, but whose salary is paid for by a related federal grant) are participating in the creation of materials for this re-envisioned UCLA Teacher Education methods course and will provide guest lectures and other forms of guidance. This includes videos of the UCLA course co-taught by UCLA Professor Wolf and UCLA Professor Jennie Grammer in Winter quarter 2020, and taped for use by LA Unified teachers in their micro-credentialing offerings. Depending on the future constraints on teaching at UCLA, the original proposed model may be offered in Summer 2021. This decision will be based on whether funding for students will be able to be offered, and upon the evaluation of the alternative model to be implemented this fall.

Strategically Leveraging and Disseminating the Work of the California Collaborative to Have an Exponential Impact

The leaders of the California Collaborative seek to strategically leverage the investment California has made and to ensure that the work of the Collaborative will have a much larger and exponential impact.

Toward that goal, Dr. Maryanne Wolf and Dr. Laura Rhinehart from UCLA and Dr. Sue Sears from Cal State Northridge are actively contributing knowledge to local, state, national, and international national activities specifically aimed to help parents and educators during the COVID-19 crisis with the teaching of their children. They are working to share what they are doing within the California Collaborative with others at all these levels and to concurrently connect best practices and knowledge from across the nation to the work of the California Collaborative.

Their overarching goal is to provide knowledge leadership and to be integrally connected at the very forefront of this new Science of Reading work, both here in California, nationally, and internationally.

LOCAL LEVEL: At the local level, Dr. Maryanne Wolf and Dr. Laura Rhinehart provide ongoing consultation to the Los Angeles Unified leadership on Dyslexia and Literacy in the Elementary Ages. Dr. Maryanne Wolf permitted the taping of her UCLA course on dyslexia, the reading brain, and executive function by her and Dr. Jennie Grammer (UCLA Education Professor). Also at the local level, Dr. Laura Rhinehart is conducting research with UCLA Pediatrician Dr. Sai Iyer on a questionnaire for parents of four-year-old children that will help ascertain issues in preliteracy development.

STATE LEVEL: UCLA Professor Maryanne Wolf has become a member of the California Literacy Team and the related subgroups on Dyslexia and on Foundational Reading Skills. In addition to guidance on state issues, she has helped to create a series of three videos on the science of learning and dyslexia. Similarly, Dr. Sue Sears from CSUN and Dr. Laura Rhinehart from UCLA provided a video on the applied implications of this work for both elementary and secondary students. In collaboration with other CSUN reading faculty, Dr. Sears has developed a teacher training module on morphology instruction, and provided state-wide workshops on word development for adolescents. These efforts are disseminated and supported through CALI Reads, an OSEP funded project in partnership with the California Department of Education. In addition, Dr. Wolf is working with the

UCSF Dyslexia Center as an advisor to the Schwab Foundation on proposals which use neuroscience research related to a better understanding of dyslexia through neurological, cognitive, and educational lenses. In addition, she was recently asked to become a member of the Advisory Board of the Stanford Center for Advanced Study in the Behavioral Sciences, to represent these directions of research.

NATIONAL LEVEL: The dissemination of this knowledge-base on reading and literacy levels is particularly important for our nation, given the anticipated large regressions in our children during this time of at-home instruction. Drs. Wolf and Rhinehart have helped through bi-weekly meetings for the last nine months to create a Literacy Resource Hub of activities for parents and educators, which directly correspond to an organizer of skills necessary for building the reading brain from Infancy to Adolescence. These activities are high-quality, free, digital, and either evidence-based or curated by a group of scholars in reading and neuroscience who are working together on this initiative. Dr. Sears's work on word development for adolescents is now incorporated in this resource. (Funds for this part of the work did not come out of the California Collaborative and were provided by the Haskins Lab at Yale, who have a technological team to prepare this Resource Library for the public. <http://haskinsglobal.org/resource-library/>)

Other national activities that leverage the work of the California Collaborative for Neurodiversity and Learning include a broad range of activities, beginning with a series of Town Halls for parents with Dr. Wolf and trauma/child adversity pediatrician and epidemiologist Dr. Renee Boynton-Jarrett. This is available through the Cox Campus and Facebook, through the Rollins Center at Atlanta Speech School. To further leverage the impact of the California Collaborative and its goal of using the science of reading to strengthen educational outcomes, Dr. Wolf has provided multiple interviews on these topics and others related to literacy including:

- 1) Multiple podcasts for educators and parents of individuals with dyslexia;
- 2) Various interviews and podcasts on deep literacy and the national crisis: e.g., for the National Endowment for the Arts with the Director of NEA and the Director of iCivics; for the Stanford Center for Advanced Study in the Behavioral Sciences;
- 3) Podcasts for parents with Massachusetts General Hospital learning specialist Nancy Telian;
- 4) Multiple keynote addresses and podcasts for library, literacy, and dyslexia organizations in Europe, India, and United States.

Similarly, at the national level, Drs. Wolf and Rhinehart are conducting a large federally funded study that connects directly to and shapes the work of the California Collaborative. Under the auspices of the Federal Office of Special Education Programs (OSEP), they are investigating the impact of early digital screening, which can inform early differential interventions, in four Los Angeles-area schools, including the UCLA Lab School. Within this study, funds are provided to train teachers on interventions that incorporate principles of the science of reading for neurodiverse learners. The data we are gathering and what we learn from this study will further support and refine the work of the California Collaborative.

In related fashion, Dr. Sue Sears is in the last phase at CSUN of a separate OSEP grant for older K-12 students, which already has direct results helping neurodiverse learners in the more neglected older ages. Together the data from these OSEP demonstration projects will amplify the importance of and the methods for implementing the goals of the California Collaborative.

INTERNATIONAL LEVEL: Finally, at the international level, Dr. Wolf is actively bringing broader visibility to the work of the California Collaborative and the methods being developed here in California. She is actively working to promote global literacy as an advisor to Curious Learning: A Global Literacy Initiative (which she co-created). In similar fashion, she is also an advisor and creator of the GLIA (Global Literacy in Action) initiative, begun with faculty at Chapman University, which, if successful, will plan to include UCLA and CSU sites as well.

In Canada, Dr. Wolf is serving as the Literacy Advisor to the Canadian Children's Literacy Foundation and also to the large trans-Canada Multi-Literacy Initiative by the Canadian government. She serves in a similar capacity to the E-Read Network in Europe, which is dedicated to understanding the impact of digital media on literacy, particularly the deep reading processes.

Most recently, she was elected as a permanent Academician of the Pontifical Academy of Science as an advocate for the inclusion of neuroscience and education research for children around the world.

Delays Due to Pandemic

In this first year, before the COVID-19 crisis, the California Collaborative planned to hire an Executive Director to oversee the work in schools and to help in developing the evaluation work. The decision was made to delay the hiring of that manager until schools were back in session for in-person instruction. In its place we have recently hired for a coordinator position, Ms. Trang Nguyen, to help facilitate research and ongoing activities of the Collaborative, including upcoming work on intervention in schools.

We had planned to begin to provide professional development in-service trainings to current teachers and to then measure the impact on their students' reading level. Although that work is delayed at the present time, it remains as a planned area of work once schools are back in session.

We had also planned to bring together California educational leaders and policy leaders for a convening on the science of reading, as an opportunity to provide foundational knowledge that would allow us all to work together toward shaping better educational outcomes for all of California. Until that convening is possible, Dr. Wolf is providing added knowledge on the science of reading through keynote addresses to various related organizations on these topics, including the International Dyslexia Association, the Reading League, and the NYC Everyone Reading conference.

Additions to our Foci

An important addition to the work of the California Collaborative is the addition of Post-Doctoral Fellow, Dr. Rebecca Gotlieb, who just completed her doctoral work with Dr. Mary Helen Immordino-Yang at USC. Dr. Gotlieb adds considerable, needed expertise in using neuroscience research methods to understand the social-emotional dimensions of neurodiverse learners. This important direction in the Collaborative's work will expand our foci in one of the most important and understudied areas around neurodiverse learners.

In Conclusion

In looking forward, we have much to do. But we are also inspired by the level of work that is already happening in Phase 1 during this pandemic, thanks to the dedication, commitment and inspirational ideas of experts from across the California State University Phase 1 campuses and UCLA.

In summary, the efforts towards creating a true Collaborative between CSU and UC devoted to the education of our neurodiverse learners and, in fact, all struggling learners, have continued to expand during the first year of its implementation despite the extraordinary challenges posed to everyone during this time. Indeed Drs. Sears, Rhinehart, and Wolf have doubled their efforts to provide this knowledge base not only to educators and policy-makers during this crisis, but to as many parents as they can reach.

Thank you to California's policy leaders for your investment in the Science of Reading for our state's young people. This \$6 million California Collaborative for Neurodiversity and Learning initial investment is already showing a huge impact for the future as we work together to reshape how we teach reading in California. Our goal is for all children to be strong readers who are ready to become contributing citizens of our democracy. We applaud you for your work to bring together experts from the California State University and the University of California to focus on addressing this immense challenge.

