League of Women Voters of Greater Las Cruces

Summary Report by Roberta Gran

***The Flat World and Education: How America's Commitment to Equity Will Determine Our Future* by Linda Darling-Hammond**

Linda Darling-Hammond is one of the most authoritative experts and passionate proponents for education in America. In this book she examines American education, presents and explains the problems, compares American education with systems around the world, and presents solutions.

Darling-Hammond writes about inequality and policy; how the opportunity gap is affected by resegregation, limited early learning opportunities, poverty, unqualified teachers, poor curricula, dysfunctional academic environments, testing, school funding, success stories, and how to organize for success in reform. Her emphasis is on **genuine** school reform.

The requirements for and the needs of our students, from kindergarten through college, have changed drastically in the last several decades. National and international companies are looking for applicants who are the best educated and most creative and innovative. In addition to strong skills in English, math, science and technology, employers are looking for people who easily generate and work with ideas and abstractions; are analytical, self-disciplined, well-organized, and work well in teams; and are adaptable to frequent changes. If so many other countries continue to increasingly outpace us educationally, our economy will falter.

For our country to prosper economically and socially, we must commit to major changes in our current educational system. Patchwork, uncoordinated, forever-changing reform initiatives are failed attempts at finding solutions. Education reform must be wholeheartedly **student-focused**. Our entire education system is grossly outdated. Established in the early 1900's, it represents a factory model-- an assembly line, one size fits all format. In this model, schools pass students through the curriculum and from teacher-to-teacher whether or not the student has reached proficiency. A two tiered system exists of basic skills for lower socio-economic students and a higher quality education involving more critical thinking curriculum for more affluent students.

Linda Darling-Hammond points out that solving social and scientific problems in our world has become increasingly complicated. Specialized training is now necessary in over 70% of U.S. jobs. The nature of these jobs and employment skills in general is changing rapidly, and we are not meeting the challenge in all but a few schools. We will need to educate **all** of our students equitably, using ambitious teaching and learning skills in every school in order to succeed in a knowledge-based society. Our college attendance rates have slipped from 1st to 16th in the world at a time when three-fourths of the fastest growing professions require a post-secondary education. Only 46% of African American high school graduates are now enrolled in college and are employed full time by age 21. While European and Asian countries are graduating on average over 50% of their college students, only 1 in 10 low-income kindergartners in the U.S. graduate from college. A great number are becoming prison inmates. When one considers that it costs more to keep an inmate incarcerated than it does to educate a student, there is no economic or sociological reason to continue on the track we've been on since the early 20th century. As candidate Barack Obama said, "This is morally unacceptable and economically untenable."

The entire U.S. economic structure has changed from a manufacturing and materials delivery system to an information production and services system, while at the same time knowledge is snowballing and technical information is doubling every two years. Consequently, education can no longer be just a transmission of facts and memorization. Students need to be taught critical thinking, research, and analysis, and **how** to learn in a study, research, and practical environment.

Darling-Hanmond describes in detail three other nations: Finland, Singapore, and South Korea, all once rated near the bottom. In one generation they have achieved top international ratings by improving their school systems. They have overcome their inadequate systems by making student success the top priority, upgrading curriculum, and improving instruction and assessment in **every** school. Remarkable results have been achieved by making many changes in teaching, learning, curriculum, extra-curricular support, and classroom environment and creating policies far removed from our own. In Singapore, even though 80% of families live in public housing, its 4th and 8th graders scored first in the world in math and science on the TIMMS assessments (Trends in International Mathematics and Science Study) in 2003. South Korea, where less than one-fourth of its children are educated through high school, now ranks third in college graduates, with most completing post-secondary education. In Finland the government made education the top priority and implemented all of the above improvements. Additionally, Finland offers free graduate level programs for its teachers and free courses for all adults in many areas of study. In one generation, Finland has become one of the top high tech countries in the world. Despite a long-term increase in the number of students from nations around the world, the quality of education and the assessments show increases in quality of education in every area.

Successful foreign countries share common features in the methods they have implemented to create a system that educates **all** students well. According to Linda Darling-Hammond, they are:

- Secure housing, food, and health care
- Supportive early learning environments
- Equitably funded schools
- Well-prepared, supported, and equipped teachers and leaders
- Standards, curriculum, and assessments focused on contemporary learning goals
- Schools structured to provide in-depth student and teacher learning

The commitment to create a teaching and learning system that offers excellent education to all students has been the key to their success.

It is now commonly recognized that a good education system is of paramount importance to individual and societal well-being. The future is not entirely bleak among the most neglected American schools. Some states have made comprehensive changes that have raised performance and closed achievement gaps. Almost all states have established new requirements for graduation, new curriculum formats to guide teachers, and new assessments to test knowledge. The No Child Left Behind Act (NCLB) upholds these criteria by requiring annual testing and by penalizing schools that do not meet testing targets by individuals and groups. These targeted groups are defined by race, ethnicity, language, socioeconomic status and disability. There have been some positive results from this testing, one being that differences in performance become obvious. The inequalities between the schools that have superior resources and those that are impoverished are revealed.

The NCLB law states that all students are entitled to have qualified teachers, and this has led states to push for recruiting and hiring the best prepared, certified teachers. The downside of the law is that testing is narrowing the curriculum taught, and poor test results discourage students, overwhelm schools and create a higher dropout rated. Texas is just one case in point. In some schools lower-performing students were told to stay home on the day of the testing so that school scores were inflated. This indeed discouraged those students, creating a larger dropout rate. Actions like this, and others, have taken place in states across the country.

In the early years there were demonstrated successes by way of investing in preparing teachers better, providing higher quality teaching materials, and in better support for struggling students. Some states like Vermont, Connecticut, Maine, and Colorado developed better testing mechanisms. These states and others became more creative in their approaches to improving instruction in the courses and testing assessment. They veered from the old multiple choice and rote memory models to essay writing and literary critique, critical thinking, how to find, evaluate and synthesize information, and how to conduct research and solve complex mathematical problems. Teachers were included in every step with professional development and research themselves. Student assessment was improved overall. These and other actions such as Kentucky and Vermont creating structured portfolios of student work in writing and math; and Connecticut and Maryland creating complex performance tasks for teachers to implement in their classroom, greatly improved the quality of education in those states that made the effort and worked cooperatively.

High-stakes testing reforms that require specific standards for graduation have taken place in many states, but these reforms don't necessarily match the educational experience in the poorer schools, where these reforms have shown some troublesome problems. Now states are being confronted with litigation because parents and organizations are saying that if states are required to provide the same educational standards to all students, then they must meet the responsibility of providing the tools and opportunities to meet those standards. Equitable education for all is a difficult road through the courts because of differing interpretations and our country's apparent comfort with such glaring inequality.

The means by which schools are financially supported vary from state to state. But regardless of the methods, there are those who say that money doesn't make a difference, that there is no correlation between money spent and the quality of education. However, it has been demonstrated that it is the way in which the money is spent. Inflated bureaucracies, sports, patronage and fancy gyms instead of budgets focused on learning and strong instructional strategies make a big difference. There is also the issue of urban vs. rural and high income vs. poorer neighborhoods with the increased social needs of their students. It has been demonstrated with research that the most important cause of higher levels in student learning is teacher knowledge, experience, and advanced degrees. Conversely, teacher turnover and inadequate teacher training and education result in lower student performance. As an example, solutions to the issue of financial support of schools, solutions that have brought about major improvements in New Jersey, were its Supreme Court-ordered "parity" funding of schools across the board, extremely well-managed investments in quality preschool and more effective pedagogy, particularly early literacy. New Jersey implemented new, more effective urban teacher training. Intensive and extensive teacher training, in addition to well-designed professional development throughout the life of a working teacher in all academic settings is one of the single most important actions that can be taken to improve student performance. This includes providing a teacher with administrative support, relevant resource materials and research equipment,

a congenial, clean learning environment, and an equitable, rewarding salary. It enables teachers to collaborate with each other about planning and learning scheduling.

Linda Darling-Hammond writes passionately about how we can organize our system successfully from **inequality to quality**. It's not just excellent teacher training, although that has been proven to be of paramount importance. Schools that create a positive, can-do attitude for success and are well organized show extremely high results in the poorest schools . Replacing the factory assembly line model with project-based, technology-supported curricula, making sure that all students are on grade level with math and reading skills, and are afforded opportunities to have hands-on experiences, even working with local industries, has been shown to inspire and excite students. Some communities combine high quality K-12 schooling with vital services such as healthcare, preschool, and before and after-school care. In all successful schools students are expected to meet high standards for graduation. Requirements include, according to Darling-Hammond, "scientific investigations, historical and social science research papers, mathematical problems and models, essays and literary critiques, and oral defenses of their work…" (Darling-Hammond, Ch. 8, p. 236)

Darling-Hammond says there is a need for a major redesign of our entire school system nationwide. The goal must be to "enrich the intellectual opportunities" while at the same time meeting the needs of students from different cultural and socio-economic backgrounds. To meet this goal requires major changes in the school organizations itself. In the past, teaching practices were assembly-line, repetitive and routine, with far less need for heightened skill sets. As populations grew, instead of investing in teacher education, a larger bureaucracy came into being, diverting financial resources from the classroom. There is now an effort to replace this with new, less rigid and more adaptive organizational models.

Replacing the current bureaucratic form of organization with less rigid and more adaptive concepts facilitates creating a learning environment that satisfies educational and workforce requirements. As Darling-Hammond points out, reinventing the 21st public school organization includes:

- Using incentives and structures that motivate students through collaboration not coercion.
- Building strong relationships and norms in the learning environment rather than relying solely on rules for governing behavior.
- Encouraging quality by organizing teams that can take responsibility for children's overall success.
- Creating information-rich environments that support widespread learning among students and meaningful self-assessment

These changes encourage improved thinking and creativity as opposed to enforcing compliance, but success is dependent on several reform factors. Schools with the greatest degree of success have restructured staffing patterns, reconfigured the use of time, and reshaped curriculum, teaching and assessment.

Studies have shown that schools in which there are "…smaller, more personalized units in which teachers plan and work together around shared groups of students and common curriculum.." have higher levels of achievement. Darling-Hammond cites the following school practices:

- Creating small units within schools

- Keeping students together over multiple years
- Forming teaching teams that share students and plan together
- Ensuring common planning time for teachers
- Involving staff in school-wide problem solving
- Involving parents in their children's education
- Fostering cooperative learning

For students, working on intellectually challenging tasks, the use of *authentic pedagogy* (instruction, curriculum, and assessment that requires students to apply learning in real-world contexts) brought about higher achievement. In schools where there was *authentic instruction* (a focus on active learning that calls for "higher order thinking, extended writing and products that resemble how knowledge is used in the world…") also had higher gains in achievement. Darling-Hammond goes on to describe what high-needs schools do to create better student outcomes. She focuses for this discussion on urban secondary schools since they have the greatest problems to overcome.

She focuses here on studies done in six California schools and how they organized using strategies shown above to drastically improve student achievement in their schools. These successes in school designs spurred initiatives in Chicago, Milwaukee, Philadelphia, San Diego, and Boston to name a few. Most schools are not private or charter schools, but part of school districts. She cites major achievements in schools across New York City and how graduation rates and college entrance rates skyrocketed, emphasizing that a key feature in these successful schools is their degree of personalization, a concerted effort to get to know the students in a real way, using *Advisory Systems.* But equally important is to establish high expectations, offer a college prep curriculum with comprehensive academic supports, and teaching "intellectual and research skills in the context of rigorous coursework". Most of these high achieving schools require the completion of portfolios for graduation. They must include high quality disciplinary inquiry in each of the major subject areas. All of the successful school practices require a high degree of professional learning and collaboration.

Linda Darling-Hammond writes of the ways in which successful innovation can be supported – the history, the failures, the budget problems, the charter school approach and how it can stimulate innovation, and an autonomous model. The Gates Foundation advocates a portfolio of schools that meet the varying needs of the community's student population, and in which parents and students can find a better fit, one that more closely aligns with the needs of the student. In the end, however, the goal must be that **all** schools, not just the unique ones, adopt more successful practices, and that these practices are sustained over time. This would require redesigning districts and schools, building professional capacity, managing and allocating resources, deregulating strategically, changing contracts, and rethinking accountability.

In her last chapter, she writes about policy change for genuine school reform. Unfortunately, the national goals established in 1989 by then-President George H. W. Bush have not been met, and we have slipped further from these goals than we were 20 years ago. We now need more than new goals, we need systems that guarantee all aspects of educational opportunity to **all** children, creating systems of curriculum and assessment that afford our children the education they need to lead rich and fulfilling lives as viable members of the community in the 21st century. A paradigm shift for national and state policy must focus on supporting meaningful learning and equalizing access to educational opportunity. According to Darling- Hammond, this requires five key elements:

- Meaningful learning goals – achieved by well-grounded "expectations of learning, developed by professional associations and curriculum experts that are used to inform high-quality standards, curriculum, and assessments of student learning in each state." (Darling-Hammond, Ch. 9, p. 280)
- Intelligent, reciprocal accountability systems – guaranteeing students competent teachers and acceptable educational opportunities, as well as ways to evaluate and improve curriculum, teaching and school capacity
- Equitable and adequate resources – that provide equal opportunity for all students to achieve learning standards. This will "require as much federal attention to opportunity-to-learn standards as to assessments of learning progress, and greater equalization of federal funding across the states." (Darling-Hammond, Ch. 9, p. 280). It will require equitable funding at the state level based on per pupil funding, and information/incentives that focus on productive spending to increase chances for student success.
- Strong professional standards and supports – including subsidized, high-quality academic training, mentoring, and professional development, and rewarding and supporting teachers and principals who serve high-needs students and schools.
- Schools organized for student and teacher learning – with professionals creating curriculum focused on critical content and skills, including verifiable assessments of performance. These assessments should be a tool – a carrot and not a stick – to guide and improve.

For such a system to be successful, the student must live in a supportive environment that includes secure housing, food, health care, and access to early childhood education. In a student-focused educational model, investment would be made so that a student who is ready for college would be guaranteed that opportunity.

She concludes by saying that it is far more cost effective to educate **all** our children effectively than it is to lose billions in wages, taxes, prisons and social costs, failed reforms, teacher turnover, grade retention, summer school, lost productivity and jobs that move overseas. Depriving such a large number of those students who are currently in the poorer schools will have disastrous consequences. Our ability to survive and thrive economically and socially as a nation will depend on ensuring that all our people are guaranteed the "rich and inalienable right to learn". Time is running out.

ACRONYM
TIMSS: Trends in International Mathematics and Science Study

LINKS
1. http://ed.stanford.edu/faculty/ldh
2. http://stanford.edu/~ldh/resume.html
3. http://store.tcpress.com/0807749621.shtml
4. http://fora.tv/2010/08/02/Linda_DarlingHammond_The_Flat_World_and_Education
   (Speech given by LDH at a Chautauqua conference.)
5. www.thenation.com/article/restoring-our-schools
6. http://www.massinsight.org/stg/research/challenge/
7. http://ssrn.com/abstract=1265809