Wired magazine’s October 2013 cover shows a 12-year-old girl named Paloma Noyola Bueno from Matamoros, Mexico. She is holding her schoolbooks and looking straight ahead with a serious but serene countenance. Over her in large, bold letters is the audacious title “The Next Steve Jobs,” and the subtitle “Genius is everywhere—but we’re wasting it. How to unleash the great minds of tomorrow.” Paloma’s school stands next to a city waste dump and struggles with challenges such as “intermittent electricity, few computers, limited Internet, and sometimes not enough [for the children] to eat.”

How did the story of Paloma Noyola Bueno capture the attention of a major technology publication? Paloma received a score of 921 on the math section of Mexico’s version of the SAT test, the highest score in her country that year. Nine of her classmates scored above 900 on the same test. How could children from desperately poor families, attending an urban school in disrepair, achieve such high scores?

Paloma’s story shows what is possible to achieve among the urban poor worldwide. Children from disadvantaged backgrounds who suffer from the structural and cultural conditions that perpetuate inequality can still reach high levels of attainment. Replicating Paloma’s story is what Seventh-day Adventist education should be about, worldwide.

Context and Challenges

A recent UNICEF report predicts that “by 2050, 70 percent of all people will live in urban areas. Already, 1 in 3 urban dwellers lives in slum conditions. . . . Children living in slums are among the least likely to attend school.” Around the world, about 100 million children are not in school. The UNICEF report asserts that “every excluded child represents a missed opportunity—because when society fails to extend to urban children the services and protection that would enable them to develop as productive and creative individuals, it loses the social, cultural and economic contributions they could have made.”
How can Adventist schools contribute to increasing the achievement and educational levels of disadvantaged children? What can we do to improve the quality of education in urban settings? These are critical questions facing the Adventist Church. The purpose of this article is to summarize the current thinking and research on these fundamental questions.

**Barsriers to Educational Success**

Poverty brings many challenges to the educational task of which Christian educators must become more aware. Poverty is generally understood as economic scarcity, but here we will use Eric Jensen’s definition: “A chronic and debilitating condition that results from multiple adverse synergistic risk factors and affects the mind, body, and soul.” Poverty limits a child’s learning potential because his or her family is burdened with multiple risk factors such as emotional and social challenges; acute and chronic stressors; cognitive lags; and health and safety issues. Poor families tend to be impacted by more than three major risk factors at any one time.

Scholars talk about the cumulative effects of the poverty-related risk factors that make life a continuous struggle. For example, a child’s illness or injury in a family without access to health care can easily cascade into a major crisis, contributing to emotional and cognitive impairment of the child and even premature death, as well as financial disaster for the family. The cumulative effects of poverty will damage a child’s physical, socio-emotional, and cognitive well-being.

Poverty affects cognitive learning capacity. Children raised in a single-parent household generally experience less cognitive and emotional stimulation, resulting in significant cognitive deficits. Risk factors for children living in poverty include poor nutrition/food scarcity, parental unemployment, low parental education, poor prenatal care, and unsupported home life, factors that collectively correlate highly with decreased academic performance. In addition, poverty contributes to “acting out” and other disruptive behaviors that hamper learning environments and classroom control.

Children from poor economic backgrounds start school at a disadvantage in all subject areas, and the achievement gap between them and their wealthier peers increases over time. In the United States, in addition to economic background, the persistence of the achievement gap has also been attributed to race. This is so well established that it recently led two eminent scholars to declare: “The racial achievement gap is an empirical fact that manifests itself in every American school district, at every level of schooling, and on nearly every academic assessment.” The aforementioned risk factors of economics and race keep the gap firmly in place.

Possibly the most important barrier to academic success is school absenteeism. Trailblazing research conducted by Robert Balfanz and his colleagues at Johns Hopkins University has revealed that regular school attendance is a foundational academic success indicator, especially for children living in poverty. Defined as missing 10 percent or more of a school year, chronic absenteeism is a serious problem in high-poverty areas, reaching levels that these leading scholars described as “staggering: on the order of six months to over a year, over a five-year period.”

Chronic absenteeism is more prevalent among poor students for three major reasons: (1) they cannot attend due to illness, family responsibilities, housing instability, the need to work, or involvement with the juvenile justice system; (2) they will not attend to avoid bullying, unsafe conditions, harassment, and embarrassment; (3) they do not attend because they, or their parents, do not see the value of being in school, they have something else they would rather do, or nothing stops them from skipping school.

**International Comparisons**

The Program for International Student Assessment (PISA) allows countries like Argentina, Peru, Canada, Poland, Korea, and the United States to compare educational outcomes on a standardized achievement test. Every three years, PISA examines how well 15-year-old students understand and apply knowledge in three core content areas—mathematics, science, and reading literacy—to real-life situations.

Findings from the 2012 PISA show that in all three core subjects, American students have performed at the same level since 2003, with lower average scores than 18 other education systems, in both developed and developing countries. The conventional explanation for the poor scores of U.S. students is America’s high levels of poverty and cultural diversity. However, students in Norway, with a low six percent child poverty rate, scored no better than U.S. students in 2009 and 2012. By contrast, Poland’s results have been called “the Polish miracle.” Despite a poverty rate similar to the United States, “Poland’s poorest kids outscored the poorest kids in the United States. That was a remarkable feat, given that they were worse off, socio-economically, than the poorest American kids.” And, while white American students outperformed African-American and Latino students, they scored lower than students from 16 other countries, including Japan, Germany, Belgium, and Canada. Neither poverty nor cultural diversity seem to be insurmountable barriers to achieving educational success for under-resourced children.

**Demystifying Seven Success Factors**

Growing evidence suggests that a number of highly efficient educational practices and cultural characteristics of schools can help minority children from disadvantaged backgrounds to achieve at high levels. Here are seven research-based factors or practices that together promise to create high-quality education for urban children:

1. **Caring for the Whole Child**

   Where access to adequate preschool education, health insurance, and other basic social services is lacking, a growing number of innovative schools have embraced a community-
schools model of educational reform to address the many economic, social, and emotional needs of underserved families. For example, the Harlem Children's Zone schools provide free medical and dental care and mental-health services. They also provide nutritious meals for students and support for parents. Parental support includes teaching them to become more involved in their children's lives, and reinforcing key values and education-related behaviors, such as encouraging children to attend school and read every day (especially during the elementary and middle-school years), and understanding and practicing a “growth mindset.”

Children living in poverty often lack stable environments and secure relationships with parents and other adults. Growing up as a child of divorce or in single-parent homes often contributes greatly to young people's poverty and social isolation. Creating caring school environments where every child is valued, respected, and nurtured is fundamental for all children to achieve success. Schools that serve high-poverty students must adopt a “whatever it takes” attitude and refuse to let children fail. Adventist schools should be good at implementing a “whole student care” framework, which is consistent with our wholistic understanding of the human person.

2. Data-driven Instruction

Understanding the needs and progress of students can only be done using rigorous, data-driven educational practices. For schools to become data friendly, teachers must agree on the value of statistical information to help them teach smarter, creating a culture of continual learning through collecting, analyzing, and applying data. Successfully embracing a data-driven culture within a school depends on the quality, accuracy, and timeliness of the data, and whether teachers and principal converse as part of a continuous-improvement process.

The historic and unprecedented research study called CognitiveGenesis has clearly shown the academic value of an Adventist education. Yet, as I have argued elsewhere, much research remains to be done. And relevant to this topic is the question, Does Adventist education help to close the achievement gap across racial/ethnic groups and among the most disadvantaged families? Answering this and other relevant questions will require a thorough commitment to data-driven research like CognitiveGenesis, not just in North America but throughout the world. This could be done by implementing PISA across the Adventist K-12 system worldwide.

3. Accountability

Principals and teachers at schools filled predominantly with poor children also have to accept responsibility for the learning of those children. Since the evidence says that poor children can learn at the highest levels, educators cannot blame the children for poor performance or for their family's situation. They are accountable for their students' learning losses or gains.

The movement toward greater accountability has led to the development of teacher-evaluation systems. A new analytical technique called “value-added analysis” measures academic progress by examining individual scores over time. If the students' scores grow more than the predicted level of their peers, then the teacher has added to the students' growth. The technique controls for a student's background and socio-economic status, and by looking at growth over time, shows the teacher's influence on learning outcomes. Good accountability is the product of a fair, objective, and well-developed evaluation system. Teachers in this environment continuously seek opportunities for growth, and principals focus on helping their teachers improve their practices.

The Adventist moral imperative to educate all children at the highest levels, especially those from poor, urban backgrounds, requires that evaluation systems for Adventist educators be assessed and, if necessary, modified or replaced. Teacher evaluation in Adventist schools should reflect the best practices in the field.

4. Establishing a Culture of High Expectations

Teachers and educational leaders who embrace a view of innate human intelligence may contribute to inequities through what former President George W. Bush called the “soft bigotry of low expectations.” This view argues that children are born with certain innate capacities—intelligence, natural aptitudes,
etc.—and they either have them or they don’t. Research on human intelligence over the past few decades has debunked this view,\textsuperscript{39} which creates the mindset among teachers that poor children need remedial learning or cannot achieve high standards. This mentality often leads to a culture of low expectations where some teachers prematurely give up on students who, with effective instruction, might succeed. By contrast, a growth or enrichment mindset views all children as gifted, so that teachers, staff, and educational leaders are eager to do “whatever it takes” to ensure that learners succeed.\textsuperscript{40}

Schools that serve poor children need to relentlessly focus on achievement for all students regardless of their background, skin color, or language abilities. If teachers and administrators hold high expectations and provide all the needed supports, this will enable their students to succeed. They must not accept excuses that would lower expectations.

A key characteristic of high-achieving schools for children from lower socio-economic groups is that every teacher, staff member, volunteer, and parent works to achieve milestones in the educational journey.\textsuperscript{41} Some examples are (1) requiring kindergartners to be readers before they enter 1st grade, (2) making sure 3rd graders are performing at grade level in the areas of literacy and numeracy, and (3) ensuring that 8th-grade students study and pass algebra. Another critical task for schools is ensuring that students—and parents—understand the damaging effects of chronic absenteeism, since accumulated absences can cause significant learning losses and gaps in vital areas. Although the dropout process tends to accelerate in the 9th-grade transition year, schools have a great opportunity at this level to reverse trends that lead to dropouts.\textsuperscript{42}

To track progress over time, Adventist schools could obtain key performance indicator dashboards that allow their staff to view at a glance how well individual students (and the entire school) are doing, to ensure that each student stays on track to graduate, and is adequately prepared for college and work.

5. Increased Instructional Time

Successful schools enrolling predominantly underserved children have found that extending instructional time, both in school and out of school, is key to the children’s success.\textsuperscript{43} This was Fryer’s finding\textsuperscript{44} in his “best practice” research on charter schools. Within a high-expectation school culture, providing additional time for learning, support, and enrichment is critically important.

Some schools open on weekends for additional instruction and tutoring, while others extend the school day. Enrichment activities may include arts, drama, music, sports, and field trips to museums, the zoo, and other cultural centers. One benefit of having a school in most urban contexts is the number of cultural and artistic resources available.

Perhaps the greatest opportunity to serve the academic needs of disadvantaged children is in the summer. Learning loss happens to all children, regardless of their family background, but it is more severe and longer lasting for poor children.\textsuperscript{45}

6. Human Capital

American education’s declining standing in the world has occurred in large part because of a lack of consistently high-quality teaching for all children.\textsuperscript{46} In America, some schools have low entry standards and don’t draw teachers from the top-performing students.\textsuperscript{47} Of particular concern: The majority of the worst teachers end up in poor urban schools.\textsuperscript{48} Those schools cannot attract or retain effective teachers\textsuperscript{49} because of harsh environments, undesirable neighborhoods, and ineffective colleagues and administration.

High-quality teaching should concern Christian educators because research has shown its consistent influence on learning gains, especially for children living in poverty.\textsuperscript{50} Adventist colleges and universities need to consider how teacher-education programs train instructors for its system, as well as for urban public schools. What quality standards are being used? Are teachers being adequately prepared to serve culturally and economically diverse populations? Can anything be learned from recent critiques of teacher-education programs\textsuperscript{51}

Critical to raising the academic performance of schools serving predominantly children in the lower socio-economic groups is the quality of the school principal. In particular, leadership that is empowered to make decisions, to hire the best teachers, to support instructional learning, coach teachers, and create a culture of high expectations is of utmost importance.\textsuperscript{52}

An organization called New Leaders estimates that 25 percent of a student’s success depends on the quality of the principal.\textsuperscript{53} A key multiplying effect of good leadership is the ability to attract and retain great teachers.

The Adventist Church runs an impressive array of educational institutions around the world. But does the system produce effective teachers and leaders to serve urban poor populations? Do we hold principals accountable for the results in their schools? Do we apply the best practices in the selection, training, and support of high-performing school leaders?\textsuperscript{54}

7. Character Development

Character formation is the factor with the greatest transformative power to influence academic achievement and life success. It is the hallmark of a Christian education, and more specifically, an Adventist education. Within this category fall all of the assets, virtues, and attributes that make an Adventist school a place where characters are nurtured. A growing body of research is showing that religious engagement contributes positively to educational achievement.\textsuperscript{55}

We include the spiritual dimension as part of the task of character formation, but the social scientific literature has recently uncovered additional aspects related to character formation. For example, How Children Succeed by Paul Tough\textsuperscript{56} argues that the qualities that matter most to academic and life success are character traits such as self-control, perseverance, tenacity, and self-affirmation. These traits are typically cultivated in what some consider to be the strongholds of character education: the church and the family. Unfortunately, some dis-
advantaged children live in homes where there is no affiliation to a church community, and in households where the family structure is dysfunctional. As a result, neither entity exercises an active role in the child’s development, and these children may not be exposed to important character traits such as hard work, honesty, conscientiousness, persistence or grit, creativity, curiosity, self-control, and a love of learning. Adventist schools serving the most disadvantaged children must ensure that the character traits that predict academic success are part of the formal and informal curricular offerings and enrichment experiences.

Conclusion

The story of 12-year-old Paloma Noyola Bueno exemplifies the extraordinary results that children living in poverty can achieve. Her teacher, Sergio Juárez Correa, had high expectations of his students, taught them lessons in persistence and effort, and didn’t allow their family background and circumstances to define them as anything but “gifted” children. And that is what they became—gifted.

This story validates the vision of Adventist education to combine salvation and wholeness with excellent education for all children, especially those who need it most. The end, what is required to overcome the barriers is a “mega dose” of hope. Hopeful kids try harder and persist longer. The good news, supported by empirical evidence: It is possible to educate the poorest and most disadvantaged children to high levels. To do so takes courage, persistence, and total commitment to pursuing educational excellence with equity at all costs. This responsibility should be embraced by all Christian educators because it is an issue of justice and the development of human potential—restoring God’s image in humankind.

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NOTES AND REFERENCES


6. Ibid.


15. Ibid., pp. 4, 5.

16. Ibid.

17. Ibid.

18. Ibid.


20. Ibid., p. 136.


27. Tough, Whatever It Takes, op. cit.


30. CognitiveGenesis assessed the performance of students within the North American Division. See http://www.cognitivegenesis.org to learn more.


34. See the Measures of Effective Teaching site at http://www.metproject.org.

35. See the Value-Added Research Center at http://varc.wceruw.org.


41. Ibid.


51. See, for example, NCTQ’s “Teacher Prep” reports at http://www.nctq.org/teacherPrep/review2014.do.


56. Tough, Whatever It Takes, op. cit.

57. Ibid.