# The Ten Dynamics of Poverty—By Understanding the Barriers Created by Poverty, Schools Can Help Overcome Them

MUCH DISCUSSION CENTERS AROUND THE BARRIERS that are created by poverty and those barriers' impact on school success. Arguments span the spectrum from "it is a system problem" to "it is a school problem" to "it is an individual problem." It would be myopic, in my view, to assign the blame solely to one cause. However, there are many things schools can do to make a difference in achievement. I would identify the following 10 dynamics:

## 1. RESOURCES OF THE HOUSEHOLD

Poor children are often defined almost exclusively by money. Actually, poverty is about access, or lack of access, to nine resources: financial, emotional, mental, spiritual, support systems, relationships/role models, knowledge of hidden rules, physical, and language. Resource analysis is important because it suggests where to make interventions, which work only if they're based on resources to which the student has access. For example, if the parent cannot read, there is no point in asking the parent to read to the child.

*Schools can be much more successful if they know the resources of students, then base interventions on the available resources.*

## 2. VOCABULARY/SECOND LANGUAGE LEARNERS

Hart and Risley (1995) found in their research that the average 4-year-old in a professional household has heard 45 million words while a 4-year-old in a welfare household has heard 13 million words. In fact, they found that a 3-year-old in a professional household has more vocabulary than an adult in a welfare household (Hart & Risley). Furthermore, Montano-Harmon (1991), a Latina linguist in California found that the issue for many bilingual children is that they know only casual register in both languages and do not know formal register (language of school and work) in either language.

*Schools can be much more successful if they teach students to draw the meaning of vocabulary words and use discipline as an opportunity to teach formal register. (The student says something "sucks." The student needs to find two other ways to say sucks as a newscaster would say it—e.g., "There is no longer any joy in this activity.")*

## 3. EXECUTIVE FUNCTION PROCESSING

In a study released in 2008 using EEG scans with poor and middle-class children, researchers found that the prefrontal cortex of the brain (executive function) in poor children was undeveloped and resembled the brains of adults who have had strokes (Kishiyama, Boyce, Jimenez, Perry, & Knight, in press). The executive function of the brain handles impulse control, planning, and working memory. The researchers went on to state that it is remediable, but there must be direct intervention.

*Schools can direct teach planning and procedural steps and systematic processes (e.g., writing process, problem-solving process, etc.).*

## 4. INTERGENERATIONAL TRANSFER OF KNOWLEDGE

Part of human capital is a knowledge base. Knowledge bases are a form of privilege, just as social access and money are. Such knowledge bases also can be passed on intergenerationally. In an Australian study that followed more than 8,500 children for 14 years, the researchers found they could predict with reasonable accuracy the verbal reasoning scores of 14-year-olds based on the maternal grandfather's occupation (Najman et al., 2004).

*Schools can teach knowledge bases to students because knowledge is a form of power.*

## 5. ABSTRACT REPRESENTATIONAL WORLD OF SCHOOL

Lave and Wenger (1991) indicate that beginning learning is about a situated environment that has people, relationships, context, tasks, and language. They add that when an individual makes the transition to formal schooling, learning becomes decontextualized. The context is taken away, relationships are seldom considered in the learning, and reasoning is not with stories but with laws and symbols (abstract representational systems). The research indicates that to make the transition between those two environments, one needs relationships and support systems.

*Schools can use mental models (stories, analogies, drawings) to translate between the sensory world and the abstract representational world.*

## 6. RELATIONSHIPS OF MUTUAL RESPECT

Because learning is always double-coded (Greenspan & Benderly, 1997)—both cognitively (based on the content) and emotionally (based on the relationship)—relationships enhance or detract from learning. Goleman (2006), in his book Social Intelligence, reports the findings of a study of 910 first-graders, all of whom had teachers with excellent pedagogy. However, if the

at-risk students perceived the teacher as cold and controlling, the students essentially refused to learn from that teacher.

*Schools can establish relationships of mutual respect with students and monitor for that through observation and student surveys. These are critical to learning.*

## 7. DIFFERENCES BETWEEN SCHOOL RULES AND RULES OUTSIDE SCHOOL

Different environments require different responses. In the book A Framework for Understanding Poverty, these responses are referred to as "hidden rules." Because the worlds of work and school tend to use the same rules, if a student does not know the rules of school, then we teach those rules to that student. We use this analogy: Do you use the same rules in basketball that you do in football? The answer is no because you would lose. Different rules do not make one set better than another; they are just different. For example, if you are going to survive in a generational poverty neighborhood, you must know how to physically fight. But if you bring fighting into school, you are suspended or expelled.

*Schools should teach the hidden rules of school to students so they also can negotiate the environments of school and work.*

## 8. CHAOTIC, UNSAFE LEARNING ENVIRONMENT

Research on allostatic load indicates that the more chaotic (and dangerous) the environment, the less capable working memory is in the brain (McEwen, 2000). The more unstable the environment, the less learning occurs because time is given to surviving the current crisis, as opposed to devoting time to learning.

*For brains to function well, schools must provide a strong classroom management approach, clear guidelines for behaviors, and a sense of safety, as well as teach two sets of rules and have relationships of mutual respect.*

### 9. STAFF MOBILITY/STUDENT MOBILITY

High-poverty schools have high staff mobility and high student mobility. One of the characteristics of generational poverty is the amount of instability it brings to situations. In this case, the instability and insecurity occur both at home and at school. To combat high staff mobility, some school districts are offering a 5% additional pay differential to keep staff stable.

*To combat high student mobility, it is imperative that schools use a formative assessment for students and immediately provide the interventions and safety nets for those students.* See Payne (2008).

### 10. REALITIES OF GENERATIONAL POVERTY

There are many realities in generational poverty that impact children: gangs, violence, poor or no healthcare and dental care, substandard housing, greater environmental pollution, drugs, etc. While middle class may have some of these, generational poverty has a disproportionate amount—and at the same time there are fewer resources to address them.

*Schools can provide access to community agencies that can also help students address these issues. See the book* Collaboration For Kids (Conway, 2006), *which provides a process.*

## Conclusion

While schools certainly cannot mitigate all the issues in poverty, schools *can* provide for many students from poverty the key tools to begin making the transition out of poverty, should those students wish to do so. Those tools include education, relationships with individuals different from oneself, and eventual employment. Such tools impact not just the generation being taught but the students' children and their grandchildren. Education is a gift for life.

# References

Conway, H. W. (2006). *Collaboration for kids: Early-intervention tools for schools and communities.* Highlands, TX: aha! Process.

Goleman, D. (2006). *Social intelligence: The new science of human relationships.* New York, NY: Bantam.

Greenspan, S. I., & Benderly, B. L. (1997). *The growth of the mind and the endangered origins of intelligence.* Reading, MA: Addison-Wesley.

Hart, B., & Risley, T. R. (1995). *Meaningful differences in the everyday experience of young American children.* Baltimore, MD: P. H. Brookes.

Kishiyama, M. M., Boyce, W. T., Jimenez, A. M., Perry, L. M., & Knight, R. T. (in press). Socioeconomic disparities affect pre-frontal function in children. Journal of Cognitive Neuroscience. Available from http://www.mitpressjournals.org/doi/abs/10.1162/jocn.2009.21101

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation.* New York, NY: Cambridge University Press.

McEwen, B. S. (2000). Allostasis and allostatic load: implications for neuropsychopharmacology. *Neuropsychopharmacology, 22*(2), 108–24.

Montano-Harmon, M. R. (1991). Discourse features of written Mexican Spanish: Current research in contrastive rhetoric and its implications. *Hispania, 74*(2), 417–425.

Najman, J. M., Aird, R., Bor, W., O'Callaghan, M., Williams, G. M., & Shuttlewood, G. J. (2004). The generational transmission of socioeconomic inequalities in child cognitive development and emotional health. *Social Science & Medicine, 58*(6), 1147–1158.

Payne, R. K. (2008). *Under-resourced learners: 8 strategies to boost student achievement.* Highlands, TX: aha! Process.