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How Poverty Affects Classroom Engagement

Eric Jensen

Students from low-income households are more likely to struggle with engagement—for seven reasons.

Poverty is an uncomfortable word. I'm often asked, "What should I expect from kids from low-income households?" Typically, teachers are unsure what to do differently.

Just as the phrase *middle class* tells us little about a person, the word *poverty* typically tells us little about the students we serve. We know, for example, that the poor and middle classes have many overlapping values, including valuing education and the importance of hard work (Gorski, 2008). But if poor people were exactly the same cognitively, socially, emotionally, and behaviorally as those from the middle class, then the exact same teaching provided to both middle-class students and students from poverty would bring the exact same results.

But it doesn't work that way. In one study of 81,000 students across the United States, the students not in Title I programs consistently reported higher levels of engagement than students who were eligible for free or reduced-price lunch (Yazzie-Mintz, 2007). Are children from poverty more likely to struggle with engagement in school?

The answer is yes. Seven differences between middle-class and low-income students show up at school. By understanding those differences and how to address them, teachers can help mitigate some of the negative effects of poverty.

But first, my most important suggestion is to get to know your students well. Without respect—and without taking time to connect with your students—these seven factors will mean little.

Difference 1: Health and Nutrition

Overall, poor people are less likely to exercise, get proper diagnoses, receive appropriate and prompt medical attention, or be prescribed appropriate medications or interventions. A study by two prominent neuroscientists suggested that intelligence is linked to health (Gray & Thompson, 2004). The poor have more untreated ear infections and hearing loss issues (Menyuk, 1980); greater exposure to lead (Sargent et al., 1995); and a higher incidence of asthma (Gottlieb, Beiser, & O'Connor, 1995) than middle-class children. Each of these health-related factors can affect attention, reasoning, learning, and memory.

Nutrition plays a crucial role as well. Children who grow up in poor families are exposed to food with lower nutritional value. This can adversely affect them even in the womb (Antonow-Schlorke et al., 2011). Moreover, poor nutrition at breakfast affects gray matter mass in children's brains (Taki et al., 2010). Skipping breakfast is highly prevalent among urban minority youth, and it negatively affects students' academic achievement by adversely affecting cognition and raising absenteeism (Basch, 2011).

When students experience poor nutrition and diminished health practices, it's harder for them to listen,

concentrate, and learn. Exposure to lead is correlated with poor working memory and weaker ability to link cause and effect. Kids with ear infections may have trouble with sound discrimination, making it tough to follow directions, do highly demanding auditory processing, and understand the teacher. This can hurt reading ability and other skills. Poor diets also affect behavior. Students can often appear listless (with low energy) or hyperactive (on a sugar "high").

What You Can Do

Remember, the two primary foods for the brain are oxygen and glucose; oxygen reacts with glucose to produce energy for cell function. Schools can provide these at zero cost. Having students engage in slow stretching while taking slow deep breaths can increase their oxygenation. Yoga training has been shown to increase metabolic controls so children can better manage themselves.

Recess and physical education contribute to greater oxygen intake and better learning (Winter et al., 2007). Never withhold recess from students for a disciplinary issue; there are countless other ways to let them know they behaved inappropriately. Children need physical education programs at every level to perform well academically. In addition, the use of games, movement, and drama will trigger the release of glucose, stored in the body as glycogen. Proper glucose levels are associated with stronger memory and cognitive function. In short, physical activity will reduce some of the issues associated with poor nutrition and will build student health.

Difference 2: Vocabulary

Children who grow up in low socioeconomic conditions typically have a smaller vocabulary than middle-class children do, which raises the risk for academic failure (Walker, Greenwood, Hart, & Carta, 1994). Children from low-income families hear, on average, 13 million words by age 4. In middle-class families, children hear about 26 million words during that same time period. In upper-income families, they hear a staggering 46 million words by age 4—three times as many as their lower-income counterparts (Hart & Risley, 1995). In fact, toddlers from middle- and upper-income families actually used more words in talking to their parents than low-SES mothers used in talking to their own children (Bracey, 2006). This language difference is not subtle; it's a mind-boggling, jaw-dropping cognitive chasm.

A child's vocabulary is part of the brain's tool kit for learning, memory, and cognition. Words help children represent, manipulate, and reframe information. Kids from low-income families are less likely to know the words a teacher uses in class or the words that appear in reading material. When children aren't familiar with words, they don't want to read, often tune out, or feel like school is not for them. Also, many students don't want to risk looking stupid (especially to their peers), so they won't participate in class.

What You Can Do

Vocabulary building must form a key part of enrichment experiences for students, and teachers must be relentless about introducing and using new words. Include vocabulary building in engagement activities, such as by creating "trading card" activities, in which students write a vocabulary word on one side of a 3 × 5 card and a sentence using the word correctly on the other. Students can do a "class mixer" and test other students; they give the new word to their partner, and their partner has to use it in a sentence. Teachers can also draw cards from a bowl and ask the class to use the new word in a sentence.

Teachers can incorporate vocabulary practice into daily rituals. For example, the teacher posts a word for the day and when either the teacher or a student uses it—and another student is first to point it out—that student gets a simple privilege. Classroom teams or cooperative groups should present a word for the day to the whole class every day, with teachers reinforcing those words for days and weeks afterward.

Difference 3: Effort

Uninformed teachers may think that poor children slouch, slump, and show little effort because they are—or their parents are—lazy. Yet research suggests that parents from poor families work as much as parents of middle- or upper-class families do (Economic Policy Institute, 2002). There's no "inherited laziness" passed down from parents.

One reason many students seem unmotivated is because of lack of hope and optimism. Low socioeconomic status and the accompanying financial hardships are correlated with depressive symptoms (Butterworth, Olesen, & Leach, 2012). Moreover, the passive "I give up" posture may actually be learned helplessness, shown for decades in the research as a symptom of a stress disorder and depression. Research from 60 high-poverty schools tells us that the primary factor in student motivation and achievement isn't the student's home environment; it's the school and the teacher (Irvin, Meece, Byun, Farmer, & Hutchins, 2011). Effort can be taught, and strong teachers do this every day.

Students who show little or no effort are simply giving you feedback. When you liked your teacher, you worked harder. When the learning got you excited, curious, and intrigued, you put out more effort. We've all seen how students will often work much harder in one class than in another. The feedback is about themselves—and about your class.

Take on the challenge. Invest in students who are not putting out effort. In a study of more than 1,800 children from poverty, school engagement was a key factor in whether the student stayed in school (Finn & Rock, 1997).

What You Can Do

First, strengthen your relationships with students by revealing more of yourself and learning more about your students. Ask yourself, "What have I done to build relationships and respect? Do my students like me?"

Use more buy-in strategies, such as curiosity builders (a mystery box or bag); excitement and risk ("This idea's a bit crazy; let's make sure we have the number for the fire department, just in case"); and competition ("My last class accomplished _____; let's see what you can do!"). Make the learning more of the students' idea by offering a choice, and involve them more in decision making.

Second, teachers must make connections to students' worlds in ways that help them see a viable reason to play the academic game. Can you tie classroom learning to the real world? Use money, shopping, technology, and their family members to make the learning more relevant. Without clear links between the two, students often experience a demotivating disconnect between the school world and their home life. As a result, they give up.

Third, affirm effort every day in class. Most teachers don't keep track of their comments to students; maybe they should. When teachers give more positives than negatives (a 3:1 ratio is best), they optimize both learning and growth (Fredrickson & Losada, 2005). When affirmed, challenged, and encouraged, students work harder.

Fourth, set high goals and sell students on their chances to reach them. Get them to believe in the goals by showing them real-world success stories of adults who came from the same circumstances the students did and who achieved their goals.

Finally, provide daily feedback so students see that effort matters and that they can adjust it for even greater success. Affirm your students, and let them know how much good you see in them.

Difference 4: Hope and the Growth Mind-Set

Hope is a powerful thing. Research suggests that lower socioeconomic status is often associated with viewing the future as containing more negative events than positive ones (Robb, Simon, & Wardle, 2009). Low or no expectancy ("helplessness") is also related to low socioeconomic status (Odéen et al., 2012). In short, being poor is associated with lowered expectations about future outcomes.

The student's attitude about learning (his or her mind-set) is also a moderately robust predictive factor (Blackwell, Trzesniewski, & Dweck, 2007). Taken together, hope—or the lack of hope—and mind-set—whether you believe that you're simply born smart or that you can grow in intelligence along the way—can be either significant assets or serious liabilities. If students think failure or low performance is likely, they'll probably not bother to try. Similarly, if they think they aren't smart enough and can't succeed, they'll probably not put out any effort.

What You Can Do

Teacher and student beliefs about having a fixed amount of "smarts" that the student can't increase will influence engagement and learning. Teach students that their brains can change and grow, that they can even raise their IQs. Provide better-quality feedback (prompt, actionable, and task-specific).

Also, telling students that they have a limited amount of focusing power is likely to disengage many of them (Miller et al., 2012). There's an alternative to saying, "Don't feel bad that you didn't finish. It's late in the day, and we've all got brain drain." Instead, say, "Stick with this just a bit longer. You can do this! Your mind is a powerful force to help you reach your goals."

Don't use comforting phrases that imply that even though a student isn't good at something, he or she has "other" strengths (Cooper, 2012). Instead, focus on affirming and reinforcing effort. Guide students in making smarter strategy choices and cultivating a positive attitude.

Difference 5: Cognition

Children from lower socioeconomic backgrounds often perform below those from higher socioeconomic backgrounds on tests of intelligence and academic achievement (Bradley & Corwyn, 2002). Commonly, low-SES children show cognitive problems, including short attention spans, high levels of distractibility, difficulty monitoring the quality of their work, and difficulty generating new solutions to problems (Alloway, Gathercole, Kirkwood, & Elliott, 2009). These issues can make school harder for children from impoverished backgrounds.

Many children who struggle cognitively either act out (exhibit problem behavior) or shut down (show learned helplessness). But cognitive capacity, as well as intelligence, is a teachable skill (Buschkuehl & Jaeggi, 2010).

If you're not teaching core cognitive skills, rethink your teaching methods. Students who struggle with reading, math, and following directions may have weak vocabulary, poor working memory, or poor processing skills. Studies show that high-performing teachers can overcome the problems of underperforming kids (Ferguson, 1998). Like effort, cognitive capacity is teachable.

What You Can Do

Focus on the core academic skills that students need the most. Begin with the basics, such as how to organize, study, take notes, prioritize, and remember key ideas. Then teach problem-solving, processing, and working-memory skills.

Start small. Teach students immediate recall of words, then phrases, then whole sentences. This will help them remember the directions you give in class and will support them as they learn how to do mental computations. This will take tons of encouragement, positive feedback, and persistence. Later, you can use this foundation to build higher-level skills.

Difference 6: Relationships

When children's early experiences are chaotic and one or both of the parents are absent, the developing brain often becomes insecure and stressed. Three-quarters of all children from poverty have a single-parent caregiver.

In homes of those from poverty, children commonly get twice as many reprimands as positive comments, compared with a 3:1 ratio of positives to negatives in middle-class homes (Risley & Hart, 2006). If caregivers are stressed about health care, housing, and food, they're more likely to be grumpy and less likely to offer positive comments to their kids.

The probability of dropping out and school failure increases as a function of the timing and length of time that children are exposed to relational adversity (Spilt, Hughes, Wu, & Kwok, 2012). Having only a single caregiver in the home—if the father is absent, for example—can create both instability and uncertainty because the children are missing a role model. Two caregivers offer the luxury of a backup—when one parent is at work, busy, or overly stressed, the other can provide for the children so there's always a stabilizing force present. Relationships can be challenging for children who lack role models and sufficient supports.

Low-income parents are often less able than middle-class parents to adjust their parenting to the demands of their higher-needs children (Paulussen-Hoogeboom, Stams, Hermanns, & Peetsma, 2007). For example, many parents don't know what to do with children who have attention deficit hyperactivity disorder (ADHD), who are oppositional, or who are dyslexic.

Disruptive home relationships often create mistrust in students. Adults have often failed them at home, and children may assume that the adults in school will fail them, too. Classroom misbehaviors are likely because many children simply do not have the at-home stability or repertoire of necessary social-emotional responses for school. Students are more likely to be impulsive, use inappropriate language, and act disrespectful—until you teach them more appropriate social and emotional responses.

What You Can Do

Children with unstable home lives are particularly in need of strong, positive, caring adults. The more you care, the better the foundation for interventions. Learn every student's name. Ask about their family, their hobbies, and what's important to them. Stop telling students what to do and start teaching them how to do it.

For example, if you ask a high school student to dial down his or her energy for the next few minutes and the student responds with a smirk or wisecrack, simply ask him or her to stay a moment after class. Never embarrass the student in front of his or her peers. After class, first reaffirm your relationship with the student. Then demonstrate the behavior you wanted (show the student the appropriate facial expression and posture); say why it will be important as the student moves through school ("This will keep you out of trouble with other adults"); and indicate when a given response is appropriate and what it should look like ("When you think your teacher has overstepped his or her bounds, this is what you should say"). End by affirming common goals and interests ("We're both in this together. We can make this work—if we each do our part").

Difference 7: Distress

Although small amounts of stress are healthy, acute and chronic stress—known as distress—is toxic. Children living in poverty experience greater chronic stress than do their more affluent counterparts. Low-income parents' chronic stress affects their kids through chronic activation of their children's immune systems, which taxes available resources and has long-reaching effects (Blair & Raver, 2012). Distress affects brain development, academic success, and social competence (Evans, Kim, Ting, Teshler, & Shannis, 2007). It also impairs behaviors; reduces attentional control (Liston, McEwen, & Casey, 2009); boosts impulsivity (Evans, 2003); and impairs working memory (Evans & Schamberg, 2009).

Distressed children typically exhibit one of two behaviors: angry "in your face" assertiveness or disconnected "leave me alone" passivity. To the uninformed, the student may appear to be either out of control, showing an attitude, or lazy. But those behaviors are actually symptoms of stress disorders—and distress influences many behaviors that influence engagement.

The more aggressive behaviors include talking back to the teacher, getting in the teacher's face, using inappropriate body language, and making inappropriate facial expressions. The more passive behaviors include failing to respond to questions or requests, exhibiting passivity, slumping or slouching, and disconnecting from peers or academic work.

What You Can Do

Address the real issue—distress—and the symptoms will diminish over time. Begin by building stronger relationships with students; this helps alleviate student stress.

Reduce stress by embedding more classroom fun in academics. Provide temporary cognitive support—that is, help students get the extra glucose and oxygen they need—by having them engage in such sensory motor activities as the childhood game "head-toes-knees-shoulders," in which children touch different parts of their bodies in quick succession. Such actions can support behavioral regulation, which is so important for early academic success.

Next, don't try to exert more control over the student's life. This will only create continued issues with engagement. Instead, give students more control over their own daily lives at school. Encourage responsibility

and leadership by offering choices, having students engage in projects, and supporting teamwork and classroom decision making. Having a sense of control is the fundamental element that helps diminish the effects of chronic and acute stress.

Finally, teach students ongoing coping skills so they can better deal with their stressors. For example, give them a simple, "If this, then that" strategy for solving problems using new skills. You can do this through telling stories about your own daily stressors, allowing students to brainstorm solutions, and then sharing the coping tools that worked for you and modeling how you addressed various challenges.

Seeing Clearly

Remember, students in poverty are not broken or damaged. In fact, human brains adapt to experiences by making changes—and your students can change.

You can help them do so by understanding these seven differences and addressing these differences with purposeful teaching. Your school can join the ranks of the many high-performing Title I schools where students succeed every day.

Trends of the Times

One in five U.S. children under the age of 18—or 16 million children—live in poverty.

Source: U.S. Census Bureau. Retrieved from www.census.gov/hhes/www/poverty/data/incpovhlth/2011/index.html

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- Eric Jensen is the author of *Engagement with Poverty in Mind* (ASCD, 2013) and *Teaching with Poverty in Mind* (ASCD, 2009); www.jensenlearning.com.