

# Intellectual Capital

## The Learning Gap

A recurring truth of education in America is that children from high income homes who have highly educated parents tend to do well in school. Likewise, those from low income households who have relatively uneducated parents tend to do poorly. In this country, no other factor comes close to explaining the success of some students and the failure of others.(1) What is worse, recent studies are beginning to show that the gap between low socio- economic students and their fellow classmates is beginning to grow again after a period of narrowing.(2) Because of this, a major goal of education reform is the eradication of this learning gap which is arguably the primary cause of continued poverty, high crime rates, and general distrust between those who participate in the American dream and those on its margins. Unfortunately, there is considerable disagreement as to how American public education should be reformed.

Professional educators have tended to endorse a package of reforms that have been around since the 1920s and 30s. These reforms are associated with the Progressive Education Movement which emphasized “naturalistic,” “project-oriented,” “hands-on,” and “critical- thinking” curricula and “democratic” education policies.(3) Beginning in 1918 with the *Cardinal Principles of Secondary Education*, published by the Bureau of Education, educators have challenged the emphasis on subject matter and have attempted to replace it with what might be called the “tool” metaphor.

The “tool” metaphor maintains that students should not be filled with a lot of useless knowledge, but instead, should be taught how to learn. Although various arguments are used to promote this view, the one most often heard goes something

like this: "Since knowledge is growing so quickly, in fact it is exploding, we need to teach kids how to learn, not a bunch of facts that will quickly become outdated." It has been shown by historian Lawrence Cremin that our elementary schools have been dominated by this metaphor since the 1960s, and that our secondary schools are not far behind.(4) The result of this monopoly has been a reduction of what might be called "Intellectual Capital." The loss of this "Capital" is the focus of an important book titled *The Schools We Need*, by E. D. Hirsch. Hirsch is an advocate for what has been called "cultural literacy," the notion that all children need to be taught the core knowledge of our society in order to function within it successfully. Implementing his arguments may provide our only chance for equal opportunity for all Americans, regardless of class, race, or ethnicity.

For Christians, this is an issue of justice and mercy. Unless we are comfortable with the growing number of people unable to clothe, house, and feed themselves and their families, we need to think seriously about why our educational system fails so many children. Teachers are more educated than ever before, class-sizes have continued to decline, and teachers have made great gains in personal income. But while America continues to spend much more to educate its children than do most countries of the world, it also continues to fall behind in student performance. Could it be that the problem lies in the philosophy which drives what teachers teach and how they teach it? Our argument is exactly that—that educators, particularly at the elementary school level, have adopted a view of education that places an extra burden on those who can least afford it, our least affluent children.

## **Defining Intellectual Capital**

Earlier we stated that poverty and suffering in America can be partially blamed on an education system that fails to prepare children from lower socio-economic backgrounds with a

foundation that will allow them to compete with children from middle and upper-class homes. Central to this argument is a notion called intellectual capital. Let's begin this discussion by defining the term and explaining its importance. In his book, *The Schools We Need*, E. D. Hirsch, Jr., argues that "just as it takes money to make money, it takes knowledge to make knowledge." (5) He contends that those children who begin school with an adequate level of intellectual capital have a framework upon which further learning may be built. Those who lack the necessary educational experiences and sufficient vocabulary tend to fall further and further behind.

Not just any information serves as intellectual capital. According to Hirsch the knowledge taught and learned must be of a type that "constitutes the shared intellectual currency of the society," or put another way, "intellectual capital has to be the widely useful and negotiable coin of the realm." (6) Just as play money doesn't purchase much in the real world, neither does knowledge that falls outside of this "shared intellectual currency." The current controversy surrounding Ebonics is an example. I doubt that Hirsch would agree that time spent either teaching or affirming a supposedly African-based language system is helpful to young people who need to compete in the American economic system.

Understanding Hirsch's point about intellectual capital would be interesting, but not very useful, if not for the fact that research has shown that initial deficits in specific children can be overcome if done so at an early age. Other nations, with equally diverse populations, have shown that early disparities in learning can be remediated if this notion of a shared knowledge base is taken seriously. France is an example of such a nation. Its "knowledge intensive" early childhood education programs have performed an amazing feat. "Remarkably, in France, the initial gap between advantaged and disadvantaged students, instead of widening steadily as in the United States, decreases with each school grade. By the end of

seventh grade, the child of a North African immigrant who has attended two years of French preschool will on average have narrowed the socially induced learning gap.”(7)

One might ask what American schools are teaching if not a knowledge intensive “core curriculum” like the one found in the French model. This question is difficult to answer because there is no agreed-upon curriculum for elementary students in this country. Our desire to treat teachers as autonomous teaching professionals often means that little or no supervision of what is taught occurs. There are a number of good arguments for local control of our schools, but when it comes to the curriculum, it has resulted in little consistency from one school to another, and even from one classroom to another in the same building.

Can't we all agree that by the end of the first grade students ought to be able to do and know certain things? Unfortunately, it's not that simple. At this point, we will look at some of the philosophical reasons for the vast difference in teaching methods and goals that are being advocated by different education experts.

## **Romantics and Traditionalists**

In his book *The Schools We Need*, E. D. Hirsch argues that there are two distinct camps of education reformers in our country today. One group, virtually in control of the elementary and much of the secondary school curriculum, consists of what Hirsch calls the anti-knowledge progressives. This group emphasizes critical thinking skills over mere facts, the “unquestionable” value of self-esteem as a curricular end, and teaching “to the child” rather than from a curriculum focused on the content of the subject matter. They also argue against forcing a child to learn what they believe to be developmentally inappropriate schoolwork. This thinking reflects the eighteenth century Romantic era view that all children possess a spark of divinity, a notion that coincides

with the pantheistic philosophies of eighteenth-century thinkers like Rousseau, Hegel, and Schelling. In 1775, Schelling wrote that "the God-infused natural world and human nature were both emanations of the same divine substance." (8) All things natural are good. Evil lies in separation from nature, such as seating children in rows and requiring intense study from books for several years.

Rather than allowing for a mystical view of child development, traditionalists support a "core curriculum." Hirsch points to four errors made by progressive reforms. He argues that: "(1) To stress critical thinking while de-emphasizing knowledge actually reduces a student's capacity to think critically. (2) Giving a child constant praise to bolster self-esteem regardless of academic achievement breeds complacency, or skepticism, or both, and ultimately, a decline in self-esteem. (3) For a teacher to pay significant attention to each individual child in a class of twenty to forty students means individual neglect for most children most of the time. (4) Schoolwork that has been called 'developmentally inappropriate' [by progressives] has proved to be highly appropriate to millions of students the world over, while the infantile pabulum now fed to American children is developmentally inappropriate (in a downward direction) and often bores them." (9)

As parents and taxpayers, the most vital question we want answered is, "Who is right?" Is there research that supports one side of this debate over the other? Hirsch contends that there is much evidence, from various perspectives, that supports the traditional view. However, because of the current monopoly of the progressive mindset in public education today, the traditional view is rarely even considered. Hirsch goes as far as to say that for most public school officials there is no *\*thinkable\** alternative to the progressive view. "No professor at an American education school is going to advocate *pro*-rote-learning, *pro*-fact, or *pro*-verbal pedagogy." (10)

Education leaders usually respond in one of four ways to criticism: 1) They deny that our schools are ineffective. 2) They deny the dominance of progressivism itself. 3) They deny that where progressivism has been followed, that it has been authentically followed. 4) They blame insurmountable social problems on poor performance rather than the prevailing educational philosophy.

Remember, this discussion is about more than which group of experts wins and which loses! If Hirsch is right, our current form of schooling is inflicting a great injustice on all students, but even more so on those from our poorest homes and neighborhoods. Now, we will look at some of the evidence that argues against the progressive approach to education and for a more traditional curriculum.

## **Looking at the Research**

Research has confirmed the superiority of the traditional, direct instruction method which focuses on the content to be learned rather than on the child. E. D. Hirsch, in his book *The Schools We Need*, has a chapter titled "Reality's Revenge" which lends considerable detail to his argument that progressive educational theory lacks a real world foundation.

Hirsch uses evidence from three different sources to support his rejection of the progressive model for instruction. Classroom studies, research in cognitive psychology, and international comparisons all point to a common set of practices that promote the greatest amount of measurable learning by the largest number of students. This list of common practices are remarkable in that they are exactly what progressive educators in this country are arguing that we should do *\*less\** of.

First, let's consider the finding of two examples of classroom studies. Jane Stallings studied 108 first grade and 58 third grade classes taught by different methods and found that a

strong academic focus rather than the project-method approach produced the highest gains in math and reading. The Brophy-Evertson studies on elementary students in the 70s found that classroom teaching was most effective:

- When it focused on content
- When it involved all students
- When it maintained a brisk pace
- When it required students to read aloud often
- When decoding skills were mastered to the point of over-learning
- When each child was asked to perform tasks resulting in immediate nonjudgmental feedback.

Summarizing the results of numerous classroom studies, Hirsch states, "The only truly general principle that seems to emerge from process-outcome research on pedagogy is that focused and guided instruction is far more effective than naturalistic, discovery, learn-at-your-own-pace instruction."(11)

Cognitive psychology confirms, from another viewpoint, what classroom research has already told us. Research into short term memory has uncovered important reasons to have children in the early elementary years spend considerable effort memorizing language and mathematics basics. The argument goes something like this: Individuals have only so much room, or short-term memory, in which to juggle a number of ideas at once, and this memory space is particularly restricted for young children. In reading, children end up having to focus on both the basics of decoding and word recognition as well as on high level comprehension strategies. This gives those who have memorized phonics and who have a larger vocabulary a significant advantage over those who don't. Children who over-learn decoding and word skills, have more time, memory-wise, to focus on higher-level kinds of thinking. In other words, rote memorization of the basics leads to higher order thinking, which is exactly the opposite of what is being stressed by progressives.

If Christians want to see our public schools become tools for social justice, to educate all children regardless of background, a content-oriented curriculum is essential. An early emphasis on higher-level thinking skills is not only a poor use of time in the classroom, but can actually slow down students from disadvantaged backgrounds. This is particularly true of early elementary years when decoding skills and a large vocabulary are being acquired.

Next, we will see how international studies add more evidence to this argument for a content-focused curriculum.

## **International and Domestic Examples**

In the discussion thus far we have been trying to discern why much of what happens in many of our classrooms fails to provide the intellectual capital elementary school children need. At this point, it should be noted and emphasized that we are not questioning the desire of our classroom teachers, or those who write curricula for the classroom, to benefit our children. We do argue that the philosophical foundations for today's educational theories are often not supported by research, nor by a biblical view of human nature.

Earlier we noted classroom studies and findings from cognitive psychology that refute progressive educational practices. Now we will turn our attention to large-scale international comparative studies. These examples can be found in E. D. Hirsch's book, *The Schools We Need*.

Just as it was found that the best American classrooms were businesslike and focused on the job at hand, international studies found that Chinese and Japanese teachers have a low tolerance for errors and rarely let self-esteem issues get in the way of correcting them. In fact, these errors are used by the teachers for assessing the strengths and weaknesses of various tactics for solving a problem. Asian classrooms begin a period with reciprocal bows and a description of what will



be accomplished during the lesson. The period ends with a summary of the work. The pace tends to be slower than American classrooms, but skills are taught with greater thoroughness. Fewer problems are covered with the focus on mastering them rather than simply getting them done.

Asian teachers tend to use whole-class instruction, utilizing students' responses to generate dialogue that moves the class towards the desired knowledge or skill. Students know that they may be called upon at any moment to provide a solution to the problem at hand. They are engaged and focused on the material. During the period students might work together in groups on a problem, but only for a short time. Asian teachers assign less seatwork to their students and embed it throughout a lesson rather than at the end of class. The American practice of giving students a long block of time at the end of class to do homework usually causes students to lose focus and become bored with the repetitive tasks.

To achieve the greatest results, the classroom must be content oriented and the teacher must be working hard to keep all students engaged in the work. Too often, American classrooms lack one of these two essential ingredients.

Hirsch's proposals, although revolutionary to many of today's teachers, would seem obvious to most teachers of a generation ago. They are also obvious to many Christian educators. A good example is the classical Christian education model advocated by Douglas Wilson and his Logos Schools organization.<sup>(12)</sup> Wilson endorses the Trivium curriculum model which focuses on grammar in the early grades, dialectic or logic in the middle school, and rhetoric in high school. Grammar is the memorization of the basic rules and facts of any subject matter, whether it be language or mathematics. The dialectic stage teaches students how the rules of logic apply to a subject area, and rhetoric teaches students how to communicate what they have learned. All of this can be done in a way to make it both challenging and meaningful to the vast majority

of public and private school students. However, failing to accomplish this soon, we will continue to see a widening gap between those who have been vested with intellectual capital and those who have not.

## Notes

1. "Quality Counts," A special supplement to *Education Week*, Vol. XVI (22 Jan. 1997), p. 19. The text notes that a major study concluded that 75% of students' achievement is the result of home and family.

2. "Achievement Gap Widening, Study Reports," *Education Week*, Vol. XVI, No. 14 (4 Dec. 1997), p. 1

3. Hirsch, E.D., Jr. *The Schools We Need: And Why We Don't Have Them* (New York: Doubleday, 1996), p. 7.

4. Ibid., p. 49.

5. Ibid., p. 20.

6. Ibid., p. 21.

7. Ibid., p. 42.

8. Ibid., p. 74.

9. Ibid., p. 66.

10. Ibid., p. 69.

11. Ibid., p. 184.

12. Wilson, Douglas. *Recovering the Lost Tools of Learning: An Approach to Distinctively Christian Education* (Wheaton, Ill.: Crossway Books, 1991), p. 91.