

At-Risk Youth and the Creative Process

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Talented children and youth who are disruptive, or violent, or delinquent, or just poor students are a paradox worthy of exploration in a search for new solutions or explanations.

Ken Seeley (2003)

What enables young people at risk for delinquency to choose a more constructive path? Most likely it is finding something they are good at, that they enjoy doing, and that is seen as valuable by others. Art is often the answer. Art begins with imagery, a function of the right hemisphere. When right-hemispheric gifts are honored and developed, they serve as a protective shield and channel energy in a positive direction. When they are ignored or neglected, children and youth seek other outlets that may be detrimental to themselves and society.

A disconcerting proportion of the delinquent population is gifted and talented. The largest study ever undertaken of gifted delinquents was conducted in the Arapahoe County juvenile court system. The study revealed that 15 percent of incarcerated youth tested in the top 3 percentile on standardized intelligence scales (Harvey & Seeley, 1984; Seeley, 1984, 2003); some estimate that as many as 25% are gifted. Fifteen percent is five times the number of intellectually gifted youth in juvenile hall than would be predicted by chance. The majority exhibited a “fluid” or “spatial” learning style, in which the right hemisphere is favored over the left hemisphere. Such children are often unrecognized as gifted, as sequential methods of instruction fail to reach them. “The traditional classroom situation appeared to have suppressed these students' high fluid abilities in the process of their learning of academic skills” (Harvey & Seeley, 1984, p. 77).

“High fluid ability versus crystallized ability and high visual-spatial versus auditory-sequential learning style are found among many high risk gifted youth. These fundamental conditions can have a great impact on the students’ competence and motivation” (Seeley, 2003, p. 449). Fluid or visual-spatial abilities are usually measured by performance on nonverbal tasks (Block Design, Mental Rotations, etc.). Creative individuals often excel at more visual activities, such as puzzles, LEGOs, mazes, maps, chess, computers, science, taking things apart to see how they operate, and all forms of art. They may not be as facile at linear-sequential reasoning, which is stressed throughout formal education. I call these nonlinear thinkers “visual-spatial learners” (Silverman, 2002) and I believe that recognizing and teaching to their learning style is a powerful way of salvaging at-risk youth.

Visual-spatial learners are individuals who think in pictures rather than in words. They have a different brain organization than auditory-sequential learners. They learn better visually than auditorally. They learn all-at-once, and when the light bulb goes on, the learning is permanent. They do not learn from repetition and drill. They are whole-part learners who need to see the big picture first before they learn the details. They are non-sequential, which means that they do not learn in the step-by-step manner in which most teachers teach. They arrive at correct solutions without taking steps, so “show your work” may be impossible for them. They may have difficulty with easy tasks, but show amazing ability with difficult, complex tasks. They are systems thinkers who can orchestrate large amounts of information from different domains, but they often miss the details. They tend to be organizationally impaired and unconscious about time. They are often gifted creatively, artistically, technologically, mathematically or emotionally.

Non-sequential children have a difficult time in school. The school curriculum is sequential, the textbooks are sequential, the workbooks are sequential, the teaching methods are sequential, and most teachers learn sequentially. Children are graded on their mastery of sequential subjects: reading, writing, spelling, and arithmetic. Sequential children feel smart, and non-sequential children feel dumb. They dread long division, spelling, showing their work, step-by-step instruction when they don't know where it's leading, handwriting, rote memorization, drill and repetition.

Visual-spatial learners are at risk in most schools. Carol Gohm, Lloyd Humphreys, and Grace Yao studied over 1,000 spatially gifted high school seniors (578 boys and 511 girls) and found them to be “disenchanted with education” (1998, p. 528). In their article, “Underachievement Among Spatially Gifted Students,” the researchers reported that this group received less college guidance from school counselors, were less likely to go to college, and had lower career aspirations than equally intelligent students who excelled in subjects such as mathematics.

Academic failure has emerged in studies as an important risk factor for crime, violence and substance abuse (Hawkins, Catalano, & Brewer, 1994). Children with stronger right hemispheres are often seen as underachievers. When children have weaker left hemispheres, they may be highly creative and talented, but struggle with linear-sequential work. They become disengaged with school and at risk for anti-social endeavors. “Student engagement has been found to be the single most robust predictor of students' performance and personal adjustment in school. This conclusion holds regardless of whether students come from families that are relatively advantaged or disadvantaged economically or socially” (Connell, 1998, p. 2).

Underachievement patterns can be reversed when students have long-standing out-of-school creative interests, such as art, and parents are supportive of their children's interests. Emerick (1992) studied teens who had underachieved for a period of three years and then overcame underachievement, becoming achievers for at least a full year. She found several common themes among them. They all engaged in a creative passion. Their parents maintained positive attitudes toward them, even in the face of academic failure, perceiving the underachievement as temporary, rather than as a permanent

pattern. They placed responsibility for homework directly on their children. And they did *not* deprive their children of their creative work, or make it contingent upon their getting good grades. All of the students were able to name a specific teacher who they felt was the single most influential factor in the reversal of their underachievement pattern. This teacher continued to believe in them, in spite of their grades, and helped them to see how they could turn their creative interest into a life career by succeeding in school. In all cases, their creative pursuit allowed these young people to reverse underachievement.

I worked with a successful artist/architect who was in continuous trouble in his teens. In high school, he became enthralled with the work of Frank Lloyd Wright and began to emulate his style. When he was given a scholarship to an architectural school, it turned around his life. Without recognition of his talents as a potential architect, he believes he would have spent the remainder of his life behind bars. He has been a mentor for troubled teens, using art as a means of building their self-esteem, unlocking their potential, and setting them on the right path.

There are several instructional strategies that can prevent or reverse underachievement and reduce the incidence of drop-outs, drug abuse and delinquency. They are quite simple, but they fly in the face of time-honored traditions.

1. When bright students refuse to do written work, *allow them to use a keyboard*. In the majority of cases, their handwriting is slow and labored. They produce much lengthier, more sophisticated work on the computer than they do by hand. Handwriting was an extremely important skill for 5,000 years. It was the only reliable way that information could be passed down from generation to generation. But in the 21st century, it is unlikely that young people's handwriting will assist them in gaining employment in their adult lives. They will be much more employable if they have computer skills. Handwriting should be taught as an art form, not as a means of note taking. Typing is a much faster and more efficient means of taking notes. The key to beautiful penmanship is sufficient time. Some students with poor handwriting are excellent artists and can master calligraphy.
2. *Allow them to construct, draw or otherwise create visual representations of concepts*. Many at-risk students know more than they can express in written form. Creative teachers give them other options that allow them to use and develop their creativity. Mastery of concepts can be demonstrated through PowerPoint presentations, dioramas, maps, models, photographs, collections, demonstrations and engaging projects that do not require extensive writing.
3. *Use computers so that material is presented visually*. The computer teaches visually, it has no time constraints, it doesn't raise an eyebrow when the student makes an error. In some classrooms, all students have a computer on which they do their assignments. This eliminates "lost assignments." Internet resources are

often highly visual and more engaging than getting the information from books, and the information is more current.

4. *Avoid timed tests.* Timed tests were developed during the Industrial Revolution to create more efficient factory workers. Success in the technological 21st century is not as dependent upon time. At-risk, visual-spatial learners need more time to translate their pictures into words. Think of the time it takes a computer to download a photograph versus the time it takes to download text. If a student has a serious problem with timed situations, assessment by a school psychologist within three years of college board examinations can determine if the youth qualifies for extended time for SATs and ACTs.
5. *If students can demonstrate consistent accuracy, allow credit for correct answers even if they cannot show their work.* Visual-spatial students see solutions in their mind's eye. They arrive at conclusions intuitively without taking a series of steps. This is not cheating. This is a different way of processing information. Unfortunately, state achievement tests do not take this learning style into account and assume that unless students show the steps they took to arrive at answers, they don't understand the material.
6. *Avoid drill and repetition.* At-risk visual students learn through seeing images. An image is permanent. It is not improved by drill or repetition. The brighter the student, the more turned off to school he or she is likely to be by having to drill information grasped the first time. See if the student can do the hardest problems on the page. If so, skip the rest.
7. *Grade content separate from mechanics.* While they have excellent ideas, bright at-risk students usually have a difficult time with spelling, punctuation and the mechanics of writing. They need to be given credit for their ideas, instead of being penalized for their inability to remember the details. In a technological era, in which computers eliminate the arduous task of writing by hand, help correct spelling and provide assistance with grammar, the main goal for students should be the generation of creative ideas. This is how they will be evaluated in the work force in their adult lives.

More teaching strategies can be found in *Upside-Down Brilliance: The Visual-Spatial Learner* (Silverman, 2002).

Ironically, more and more image-thinkers are being born throughout the world. In past generations, they were often crippled in our schools and marginalized in society. But this millennium belongs to those who are gifted in imagery. It is their genius that created the technological era, and they are the ones who will thrive in the 21st century workforce. The left-hemispheric curriculum of reading, handwriting, and calculating, which dominated schools for centuries, is obsolete. These skills are not sufficient to gain employment in today's world. Creativity, facility with computers, visualization skills, and the ability to see and solve problems from many different perspectives are becoming

more critical. These visual-spatial skills have been peripheral in education. By the middle of the 21st century, I predict that they will be central. The skills we have prized for thousands of years will be relatively useless when every child has a computer. Instead of worshipping the printing press, schools will need to prepare students for the computer-based, creative, visually-oriented careers awaiting them.

The arts have always served as the area in which many at-risk students could feel successful in school. As the arts have been removed from schools, being deemed “a frill” that is dispensable during tight budgetary times, at-risk students are in greater jeopardy. It is essential to support extra-curricular art programs as a means of preventing underachievement, school dropouts and delinquent behavior. Art is the sanctuary, the emotional healer, the ray of hope for the at-risk, visual-spatial thinker.

The hardened pedagogy that reinforces only the student mastery attempts that meet the crystallized, auditory-sequential teaching unfortunately misses an important group of students who understand their world differently and have the potential for making significant contributions. As we continue to grow into the twenty-first century, the loss of these non-linear thinkers is too great. (Seeley, 2003, p. 450)

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