

# Using Chess as a Teaching Tool To Help At-Risk Students Develop Resilience to Adversity

“Helping kids grow one move at a time...”



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## Introduction

In 1968 in Newcastle, England, Mary Bell, an eleven-year old girl, killed two younger boys nine weeks apart. Gitta Sereny writes about the story of Mary Bell in Cries Unheard (1998). Sereny makes the following statement about the judicial system:

For adults, who in theory can be expected to be equipped with the same sense of right and wrong as those sitting in judgment over them, this system is justifiable: they have to be held responsible under the law for what they do; anything else would lead to chaos. But for children, for whom there is a wide separation between what they should know or are believed to know and what they do feel and understand, the evidence that proves their crimes, once obtained, should become almost irrelevant. The only thing that should count is human evidence—the answer to the question “Why?” (p. 71)

Indeed, why kids are committing more lethal crimes is a question of utmost importance given the recent school shootings in KY, CA, SC, TN, WA, AL, MS, AK, PA, OR, and CO (Time, May 31, 1999; McGee, J. P., unknown date). In part one of this paper, I summarize risk factors that red flag adolescents for challenging behaviors. In part two of this paper, I discuss protective factors that contribute to resiliency, or the ability to succeed or at least to not become “criminal” in spite of risk and adversity.

In part three of this paper, I review the qualities of programs that foster resiliency and propose one program to be implemented in any school.

## **Risk and Resilience in Adolescents with Challenging Behaviors**

A preliminary on-line search at the U.S. Department of Education Office of Educational Research and Improvement Information Services (OERI) using the query, “risk factors protective factors adolescents,” resulted in 3,171 findings. Indeed, the question, what factors put students at-risk for failure and what factors foster success, has been researched.

In 1990, OERI published “A Profile of the American Eighth Grader, National Education Longitudinal Study of 1988: Research in Brief.” In this report, these at-risk indicators were noted: single parent family, family income of less than \$15,000, home alone more than three hours a day, parents have no high school diploma, sibling dropped out, and limited English proficiency. Students with multiple risk factors tended to have more educational problems.

Vue-Benson and Shumer (1994) in their “Topic Bibliography on Resiliency and ‘At-Risk’ Youth” comment, “The use of the term ‘at-risk’ is widespread, yet remains ambiguous and usually operationally defined. Criteria for who is at-risk include economic conditions, involvement with the criminal justice system, potential for dropping out of school and levels of academic achievement significantly below acceptable standards. The use of the term ‘at-risk’ is problematic in that it focuses on deficits and under emphasizes strengths and possible resiliency

factors.” (introduction) They then focus on the literature that closely links service-learning to at-risk and resiliency issues.

In reviewing the research on at-risk factors, I concur with these authors that the at-risk factors do focus on deficits. At-risk factors describe the individual, family, school, community, and peer problems that provide fertile ground for trouble. Guerra and Williams (1996) list specific risk factors for youth violence.

(see Table 1)

Table 1

**Specific Risk Factors for Youth Violence**

Guerra & Williams (1996). A Program Planning Guide for Youth Violence Prevention (p. 15)

<b><u>Individual</u></b>	<b><u>Family</u></b>	<b><u>School/Community</u></b>	<b><u>Peers</u></b>
<ul style="list-style-type: none"> <li>▪ Poor academic skills</li> <li>▪ Impulsivity</li> <li>▪ Substance abuse</li> <li>▪ Poor social problem solving skills</li> <li>▪ Inability to understand the perspective of others</li> <li>▪ Poor conflict resolution skills</li> <li>▪ Difficulties in understanding the moral consequences of actions</li> </ul>	<ul style="list-style-type: none"> <li>▪ Inconsistent discipline</li> <li>▪ Reliance on coercion</li> <li>▪ Harsh or abusive discipline</li> <li>▪ Poor monitoring of activities</li> <li>▪ Insecure attachments</li> <li>▪ Defensive communication</li> <li>▪ Deviant shared values</li> <li>▪ High percentage of negative interactions</li> <li>▪ Low levels of emotional closeness</li> <li>▪ Inefficient use of family resources</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lack of student/parent involvement</li> <li>▪ Low academic achievement</li> <li>▪ Lack of social organization &amp; social support</li> <li>▪ Few opportunities for recreation</li> <li>▪ Unemployment &amp; economic disparities</li> <li>▪ High levels of community crime</li> <li>▪ Availability of firearms</li> </ul>	<ul style="list-style-type: none"> <li>▪ Low social status</li> <li>▪ Rejection by peers</li> <li>▪ Gang involvement</li> <li>▪ Shared deviant peer norms</li> <li>▪ Association with delinquent peer groups</li> </ul>

Tolan and Guerra (1998) note that “few studies have attempted to identify risk factors for adolescent violence separate from its role as part of a general pattern of serious antisocial behavior. However, it is likely that most of the factors that influence violent behavior are also those that influence antisocial behavior.” (p. 6) These researchers report risk factors by individual characteristics, family-functioning, peer influences, and community/social factors. (see Table 2)

Table 2

**Biopsychosocial Risk Factors**

<b><u>Individual Characteristics</u></b>	<b><u>Family-Functioning</u></b>	<b><u>Peer Influences</u></b>	<b><u>Community/Societal</u></b>
<ul style="list-style-type: none"> <li>▪ Impaired cognitive functioning &amp; low academic achievement</li> <li>▪ Poor peer relations skills</li> <li>▪ Biases &amp; deficits in cognitive processing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Poor parental management methods</li> <li>▪ Low emotional cohesion</li> <li>▪ Inadequate family problem solving &amp; coping skills</li> </ul>	<ul style="list-style-type: none"> <li>▪ Association with deviant peers</li> </ul>	<ul style="list-style-type: none"> <li>▪ increased violence in society (p. 2)</li> </ul>

Tolan and Guerra assert that most interventions tend to focus on changing one risk factor or the individual. They state that a biopsychosocial model linking risk factors on multiple levels is needed to address the individual factors, close interpersonal relations, proximal

social contexts, and societal macrosystems. In summary, “it takes a village to raise a child.”

### Protective Factors That Foster Resilience in Adolescents

Sachs (1999) comments on “our nation’s unwillingness to provide proactive interventions for students with E/BD [emotional/behavior disorders].” (p. 82) He maintains that the reasons for this neglect are fear and anger and school and community apathy. He states:

I know that many students with E/BD inflict havoc in our schools and communities. But I do not understand why we are willing to write off all of these students as unsalvageable and unworthy of receiving appropriate interventions. We know that many of these children have been abused or exist in environments that are fertilizer for social and emotional problems. Yet, we expect students with E/BD to be resilient and overcome tremendous odds against healthy social and emotional development. Imagine what it must be like to be physically, emotionally, or sexually abused, then come to school and be expected not to act out. If students act out their pain, they are suspended or expelled. When they are suspended or expelled they are then unsupervised in our communities, where they often come into contact with the juvenile justice system. While it is unrealistic to believe that special

education services are going to 'cure' a majority of these students, we do know that we can succeed with some of them. We can reduce the amount of pain and suffering that students with conduct disorders inflict on our environments and themselves. (pp. 81-82)

Sachs summarizes his concerns for the E/BD students by saying that if these students act out their pain, they will be removed from the school environment and not get the help that they need. If they internalize their pain, no one will notice and still they will not get the help that they need. So, "the 'hidden conspiracy' in our schools is an excellent recipe for disaster..."

(p. 82) He questions school administrators and legislators about being "willing to modify our laws to incarcerate and execute our children" but not being willing "to invest in proactive intervention procedures ... that can salvage some of these students and decrease the number of violent acts and suicides that occur in schools and communities." (p. 82)

Walker & others (1999) state, "because of long-term exposure to such risk factors as poverty, drug and alcohol use by caregivers, child neglect, social fragmentation, weak parenting practices, and violent images in the media, we have produced a generation of children and youth who are far more at risk for unhealthy lives than prior generations." (p. 293) However, in spite of such risk factors, many "at-

risk” students do succeed. What helps students to beat the odds and overcome adversity?

In their research on risk for violence among abused and neglected children, Widom and Maxfield (1996) state:

Abused and neglected children overall had more arrests as juveniles (26 vs. 17%) than as adults (29 vs. 21%). Although physically abused children had the highest rates of arrest for violent criminal behavior (16%), neglected children had arrest rates for violence almost as high (13%). Importantly, the majority of these abused and neglected children did not become delinquents, adult criminals, or violent offenders, indicating that the linkage between childhood victimization and later antisocial and criminal behavior is far from inevitable. Thus, these earlier reports indicated that child abuse and neglect may predispose children toward a negative life trajectory, but they also emphasized that the relationship was by no means deterministic. (p. 225)

The Children’s Court Centennial Communications Project, Second Chances: Success Stories web site celebrates the lives of “former delinquents made-good.” “These stories of hope, of perseverance, of young people thriving despite heavy odds—sometimes with help, sometimes on their own—to live productive lives—sometimes of an ordinary nature, sometimes of an extraordinary brand...” The developers

of this project mourn the fact that the vision of the founders of juvenile court in our country has been discarded. “This is not because young people have changed, but because adults are no longer as willing to devote the time, energy and resources to guide children through adolescence and because it has become fashionable to give up on youth.” It is hoped that these success stories will “rekindle the same fire that led Jane Addams and the other turn-of-the-century crusaders to make our world a better and more humane place for our children.” (all quotes from main page of web site) So, how do we do this?

An ERIC query using the descriptors, “protective factors resilience adolescents,” resulted in 17 documents indicating that research has been done on this topic. Reviewing abstracts of these documents, I located an extensive value search on “At-Risk Youth and Dropout Prevention” that summarizes 315 relevant articles. Perhaps a more important find was “Prevention Strategies That Work” produced by the U.S. Department of Education/OSERS/OSEP in 1999.

But how does one ascertain which programs work? This is the question that Tolan and Guerra (1998) attempt to answer in What Works in Reducing Adolescent Violence: An Empirical Review of the Field. They compare the value of approaches to adolescent violence and antisocial behavior in addressing individual, interpersonal, social, and societal

factors and rate these approaches as works, doesn't, work, unclear, and untested. And, they call for more research:

The need for research is so urgent because there currently are so many programs affecting so many adolescents, families, schools, and communities at such large cost and operating under the aura of so much promise. Well-intentioned efforts are being applied to many children and adolescents without any indication of their effects. It usually is hard to imagine that a good idea put into action by well meaning and enlightened people cannot help. Also, given that adolescent violence is such an injurious social problem, it may seem that any effort is better than nothing. Yet our review and several of the more long-term and sophisticated analyses suggest that both of these assumptions can be dangerously wrong. Not only have programs that have been earnestly launched been effective, but some our seemingly best ideas have led to worsening the behavior of those subjected to the intervention (Lorion et al., 1987; McCord, 1978; Miller, 1962). Even when our hearts are most impassioned and our minds most sharply focused, we can still be seriously wrong. Thus, evaluation is urgently needed to help us sort out what is helpful, what is harmless but ineffective, and what will actually make the problem worse. (p. 33)

What is a practitioner to do? How does a classroom teacher make sense of all of the research and the criticisms about the flaws in the research and apply best practices in her daily interactions with students with some hoping of making a positive difference in them, and in the world? To answer this question for myself, I look for common themes in the research. Regardless of methodology, what common factors can help our troubled students to overcome adversity and to be resilient against a fated negative life trajectory?

In “Prevention Strategies That Work,” researchers for the U.S. Department of Education/OSEP describe components of promising prevention programs. (see Table 3)

Table 3

### Components of Promising Prevention Programs

Does your school have the following prevention practices?

#### Prevention in the Classroom

- Positive behavior management.
- Social skills instruction.
- Academic enrichment.

#### Schoolwide Prevention

- Unified discipline approach.
- Shared expectations for socially competent behavior.
- Academic enrichment.

#### School-Family-Community Linkages

- Parent partnerships.
- Community services.

(p. 3)

In order for these components to be implemented and maintained, what factors need to be present? Bernard (1999) perhaps summarizes this best in her work on risk and resilience:

For more than a decade public and educational discourse has focused on 'children and families at risk' (Swadener & Lubeck, 1995, p. 1). Social science research has identified poverty, a social problem, as the factor most likely to put a person 'at risk' for drug

abuse, teen pregnancy, child abuse, violence, and school failure. Nonetheless, policy makers, the media, and often researchers themselves have personalized 'at-riskness,' locating it in youth, their families, and their cultures. Even though this approach sometimes succeeds in getting needed services to children and families, it has led to stereotyping, tracking, lowering expectations for many students in urban schools, and even prejudice and discrimination. Looking at children and families through a deficit lens obscures a recognition of their capacities and strengths, as well as their individuality and uniqueness.

Outson, & Smith, 1979).

Commonsense cautions against this deficit approach, and new rigorous research on resilience is disproving it scientifically. Studies demonstrate both the ways that individuals develop successfully risk and adversity, and the lack of predictive power of risk factors. Further, they articulate the practices and attitudes that promote healthy development and successful learning in students. Their findings are corroborated by research into the characteristics of teachers and schools, families, organizations, and communities that successfully motivate and engage youth from high-risk environments, including urban poverty (Ianni, 1989; McLaughlin,

Irby, & Lanman, 1994; Meier, 1995; Rutter, Maughan, Mortimore,  
(p.1)

Bernard (1997) states, “A key finding from resilience research is that successful development and transformative power exist not in programmatic approaches per se but at the deeper level of relationships, beliefs, and expectations, and willingness to share power.” (p. 1) She acknowledges that all individuals have the power to transform and change and that teachers and schools have the power to transform lives by building caring relationships, having positive and high expectations, and providing opportunities to participate and contribute.

She lists these strategies for building resilience:

- Teacher support from administrators
- Staff development
- School–community collaborations
- Classroom approaches including...
  - teaching to students’ strengths,
  - teaching students that they have innate resilience,
  - providing growth opportunities for students,
  - using self–assessments to identify areas of strengths and challenges, and
  - using the resilience approach in an experiment. (pp. 1–2)

Burns (1994) also advocates for “moving beyond a pathology approach that focuses on the deficits of children and families, to an empowerment perspective that concentrates on and engages their strengths.” (cited in ED377986)

In this same citation, Burns also makes an important point noting that “95% of all human learning is based on modeling.” Given that anti-social behavior is modeled in many at-risk students’ homes, it is extremely important that pro-social behaviors be modeled by other adults in their lives. Because of mandatory school attendance, teachers are an available resource to meet this need.

Bernard (1997) concludes,

Working from their own resilience and well-being, teachers engage those qualities in their students. If they can let go of their tight control, be patient, and trust the process, teaching will become more effortless and enjoyable, and will be responding to recommendations from the research on resilience and on nurturing teachers and successful schools... When teachers care, believe in, and embrace the “city kids”, they are not only enabling their healthy development and successful learning, but creating inside-out social change; they are building a creative and compassionate citizenry.

(p. 2)

If teachers are behavior role models for students, what characteristics do “good teachers” have? McIntyre et al. (1998) queried the consumers, the students, and concluded “for programs for these (EBD) youths to work, each student must have at least one reliable and important adult with whom to form an attachment.” (p. 135) In his new book, Connect, Dr. Ed Hallowell (1999), expert in attention deficit hyperactivity disorder, would call this the “human moment: the basis for the bridges that we build to one another.” (inside cover)

The student consumers in McIntyre’s research noted specific characteristics such as personality traits, respect of students, behavior management practices, and instructional skills that make a good teacher. According to McIntyre, these characteristics are summarized well by Mackie and colleagues (1957, p. 26):

Above all, the teachers should provide a flexible school program to permit individual student adjustment and development and provide experiences in which they can be successful.... The teacher, all agree, should be a well-adjusted, warm, and accepting person... objective and supporting. He must have achieved a high degree of maturity himself. In addition, he must be able to ‘take it.’ (p. 33)

This observation was made over two decades ago, and in 1973 Walker and Buckley (see Wehby et al., 1998) reported “that teachers attended to inappropriate behavior while often ignoring appropriate

classroom behavior.” (p. 55) It is also well documented that these inappropriate behaviors are most often punished and quick fixes are sought to eliminate the challenging behaviors, but these strategies are ineffective in changing student behavior long-term. The current emphasis on functional assessment for students with challenging behaviors mandated by IDEA 1997 forces teachers to assess the classroom environment as a possible cause and prevention for these disruptive behaviors.

Edelman (1999) writes:

During the next century young people will be confronted with many new challenges, and a world very different from the one in which we were raised. Yet century after century, children continue to have the same needs; a loving family, a nurturing environment, a sound education, and the imparting of spiritual and moral values. As this book demonstrates, there are many children who have been able to rebound from unbearable circumstances to grow into successful, caring adults. Let’s not give up on any child, because everyone of them deserves the chance to succeed in life.

(web site, Afterword)

And, Bernard (1995) writes:

Along with other educational research, research on resilience gives educators a blue print for creating schools where all students can thrive socially and academically. Research suggests that when schools are places where the basic human needs for support, respect, and belonging are met, motivation for learning is fostered. Reciprocal caring, respectful, and participatory relationships are the critical determining factors in whether a student learns; whether parents become and stay involved in the school; whether a program or strategy is effective; whether an educational change is sustained; and, ultimately, whether a youth feels he or she has a place in this society. When a school redefines its culture by building a vision and commitment on the part of the whole school community that is based on these three factors of resilience, it has the power to serve as a 'protective shield' for all students and a beacon of light for youth from troubled homes and impoverished communities. (p. 2)

In summary, even well researched effective programs that claim to address the personal, social, and academic needs of students are only as good as the adults who implement them. Caring adults who respect children and adolescents will find ways to build resilience in them

through positive personal interactions that focus on competence (strengths), choice (autonomy), and community (social responsibility).

### CHES: A Universal Teaching/Learning Strategy For Building Resilience

Kohn (1999) critiques common pedagogical methods in education. While critical of many, he advocates for education “to produce not merely good learners but good people.” (p. 227) He argues that, “School is about more than intellectual development; it is about learning to become a responsible, caring person who can make good choices and solve problems effectively.... What we want to promote are talking and listening, looking for alternatives and trying to reach agreement, solving problems together and making meaningful choices.” (pp. 259–260)

[Note: The U.S. Chess Federation (USCF) provides a packet of materials promoting the CHES–IN–THE–SCHOOLS program, formerly called the American Chess Foundation. The following information about using chess as a teaching tool including all quotations, unless otherwise cited, came from that promotional material and from my professional and personal experiences.]

The CHES–IN–THE–SCHOOLS program claims to “help kids grow one move at a time.” The mission of this program is “to motivate at-risk children and enhance their higher-order thinking skills, self-confidence

and academic achievement by using the game of chess as an educational tool.”

Dr. Robert Ferguson, Jr., Executive Director of the American Chess School, prepared a “Chess in Education Research Summary” which reviews key chess research studies. This research summary was prepared for the BMCC Chess in Education, A Wise Move, Conference (no date on report) concludes, “Chess has been proven to enhance creativity, concentration, critical thinking skills, memory, academic achievement, problem solving, cultural enrichment, intellectual maturity, self-esteem, standardized test scores, and a score of other qualities that every administrator, school board director, parent, and teacher desires.” (see Table 4)

As Coordinator for Gifted Students in Bradford, PA, Robert Ferguson used the Watson–Glaser Critical Thinking Appraisal to measure critical/analytical achievement during the EXPLORE Program from 1979–1983. A variety of critical thinking development programs were used and the results were that “chess exceeds all other thinking development programs.” Ferguson also found significant growth in creative thinking as measured by the Torrance Test of Creative Thinking.

Table 4

In its short existence, NY CHESS has proven that:

- 🍏 instills in young players a sense of self-confidence and self-worth;
- 🍏 dramatically improves a child's ability to think rationally;
- 🍏 increases cognitive skills;
- 🍏 improves children's communication skills and aptitude in recognizing patterns, therefore:
- 🍏 results in higher grades, especially in English and Math studies;
- 🍏 builds a sense of team spirit while emphasizing the ability of the individual;
- 🍏 teaches the value of hard work, concentration, and commitment;
- 🍏 makes a child realize that he or she is responsible for his or her own actions and must accept their consequences;
- 🍏 teaches children to try their best to win, while accepting defeat with grace;
- 🍏 provides an intellectual, competitive forum through which children can assert hostility, i.e. 'let off steam,' in an acceptable way
- 🍏 can become a child's most eagerly awaited school activity, dramatically improving attendance;
- 🍏 allows girls to compete with boys on a non-threatening, socially acceptable plane;
- 🍏 helps children make friends more easily because it provides an easy, safe forum for gathering and discussion;
- 🍏 allows students and teachers to view each other in a more sympathetic way;
- 🍏 through competition, gives kids a palpable sign of their accomplishments, and finally;
- 🍏 provides children with a concrete, inexpensive and compelling way to rise above the deprivation and self-doubt, which are so much a part of their lives (Palm, 1990, pp. 5-7).

While chess may make kids smarter and more creative, it may also improve their behavior. In a press release in October, 1999, the U.S. Chess Federation (USCF) referenced an article in NEA Today in February, 1997, that included USCF as one of “50 Ways to Get Free Stuff for Your School” through their “Chess-for-Youth” program sponsored by the U.S. Chess Trust. In this press release, USCF claims that “research indicates that students exposed to chess classes show improved motivation for classroom work, greater critical thinking skills, enhanced self-esteem, and fewer discipline problems.” Two newspaper articles reprinted by USCF note that chess teaches patience and problem solving and that children with behavior problems find chess absorbing. CHESS-IN-THE-SCHOOLS notes that, “Teachers often report improvement in the students’ behavior, attitude, and scholastic performance: test scores went up, particularly in reading and math; attendance and punctuality improved; children began looking forward to school, and students developed confidence in their ability to succeed at schoolwork.”

The CHESS-IN-THE-SCHOOLS program works as a collaborative effort with public schools: they provide instruction and materials and schools provide students, classrooms, and teachers to act as Chess Coaches. The USCF offers free scholastic promotional materials including how-to guides, posters and bumper stickers, and a basic chess

curriculum, in addition to “free stuff” such as chess sets and boards to schools that are interested in starting chess programs. Indeed, chess is on the move as an integral part of school curriculum. In October 1992, The State Legislature of New Jersey passed Bill #S452 to include chess instruction in elementary schools in second grade.

One major aspect of using chess as a teaching/learning program is its universality. The game can be learned as young as age four and played for a lifetime. It can be learned at a basic level for special needs students and at an expert level for regular education and talented and gifted students. It can be played in any country by any gender almost anywhere—in a park, on a train, on a computer, at home, or in school. It can be used as therapeutic tool for counseling students for whom traditional “talk therapy” is not effective. Chess clubs/classes can meet before, during, or after school. Chess Coaches can be volunteer parents, relatives, teachers, college students, or community members. Educators can make collaborative efforts with local department stores such as K-Mart and restaurants such as Pizza Hut in the business community to tap resources for materials and awards for tournaments. The first CHESS-IN-THE-SCHOOLS program was a collaborative effort in 1986 between Mobil executive Faneuil Adams, Jr., and chess master Bruce Pandolfini. In 1995, chess master Maurice Ashley and Intel Corporation joined efforts to provide computer chess to students in New York Schools. Ashley

encourages students to access Chess Forum on America Online (AOL) to study chess strategies. ChessCafe.com provides international links to chess clubs worldwide.

As an educator, I learned the value of chess as a teaching/learning tool from my students. As a resource teacher for students with learning disabilities and emotional/behavioral disorders in the Department of Defense Schools in Germany, many of my students were lonely, without friends. Many of them also had weak verbal skills and significant attentional weaknesses. One of these students taught me how to play chess. Then, he taught another student. Then, they invited other students to join them for chess during lunchtime in my classroom. Soon, we had a chess club. These students were no longer lonely as they had connected to their peers through the game of chess. I was always amazed at their ability to concentrate on the same game for continuous lunch sessions! Using magnetic chessboards, they would store their chess games away in safe places “to be continued,” like a good book.

As an American living in a German village, I also learned the value of playing chess as a way to connect with my German neighbors. Although the words are different, the game is the same. The socialization aspect of the game is universal. Walking through parks in Europe, large plastic chess pieces on painted concrete chess boards are moved by any passer-by who so chooses in an on-going community game. One of my

German friend's father was captured by American soldiers in Italy during World War II and brought to a prisoner of war camp in Texas. Through my friend's translation, he told me that he was treated well there and that he spent his non-working time carving chess pieces from scrap wood and that the soldiers spent many fearful hours absorbed in chess. This activity kept their minds from deteriorating from boredom and worry; it helped them to stay connected in a positive way to other soldiers; and, it helped them to pass the time from war to peace.

In addition to the research supported academic gains that student chess players can make, I was most interested in the social skills that chess players may develop. In The Morals of Chess, Benjamin Franklin emphasizes chivalry and courtesy. (cited in Wojcio in USCF promotional materials) Chess players must be respectfully quiet and patient while their opponents think about their next moves. Students have to make good decisions and be less impulsive. The "touch move" requires students to think before they move their pieces, or accept the consequences of not thinking through their options. Teacher Karen Avenoso notes in her newspaper article, "Chess Whiz Kids," that kids are "naturally competitive and there's a lot of chaos in their lives. On the kingdom of the chess board, they're totally in control." This control gives them a feeling of autonomy and empowers them to problem solve. Students also learn the strengths and weaknesses or limitations of each

chess piece, which can lead into an insight into the strengths, and weaknesses of others, and self, and appreciation for strengths and tolerance for differences. Students have asked me, “Why does the white piece always go first?” This query sometimes leads to discussions about racial discrimination and the need for rules to establish guidelines for routine play.

As an introduction to chess, I have often used the film, Searching for Bobby Fischer. This PG-rated film is based on a true story about a gifted seven-year-old chess player, Josh Waitzkin, who has a good heart and uses the skill of compromise to balance competition and playing for the love of the game. It is a story about living a balanced life in which having a good heart triumphs over beating a competitor. After the film’s credits, there is a short documentary about the real Josh Waitzkin and the U.S. Chess Federation.

In an alternative school in MD where I taught, playing chess was one of the choices students could make when their assignments were completed. Often, students came to borrow chess games to fill “down-time” in other classes and to play during lunchtime. As more and more students became interested in the game, the students suggested a “Chess Tournament” to be played on the last few days of school during non-exam time. The students and I planned this very successful event together. The administration paid for the chess games that were

awarded to students for several categories: most games won, most games played, most improved player, and best chess sportsmanship. All students who participated were awarded a certificate of participation. (see appendix A)

In a juvenile detention center in VA, I started a chess class as an elective class in the Choices time period. Chess class alternated with creative writing/art co-taught by the art therapist and myself every other Wednesday. My co-teacher, who did not see the value in the activity, resisted the idea. One of her arguments was, what do the kids who can not play chess do during this time? My response was, we teach them how to play. And, using volunteer student chess coaches, all students learned how to play at a basic level. Some students were oppositional due to anxiety or fear of learning something new and not wanting to look “dumb” in front of their peers. However, the student chess coaches were supportive and patient and proved to be very good chess teachers.

At the beginning of each chess class period, a volunteer student reviewed the purpose of playing chess and the “rules” using an overhead transparency. (see Table 5) In addition to volunteer chess coaches and purpose/rules reviewer, student volunteers set up the chess tables and distributed and collected materials. Counselors reported that students often asked for chessboards during their free time in the evenings. And,

some students asked me for chess games as an exit gift so that they could play at home with their family members.

Table 5

Why play chess? To learn to think before you act!

***RULES***

- Capture; don't kill.
- Touch it; move it; leave it.
- Be patient and respectfully quiet of your opponent's think time.
- Compliments only.
- Disagreement? Start over.

During these three chess club/class experiences, students often asked to “check-out” or borrow a chess game, like a book, to take home for family play, and students asked for chess games as departing gifts so that they could continue to play. One of my detention students said that playing chess “made his brain itch.” I think that he was saying that he was learning!

Research supports using chess as a teaching tool for improvement in academics, socialization skills, and personal/interpersonal growth. CHESS-IN-THE-SCHOOLS programs can be implemented in any school at any time for all students at a minimal cost by accessing community

resources and non-profit organizations such as USCF. The critical issue is finding a Chess Class/ Club Coach who will advocate for the program because she or he believes in the valuable outcomes of the program and the ability of students to become better learners and better people.

Quantitative research projects are documented by USCF and can be used as models for local assessments of the programs. Perhaps more important is the subjective, qualitative research that finds that CHESS-IN-THE-SCHOOLS is a universal teaching tool that crosses cultural, age, gender, and intellectual boundaries and invites collaboration between families, schools, and businesses in the community.

Linquanti & Berliner (1994) state, “Efforts to promote healthy human development and involve students, families, and communities together in interventions often reflect what youth development expert Karen Pittman describes as a shift ‘from thinking of youth problems as the principal barriers to youth development, to thinking of youth development as the most effective strategy for preventing youth problems’ (Pittman & Weissman, 1991).” (p. 15) In today’s world of increased lethal crimes by juveniles, it will take the community’s efforts to teach our youth to value strengths and respect differences, to think before they act, and to solve problems peaceably. CHESS-IN-THE-SCHOOLS is a universal teaching tool that fosters the resilient traits of connection, competence, choice, and community. It is these traits that

at-risk students can learn “one move at a time” to be better people and to make a better, safer world for the future.

## Summary

Students in our schools mirror the problems of our society. Students “at-risk” for school failure are generally from poor, minority families who live in neighborhoods with high crime rates, high unemployment, few opportunities for recreation, and easy access to firearms. In these families, parents often rely on coercive methods of discipline, do not monitor children well, participate in many negative interactions, and sometimes share deviant behaviors with their children such as substance abuse and physical abuse. Children from such families often have poor academic skills, poor conflict resolution skills, and poor problem-solving skills; act impulsively; use drugs; and lack the ability to understand the perspective of others. They may associate with delinquent peers and become involved in gangs for status, power, and control.

However, many “at-risk” students resist a negative life trajectory. Research on resilience to adversity suggests that at-risk students benefit from strength-based programs that model and teach pro-social behaviors and provide growth opportunities for students to connect to a caring adult, to develop competence, to exercise choice, and to make a meaningful contribution to the community.

The CHESS-IN-THE-SCHOOLS program is a well researched program that “helps students to grow one move at a time.” Chess is

universal teaching tool for ages four through a lifetime. A volunteer or paid Chess Coach can sponsor a chess club or class at any grade level before, during, or after school, giving students supervised opportunities to improve both academic and social skills. The US Chess Federation and local businesses are resources for materials. The skills that students learn by playing chess, such as problem-solving, thinking before acting, and behaving courteously, can make them smarter students and more responsible citizens.

Appendix A

# Chess Tournament Rules

(June, 1997, revised 12/99))

- a) Follow your regular schedule. Meet your responsibilities in your class; then ask politely for a pass to C-1 or D-4.
- b) You may wear your "thinking cap" during tournament play only, not outside of C-1/D-4.

## Rules of play

- Be ladies and gentlemen! Make positive comments only!
- Resolve differences peaceably, or start over.
- Maintain your Chess Tournament Log (over) and turn it in at 1:45 PM to any supervising staff member.

You will receive a certificate for participating.

Chess games will be awarded as prizes for:

- 1) most games won
- 2) most games played
- 3) most improved player
- 4) 5) 6) best chess sportsmanship

Winners will be announced over the P.A. at 2:05  
just before bus dismissal.

Thank you for learning through chess!

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