sixseconds
THE EMOTIONAL INTELLIGENCE NETWORK

Helping all people make
empathic and wise decisions

A Case for

Emotional Intelligence in Our Schools

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Executive Summary

Emotional intelligence (EQ) is the ability to use emotions effectively and productively. Since the publication of the initial research in 1990, innovative schools and educational organizations have begun integrating emotional intelligence into their educational programs. It is becoming increasingly clear that these skills are one of the foundations for high-performing students and classrooms.

When emotional intelligence began to attract the public attention, there were few model programs. In his 1995 book, *Emotional Intelligence*, Daniel Goleman described two of the preeminent programs, a class in some New Haven schools, and the *Self-Science* curriculum.[1] As the benefits of emotional intelligence have become more widely recognized and investigated, several implementation strategies have been designed. These include assessments, training programs, and educational curricula that assist educators to build emotional intelligence.

Current research in education, psychology, and related fields is accumulating to show the benefits of Social Emotional Learning (SEL) programs for children as young as preschoolers. Public awareness is catching up to the research. Recently a *New York Times* editorial reviewed key research findings and concluded, "…**social and emotional learning programs significantly improve students' academic performance**."[2] Additional research also shows emotional intelligence is strongly linked to staying in school, avoiding risk behaviors, and improving health, happiness, and life success.

Several organizations have emerged to help schools and organizations implement emotional intelligence and social-emotional learning programs, including The Collaborative for Academic, Social and Emotional Learning (CASEL), The George Lucas Educational Foundation (GLEF), The Center for Social Emotional Learning, CSEE, and Six Seconds, The Emotional Intelligence Network.

Contents

Introduction

Emotional intelligence (EQ)[3] is emerging as a critical factor for sustaining high achievement, retention, and positive behavior as well as improving life success. Increasingly, schools and educational organizations are turning to EQ seeking a systemic solution to improve outcomes – both academic and social (such as school attrition, student satisfaction, peer relationships, and health).

What's driving this interest? Is emotional intelligence "just a fad," or does the science offer new insight and tools that genuinely affect performance? And if EQ is so important, how do educators find their way to the value amidst the hype?

American Psychologist, one of the most prestigious sources of peer reviewed psychological research, has released several articles on emotional intelligence. In particular, these reports have demonstrated time-tested support for school-based emotional intelligence prevention and intervention programs leading researchers to conclude:

> "There is a solid and growing empirical base concluding that well-designed, well-implemented school-based prevention and youth development programming can positively influence a diverse array of social, health, and academic outcomes."[4]

In a time of budget cuts, intense societal pressures on youth, and national testing standards, the strain on educational funds to fulfill the diverse needs of our children is becoming increasingly apparent. This calls for innovative approaches to addressing the academic, social, psychological, and physical health needs of developing students. Because of its wide ranging impact, emotional intelligence prevention and intervention programming may be the key investment that secures a positive future for our children.

What is Emotional Intelligence?

Emotional intelligence is the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth.

– Mayer & Salovey, 1997.[5]

Most people first heard the term "emotional intelligence" around 1995 with the publication of Daniel Goleman's best-selling book *Emotional Intelligence*. In that work, Goleman laid out a powerful case that such factors as self-awareness, self-discipline, and empathy determine personal and professional success. He drew on the work of numerous leading scientists and authors who were working to define and measure the skills of emotional intelligence.[6]

Drawing on Goleman's definition and incorporating the original research by top scientists in the field, Six Seconds set out to create a definition of how to put emotional intelligence into action. Therefore their definition is simple and direct: Emotional intelligence is the capacity to blend thinking and feeling to make optimal decisions.

Researchers once said emotions impede thinking, but in the last decades they've found that emotions actually are critical to thinking. EQ researchers are identifying:

- The way emotions and thinking interact to create our awareness and decision-making.

What is EQ?

Some people just know how to get along with others; some people are more self-confident, and some are great at inspiring people. All these require people to be smart about feelings.

Emotional intelligence can be applied through a set of learnable skills that include identifying and changing emotions, motivating yourself, and empathizing with another person. Almost anyone can learn the EQ skills to build more successful relationships.

For children, EQ helps increase academic success, bolster stronger friendships, and reduce risk behaviors. For adults, EQ skills are critical for career growth, relationships, and for health.

- How emotions are essential to successful human interaction.
- What processes are involved in learning to use and manage emotions more effectively.

The research is beginning to demonstrate what many educators, counselors, parents, and other observers had long recognized – that the most successful people were not necessarily those with high IQs but rather those with highly developed interpersonal and social skills.

Today many prominent psychologists and researchers agree EQ is an intelligence that is separate from cognitive intelligence (IQ) and has components that are different from traditional measures of personality. There were several pioneers who have helped raise this awareness.

Peter Salovey is a dean and professor of psychology at Yale University. Jack Mayer is a professor at the University of New Hampshire. The two psychologists published the first academic definition of emotional intelligence in 1990, and have continued as the leading researchers in the field.

Reuven BarOn, a psychologist and researcher at University of Texas Medical Branch, is another pioneer in the field. He created the first validated measure of "emotionally intelligent behavior," the EQ-i.[7] Other leading researchers in this area include Joseph LeDoux, Antonio Damasio, and educators such as Karen McCown, Anabel Jensen, and Maurice Elias.

Now there are several statistically reliable measures of emotional intelligence and emotional competence for adults and two

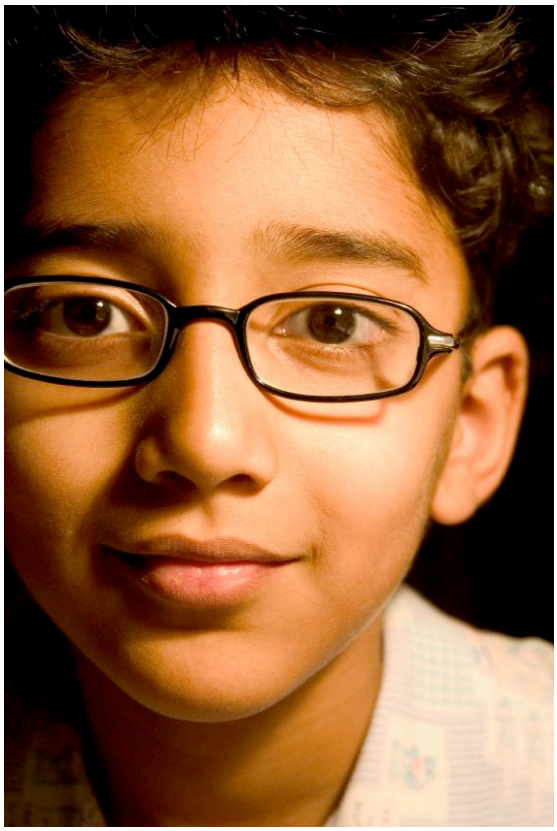
Glossary

Emotional intelligence: a scientifically validated function of the human brain to process and utilize emotional information.

EI: abbreviation for "emotional intelligence."

EQ: abbreviation for "emotional quotient," similar to "intelligence quotient," also used to mean "emotional intelligence."

SEL: Social-emotional learning, class to teach application of EQ (as geometry is a class to teach application of mathematical IQ).

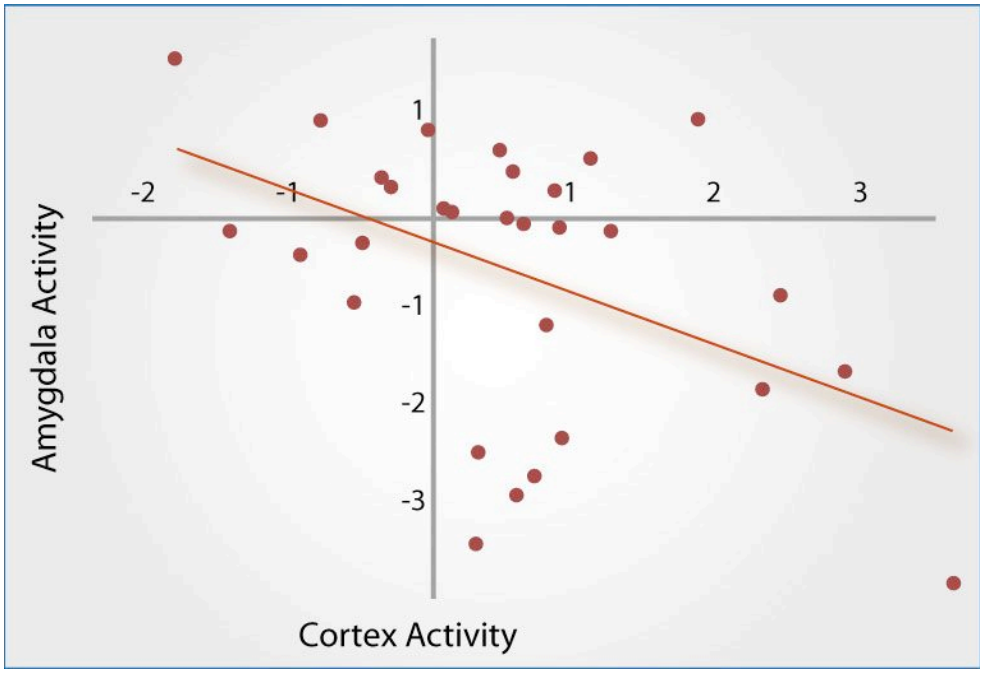


measures for children. These assessments are being used to demonstrate the links between emotional intelligence and performance.

One of the newest tools is called the "Six Seconds Emotional Intelligence Assessment-Youth Version," or "SEI-YV."[8] The SEI-YV is unique because it provides a link between EQ skills and life outcomes (such as academic achievement and health). Moreover it offers an actionable model to improve.

One of the important components of emotional intelligence is the accurate appraisal of emotion. Identifying and naming emotions is generally identified as "Emotional Literacy," which is a competence central to many social-emotional learning programs. Recent research on emotional literacy demonstrates the bridge between cognition (analytical thinking, such as use of language), affect (experience of emotion), and physiology (the body's response). A team at UCLA used fMRI (functional magnetic resonance imaging, a tool that shows very specific brain activity) to assess how emotion is regulated. In the study, 30 adults, ages 18-36, where given different mechanisms for processing emotional datum. **It turns out that naming emotions reduces the emotional reaction** (in the amygdala, the part of the brain responsible for fight-flight-freeze reactions). [9]

In other words, when thoughts and feelings are working together – when emotional intelligence is working – people are able to self-regulate their feelings and reduce the kind of reactivity that otherwise escalates (as shown in the graph).



This graph shows that when subjects name emotions, more activity in the cortex correlates with reduced activity in the amygdala, showing that naming feelings helps reduce reactivity.[9]

In addition to assessing individual emotional intelligence, it is possible to ascertain the emotional context, or climate, of a school or organization. While not strictly a measure of emotional intelligence *per se*, it makes sense that if people in the group are effectively using their emotional intelligence to manage behavior, perceptions of the climate will be generally more positive.

Emotional intelligence is not, in itself, sufficient to create optimal outcomes for youth. However, the way emotional intelligence is used, both by youth and those who support them has a powerful effect on the children's lives, yet it is frequently ignored. Emotional intelligence appears to be a core ingredient that, when developed and well employed, has wide-ranging benefits for learning, relationships, and wellness.

Everyone has emotional intelligence. For most of us, it's an underdeveloped area and an untapped resource. Peter Salovey said, "Yes we can control emotions. The trick is doing it in the right way at the right time."[10] This concept has a long history; around 350 BC, Aristotle wrote, "Anyone can become angry -- that is easy. But to be angry with the right person, to the right degree, at the right time, for the right purpose, and in the right way- that is not easy."

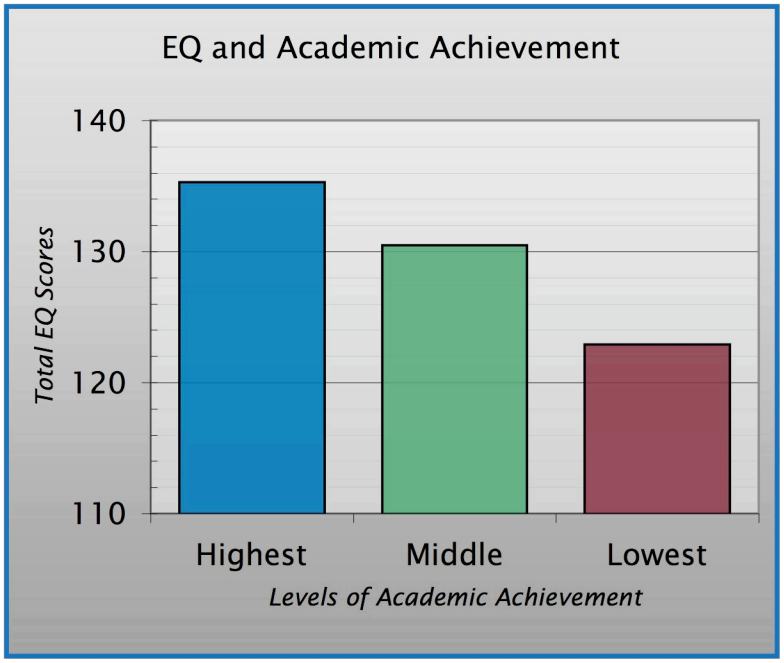
The research progress in the last 15 years is remarkable; it's becoming increasing clear how emotion and cognition function together, and how we perceive and process emotional information. At the same time, other intelligence research has been underway for over 100 years, so emotional intelligence remains an emerging science. Meanwhile, worldwide, thousands of schools, counselors, and educators, and millions of parents, are utilizing the new findings to help young people thrive.

EQ and Academic Achievement

The introduction of emotional intelligence and social emotional learning curricula has sparked a new field of research examining the efficacy of EQ intervention programs. So far, the results indicate that emotional intelligence has extraordinary potential as a mediator of positive school outcomes.

> "…Social and emotional learning students have significantly better attendance records; their classroom behavior is more constructive and less often disruptive; they like school more; and they have better grade point averages. They are also less likely to be suspended or otherwise disciplined."[2]
>
> Timothy Shriver & Roger Weissberg, *The New York Times*

For example, in a 2004 study of 667 high school students, James Parker and team gave students an emotional intelligence assessment and compared those scores to their year-end grades. As shown in the graph to the right, EQ and academic performance are strongly related.[11]



Students with the highest grades also have the highest EQ – and likewise for the middle and lowest groups. In other words, this study shows a strong relationship between EQ and academic achievement.[11]

Participants in the study were asked to complete an EQ inventory between the first and second semesters of the academic year. At the end of the year, each EQ response was matched with the student's final grade point average. Students were then divided into three groups based on their grade point

percentiles: highest achievement (80th percentile and above); lowest achievement (20th percentile and below); middle (between the 80th and 20th grade point percentiles). The following results were observed:

- Students in the highest achievement group also demonstrated greater interpersonal competency, adaptability, and stress management than students in the other groups.
- Students in the middle percentile group scored significantly higher than the 20th percentile group for interpersonal competency, adaptability, and stress management.

In a study of the *Self-Science* SEL curriculum including 311 students in 13 classrooms, teachers identified the program to be highly effective in improving both classroom relationships and academic performance (see box to upper right).[12]

In their meta-analysis of 379 SEL prevention and youth development interventions, Durlak & Weissberg reported that SEL intervention programs produced a variety of positive student outcomes including achievement (see box to lower right).[13]

Perhaps one reason these studies are showing such large effects is that

100% of the teachers reported that Self-Science increases cooperation and improves classroom relationships.

In addition, they agreed (92%) that the program helped:

- Increase student focus/attention
- Improve teacher/student relationships

The teachers also agreed (77-85%) that it worked to:

- Improve student learning
- Enhance collaborative work
- Increase positive verbal statements
- Decrease "put downs" (negative verbal messages) between students[12]

SEL Programs Proven to Improve

- Personal and social competencies
- Decreased antisocial behavior and aggression
- Fewer serious discipline problems and school suspensions
- Increased acceptance among peers
- Better school attendance
- Higher grade point averages
- Higher academic achievement scores[13]

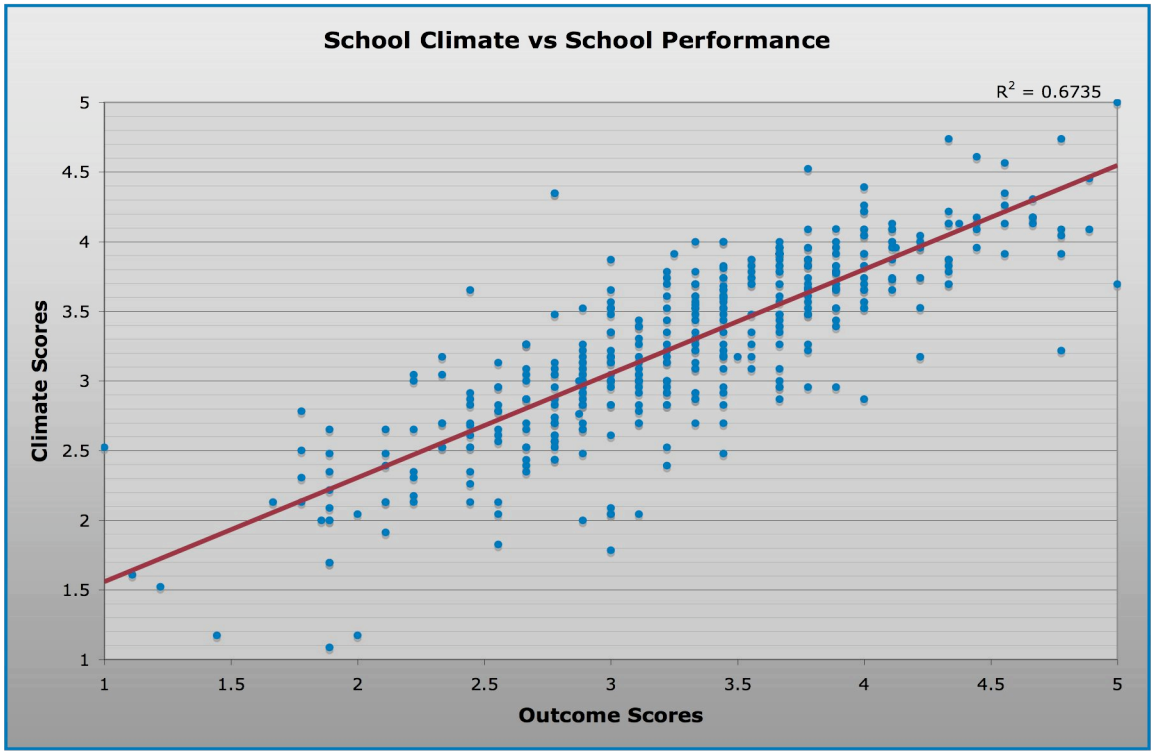
students are under a great deal of stress, which can easily derail them. Applying emotional intelligence skills appears to be an effective coping mechanism. For example, Petrides, Frederickson, and Furnham suggest that specific aspects of emotional intelligence may be especially important for students at risk. Specifically, their research suggests that students who struggle academically face even greater pressures than their peers. High EQ may serve to mediate, and thus dampen, the effects of associated stressors making all the difference between acceptable and unacceptable academic performance.[14]

In parallel to an individual student's capacity to cope, the school environment likewise has a major affect on performance. When students feel a sense of belonging in a respectful environment, they are more free to focus on their academic work. One of the ways SEL programs seem to improve academic achievement is by improving the school climate. Focusing attention on feelings and helping students and adults recognize the emotional impact of their choices may foster a more positive climate.

The Assessment of School Climate examines four aspects of the school climate: Empathy (feeling cared for), Accountability (sense of follow-through), Respect (considerate behavior), and Trust (belief in the people and institution). These factors are highly predictive of three critical outcomes: Connectedness, Learning, and Safety. These outcomes are combined into a "School Performance" variable. Regression analysis finds that 62.36% of the variation in School Performance is predicted by the climate (as shown in the graph on the following page). More

specifically, climate predicts:

- 47.92% of the variation in Connectedness
- 55.25% of the variation in Learning
- 37.30% of variation in Safety.[15]



This graph shows the relationship between perceptions of climate and performance in one school; 454 students, teachers, and parents are shown.[15]

In summary, emotional intelligence is strongly linked to academic performance. High EQ seems to help youth manage the complexities and pressures that would otherwise derail them. This effect occurs both on an individual basis and in terms of the overall school climate.

Among other noted benefits of emotional intelligence, studies suggest that students with higher emotional intelligence tend to demonstrate better school attendance than their classmates with lower EQ scores. Given the importance of staying in school both for academic and life success, the link between EQ and retention will be examined next.

EQ and Academic Retention

According to the United States Department of Education's Office of Educational Research and Improvement, 5% of high school sophomores, juniors, and seniors dropped out of high school in the 1999 school year (a rate that is consistent since the late 1980's). Furthermore, in 2000, nearly 11% of the 3.8 million 16- to 24-year olds in the US failed to earn a high school diploma.[16]

Rumberger suggests that the personal consequences of dropping out of high school may include decreased economic benefit as a result of insufficient academic skill, as well as poorer psychological and physical health that arises as an indirect result of from employment and income challenges.[17] The fact is school attrition hurts our students and our communities (please see NCSET[18]).

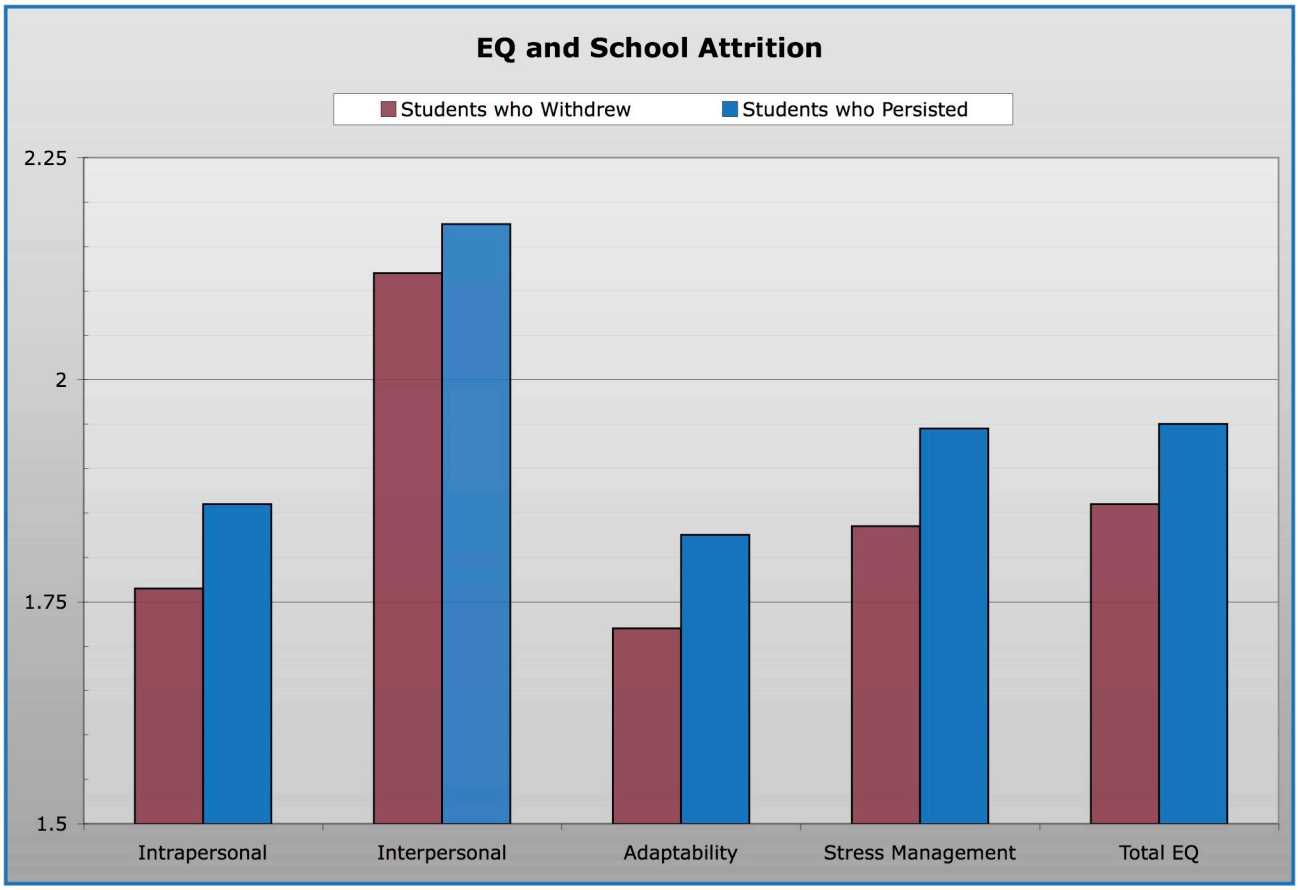
Recent studies of EQ and college retention indicate that students with higher emotional intelligence are less likely to drop out of school than their peers. Parker, Hogan, Eastabrook, Oke and Wood matched a sample of 213 individuals who had dropped out of their universities before the beginning of their second year with a group of 213 individuals who stayed with their academic programs.

After accounting for age, gender, and

Youth who do not complete high school are less likely to be employed than high school graduates (U.S. Department of Labor, 2003).

Approximately 80% of prison inmates do not have a high school diploma (Office of Juvenile Justice and Delinquency Prevention, 1995).[16]

ethnicity, results of the study suggested that **the persistent group had significantly higher levels of EQ**, interpersonal competency, adaptability, and stress management than students who withdrew from their programs.[19] As shown below, it appears that emotional intelligence is an important indicator of students staying in school:



The students who stayed in school (in blue) have higher emotional intelligence, indicating emotional intelligence can improve school retention.[19]

EQ and Prevention

In addition to academic success and school retention, many studies have examined the relationship between emotional intelligence, health, and behavior. In his 1995 book, *Emotional Intelligence*, Daniel Goleman wrote about two model social emotional learning (SEL) programs; one is called Self-Science. Goleman asserted that EQ education is a critical component for improving life-outcomes: "Self-Science is an almost point-for-point match with the ingredients of emotional intelligence – and with the core skills recommended as primary prevention for the range of pitfalls threatening children."[20] Studies now document this link, showing how developing emotional competence reduces risky behaviors (such as drug use, dropping out, and violence) while increasing pro-social behaviors (such as exercise, positive peer relationships, and leadership).

As mentioned above, the Self-Science[12] and Durlak & Weissberg[13] studies found SEL programs improved student behavior. Likewise the retention data indicates high emotional intelligence may help youth mitigate stressors that could lead them to leave school – perhaps this same capacity helps people avoid other risky behaviors.

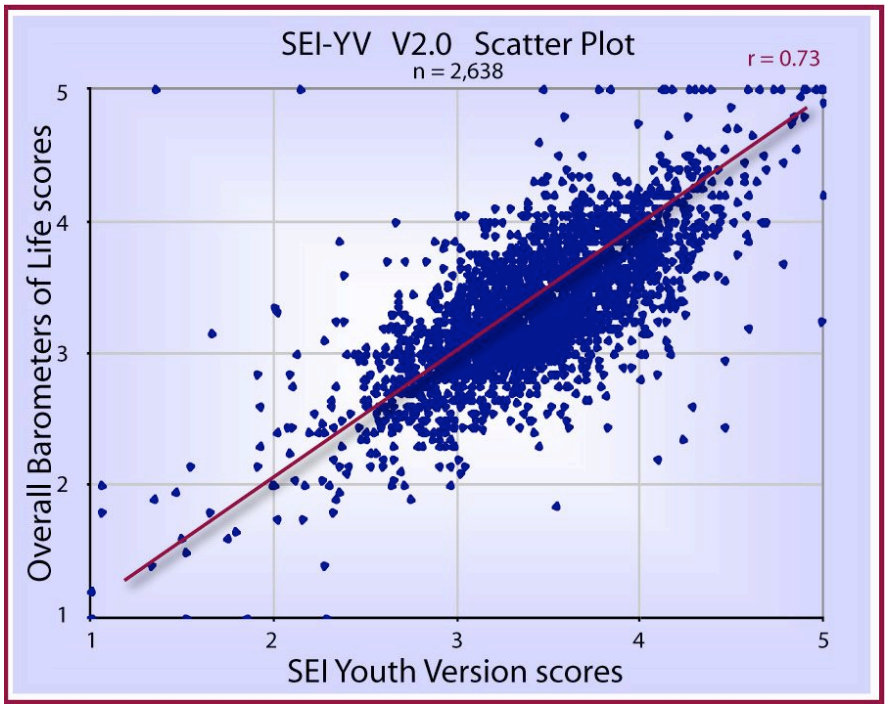
The pro-social benefits of emotional intelligence begin at a very young age. In a study of four-year-olds, 51 preschoolers were observed, tracking how they behaved and how they were accepted by peers. Then they were tested to see how much knowledge they had about emotions. **Those with higher emotion knowledge were less involved in aggressive interactions and more accepted by their peers**.[21]

This trend continues in elementary school. In a study of 160 students (mean age 10.8**),**

those with higher EQ scores were recognized by teachers and peers both as cooperative and as leaders, and for being neither disruptive nor aggressive.[22]

By middle school, the challenges become more severe, with middle schoolers experimenting with many risky behaviors including using alcohol or tobacco. Dennis Trinidad and Anderson Johnson assessed 205 middle school students in southern California, measuring both emotional intelligence and use of alcohol and tobacco. **The teens with higher emotional intelligence were less likely to use alcohol and tobacco.**[23]

In one of the largest studies to date, Carina Fiedeldey-van Dijk and the Six Seconds' team assessed an international sample of 2,665 youth ages 7-18. The study compared scores on the Six Seconds Emotional Intelligence Assessment – Youth Version with a composite "Barometer of Life" comprised of Good Health, Relationship Quality,



Youth EQ scores are strongly correlated with scores on important life outcomes (a composite of health, relationships, satisfaction, achievement, and efficacy).[24]

Life Satisfaction, Personal Achievement, and Self-Efficacy. As shown in the graph, EQ scores are strongly correlated with these outcomes.[24]

In a fascinating study of teenage behavior, Mayer, Perkins, Caruso, and Salovey tested adolescents for EI and verbal IQ.[25] The teens were asked "*Think about the last time you were out with some friends and they wanted to do something you were uncomfortable with (e.g., it seemed risky or not a good choice).*" The responses illustrate that increased emotional intelligence helps teenagers make more complex, sophisticated, and pro-social decisions. Three of the responses are shown here. Student A scored high on IQ and average on EI; B scored moderately high IQ and high EI; C scored high on both tests.

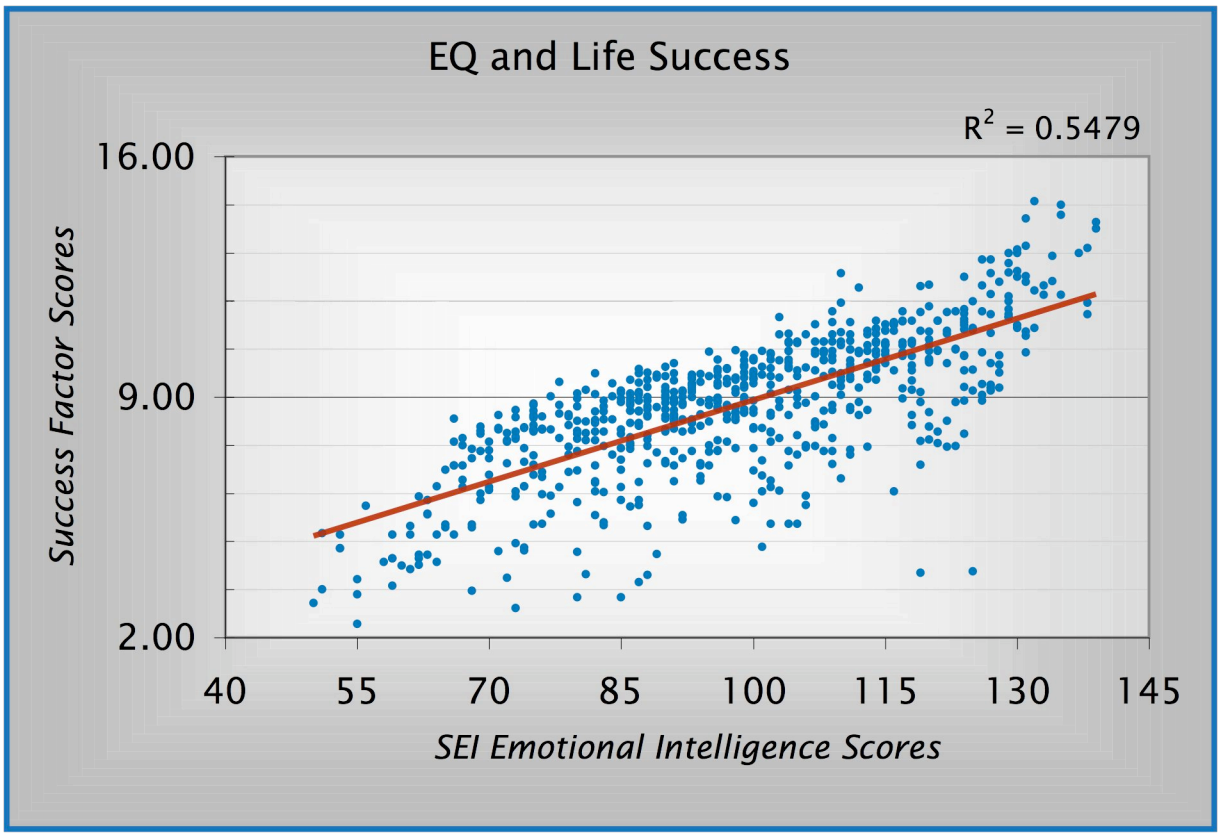
Student A: Verbal IQ:127; EI:100	Student B: Verbal IQ:116; EI 127	Student C: Verbal IQ: 133; EI: 128
"They wanted me to beat the hell out of (someone)…violence makes me uncomfortable…They won, but I fought so that I would never harm him."	"…Some of my friends decided to start mooning cars…I guess if it weren't for the values instilled in me from when I was little I probably would have joined them…I didn't do it."	"Once my friends wanted to sneak in someone's room and paint him while he slept… I felt like it was betraying the trust I had with the other person, I didn't feel right with sneaking up on a sleeping person with no way to defend himself, and I thought doing this would make the person have his feelings hurt. I know how little pranks like this could really hurt someone's feelings…"

There are several EQ studies with college students that reinforce the data presented above. Marc Brackett and team have conducted studies on self-care, academics, personal relationships, and behavior. In one study they found significant correlations between low EI and negative behaviors (e.g., use of drugs and alcohol, violence, vandalism), especially for males.[26]

In addition, there are numerous studies of emotional intelligence and positive life outcomes in adults. For example, a study of 365 students and

adults in Greece (mean age 25) found a strong correlation between EQ and issues with anxiety and with overall health.[27]

Six Seconds' researchers had 665 adults complete the SEI assessment[28] and a questionnaire about success factors. The success factor questionnaire included items about health, quality of life, effectiveness, and relationships – outcomes combined into a Life Success variable. Regression analysis revealed a strong relationship: 54.79% of variation in Life Success is explained by scores on the SEI.[29]



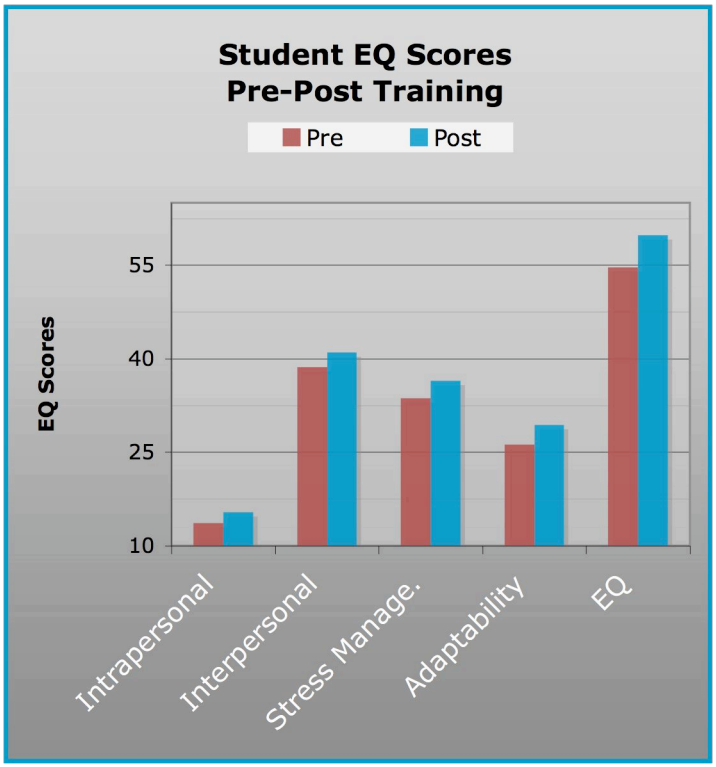
People with higher emotional intelligence also tend to score higher on "Success Factors" including health, relationships, quality of life, and effectiveness.[29]

Related Research

With mounting evidence that EQ and SEL programs improve school outcomes, several additional questions arise, including:

- **Can student EQ improve?**
- **Can parent EQ improve?**
- **How does EQ help educators?**

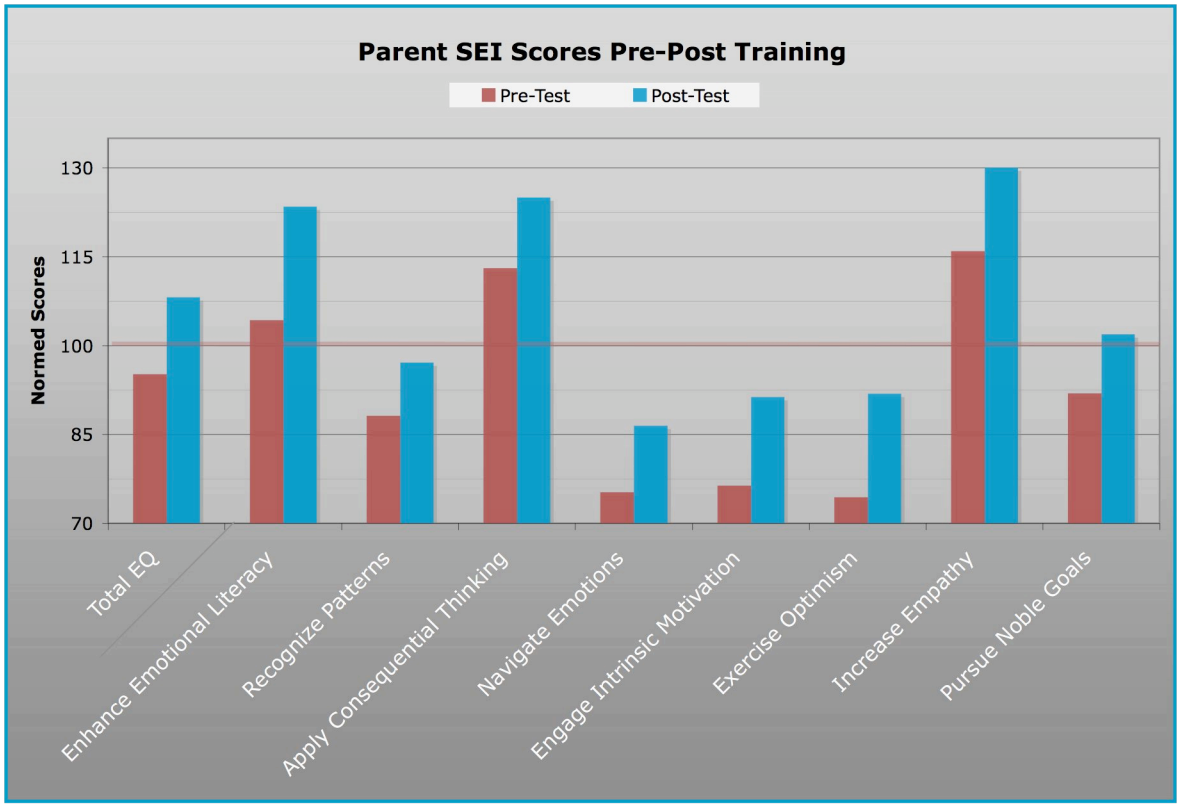
To address student improvement, Six Seconds conducted a study of 13 different classrooms for six weeks; prior to the start, students completed an assessment, then had six lessons, then another assessment. While the data suggests that EQ training would be most effective with a longer period of training, results show that students' EQ increased significantly with even relatively brief exposure to the program. One class of 26 seventh graders increased by almost 5 points on the EQi-YV.[30] This finding led Reuven Bar-On (the creator of the EQi assessment) to write: "At the end of the first year, the children were better able to understand and express themselves, to understand and relate with others, to manage and control their emotions, and to adapt to their immediate school environment.



This graph shows that student EQ scores increased after just six weeks of emotional intelligence classes.[30]

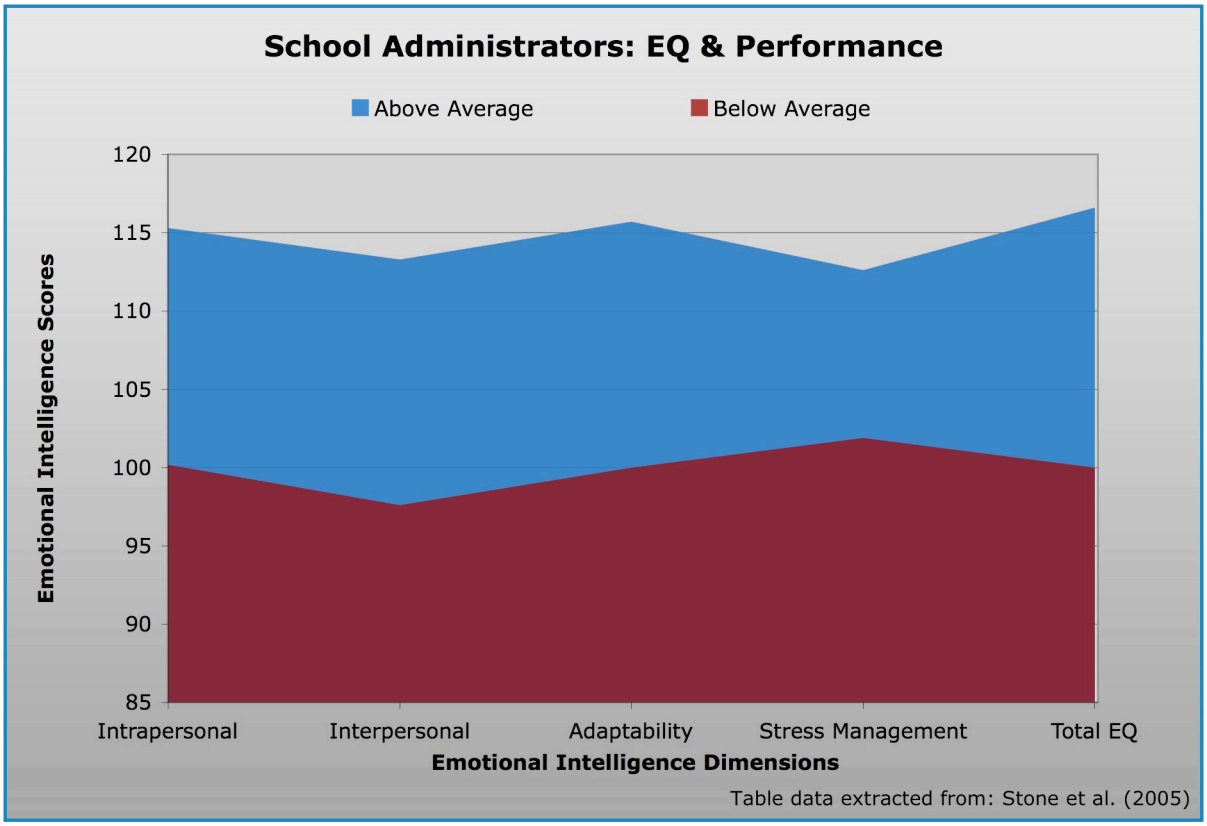
These important changes suggest that this program is viable."[31]

To understand how parents could be taught EQ skills, and how these skills would then affect their children, Sue McNamara conducted a study in which she administered an interview and the SEI assessment, then delivered four weeks of parent education using the "EQ for Families" program,[32] and then followed-up with a post-interview and a repeat of the SEI assessment. Parents also kept a daily journal. Parents' scores increased significantly and according to their journals and exit interviews, family interactions became much more positive.[33]



This study found that scores went up significantly after four workshops teaching parents emotional intelligence skills.[33]

In addition to the benefits to children and parents, developing emotional intelligence helps educators. For example, Stone, Parker, and Wood studied 464 principals and vice-principals in Ontario. They concluded that overall EQ was a significant predictor of administrative success.[34] That is, educators with high EQ were more often rated as above average administrators by both supervisors and staff. As shown in the graph below, the administrators who were rated "above average" also had a significantly higher level of EQ.



School administrators rated above average also have higher levels of EQ – indicating emotional intelligence is connected with leadership performance.[34]

Conclusion

In an era when children frequently feel disconnected from friends and family, where rapid social change is the norm, when media and sports stars demonstrate poor behavior,[35] educators recognize the human need for developing social and emotional skills.

At the same time, school budgets are being cut while pressure is being intensified to improve test scores – leaving many educators with a perceived dichotomy. They believe the choice is either nurture children or help them achieve. Fortunately, the compelling evidence shows that it is not an either/or choice; rather, the data says **addressing children's social and emotional needs is an effective way to improve academic achievement**.

Research has illustrated how EQ can substantially decrease anti-social behavior and aggression, school suspensions, and discipline problems while increasing personal and social competency, school attendance, satisfaction, and academic achievement.[36] This overwhelming body of new findings has led to a powerful conclusion: "direct intervention in the psychological determinants of learning promise the most effective avenues of reform."[37]

Social and emotional development is central to children's success in school. By incorporating EQ into existing educational programs, we can promote our children's achievement in the present and secure their success for the future.

Further Reading

Books:

Reuven Bar-On, J.G. Maree, and Maurice Elias (Eds). *Educating People to Be Emotionally Intelligent.* Westport: Praeger, 2007.

Catherine Corrie. *Becoming Emotionally Intelligent*. London: Network Educational Press Ltd, 2003.

Maurice Elias, Hariett Arnold, & Cynthia Husssey (Eds). *EQ+IQ: Best Leadership Practices for Caring and Successful Schools*. Thousand Oaks, Corwin Press, 2002.

Maurice Elias et al. *Promoting Social and Emotional Learning: Guidelines for Educators*. Alexandria: ASTD, 1997.

Karen McCown et al. *Self-Science, The Emotional Intelligence Curriculum*. San Francisco: Six Seconds, 1999.

Web Sites:

www.6seconds.org - The Emotional Intelligence Network

www.edutopia.org - The George Lucas Educational Foundation

www.CASEL.org - Collaborative for Academic, Social, and Emotional Learning

www.CSEE.net - Center for Social Emotional Education

www.EQ.org - directory of hundreds of EQ web sites and services

About the Authors

Joshua Freedman is the Chief Operating Officer of Six Seconds, The Emotional Intelligence Network. Six Seconds is the first international 501(c)3 not-for-profit organization supporting the development of emotional intelligence to help future generations thrive. Anabel Jensen, Ph.D., is the President and leads Six Seconds' educational programs. See the web site (www.6seconds.org) for additional information.

End Notes

Technical Note: There are many different models and definitions of emotional intelligence – this is normal for a new scientific discipline. Even the field of "classical intelligence" has not achieved a unified definition of IQ after over 100 years (hence the many different IQ tests available). This paper uses examples from many models, primarily the Mayer-Salovey-Caruso model measured by the MSCEIT, the Bar-On model measured by the EQi, and the Six Seconds model measured by the SEI.

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[1] Goleman, D (1995) *Emotional Intelligence: Why it can matter more than IQ*. New York: Bantam.

[2] Shriver, T.P., & Weissberg, R.P. (2005, August 16). "No emotion left behind," *The New York Times*.

[3] "EQ" is an abbreviation for "Emotional Quotient," and is used in this document synonymously with emotional intelligence.

[4] Greenbert, M.T., Weissberg, R.P., O'Brien, M.U., Zins J.E., Fredericks, L., Resnick, H., & Elias, M.J. (2003). "Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning," *American Psychologist* 58 (6/7), 466-474.

[5] Mayer, J. D., & Salovey, P. (1997). "What is emotional intelligence?" In Salovey, P. & Sluyter, D. (Eds.), *Emotional development and emotional intelligence: Implications for educators* (pp. 3-31). New York: Basic Books.

[6] Goleman, D (1995) *Emotional Intelligence: Why it can matter more than IQ*. New York: Bantam.

[7] Bar-On, R. (1997). The Bar-On Emotional Quotient Inventory (EQ-i). Toronto: Multi-Health Systems.

[8] Jensen, A. & Fieldeldey-van Dijk, C. (2007). *Six Seconds Emotional Intelligence Assessment – Youth Version (SEI-YV)*. San Francisco: Six Seconds.

[9] Activity in the amygdala seems to be mitigated via interaction with an area of the brain that may be critical to "thinking through" self-regulation (right ventrolateral prefrontal cortex). This graph shows a strong relationship (r=-.51) between the

cortex and amydala as the subjects named emotions. Lieberman, Matthew D, Naomi I. Eisenberger, Molly J. Crockett, Sabrina M. Tom, Jennifer H. Pfeifer, Baldwin M. Way (2007) "Putting Feelings Into Words: Affect Labeling Disrupts Amygdala Activity in Response to Affective Stimuli" *Psychological Science*, Vol. 18, Issue 5, Page 421.

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