

Systemic Reform Concerning Resilience in Education

by Joel H. Brown

From a systemic reform perspective, this brief article examines risk and resilience research and its application in education.

All truth passes through three stages. First it is ridiculed. Second, it is violently opposed, and third, it is accepted as being self-evident.
—Schopenhauer

INTRODUCTION

Today's educational community largely mirrors a disparaging societal view of young people. For the better part of the past two decades, this view has manifested itself in a problem remediation or "risk focus," when educating youth. Perhaps President George W. Bush best characterized the risk focus in his first presidential campaign debate. He described a reform-oriented Texas school as being "...full of so-called at-risk children. It's how we, unfortunately, label certain children. It means basically they can't learn" (G. W. Bush, October 3, 2000). In fact, clichéd terms like "a nation at risk," "at-risk youth," and "zero tolerance" have come to both symbolize and rationalize remediation-oriented

educational reform. Despite these efforts, substantial research shows little evidence of the risk-factor model's benefits or even harm done to youth by it. On one hand, then, this article suggests that educational reform is obstructed by adherence to a risk focus.

On the other hand, numerous studies discussed here suggest that a focus on building young people's capacities likely has a far greater potential than the risk focus to serve educational reform. By focusing on capacity building, deep learning and lifelong thriving are also facilitated. In fact, long-term research has shown that 70% of young people in the most challenging of life's conditions (e.g., severe poverty) have been shown to be "resilient." In the course of their lives, they not only survive, but they go on to thrive. Resilience is a natural, malleable, available and yet underdeveloped or unknown human resource for changing our view of, and working with, young people in learning environments. The explicit facilitation of resilience in education offers the potential to bolster not simply the 70% of young people who are in life's most challenging situations, but to mobilize each young person's learning and thriving. As noted in our book, "resilience education," as we refer to it "is not identifying which people are resilient, but rather, what resilience exists in each person" (Brown, D'Emidio-

Caston, & Benard, 2000, p. xii).

In contrast with a risk focus—where a primary educational goal is youth problem remediation—in resilience, the primary goal is learning through youth capacity building. This contrast has an important effect. As the disappointments of the risk-factor model mount, real educational reform becomes paradoxically ever more impossible and ever more possible. The key factor mitigating resilience-oriented educational reform is a human one—the tendency toward maintaining systemic stability (i.e., the risk focus) even under the deepening crisis of continuing program failure, rather than acceding to the temporary instability of change. Yet, as the several thousand-year-old Chinese "I-Ching" or "Book of Changes," notes, crisis can also represent opportunity. For many, the crisis inherent in the risk focus creates the awareness, openness, and thus the opportunity, for implementation of resilience-based services in schools.

The evidence presented in this article describes the currently invisible, yet fundamental, change period we are in: the transition from risk to resilience in education. It describes the current state of risk and resilience research and its status within the contemporary research and socio-political environment(s). More specifically,

based on evidence including our own extensive research and practice at the Center for Educational Research and Development (CERD), this article describes the following:

1. application of the risk-factor model and its effects in education.
2. resilience research and its educational application as a novel alternative to risk-based approaches.
3. how socio-political adherence to the risk-factor approach may be simultaneously mitigating and paving the way for resilience oriented reform efforts.

A context for understanding risk, resilience, and their status in contemporary education is obtained from three change stages illustrated in Thomas Kuhn's *The Structure of Scientific Revolutions* (1962). They are: (1) the contemporary "normal" paradigm of a "risk focus"; (2) the emerging "revolutionary" resilience paradigm; and (3) where the two meet today, recognition of, and resistance to, change from a risk-focused learning environment to a resilience-focused one. Situating risk and resilience in a Kuhnian perspective provides us with a good way to consider the evidence itself. It also serves as a lesson on the politics of change in contemporary educational systems.

THE "NORMAL" PARADIGM: A RISK FOCUS

Normal science means research firmly based upon one or more past scientific achievements, achievements that for some particular community acknowledges for a time as supplying the foundation for its further practice.—Thomas Kuhn (1962, p.10)

In many of today's schools, under the risk focus, based on the possession or existence of "risk" characteristics, young people are believed to have increased incidence of negative outcomes such as accidents, delinquency, and drug use (Bell & Bell, 1993; Coie et al., 1993; Hawkins, Catalano, & Miller, 1992; Gillmore et al., 1991; Hawkins, Lishner, Jensen & Catalano, 1987). For more than two decades re-

searchers reasoned that if such "at-risk" youth could be identified, then with assistance, such negative outcomes could be prevented (Sullivan & Farrell, 1999; Weinberg & Glantz, 1999). In service of this risk focus, a wide array of social programs and accompanying policies has been developed and implemented.

On the program level, to procure a portion of each state's federal funding, school districts showed how many young people likely possessed or experienced a multitude of risk factors and how they would be programmatically addressed. In 1992, for example, the State of California program funding procurement application noted the following:

The application also emphasizes the importance of reducing risk factors for drug, alcohol, and tobacco use and other problem behaviors of youth. Extensive research on risk factors offers a clear direction for prevention programs (California State Department of Education, 1991-1992, p. viii).

In this application, no less than 36 risk factors were identified as being related to children's problems (Brown & Horowitz, 1993a). They included vague factors like a "low commitment to school," "alienation" or "rebelliousness." Theoretically, the more risk factors and youth falling into these categories that were identified, the more in need the districts were and thus, the more likely they would receive funds (Romero et al, 1994). Similar risk-based programs were adopted across the country (United States General Accounting Office, 1997).

At the policy level, schools were encouraged to adopt "zero-tolerance" policies, defined as mandating "...predetermined consequences or punishments for specific offenses" (Heavise, Rowand, Williams, & Farris, 1998). Here, the intention is to disseminate an unambiguous "zero-tolerance" anti-violence and anti-drug message to all young people, particularly "high-risk" youth (The White House, 1989). In fact, there are now federally mandated zero-

tolerance policies for school violence, with more than 90% of the states adopting zero-tolerance for drugs (20 United States Code, 8921; U. S. GAO, 1997).

FAILURE OF EXISTING RULES IS THE PRELUDE TO NEW ONES.

By the early 1990s, evidence suggested that the risk-factor model was coming under increasing pressure (Fine, 1993; Richardson, 1990). In one of this nation's largest multi-year educational evaluations determining the effects of risk-based programs on young people, our research team found:

Although the program was directed to assist "at-risk" students, identification often preceded detention, suspension, or expulsion. For two reasons, researchers question the validity of the risk factor model...(a) the risk factor model is inherently difficult to implement, and (b) it is misused as an individual diagnostic tool (Brown & D'Emidio-Caston, 1995).

In this same study, one statement from one of more than 350 in-depth educational interviewees vividly illustrated the typical conceptualization and application of the risk-factor model to young people: "We are addressing the risk factors that show up, with the idea that it's real hard for me to point out which of our kids are not at risk" (Brown & D'Emidio-Caston, 1995, p.13). This official confirmed what our own team and colleagues were beginning to find—just how widely constructed and applied the risk-factor model had become. As our colleagues note, a challenge in the risk-factor model was the process of identification and labeling at-risk youth itself:

In many schools, this process results in the majority of students being identified as at-risk. This is hardly surprising, since the educational use of the term at-risk does not meet the test of the public health definition—that is, it is not known whether the characteristics used for identification actually predict which students are most likely to drop out of school...the whole field of education used the

concept of risk as part of an ideology, thereby joining science, mathematics, and morality (Baizerman & Compton, 1992, pp. 8-9).

It is not only this misapplication of the risk-factor model that is of great importance and concern here. It is also the misinterpretation of how effective the risk-factor model is that is of utmost importance. In the Kuhnian sense, the model gained status because the people

was never shown to *cause* a sustained decrease in their drug use. Instead, the decrease in young people's drug use was likely due to broad historical cycles, a largely unseen, if not unconsidered factor during the "just say no" years of the 1980s and 1990s. Consequently, the attribution of the risk-factor model's success as preventing youthful drug use is probably a case of misinterpretation between association and causation.

The evidence revealed that the application of the risk-factor model was part of a deficit view of young people. That perception in and of itself likely led to their identification and labeling—ironically, often without providing adequate assistance.

using it were seemingly successful initially in "solving a few problems that the group of practitioners has come to recognize as acute" (Kuhn, 1962, p. 23). The "acute" problems apparently being addressed by the risk-factor model were highly visible youthful drug use and violence. Let us consider youthful drug use as an example. At the end of the 1980s, which saw widespread implementation of the risk-factor model, young people's drug use dropped to its *lowest* point since the late 1970s (Johnston, O'Malley, & Bachman, 1999). At that time, it appeared as if the risk-factor model was having great success in addressing this problem. Yet, during the 90s when these same risk-based approaches were even more refined and heavily implemented than the 1980s, youthful drug use rose to its *highest* point since the latter 1970s or early 1980s (Johnston, O'Malley, & Bachman, 1999; U.S. GAO, 1991; 1996; 1997). Moreover, despite its substantial articulation and praise there was little or no scientifically sound evidence describing the frequency, intensity or duration of risk factors that prevented drug use (Brown & Horowitz, 1993a). In the 1980s the risk-factor model was *associated* with decreases in young people's drug use, but as Baizerman and Compton noted, to our knowledge it

people, in the Kuhnian sense, the risk-factor model also serves as an example of giving the illusion of apparently solving a few problems, like youthful drug use, that are seen as "acute." In reality, though, the evidence presented here suggests that the educational misapplication and misinterpretation of the risk-factor model likely occurs at the expense of many young people.

A most problematic dimension of the misapplication and misinterpretation of the risk-factor model is the substantial number of young people removed from school under zero-tolerance policies. In 1995, for example, we found that although large-scale educational programs were directed to serve "at-risk" youth, these youth were often the first removed from school through detention, suspension, or expulsion (Brown & D'Emidio-Caston, 1995). According to the U. S. Department of Education, in the only year for which these overall statistics were located (1997-1998), 3.1 million disproportionately minority young people were removed from school under zero-tolerance policies (United States Department of Education, Office of Civil Rights, 2000). The chastened plight of these out-of-school youth goes largely unstudied and unknown.

Like the misapplication and the mis-

So, not only is the risk-factor model part of a deficit view of young

interpretation of the model in education, the policy application of risk also fits a "normal" paradigm. Under "zero-tolerance" policies, the normal paradigm is indicated by individuals developing an "esoteric [set of] vocabulary and skills" (Kuhn, 1962, p. 64). The vocabulary is the extensive utilization of numerous coded policy terms applied to young people, foremost among them being "at-risk." The accompanying skill set is the ongoing enumeration and apparent utilization of a multitude of risk factors in support of its ideas, which are found in guiding policies. These guidelines are designed to transition the concepts of risk into practice, which as shown above, has now clearly occurred.

Through its "normal" application in education, the risk-factor model has legitimized an often-pejorative view of young people. It can be reasonably argued that the actions taken in service of this legitimized view have contributed to educational failure. In fact, by the middle 1990s researchers such as Blue-Swadener & Lubeck (1995, p. xi) asked "...whether the term 'at risk' is ever justified or serves children and families." Yet, as Kuhn notes, failure of existing rules in the normal paradigm serves as "the prelude to new ones" (Kuhn, 1962, p. 68).

IMPENDING REVOLUTION?: RESILIENCE AND EDUCATION

Scientific revolutions are here taken to be those non-cumulative developmental episodes in which an older paradigm is replaced in whole or in part by an incompatible new one.—Thomas Kuhn (1962, p. 92)

As noted at the outset of this article, approximately 70% of young people living in the worst of life's conditions learn to thrive by overcoming many of their fiercest challenges (Garmezy, 1983, 1985, 1987, 1991; Rutter, 1979a, 1981b, 1985, 1987; Werner, 1986, 1989, 1993; Werner, Bierman, & French, 1971; Werner & Smith, 1977; 1982). For example, in a large study of young people, Rutter found that in the face of great adversity such as poverty, poor housing

and family difficulties, "Nearly half of these children are well-adjusted, one in seven has some kind of outstanding ability, and one in eleven shows above average attainment in mathematics (1979a, p. 49)." In pioneering research that has followed people from birth to near fifty years of age, Werner found resilience in approximately 70% of equally challenged youth. Among the key "protective" factors predicting resilience:

1. affectational ties within the family that provide emotional support in times of stress, whether with the parent, sibling, spouse, or mate
2. external support systems, whether in school, at work, or church, that reward the individual's competencies and determination and provide a belief system by which to live (Werner, 1989, p.80).

Substantial resilience evidence like this shows that where bonded relationships exist, the factor of "parent-family and perceived school connectedness were [was] protective against every health risk behavior measure except pregnancy" (Resnick et al., 1997, p. 823).

RESILIENCE IN EDUCATION

The conceptualization and application of resilience concepts and protective factors in education are in their infancy. Nevertheless, findings from these first formal applications of resilience to the educational process are encouraging. For example, the Child Development Program (CDP) studies have shown a number of significant outcomes with young people with whole-school interventions (e.g., educators, administrators, counselors, and community) initiated in elementary school that are highly significant by middle school. They include positive effects on students' school-related attitudes and motives (e.g., liking for school, achievement motivation), social attitudes, skills, and values, (e.g., concern for others, conflict resolution skills, commitment to democratic values), and involvement in problem behaviors (e.g., reduced drug use and violence related behaviors)

(Battistich, Schaps, Watson, Solomon, & Lewis, 2000); Kendzior & Dasho, 1996; Solomon, Battistich, Watson, Schaps, & Lewis, in press; Watson, 1996; Watson, Battistich, & Solomon, 1997). These studies are showing that when compared with the results from control groups, early evidence of the application of resilience to education reveals higher test scores, higher grades in core academic subjects, more involvement in positive youth school and community activities and less misconduct at school than comparison students.

RESILIENCE IN EDUCATIONAL PRACTICE

Here, I would like to digress for a moment to briefly describe and develop an example of what resilience education might look like in practice. Based on our extensive research, components of educational resilience research and practices are identified in the previously mentioned *Resilience Education* (Brown, D'Emidio-Caston, & Benard, 2000). The acronym we use for resilience-based approaches to learning is "P-O-R-T-able." It is labeled as such because it may be applied in any learning situation anywhere. PORT is a way of thinking and working with others that includes four distinct elements designed to promote learning and thriving by facilitating the protective factors noted above: Participation, Observation, Reflection and Transformation. Participation: authentic active engagement with knowledge, content, students and learning processes that is focused in the present moment. Observation: noting experience. Reflection: interpreting experience. Transformation: Awareness of and responsibility for an act, process or instance of change. Overall, the P-O-R-T-able approach is a flexible and empowering one. Resilience education emphasizes protective factor development where participants make explicit, develop and build each individual's unique interests and strengths to facilitate learning.

While in the past, others have discussed the importance of educational flexibility and youth development al-

most to the point of cliché, the educational processes described in this book provide the specific educational means for turning these clichés into learning and resilience. Numerous skills-building exercises in support of the P-O-R-T-able approach to resilience education are developed in the book. As a brief example though, let us focus on a key feature, the "R" or the reflection aspect of a P-O-R-T-able resilience education. Here, in addition to focusing on traditional educational practices, we work with educators to learn how to conduct and facilitate what is called "meta-reflection." In this exercise, the educator and students may develop notes reflecting on the meaning of their observations regarding *how* they are learning, as opposed to *what* they are learning about the subject itself. For example, the educator may note, "I feel that I connect most with the students when visual aids are part of my lessons," or from the student's perspective, "I feel that I learn best when pictures are part of the lesson." Following the note taking, the educators and students then voluntarily discuss and make explicit reflective observations in dyads or in larger groups. When reflective practices are regularly incorporated into the educational process, learning strengths and interests are identified. Learning about self and others occurs. These practices promote more traditional learning, such as subject content, quite simply because the educator and learner is now regularly engaged in, and more aware of, how a young person learns. This information can be used as a learning guide when attempting to develop subject mastery. At the same time, the transactional nature of the educator-student relationship serves as a vehicle for interpersonal bonding and intrapersonal development. Interpersonal bonding and intrapersonal development are protective factors. Through exercising principles like these, the P-O-R-T-able model provides the specific means for learning and promoting bonding to person and

community. Finally, from this exercise one sees that the resilience education process is far more interactive than the traditional didactic educational process.

In summarizing the resilience research we note the following:

A plethora of educational jargon describes the condition of thriving in the face of adversity. Health educators discuss wellness, community-based youth workers talk about "youth development," special educators use the term "assets," and social workers address a strengths perspective. Early childhood educators and social psychologists discuss "child and human development. Those closely involved in alcohol and substance abuse prevention present protective factor research. A cross-discipline, integrated analysis of nearly 40 years of research tells us that identifying and nurturing an individual's capacities rather than focusing on his/her deficits creates a capable, productive and compassionate person (Brown, D'Emidio-Caston & Benard, 2000, p. viii).

From a Kuhnian perspective, the application of resilience in education with its focus on youth development represents a "non-cumulative" learning approach, which is "incompatible" with the concepts and associated practices found in a risk-factor model, with its focus on problem remediation. As such, the application of resilience in education appears to meet the definition of emerging paradigm change.

IMPENDING CHANGE? SIMULTANEOUS INSTITUTIONAL INCORPORATION AND RESISTANCE

Because it demands large-scale paradigm destruction and major shifts in the problems and techniques of normal science, the emergence of new theories is generally preceded by a period of pronounced professional insecurity—Thomas Kuhn, 1962, pp. 67-68

One indicator of a prelude to change is crisis. Kuhn argues that in a particularly relevant way, crisis emerges through "...refinement of concepts that increasingly lessens

their resemblance to their usual common-sense prototypes" (p.64). Previous research shows how scientists who had been conducting risk research began incorporating the language of resilience (Brown & Horowitz, 1993b). Distilled, the argument is that decreasing problems (risk) increases thriving (resilience). The state risk oriented funding application described earlier continues on to incorporate resilience into risk; "inventory the resources that might be available to you in reducing these risk factors and increasing protective factors (California Department of Education 1991-1992, p. viii)." Despite such attempts, as has been previously discussed, our comprehensive analysis of the risk and resilience research located significant differences between them:

Historically, protective factor research developed independently of risk factor research. It arose from a serendipitous finding in mental health and took a completely different course than risk factor research. Most important our findings show that protective factor researchers do not display the deviance assumption that is found in the risk factor mythology. Protective factor research, with its positive view of the individual student, promotes the well-being of all as opposed to the maladaptive identification of adolescents (Brown & Horowitz, 1993a, p. 547).

The attempted incorporation of resilience into risk reflects one Kuhnian aspect of a present or emerging crisis.

Another attempt at incorporation is to create additional programs that support likely failed concepts. For example, rather than questioning the fundamental policies and programs supporting a risk-factor educational environment, the federal government has continued to refine its concepts and application by offering this funding opportunity to states and their schools:

With the growing numbers of "at-risk" youth and the increased efforts of schools to reduce violence and maintain order, we anticipate that the number of children removed from regular

classroom settings may increase significantly. This competition will serve to meet our responsibility to continue to provide a meaningful education for those troubled youngsters (United States Department of Education, June 14, 1995).

As nice and potentially productive as the above sounds, without questioning the basic assumptions in a risk approach itself (e.g., the legitimacy of removing young people from school), more resources are now devoted to incorporating resilience into a risk context. Incorporation occurs by giving the appearance of promoting young people's well being at the educational periphery while refining, but not changing, underlying risk-based concepts. By developing these new services without changing underlying assumptions, policy makers and practitioners are maintaining the risk-factor model.

At the same time, these actions lessen their resemblance to "common sense prototype" alternatives. Such common sense alternatives might include shifting policies away from zero-tolerance, and reorienting the learning environment to a pro-youth development one that places the highest priority on keeping kids in school and members of the school community.

The "pronounced professional insecurity" aspect indicating paradigm change is seen as tension, where traditional establishments resist new ideas, thus undermining their own institutional traditions. Consider the example of an article providing deep analysis and discussing ideas presented in this paper in more detail. The article was recently submitted to the prestigious journal of the American Educational Research Association, the *American Educational Research Association Journal* (AERJ). In that article, despite unanimous support for publication by all three expert peer reviewers appointed by the journal, after its revision the article was rejected. According to the editor, among related issues, the article failed to "problematize the youth categories..." (L. McNeil, personal communication,

July, 25, 2000). In essence, although never previously mentioned, when describing the resilience model, the researchers failed to recast their resilience research within the “normal” risk paradigm. Now on its way to publication in a leading health education, not education, journal, the article’s socio-political journey in the educational community seems to indicate the “pronounced professional insecurity” of which Kuhn speaks.

In sum, from these socio-political examples, in the journey from risk to resilience, there are “Kuhnian” indices of a “profound period of insecurity.” It is seen in the attempted incorporation of anomalistic resilience information into the dominant risk model, lessening resemblance to common-sense prototypes, and breaching the field’s own practice norms. By distancing itself from common-sense actions such as keeping kids in mainstream schools, or enlarging the scope of scientific discourse, here numerous socio-political actions serve to preserve model dominance. They also indicate impending crisis, acting as a “prelude” to the development of a new paradigm (Kuhn, 1962, pp. 67-68). In the case of educational reform, such a change will likely be found in a move toward resilience in educational systems.

DISCUSSION AND CONCLUSIONS

This article has shown that for the better part of two decades, the risk-factor approach has been systemically applied to education as part of its reform. In Kuhnian terms, its ad hominem preservation in light of contradictory evidence demonstrates the “normal” aspects of human behavior, favoring stability over change. The adherence to the risk-factor model in education has at least these implications for young people: (a) maintaining a negative view of them in educational systems and (b) preservation of an ineffective educational approach.

The resilience research suggests and its potential for application in education is an emerging novel alternative to the risk focus. As our evaluation re-

search has evolved, and it has been used to develop and move toward a new and practical resilience-based educational model, indications are that it represents a “paradigm”-changing advance in how we can educate. This is because resilience education offers a holistic view of young people that is focused on interest and strength development largely absent a problem focus or deficit view of them.

This article also serves as an instructive lesson in the dynamics and processes involved in educational paradigm change. As a revolutionary approach, the factors working against implementation of resilience education are clearly found in the socio-political efforts of educational and associated research institutions supporting the risk paradigm. From a Kuhnian perspective though, the continuing failure of the risk-factor model to effectively serve young people’s educational needs provides the opportunity for revolutionary and paradigmatic change toward resilience-based models in educational reform efforts.

While results of the application of resilience in education are promising, it is important to consider two related issues. First, resilience education and the shift away from risk does not in any way signify that many educators do not already look for and work with the “positives” in students. Instead, as the exercise above only begins to demonstrate, resilience education has the goal of allowing educators or helping professionals to change perspective if needed, and for others, to *more effectively* engage with young people, to weave those “positives” into a coherent and effective educational practice that simultaneously promotes resilience. In already-crowded classrooms, learning how to educate this way does not necessarily mean more contact. It means more conscious and carefully selected contact. A move toward resilience also means learning how to work with groups to create an interconnected resilience-based learning community within each school. Such a community shares a youth development philosophy that at once creates and fa-

cilitates participation and buy-in among community members, administrators, educators, and students.

As a second issue, identifying and utilizing these “positives” as a means to education does not mean that we are suggesting maintaining violent or profoundly disruptive students in the classroom. With over three million young people recently being removed from school, though, the traditional risk focus clearly has profound implications for all students’ sense of school membership, thus their self-image and behaviors. For those who are removed from school, it may begin them on an uncharted life trajectory that without education, will assuredly be worsened. In the words of a student who remains in school while watching his friends removed, it gives him the impression that school is not a caring place: “I don’t think the schools are for like helping it’s just for getting the bad kids out” (Brown, D’Emidio-Caston & Pollard, 1997; interview #531, p. 21). Essentially, the risk focus may contribute to young people becoming classroom, school, and ultimately, societal challenges.

At the same time, since we know that connectedness is a key resilience factor, a goal regarding highly challenged young people is to maintain their school membership. The CDP evidence clearly suggests that in the classroom and school a resilience approach may reach challenged, if not most young people by developing connectedness. So, while clear boundaries may still be set in resilience education, such as the unacceptability of violence, its fundamental change toward youth development in the community view and educational actions in the service of that view, seems to have the effect on some youth of modulating potentially borderline violent or disruptive behaviors.

More research on resilience and its socio-political relationship to risk needs to be conducted. Nevertheless, resilience is a research and practice area that is worthy of significant and substantial development, implementation, and evaluation in education.

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Joel H. Brown is an educational researcher with rare experience in blending resilience oriented educational research with program development and training. Currently, he is the Executive Director of the Center for Educational Research and Development (CERD) (www.cerd.org), a Berkeley-based non-profit program and research organization committed to the development of resilience-based policies and programs. He was the director of the nationally noted research entitled "In Their Own Voices: Students and Educators Evaluate California School-Based Drug Alcohol and Tobacco Education (DATE) Programs." He is also the book series editor of "Advances in Confluent Education", and lead author of Corwin Press/Sage Publication's book entitled "Resilience Education." His commentary has been solicited in myriad media outlets, including CNN, NPR and *The New York Times*.