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The International Journal for Talent Development and Creativity (IJTDC) is a refereed journal published twice a year by both the International Centre for Innovation in Education (ICIE) & Lost Prizes International (LPI).

Submit all manuscripts in quadruplicate, double spaced, accompanied by a short abstract (approximately 100 to 150 words), and with citations and references, following the guidelines set forth in the Publication Manual of the American Psychological Association, 6th Edition. In addition, include author's full mailing address, phone and fax numbers, as well as an e-Mail address.

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From the Founders:

Our Combined Vision is to Support the Development of Talent and Creativity Worldwide

Taisir Subhi Yamin, Ken W. McCluskey

This *International Journal for Talent Development and Creativity* has grown out of an ongoing, vibrant partnership between the International Centre for Innovation in Education (ICIE) and *Lost Prizes* International (LPI). Over the past several years, ICIE – with its headquarters in Ulm, Germany – has established an impressive track record in terms of highlighting giftedness, creativity, excellence, and innovation in education. Indeed, the organization has reached out to many individuals and groups through its regional and international conferences (which to date have been held in Amman, Athens, Dubai, Istanbul, Jerusalem, Paris, and Ulm, with upcoming events set for Krakow, Nairobi, and a return to Paris). Through these conferences and other services, knowledge has been shared, cultural divides have been overcome, and active networks have been formed and incorporated into the ICIE family.

At the same time, LPI and the University of Winnipeg in Manitoba, Canada – with support from ICIE – have built upon two decades of work with talented, at-risk populations and launched a variety of service-delivery programs and the *Lost Prizes*/ICIE Seminars, a major course-connected conference that takes place each July on the UW campus. The overarching theme at this annual event is "expanding enrichment."

So together, ICIE and LPI will continue to work in unison to forge partnerships with other individuals and groups through professional conferences that connect educators and create a spirit of global citizenship. However, although networking at such conferences is crucial, our more-encompassing hope is to move beyond the talking stage by disseminating information via books and other publications, by providing tangible materials and training sessions for practitioners, and by sponsoring in-the-trenches international programs that truly make a difference in the lives of students, parents, and educators. Essentially, then, our combined vision is to support the development of talent and creativity worldwide. And, to be clear, we're talking about talent identification and development for all children and youth, including those who have hitherto been marginalized and disadvantaged.

The *International Journal for Talent Development and Creativity* (IJTDC) – offered both online and in hard-copy format – is one piece of our service-delivery puzzle. Since there are some messages, themes, and information we wanted to highlight from the outset, this first issue, and the next, are by-invitation-only. Many well-known researchers agreed to submit articles, and we thank them sincerely for their contributions. By the time the next volume rolls around, we will be opening things up and calling for papers in the traditional manner.

Should we feel the need to focus on a particular topic from time to time, we'll go the special issue route.

Our plan is to publish twice a year, in the summer and winter. Aside from the articles, IJTDC will contain the following regular features:

- *Book Reviews*. Important books in our discipline will be reviewed on an ongoing basis.

- *Standing on the Shoulders of Giants*. This segment honours the memory of cherished colleagues who have passed on. All individuals recognized in this manner in IJTDC will have made enormous contributions to ICIE and/or LPI.

- *Profiles in Creativity*. The intent here is to focus on the lives and work of pioneers in our area who are widely acknowledged for their creativity, and to consider what unique characteristics set them apart.

- *Exemplary Programs*. Here is the place where real-world practitioners get to share their work in an international forum. Acknowledging LPI's roots, many of the spotlighted programs will be made-in-Manitoba initiatives. In an effort to stimulate cross-cultural communication and partnering, however, the long-term goal is to feature various projects from many countries.

We'd like to close by thanking our Editor, Karen Magro, for her efforts and dedication, our reviewers for their time and expertise, and all our new readers for their pursuit of knowledge and excellence in the talent development domain. Welcome to IJTDC.

From the Editor's Desk:

Expanding Conceptions of Creativity and Talent in Learning Contexts

Karen Magro

Welcome to our inaugural issue of an *International Journal for Talent Development and Creativity.* We have a selection of outstanding contributions that provide a foundation for understanding the multiple dimensions of creativity. This first issue will also provide a base to explore new studies and theoretical paradigms of creativity. The purpose of this journal is to expand our conceptions of creativity and talent in educational contexts. It will provide an international forum for theoretical and practical discussions of creativity across the disciplines and in a wide range of learning contexts. How can teachers encourage a sense of belonging and a positive climate of learning that can empower students and allow their creativity to flourish? How can psychological, situational, and institutional barriers be minimized so that the creative potential of all individuals can be realized? The articles in this first issue highlight the importance of fostering cultures of inclusion and the development of effective educational approaches that work to maximize motivation and participation. Learning from this perspective is multi-dimensional and lifelong.

In their book *Learning in Adulthood*, Merriam, Caffarella, and Baumgartner (2007) write that the current sociocultural context is shaping the learning needs of individuals. Factors influencing these needs include: the changing demographics in a culturally and ethnically diverse world; the global economy; and rapid advances in information and technology (p.7). Howard Gardner further emphasizes the need for individuals to develop skills in several disciplines. Moreover, creativity, respect and treating others ethically must be integrated with skill development in analysis and synthesis.

As classrooms today become more multiethnic and multicultural, the roles and responsibilities of teachers have become more complex. Globalization; war and conflict; environmental devastation; and other factors are forcing people to leave their countries of birth (Sassen,1999). More and more people are on the move and migration is recognized as one of the defining global issues of the 21st century. Western countries faced with an aging population rely on immigration for sustaining their economic growth. The global city today reflects this new dynamic of change and demographic reconfiguration. Education is a key to mobilize the creative potential of all individuals. Effective teachers can be advocates, co-learners, and cultural guides for their students. Knowledge of other cultures, traditions, languages, and customs that mirror the diversity of the world will equip both teachers and students with essential skills. Teachers who have a greater understanding of the cultural background of their learners are in a better position to assess their learning needs and develop a curriculum that both challenges and engages them to learn. They can help their students break down cultural misconceptions, navigate a new culture and an unfamiliar educational system, and explore a multitude of academic and career options. Intercultural competence is an essential skill that today's teachers need. This potentially transformative dynamic involves understanding the parameters of one culture into understanding, appreciating, and integrating the strengths, values, and contributions of many cultures (Bennett, 2007).

The creativity of teachers is a quality that Maxime Greene (1978) wrote about in her landmark book *Landscapes of Learning*. She wrote about the importance of the teacher as a guide and catalyst; teachers can identify potential and possibility in students not just as academic scholars but as human beings with personal values, sound decision making abilities, and skills to activate positive changes in

the world. Imagination, hope, striving for social justice, and the possibility for creative and transformative ways of thinking and acting re-emerge in her books:

> Imaginativeness, awareness, and a sense of possibility are required, along with the sense of autonomy and agency, of being present to the self. There must be attentiveness to others and to the circumstances of everyday life. There must be efforts made to discover ways of living together justly and pursuing common ends. As wide-awake teachers work, making principles available and eliciting moral judgments, [they] must orient themselves to the concrete, the relevant, and the questionable. They must commit themselves to each person's potentiality for overcoming helplessness and submergence, for looking through his or her own eyes at the shared reality (Greene, 1978, p. 51).

Along similar lines, the Canadian literary theorist Northrop Frye (1988) reminds us that the "teacher's role is to stand out in the current drifting toward conformity" and that challenging our students to think of alternative ways of thinking and being in the world can lead to a more creative and peaceful world. Teaching can be transformative and contribute to "a society in which new ideas, new structures of intelligence and imagination can still have a revolutionary impact" (p.27).

University of Toronto education researcher George Sefa-Dei (2010) raises an important question when he asks: why are educational institutions often afraid to try something different or new? Certainly, our schools are helping some students succeed and realize their goals, but many others leave school early, feeling apathetic, alienated, and disengaged. How can we tap into the talent and creativity of learners who potentially are at-risk for leaving school early? Sefa-Dei asserts that "we need schools, educators, and learners to work concretely with principles of community, solidarity, social responsibility; mutual interdependence, collective histories, and spiritual learning….We also need to re-conceptualize an education system that is not dictated to by the needs of a labour market (p.120)."

Sefa-Dei believes that while our classrooms are more ethnically diverse than ever, this cultural diversity is not represented by the teachers and in alternative approaches to teaching. "The relevance of race, class, gender, sexual and [dis] ability identity and representations of schooling is that they point to particular embodiments of being, social existence, and knowledge production. A school system that fails to tap into youth myriad identities and/or particular identifications as valuable sources of knowledge is shortchanging learners {p. 121)."

Artistry and creativity can also be applied to teaching and learning strategies and specific educational programs that encourage multiple dimensions of learning. As our classrooms today become more culturally diverse and as schools are receiving increasing numbers of newcomers escaping zones of conflict and war from parts of Africa, South East Asia, and the Middle East, it is important to re-examine conceptions of intelligence, creativity, and giftedness within this changing cultural context. Too often, education for newcomers can focus on a "deficit" model that emphasizes skills that newcomers may not yet possess, such as fluency in English language skills and an understanding of North American cultural mores. Experiences of racism and discrimination, lowered teacher expectations, and higher rates of poverty make it difficult for youth and adults to achieve their goals. By building upon an asset model of learning that recognizes prior experiences and the unique strengths and talents that newcomers have, the groundwork for transformative learning can be established.

In *Wisdom, Intelligence, and Creativity Synthesized*, Robert Sternberg (2007) defines creativity as "the ability to produce work that is novel (that is, original, unexpected), high in quality and appropriate (that is, useful, meets task contracts)" (p.89). He highlights the importance of examining personal and societal dimensions of creativity and their link to technological innovations, new movements in art, scientific findings, and the development of new social programs. Sternberg states that innovative cultural, artistic, medical, environmental, and scientific dimensions need creativity to flourish. Indeed, when creative and critical thought are interwoven, imagination and

intellect can flourish in positive ways. Personal dimensions of creativity manifest themselves in effective problem-solving skills, divergent thinking, and effectiveness on the job. Qualities such as resilience, risk-taking, motivation, empathy, and flexibility are key emotional dimensions of creativity.

In this first issue of *an International Journal for Talent Development and Creativity*, Robert Sternberg examines the link between ethical behavior and creativity. He posits that a person can be "creative" without being ethical; however, creativity in the absence of factors that contribute to emotional intelligence such as self-awareness, empathy, and valuing others can lead to harmful actions and behaviours. Sternberg explains that ethical reasoning and creativity can be encouraged when learners are presented with case studies and moral dilemmas that would spark divergent thinking processes and problem solving. In ethical reasoning, good intentions, valuing of others, altruism, and taking personal responsibility are paramount. "The greatest protection against ethical failure is *wisdom,*" notes Sternberg. His eight step model of ethical reasoning demonstrates the way that universal core values such as honesty, sincerity, and compassion can lead to a more peaceful and creative world.

In an eloquent discussion, Lene Tanggaard and Vlad Glăveanu write about the importance of creativity with respect to the value that educational systems place on creative expression in schools. While the focus is on the Danish educational system, many of their ideas have relevance to school systems worldwide. The authors distinguish between the "first generation" view of creativity that focuses on innate ability and talent and the "second generation" perspective of creativity that emphasizes the capacity of all individuals to be creative in some way. Implications for teaching and learning are further outlined in their discourse.

John Hoover, Joanne Larson, and Timothy Baker address particular psychological dynamics that can interfere with creativity and talent development among youth. They explore the relationships between bullying and intellectual or artistic gifts among children and youth. Their article addresses the different definitions and discourses of the relevant topic of bullying. While the definitions of bullying vary, Hoover, Larson, and Baker assert that bullying can include both physical and verbal abuse which can erode personal, social, and cognitive/academic effectiveness. Interestingly, the "school climate" can work either to enhance or erode bullying and its effects on children and youth. The overall health and well-being of the bullied individual can suffer. There are lifetime physical and mental repercussions of bullying. This compelling article presents a practical model to understand and to study the psychological, social, and cognitive dynamics of creative, gifted, and talented students who are bullied. Suggestions for social skills intervention are detailed.

Several articles in this issue feature strategies and models that can lead marginalized learners to feel empowered academically, personally, and socially. Joseph Renzulli comments on factors that contribute to the achievement gap between advantaged and low-income students. He is critical of "prescriptive" models of educational change that can disengage and alienate both teachers and students. Institutional barriers often contribute to the erosion of learning. Unmanageable class sizes, limited or non-existent resources, limited approaches to professional development, and a preoccupation with standards testing rather than an engagement in learning are among the obstacles Renzulli refers to in his critique of contemporary education. A new vision of learning and education is needed. Understanding the diversity of our learners and responding with effective teaching and learning strategies, resources, class sizes, approaches to curriculum organization, and learner involvement in meaningful experiential activities can engage students who have been marginalized. Renzulli's *Enrichment Triad Model* proposes a transformative perspective of learning that has the potential to maximize motivation and participation for all students.

Fostering creative educational change is also a central theme in this first issue. With compelling research studies focusing on reducing psychological, situational, and institutional barriers that often prevent students living in "high poverty contexts" from completing their formal education, Eleousa

Polyzoi, Kathi Collis, and Michael Babb provide a transformative and visioning model for encouraging creative educational leadership. The work of these researchers further emphasizes the need for more collaboration among governments, communities, school divisions, and universities to collaborate in fostering change. Michael Fullan's *Educational Change Model* identifies eight "drivers" that are key to promoting innovative educational change. Examples of these catalysts for change include engaging people's moral purpose, building capacity, understanding the change process, and developing cultures for learning. This timely article applies Fullan's model to a Student Success Initiative Project in six urban, rural, and northern schools in Manitoba.

Larry K. Brendtro, Martin Brokenleg, and Steve Van Bockern draw on their *Circle of Courage* model to exemplify the importance of creating a positive model of learning and human capacity development to "reclaim" at-risk youth. They explore traditional First Nations' teachings that encourage a holistic and affirming perspective of diverse learners. The authors emphasize universal values and principles that transcend specific cultures. They identify Stanley Coopersmith's (1967) four foundations of self-esteem that include significance, competence, power, and virtue. Drawing on the pioneering work of developmental theorists and cultural anthropologists, Brendtro, Brokenleg, and Van Bockern argue that if children are raised in "cultures of respect" their innate creative talents can emerge in positive ways. Their valuable insights can provide counsellors and teachers with practical strategies to help "at-risk" children and youth.

Don Ambrose and Valerie Ambrose recognize the important potential of adult learners to maximize their potential and achieve new goals. Too often, adult learners from marginalized backgrounds have been neglected or ignored by traditional educational systems that are focused on the K-grade 12 continuum. However, the new knowledge economy requires individuals to continue learning throughout life. Ambrose and Ambrose first build an awareness of the nature and demands of the 21st century globalized socioeconomic context. Literacy must be conceptualized as lifelong and multidimensional. The knowledge, skills, and abilities that individuals need to adapt to the changes in the 21st century require continuous learning throughout adulthood. Ambrose and Ambrose argue that adult learners could benefit from programs that are individualized, contextualized, and structured in ways that recognize their talents. In contrast, many adult literacy and learning programs continue to be preoccupied with a narrow curriculum, a mechanistic approach to instruction, and uniform approaches to testing that do not acknowledge diversity and multiple ways of knowing. The authors hope that by presenting a dynamic model of adult learning that draws on several disciplines, the aspirations, talents, and skills of adult learners can move them toward self-fulfillment and a realization of their academic and career aspirations. Ambrose and Ambrose reinforce Canadian adult education theorist Paul Belanger's (1996) position that "the question is no longer whether adult learning is needed, and how important it is. The issue today is how to respond to this increasing and diversified demand, how to manage this explosion" (p. 21).

Donald J. Treffinger and Scott G. Isaksen specifically identify why it is important for "at-risk" students to learn and be able to apply *Creative Problem Solving* (CPS). CPS is a framework that includes four components and eight clearly defined and organized stages that can help vulnerable students develop, prioritize, evaluate, integrate, and examine options when solving specific problems. The CPS Model encourages the integration of critical and creative thinking that can be applied across the many curriculum or content areas. Treffinger and Isaksen build an "asset" model of educational change that focuses on teachers being able to identify and build upon the unique strengths of their learners.

The *Amphitheatre Model for Talent Development: Recognizing and Nurturing the Gifts of our Lost Prizes* detailed by Ken W. McCluskey, Donald J. Treffinger, Philip A. Baker, and Kevin Lamoureaux provides a unique synthesis of pertinent ideas and issues with regard to learning barriers and the way teachers, mentors, and counsellors can develop innovative educational programs that recognize the unique talents of all learners. The Amphitheatre model consists of a solid base of five foundations, two of which are alternative learning environments

and diversity and individuality. Strands such as engagement and exploration and technology for learning and doing emerge in the model. Embedded are four required levels of service for effective programming that incorporate expanding learning opportunities for all students at Level 1, for many students at Level 2, for some students at Level 3, and for a few students at Level 4. The model includes in the final dimension six indicators of excellence. These involve appropriate enrichment, independence and self-direction, and personal growth and social development. Positive teacher expectations, effective mentoring programs that include career awareness, the development of short- and long- term goals, and creative problem solving strategies are ways to "re-engage" learners who may fall "through the cracks" of educational systems that alienate marginalized youth. Earlier McCluskey (2005) wrote: "Abilities in all areas must be recognized and developed: Educators should strive to be talent scouts, developing and nurturing potential in as many areas as possible….If we take a positive approach and view the world not as it is, but as it should be, sometimes things get better"(p.35).

Ira Udow, Heather Syme-Anderson, and Karen Magro discuss the value of innovative programs like The United Nations Educational, Scientific, and Cultural Organization (UNESCO) Associated Schools Network. This is an international organization committed to fostering critical thinking about key "pillars of learning" that have personal and global impact. In a global context that is filled with conflict, unbridled capitalism, and environmental devastation, the UNESCO Schools Projects encourage students to develop creative programs that work toward achieving planetary sustainability, human rights, intercultural competence, and global citizenship. Several innovative projects in Manitoba Schools are featured in this issue. Helping students link local and global issues applies to many dimensions of creativity.

In *A Case Study of a Creative Personality*, Hava Vidergor first presents multiple perspectives on defining creativity that highlight the complex interaction of personal qualities, biographical events, and cognitive characteristics. She notes that creative thinking integrates logic and imagination. Drawing on her interviews with the noted psychotherapist and researcher, Dr. Erika Landau, Vidergor analyzes key marker events and personality traits that enable Dr. Landau to surmount adversity with resilience, openness to new possibilities, and hope. Vidergor describes how Landau developed, from her own life experiences, an innovative approach for educating gifted and talented children. The ideas from this article can provide teachers and researchers with valuable insights that can build creativity among all our learners.

We also have included a section on Exemplary Educational Programs. Located in Winnipeg, Manitoba, Canada, the John G. Stewart School (JGS) is an alternative school that addresses the needs and challenges of at-risk youth in ways that encourage personal and academic development. Kevin MacKay comments on the value of courses like dance, meditation, and art complementing more academic courses at JGS. The Culinary Arts Program has been particularly successful. Rick Smith and Alan Wiebe highlight the value of alternative mentoring programs like the Youth Justice Intake Initiative (YJEII), a collaborative project designed to enhance student learning at the Manitoba Youth Centre (MYC). This program provides tutoring and mentoring for incarcerated youth who are making a transition back into their communities and/or employment placements. Pre-service teachers work as mentors—assisting learners in developing personal, social, and academic skills. Learning portfolios are used to showcase the skills and abilities of each student.

Based in Stonewall, Manitoba, The Infinity Program (TIP) is a divisional off-campus alternative program that helps learners who face personal and situational barriers that impede their learning and their ability to succeed in life. Factors such as substance abuse, family fragmentation, and emotional problems (e.g., anxiety and depression) cause youth to become alienated and more at risk for leaving school early. Counselling and mentoring are integrated with academic supports. Individualized and specialized programs help disengaged learners feel a greater sense of connection and motivation. Experiential and project-based learning encourage individuals to explore more positive experiences, lifestyles, and behaviors.

Finally, *On the Shoulders of Giants* includes tributes about two outstanding leaders in gifted and enrichment education: John Fedlhusen and Ruth Noller. Their pioneering work will continue to enrich and inspire educators internationally. It is my hope that these ideas, theories, models, and case studies of creativity provide you with the opportunity to reflect and share your insights as you develop new teaching and research initiatives. I welcome your articles, book reviews, and tributes for future issues of this journal**.**

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Creativity, Ethics, and Society

Robert J. Sternberg

Abstract

In this article, I consider relationships between creativity and ethics, and how they apply in society. I argue that ethical reasoning requires creative thinking at various junctures. I present an 8-step model of ethical reasoning, delineating how creativity can be applied at various steps. Finally, I draw conclusions about how the model can be applied in instruction.

***Keywords*:** Creativity; ethics and society; ethical reasoning; innovative teaching; psychology; moral development.

Creativity is the generation of ideas that are novel and good or useful in some way. Ethics is a set of rules of moral conduct. Creativity and ethics are often viewed as having nothing to do with each other. One can be creative without being ethical (e.g., dictators who find ingenious ways to abuse their populations to stay in power); and one can be ethical without being creative (e.g., people who do exactly what they are told by their religious mentors without thinking about why they are doing it). To get ahead in today's world—at least in many occupations—one needs to be creative. That is, one needs to have ideas others do not have and create new markets for new services and products other individuals or companies have not yet not envisioned. In order to stay ahead, one needs to be ethical. The world has a long list of people who have risen to the top and then fallen because they lacked a sense of ethics and ended up, at best, fallen off their pedestals, and at worst, in prison.

The quintessential recent example of creativity in the total absence of ethics is Bernard Madoff, now in prison for the rest of his life. Year after year, he was able creatively to fool people into believing that he was making money for them. As is so often true of creative but unethical people who rise to the top, he was found out and disgraced, and lost a son to suicide in the process. The problem is that, the higher you rise, the more your behavior is scrutinized and the more likely you are, therefore, to suffer a loss of reputation if you have acted in unethical ways.

Sometimes, to behave ethically itself requires creativity. Situations can be constructed in which the expectation is that one will follow an unethical crowd or be made to regret, in one way or another, that one did not. Such situations have been studied in psychological research.

Two key psychological studies involved placing participants in ethically challenging situations. The studies had in common that they did not directly reveal to the participants that the situations would be ethically challenging. One set of experiments was originally conducted by Yale psychologist Stanley Milgram during the 1960s (see Milgram, 2010). Milgram and his colleagues asked participants to deliver electric shocks to "learners" in what were alleged to be verbal-learning experiments. Unbeknownst to the participants, the shocks were imaginary and were never delivered. The second study, conducted in 1971 by Stanford psychologist Philip Zimbardo (see Zimbardo, 2008), randomly divided subjects into the roles of guards and prisoners. The "guards" were to watch over the "prisoners." Within a brief period of time, the guards started acting like sadistic prison guards, and the prisoners started acting like cowed prisoners.

The behavior of the participants was ethically challenging as well as challenged. The studies placed the participants in difficult ethical situations and most participants did not acquit themselves particularly well. The studies themselves were ethically challenged because it was impossible fully to debrief participants. It is not enough simply to tell participants that they were subjects in experiments and so as a result their ethically challenged behavior was really all right. The participants had to go through their lives knowing that, given the opportunity, some of them acted in ways that by any reasonable standard were ethically unacceptable and potentially dangerous to others.

It is ironic that two of the most creative and widely cited studies ever done in psychology both were ethically challenging for the experimenters as well as for the participants. Milgram did not and could not debrief his participants properly: No matter what they were told, they could and probably would go through their lives knowing that, had the experiment not involved a deception, they might have killed the "learner" in the experiment. Zimbardo could not properly seek informed consent, because he did not realize how brutal the "guards" in his study would be toward the "prisoners" and so he could not warn participants of what might and, in fact, did happen. If either of these studies, at least as done in their original form, were submitted to an institutional review board today, it is extremely unlikely either would be approved. The studies show that creativity and ethics do not necessarily go together, and often do not. One easily can be creative without being ethical.

In this essay, I will concentrate on the opposite side of this argument: that in daily experience, it is hard (although certainly not impossible) to be ethical without being creative. In real life, ethical decisions often require creative thinking.

Creativity and ethics often do not automatically go together. Creativity has a dark side (see Cropley, Cropley, Kaufman, & Runco, 2010; Sternberg, 2010a), as revealed by Adolph Hitler and Josef Stalin. Merely asserting the importance of ethical behavior also can have a dark side, as revealed by hypocritical television preachers such as Jim Bakker, who was convicted of fraud in 1989. In this essay, I seek explicitly to address the creative aspects of ethical reasoning. The basic thesis is that ethical reasoning is difficult in part because it often requires a level of creative thinking that the individual doing the ethical reasoning lacks. More centrally, both ethical action and creative action often require people to defy the crowd. When we fail to teach our children to think creatively, we may therefore be inadvertently may be ill-preparing them for a life in which they will need to be ethical.

Not all ethical challenges are as demanding as those in the Milgram and Zimbardo studies. Yet people act unethically in many less challenging situations. Why? Two psychological researchers sought to answer this question.

The Bystander Effect

Latané and Darley (1970) were interested in understanding the kinds of situations in which bystanders observing individuals in trouble would intervene. They demonstrated that, contrary to the expectations of most people, bystanders intervene to help someone in trouble only under very limited circumstances. For example, if bystanders think that someone else might intervene, the bystanders tend to stay out of the situation. Consider, as an example, someone whose car has broken down and who, as a result, finds him or herself stranded on a road. Bystanders are more likely to intervene if the motorist is stranded on a lonely country road than if the motorist is stuck on a major highway with hundreds of cars speeding by. Under the latter circumstance, people leave it to (often imaginary) others to help.

Latané and Darley even showed that students of divinity who were about to deliver a lecture on the parable of *The Good Samaritan* were no more likely than other bystanders to help a person in distress who was in need of—a good Samaritan! If the student passed an individual on the ground and obviously in distress, the student was more likely to help if he or she was not rushed, but less likely to help if there was little time before the lecture was due to begin.

A number of investigators have queried whether there might be some inner "intelligence" or ethical ability that is dispositional in nature. Gardner (1999) wrestled with the question of whether there is some kind of existential or even spiritual intelligence that guides people through challenging life dilemmas. In the end, he concluded that there is no distinct "spiritual intelligence." Coles (1998), on the other hand, argued for a moral intelligence in children as well as adults. Both Jean Piaget (1932) and Lawrence Kohlberg (1984) believed that children and adolescents pass through successive stages of moral reasoning. In other words, as children grow older, they advance through successive levels of sophistication in dealing with moral questions. Some individuals will advance faster and further than others. As a result, adults will demonstrate individual differences in achieved levels of moral development. Harkness, Edwards, and Super (1981), however, have questioned whether the stages posed by Kohlberg can be applied to culturally diverse groups of individuals. This is a

central question that remains to this day unresolved.

In contrast to the Kohlberg, Gilligan (1982) argued that Kohlberg's stage model overly emphasizes development of principles of universal justice over a psychology of caring and compassion. In particular, she proposed that men are more attuned to issues of universal justice and women to issues of caring and compassion. There is no strong evidence for her assertion.

Some believe that ethical reasoning has a large nonrational component (e.g., Rogerson, Gottlieb, Handelsman, Knapp, & Younggren, 2011). However, I claim here that ethical reasoning can be largely rational, but usually is not because people fail to follow through on the complete set of steps needed to reach an ethical conclusion. Moreover, they often fail to follow through because they lack sufficient creative imagination to reach such a conclusion.

A Model of Ethical Reasoning and its Relation to Creativity

Drawing in part upon the Latané-Darley (1970) model of bystander intervention, I have constructed a stepwise model of ethical behavior that applies to a variety of ethical problems. The model specifies the specific skills students and others need to reason and then behave ethically.

The basic premise of the model is that it is far harder to behave ethically than one would expect simply on the basis of what we learn from our parents, from school, and from our religious training (Sternberg, 2009a, 2009b, 2009c). To intervene in an ethically challenging situation, individuals must go through a series of steps. Unless all of the steps are completed, the individuals are not likely to behave in an ethical way, regardless of the amount of training they have received in ethics, and regardless of their levels of other types of skills. The example I will draw on most is genocides, such as in Rwanda (1994) and Darfur (2003) , where there is a potential for outside intervention but the intervention in fact never happens, or happens only to a minor extent. However, the example need not be so dramatic: People who become aware of unethical behavior in their everyday work settings often do not report it. The case of the disgraced former football coach Jerry Sandusky at Penn State University (2012) exemplifies this point. When officials were aware of a child molester among them, most did nothing for many years to stop him.

According to the proposed model, enacting ethical behavior is much harder than it would appear to be because it involves multiple, largely sequential, steps. To behave ethically, the individual has to:

1. *Recognize that there is an event to which to react;*
2. *Define the event as having an ethical dimension;*
3. *Decide that the ethical dimension is of sufficient significance to merit an ethics-guided response;*
4. *Take responsibility for generating an ethical solution to the problem;*
5. *Figure out what abstract ethical rule(s) might apply to the problem;*
6. *Decide how these abstract ethical rules actually apply to the problem so as to suggest a concrete solution;*
7. *Prepare for possible repercussions of having acted in what one considers an ethical manner; and*
8. *Act.*

Consider each step in turn:

1. Recognize that there is an event to which to react

In cases where there has been an ethical transgression, the transgressors often go out of their way to hide the fact that there is even an event to which to react. For example, many countries hide the deplorable conditions of their political prisoners. During World War II, The Nazis hid the existence of death camps and referred to Jews, Roma, and other peoples merely as being "resettled." In 1994, The Rwandan government tried to cover up the massacre of the Tutsis and also of those Hutus who were perceived as sympathetic to the Tutsis. Jerry Sandusky at Penn State went out of his way to act like a normal guy with a special caring and fondness for children. In fact, he was mercilessly abusing children, taking advantage of his position as a coach to lure children to him. The goal of the transgressors is to obscure the fact that anything is going on that is even worth anyone's attention.

The situation as described by the offending agent may be different from the actual situation. Put another way, one has to be creative in contemplating possibilities other than the one presented by those who wish to cover up their transgressions. One has to recognize the obfuscation that transgressors try to create.

When some people hear their political, educational, or religious leaders talk, they typically do not believe there is any reason to question what they hear. After all, they are listening to authority figures. In this way, leaders, and especially cynical and corrupt leaders, may lead their followers to accept corruption and even disappearances as nonevents. It requires an extra creative step to consider other possibilities, and many people will not decide for creativity in this and other instances (see Sternberg, 2000). They do not want to think too deeply about the situations, because it is too painful to contemplate what really may be happening.

2. Define the event as having an ethical dimension

Given that one acknowledges that there is a situation to which to pay attention, one still needs to define the situation as having an ethical dimension. Given that perpetrators will go out of their way to define the situation otherwise—as a nonevent, a civil war, an internal conflict that is no one else's business, or a deep love for children—one must actually redefine the situation to realize that an ethical component is involved. Redefinition of problem situations is one of the keys to creativity (Sternberg, 2000, 2003). Again, a creative component is central to ethical reasoning. One cannot accept the perpetrator's definition of the situation but rather has to redefine it—the essence of creativity.

In the case of the Nazi genocide, the campaign against Jews was defined as a justified campaign against an internal enemy bent upon subversion of the state (Sternberg & Sternberg, 2008). It was of course not defined as genocide by the perpetrators. To this day, the Turkish government defines the Armenian genocide as a conflict for which both sides must share the blame (Sternberg & Sternberg, 2008). In Rwanda, the government defined the genocide as a fight against invading aggressors who came from outside the country and did not belong there in the first place. And Jerry Sandusky characterized his behavior toward children as showing care for them, not unacceptable lust. Redefining a situation requires creative effort, and most people simply do not decide for creativity (Sternberg & Lubart, 1995).

3. Decide that the ethical dimension is significant

If one observes a driver going one mile per hour over the speed limit on a highway, one is unlikely to become perturbed about the unethical behavior of the driver, especially if the driver is oneself. Genocide is a far cry from driving one mile per hour over the speed limit. And yet, if one is being told by cynical, dishonest leaders that the events that are transpiring are the unfortunate kinds of events that happen in all countries—didn't America have its own Civil War?—then it may not occur to people that the event is much more serious than its perpetrators are alleging it to be. Again, if people are told that events have no significant ethical dimension—that they are routine events—then it takes an additional creative step on an individual's part to imagine otherwise: They have to think about how and why what they have been told is false. For example, if I tell you that the campaign against Tutsis in Rwanda was not a genocide but rather a Civil War, you have to do the extra step either of drawing upon your existing knowledge or acquiring new knowledge to ascertain that my statement is not true. When Jerry Sandusky showered with young children, he tried to convey to others that it simply was of no consequence; in fact, the showering was only a symptom of a much greater problem of child abuse.

4. Take personal responsibility for generating an ethical solution to the problem

People may allow leaders to commit wretched acts, including genocide, because they figure it is the leaders' responsibility to determine the ethical dimensions of their actions. Isn't that why they are leaders in the first place? Or people may assume that the leaders, especially if they are religious leaders, are in a uniquely good position to determine what is ethical. If a religious leader encourages someone to become a suicide bomber or to commit genocide, that "someone" may feel that being

such a bomber must be ethical. Why else would a religious leader have suggested it? When Jerry Sandusky at Penn State misbehaved, no one who knew about it wanted to be the one to take responsibility to do something about the misbehavior.

Taking personal responsibility means redefining a situation as involving oneself in some way, not just others. Since it is so much easier to view an ethical dilemma as someone else's problem, many people do not make the creative step.

5. Figure out what abstract ethical rule(s) might apply to the problem

In this step, we have to think about various ethical rules we may have in our minds, and examine which one best seems to apply to the given situation. This part is analytical. However, when there is not an exact fit, we must creatively mold what we know to the current situation. Most of us have learned, in one way or another, ethical rules that we are supposed to apply to our lives. For example, we are supposed to be honest. But who among us can say he or she has not lied at some time, perhaps with the excuse that we were protecting someone else's feelings? By doing so, we insulate ourselves from the effects of our behavior. Perhaps, we can argue, the principle that we should not hurt someone else's feelings takes precedence over not lying. Of course, as the lies grow larger, we can continue to use the same excuse.

When leaders encourage genocide, they clearly violate one of the Ten Commandments, namely, "Thou shalt not murder." This is why the killings, to the extent they are known, are posed by cynical leaders as "justifiable executions" rather than as murders. The individual must analyze the situation carefully to realize whether the term "murder" applies. In the Sandusky case, those involved got bogged down in the question of what the rule is for notifying the police. No one did so until much too late. This step is primarily analytical rather than creative.

6. Decide how these abstract ethical rules actually apply to the problem so as to suggest a concrete solution

This kind of translation is, I believe, nontrivial. In our work on practical intelligence, some of which was summarized in Sternberg et al. (2000), we found that there is, at best, a modest correlation between the more academic and abstract aspects of intelligence and its more practical and concrete aspects. Both aspects, though, predicted behavior in everyday life. People may have skills that shine brightly in a classroom, but that they are unable to translate into real-world consequential behavior. This step, as applied to recognizing that murder is afoot in a genocide, is primarily analytical. In the Sandusky case, the president of the university and some of his colleagues misapplied the rules of ethics: They argued they were being humane by not destroying his life. Unfortunately, their inaction resulted in the lives of many children being destroyed.

7. Prepare for possible repercussions of having acted in what one considers an ethical manner

When Harry Markopolos (see Markopolos, 2011) pointed out to regulators that Bernard Madoff's investment returns had to be fraudulent, no one wanted to listen. It was Markopolos who was branded as a problem, not Madoff. In general, when people blow the whistle, they need to be prepared for their bona fides to be questioned, not necessarily those of the person on whom they blew the whistle (as Marianne Gingrich discovered, when she was branded a liar by her former husband, upon her revelation that her ex-husband wanted an open marriage when she discovered that he was having an affair, later resulting in divorce).

People think creatively when they imagine the possible repercussions of acting ethically—will they lose their friends, will they lose their job, will they lose their reputation? During the Enron scandal in 2002, whistleblower Sherron Watkins lost all three. Relatedly, when reports first came in of Nazi genocide, there was a general reaction of disbelief—how could such atrocities possibly be happening? Whistleblowers need to imagine all the things that can go wrong, but they also need to imagine what could go right and how they can maximize the chances of things going right. Such imagination requires creative thinking.

In the Jerry Sandusky case, administrators were afraid that making the case public would bring down the reputation of Penn State. They were right. What they failed to realize is that not reporting the behavior publicly would do far greater harm to the university's reputation.

8. Act

In ethical reasoning as in creativity, there may be a large gap between thought and action. Both often involve defying the crowd and hence even people who believe a certain course of action to be correct may not follow through on it.

Sometimes, the problem is not that other people seem oblivious to the ethical implications of the situation, but that they actively encourage you to behave in ways you define as unethical. In the Rwandan genocides, Hutus were encouraged to hate Tutsis and to kill them, even if they were within their own family (see discussion in Sternberg & Sternberg, 2008). Those who were not willing to participate in the massacres risked becoming victims themselves (Gourevitch, 1998). The same applied in Hitler's Germany. Those who tried to save Jews from concentration camps themselves risked going to such camps (Totten, Parsons, & Charny, 2004). It is easier to follow the crowd than to act creatively or, in many instances, ethically. This is why corruption is so common throughout the world. Even when people know of it, they often re-elect corrupt leaders, allowing the corruption to persist.

Teaching for Ethical Reasoning

We need to teach for ethical reasoning (Sternberg, 2010b). In recent years, we have seen the end of Bear Stearns, Lehman Brothers, Merrill Lynch, and numerous other financial enterprises. Few people reached the depths of Bernard Madoff, the epitome of unethical behavior on Wall Street, who sits in a prison cell. The irony is that firms like Bear Stearns and Lehman Brothers hired only those they considered to be the best and the brightest. They recruited from the very top colleges and universities in the nation. It appears that whatever qualities one needs to be accepted by these institutions and to be graduated from them with distinction are not the qualities that would have led to success in the firms. In large part, university success reflects a student's ability to absorb a knowledge base and to reason analytically with it. Success in business and in life require creative and ethical reasoning, none of which are at a premium in university life or in the standardized tests now used to admit students to universities. In a nutshell, we are selecting for and developing qualities that, while important, are woefully incomplete when it comes to success in the world.

The proposed model applies not only to analyzing others but to evaluating one's own ethical reasoning. When confronted with a situation having a potential ethical dimension, students can learn literally to go through the steps of the model and ask how they apply to a given situation.

Effective teaching of ethical reasoning involves presenting case studies, but it is important that students as well generate their own case studies from their own experience, and then apply the steps of the model to their own problems. They need to be actively involved in seeing how the steps of the model apply to their own individual problems. Most importantly, they need to think creatively as they use the model of ethical reasoning in thinking about ways of defining and redefining ethical dilemmas that enable them to get through the various steps.

As an example, suppose you think you see your roommate copy text without attribution from a document on the Internet into a paper he is writing. First you have to pay attention to the situation rather than simply ignore it. Second you have to define it as an ethical situation. Some students today would view it as something that they themselves do and that is not at all bothersome. Third you have to decide it is important enough to pay attention to. Maybe you see an ethical aspect to the situation, but do not see it as a big deal. Fourth you have to decide it is personally relevant. Perhaps you believe instead it is none of your business. Fifth you have to decide what ethical principle applies. Is this an example of plagiarism? Sixth you have to determine how to apply the principle to the situation. Is copying from the Internet relevant to plagiarism? How much text has to be copied before it is plagiarism? Seventh you have to decide whether to say anything, thereby risking the wrath of your roommate and perhaps losing a friend. Eighth you have to decide to act rather than just leave the situation alone.

As a university administrator, I, like other administrators, have discovered that students' ethical skills often are not up to the level of their ability-test scores. Colleges run the full gamut of unethical behavior on the part of students: drunken rampages; cheating on tests; lying about reasons for papers turned in late; attacks by students on other students; and, questionable behavior on the athletic field. Faculty members, of course, are not immune either: Few academic administrators probably leave their jobs without having had to deal with at least some cases of academic or other misconduct on the part of faculty. In hearing excuses students invent for work not done, I often have wished that students and faculty alike would apply their creativity to ethical rather than unethical uses.

In speaking of the challenges of leadership, and particularly of leaders who become foolish, I have spoken of the risk of ethical disengagement (Sternberg, 2008). Ethical disengagement (based on Bandura, 1999) is the dissociation of oneself from ethical values. One may believe that ethical values should apply to the actions of others, but one becomes disengaged from them as they apply to oneself. One may believe that one is above or beyond ethics, or simply not see its relevance to one's own life. Unless one seeks creatively to redefine the way one sees oneself, one sees oneself as ethical when in fact one has entered into a period of downward ethical drift (Sternberg, in 2012).

Schools should teach ethical reasoning; they should not necessarily teach ethics. There is a difference. Ethics is a set of principles for what constitutes right and wrong behavior. These principles are generally taught in the home or through religious training in a special school or through learning in the course of one's life. It would be challenging to teach ethics in a secular school, because different religious and other groups have somewhat different ideas about what is right and wrong. There are, however, core values that are common to almost all these religions and ethical systems that schools do teach and reinforce, for example, reciprocity (the golden rule), honesty, sincerity, and compassion in the face of human suffering.

Ethical reasoning is how to think about issues of right or wrong. Processes of reasoning can be taught, and the school is an appropriate place to teach these processes. The way to teach these processes is by teaching students the model, and having them apply it to case studies. The reason is that, although parents and religious schools may teach ethics, they do not always teach ethical reasoning, or at least, do so with great success. They may see their job as teaching right and wrong, but not how to reason with ethical principles. Moreover, they may not do as good a job of it as we would hope.

Is there any evidence that ethical reasoning can be taught with success? There have been successful endeavors with students of various ages. Paul (Paul & Elder, 2005), of the Foundation for Critical Thinking, has shown how principles of critical thinking can be applied specifically to ethical reasoning in young people. On the present view, for the instruction to be fully successful, teachers also would have to teach for creative thinking. DeHaan and his colleagues at Emory University have shown that it is possible to teach ethical reasoning successfully to high school students (DeHaan & Narayan, 2007). Myser (1995) of the University of Newcastle has shown ways specifically of teaching ethics to medical students. Weber (1993) of Marquette University found that teaching ethical awareness and reasoning to business-school students can improve from courses aimed at these topics, although the improvements are often short-term. Poneman ("First Center to Study Accounting Ethics Opens," 2010) and Jordan (2007) both found that as leaders ascend the hierarchy in their businesses, their tendency to define situations in ethical terms actually seems to decrease.

Ultimately, the greatest protection against ethical failure is wisdom, which I define as using one's knowledge and skills to help achieve a common good, over the long as well as the short term, through the infusion of positive ethical values. In this way, one recognizes that, in the end, people benefit most when they act for the common good. Wisdom is the ultimate lifeboat (Sternberg, 2005; Sternberg, Jarvin, & Grigorenko, 2009; Sternberg & Jordan, 2005; Sternberg, Reznitskaya, & Jarvin, 2007).

Conclusion

Deciding how to confront ethical challenges is one of the biggest challenges we will face in our lives (Sternberg, 2011a, 2011b). But when citizens fail and when leaders fail, it is not usually because they are not smart or knowledgeable enough. It rather is because they lack the creativity and ethical reasoning they need to get their businesses and their lives back on track.

Creativity does not require ethical reasoning. But ethical reasoning typically involves creativity. If we do not encourage our children to think creatively, we will not transmit to them the skills to think ethically. If we teach them only to think creatively and not to act ethically, we have no reason to believe that they will use their creativity in an ethical manner. History, indeed, often suggests otherwise.

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Creativity in Children's Lives
An Unconditional Good for Whom?

Lene Tanggaard, Vlad Glăveanu

Abstract

This article addresses the question of whether and how creativity is important in children's lives in relation to creative expression in school, with a focus on the Danish educational system. It starts by outlining different conceptions of creativity: the first generation view considers it largely innate and specific for a selected few; the second generation perspective 'democratizes' creativity and emphasizes the fact that we can both teach and learn it. On the background of this latter approach, we analyze the common claim that schools can 'kill' creativity and the implications of this assertion. This leads to a consideration of the implicit and explicit epistemological and ontological assumptions behind creativity theories and the realization that adopting a 'romantic' view of what it means to create can actually be counterproductive in a school setting, at least for some students. An invitation to engage with creativity critically and reflectively in education is offered towards the end.

***Keywords*:** Perspectives on creativity; teaching roles and responsibility; creativity and children; Danish educational system; educational innovation.

> *Creativity as a term and concept, is one of the most prized commodities of capitalism, just as it is one of the most cherished benefits of democracy* (Rob Pope, 2005, p. 29)

Creativity is one of the most debated topics today in science and in society. While psychological research into creativity increased considerably in the past decades (Hennessey & Amabile, 2010), there is still much to be understood in relation to the nature of creative expression and our possibilities to assess and foster it. At a societal level, these concerns are reflected in the explicit, collective effort to find new ways of using creativity as a resource for growth and social transformation. For this purpose, for example, the European Union declared 2009 as the European Year of Creativity and Innovation.

One of the greatest concerns for governments and scientists alike has always been related to creativity in schools and the key question of how we can help children develop their creativity within present day 'cultures of conformity' (Sternberg & Lubart, 1995). This is all the more important in the context of current worries over the negative impact school environments can have on creativity (Runco, 2003; Saracho, 2012). Creativity is also one of the top priorities of the educational system in Denmark, our focus in this paper. A recent chronicle in Politiken (one of Denmark's biggest daily newspapers) stated for instance that "Kreativitet skal på skoleskemaet" [Creativity needs to be on the agenda in school] (Sørensen & Austring, 2012) and the main point was that teaching students music, sports, dance, artwork, handicraft, and design will not only develop skills transferable to the other more 'traditional' subjects, i.e. language and mathematics, but also be of more general importance, enhancing the overall personal and social education and thus adding to the "buildung" (general education) of the child.

The fact that there is a need to write such a chronicle is interesting; on the one hand, it points to creativity as something celebrated and talked about in the current society but, on the other hand, it might also be a sign of the poor conditions for creativity to actually thrive in the school system. In Denmark, while creativity is celebrated in the public sphere, as reflected in chronicles and political statements, school curricula has an increased focus on more functional skills like reading, writing, and mathematics (Kamp, 2010). This is partially a response to the discontentment with recent Program for International Student Assessment (PISA)-measurements placing Danish children in the middle ranges compared with other Western countries and Asia. While research related to the possible relation between functional skills and creativity (Cropley, 2005) has been extensive within creativity studies,

in this paper we will raise the more fundamental question of whether creativity is always to be regarded as an unconditional good in children's lives and, importantly, for whom? In light of the introductory quotation from Rob Pope, highlighting creativity as a good in people's lives, made possible by increased participation in societies characterized by democratic citizenship and capitalism, it is indeed necessary to treat the phenomena of creativity both constructively, critically, and reflectively. The key question here is undeniably what happens to creativity, and to children, when we make explicit the intention to find, foster, and develop creativity in children's lives – in school and beyond.

1. Children's creativity

Most people would immediately, if asked, say that they regard children as creative beings. In her doctoral dissertation from 2008, the Swedish creativity researcher, Cecilia Levin, states that most people (researchers included) think that children are most creative until they reach 10 years of age; thereafter, school and adults are typically blamed for smothering creativity in the attempt to teach children to answer questions correctly rather than discovering and creating new ones. In light of this, Glăveanu (2011) writes that the Western conception of creativity, and not least the conception of children's creativity, is often romantic. We regard the playing, dancing, singing, and drawing child as the utmost and most precise sign of creativity in general, in a Western cultural context. According to Howard Gardner (1982), it is "our romantic tradition, remolded in terms of a modernist ethos, [that] has made us responsive to the notion of the child as artist, and the child in every artist". (p. 92)

That is, some scientific understandings of creativity, including modern-day ones, support the unquestionable belief in children's' creativity or artistic talent. The counter-argument is formulated in light of research results indicating that children's creativity is not simply "there", but needs to be recognized, cultivated, and trained to lead to eventual creativity in the context of the demands of a future adult life; children's creativity is maybe only the first of many steps in their lives. How are we to conceive of this possible, currently changing conception of creativity moving away or sideways with a more romantic conception? What do these changes mean in relation to our idea of creativity among children? Ultimately, how are creative dimensions to be identified and fostered?

1.1. From first to second generation creativity

Has creativity become 'open' and available to everybody as the above section might indicate? Some researchers, and politicians and managers alike, currently point to the fact that creativity, as well as human imagination and fantasy, is vital for developing new products, new technologies, and new and sustainable solutions to global, societal, and economic challenges in an increasing open and globalized knowledge-based, creative world economy (Peters, 2010). This belief is indeed a requirement for opening up the possibility of becoming creative to many more than the selected few within specific domains of life. Definitely many researchers have contributed to loosening the close and exclusive connection between creativity and art or design by arguing that creativity can be found within many other fields, such as architecture and literature. They argue that creativity can be taught and learned and that creativity is much more collectively achieved than hitherto considered in a Western context (Craft, 2005; Glăveanu, 2010, 2011; McWilliam, Dawson & Pei-ling Tan, 2011). In the words of Csikszentmihalyi, "Creativity is no longer a luxury for the few, but a necessity for all" (2006, p. xviii). One could say that we are moving from a first generation to a second generation conception of creativity challenging the exclusive, romantic conception.

According to McWilliam (2011), there is globally on the work market, an increased tendency to recognize and seek creative and relational capabilities rather than more restrictive and functional, instrumental skills. From seeing creativity in a romantic key, as largely individual and inborn, many now conceive of creativity as pluralistic, manifold, and as something we learn while living. This second generation conception of creativity has been growing for the last 20 years, and it does suggest that the schools and institutions (and families) in which children spend their lives can actually do something to promote the much sought after creativity.

Rather than considering creativity as inborn and only available for a few, carefully selected and exceptionally gifted talents, a second generation conception would rather look for the possible

interplay between a child's disposition or signs of creativity and the carefully, designed, stimulating environment promoting creativity. Children can indeed have many different dispositions to act creativity. For example, as evidenced by Howard Gardner's research on multiple intelligences (1993), some children are extremely good with words, others with using their bodies in sports, and still others with dancing, singing, using their imagination, playing with others, and creating events or engaging in arts and painting. For some children these different abilities cross different domains. Moreover, if children live in a more simulating environment, with fewer barriers blocking their development, their intrinsic ability to act creatively within their respective fields of mastery will eventually thrive. In this view creativity is to be thought of as a general human capacity rather than as something exclusively connected with the arts, even if arts may still be, for good reasons, the archetype of creativity. That is: all people can be creative to achieve a more fulfilling life, but barriers stand in the way. Supporting the above pluralistic and domain-specific conception of creativity, a literature review concerning texts on creativity and innovation within the EU has suggested a distinction between creative learning and innovative teaching, and pointed to the fact that innovative teachers are required to help students develop their creative abilities and engage in creative learning (Ferrari, Romina & Punie, 2009), a distinction which is also supported by empirical studies in a Danish context (Tanggaard, 2008; 2010; 2011a).

2. Where do we go from here?

There are at least two interesting tendencies concerning creativity in children's lives that need further reflection. One tendency is for the discourse on creativity to act as a kind of counter-culture in an age where functional, instrumental skills are accounted for and tested to a higher extent than ever in schools. As seen in the above, we tend to celebrate creativity in the EU and elsewhere, but it might be so because we actually do discourage it along the way. The other aspect to think about is that literature and research on creativity seems to point to particular conceptions of what it means to be human or what "buildung" (general education) and good education consist of and this does have significant implications for our understandings of children and youth. Overall, creativity appears as good, something to care for and develop in children, something that control societies, like bulldozers, can drive over and 'flatten'. As follows, an elaboration of these two tendencies in light of our own research experiences regarding creativity is presented.

2.1. Creativity as counter-culture

One of the authors of the present paper recently conducted an interview-study concerning the conceptions of creativity among school teachers in Denmark (Tanggaard, 2010). It was very clear from analyzing the interviews that teachers were worried about the increased weight placed on the control of pupils, on standard, national tests, and the various accountability measures set in place to compare the performance of schools. They saw this as lowering their motivation to experiment with innovative teaching practices. These teachers feared the likely consequences of innovation when knowing that manual-based, "teaching to the test" techniques would make pupils score higher on tests. If teachers, on the other hand, spent too much time experimenting, not knowing the exact results their actions can have on learning, they would risk being blamed by parents and the school principal for not achieving appropriate results. Even if they believed in the beneficial effect of innovative teaching practices in relation to the development of pupils' skills, they felt less motivation towards being creative in their teaching.

Another tendency in the interviews was for teachers to recognize the creativity of learners who try to avoid school-work or homework. They pointed to the most unorthodox behavior and unexpected attitudes among their pupils as a result of creativity. Viewed in light of other results in this area, these observations are recurrent. In a study conducted by Andiliou & Murphy (2010), teachers say that they would like to promote creativity, but they feel that greater political ambitions and goals are contributing to hinder this. However, it seems that the difficulties to develop creativity in schools are what is mostly touched upon in the literature concerning creativity in school. Levin (2010) is cited for her concern about the lack of ability among school actors to recognize and develop children's creativity. According to Levin, many teachers respond when asked about their opinion concerning creativity that they would like to see more creativity in their classes, but they find it

hard in practice to actually include and to find the appropriate space and room for the most creative children (Karwowski, 2010). There is, as such, a disconnection between intention and behavior. Creative children are potentially seen as being day-dreamers, not always concentrating on the given task and being reluctant to follow the proposals put forward by teachers in class. Indeed, creativity is often associated with stubbornness and non-conformism, and it is seldom the case that teachers actually celebrate behaviors associated with this (Sternberg & Lubert, 1995; Sawyer, 2012).

Turning towards research on creativity among recognized creative actors in Western societies, many of them report not having liked school, dropping out of high school or having been taught at home (Csikszentmihalyi, 1996; Tanggaard & Stadil, 2012). So even if we are used to feeling acknowledged if somebody praises us for our creativity, there are likely undercurrents of counter-culture connected to the phenomena of and discourse about creativity as it is used and practiced in everyday life. This might be the reason why some people prefer to talk about innovation rather than creativity. However, it is indeed a fact that many people who eventually make a living from their own creativity do not always feel that school contributed to this, but does this indicate that schools need to change? Or is it the existing structures of school that actually invite these people into a creative life trajectory? One way to address these questions is to look more closely at the conception of human life celebrated, more or less explicitly, through the current optimism concerning creativity.

2.2. Creativity and conceptions of human life

In order to further our critical study of dominant creativity discourses, we need to study more carefully the implicit idea of human life celebrated within them. Sawyer (2012) claims that early studies on creativity had an obvious talent focus. There was an explicit interest in finding the true, creative talents and finding ways in which to care for their flourishing. As pointed out by various sources, there is thus a remarkable similarity between themes and topics in the 'genius' research from the 19th century and contemporary 'creativity' research (Albert, 1969; Becker, 1995: Runco & Albert, 2010). The current interest in creativity differs from earlier approaches to 'genius' in one important respect, however. Creativity is today thought of as indispensable for the future prosperity of the knowledge economies. Creative skills and processes may be extraordinary, but it seems of great political and economical importance that not only specially gifted persons start acting creatively. As argued above, creativity is more or less thought of as a general competence requirement by those who want to "make it" on the global labor market. While creativity was formerly closely tied to the elite, it is currently being democratized, at least in relation to the ways in which creativity is talked about. In this regard, schools do play a great role.

Sawyer (2012) and Tanggaard (2008) note that it takes about 10 years to really master a domain or a skill, e.g. playing the piano, and schools are quite good at teaching children basic material to be used for future creative achievements; however, what schools are less good at is allowing children to play creatively with these materials. What should schools do? Are they to celebrate and support the ability to always turn things upside down, to think radically different? What kinds of consequences would this approach have? Is what follows also endorsing a view of human life as having to always question everything and be ready to fight others for one's views? Many assessments of creativity measure the ability of individuals to think divergently. However, the obvious critique of this is that such measures are not always an indicator of what it means to be creative in real life, outside of the testing situation (Tanggaard, 2008; 2010; Zeng, Proctor & Salvendy, 2011). Real life creativity does not rely exclusively on divergent thinking, nor on the ability to act appropriately in relation to the practices in which the creative is to be recognized as such. Accordingly, some people might need to be very good at divergent thinking, while others might need to be good at analyzing the practicalities of acting creatively.

The observation above is central in relation to didactical and educational practices because it directs teachers and other educational actors' attention towards particular aspects of creativity, maybe at the expense of others. Sometimes it might be divergent thinking that needs attention while, at other points in time, it may be the ability to actually recognize what is creative. Some new products are actually only old wine in new bottles and the ability to

recognize this is central to creative action. Above all, every kind of creativity theory or learning theory follows particular epistemological and ontological assumptions (Greeno, 1997). If the discourse of creativity is meant to imply that everybody must learn to turn everything upside down (a view that has romantic overtones), some children risk exclusion. It might even be those who are excellent in relation to finding out what would be relevant to turn upside down. While school in the form known for centuries in the Western context has been focused on teaching children to be quiet and patient, answering questions correctly, having maybe contributed to problems for those who like to take action and to find their own questions, the opposite would just marginalize other children. Indeed, this is where didactical competence is vital among teachers to avoid bringing forth too many new problems while changing educational ideals, which is what is currently going on in relation to creativity. To turn back to the initial quote, creativity as norm-breaking is not necessarily good for everybody at all times, even if we sometimes we tend to forget this (Pedersen, 2011).

Conclusion

This paper started with a quote from Rob Pope, reminding us of creativity's ties with both democracy and capitalism. This points to an interesting double aspect of the concept which indicates that creativity is indeed good for somebody, but not necessarily for everybody. We discussed how the concept of creativity has gone through some interesting changes in the last decades, from being tied to specific talents, often within the arts, to being something for everybody, to be discovered in its diverse forms, trained and learned. One of these current forms was then analyzed, focusing on the possible counter-culture elements of the discourse of creativity (which might also be the reason why some politicians prefer to talk about innovation). Lastly, some implicit and/or explicit epistemological and ontological assumptions "hiding" within creativity theories were highlighted not least in relation to the point that while schools may have difficulties with finding and supporting creativity among pupils, they would face new problems if they really decided to go down the road of creativity. Despite having passed to a second generation view of creativity and believing in the universality and educability of creative expression, we also tend to operate with counterproductive assumptions associated with the more romantic view. Accordingly, reflexivity and didactical sensitivity are necessary if creativity is to be placed at the top of the school agenda in order to avoid one-sided competence ideals, either favoring creativity or not. At the very least, a strategy emphasizing the need for more creativity would need to be followed by a careful educational reflection concerning the likely consequences associated with how we define creativity, conceive of "creative students" and innovative teaching.

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Bullying, School Climate, Social Climate and Intellectual Development: Implications for the Lives of High-Achieving, Creative Students

John Hoover, Joanne Larson, Timothy Baker

Abstract

This paper consists of a selective, critical literature review of research dealing with the potential relationship between bullying and the characteristics associated with potential status as creative, gifted, and talented. While no clear and direct indication exists that gifted or talented status produces risk for victimization, indirect evidence for such a relationship may be associated with three sets of mediating variables. First, we noted a more direct association between bullying and the intellectual and social climate within schools. Second, some bullying is probably motivated by the nature of gendered expectations, differentially impacting boys in literacy and fine arts and girls in mathematics and science. Finally, the individual level of social and linguistic skills appears to be associated with victimization. We propose a model for exploring bullying as a mediating variable between school climate issues and gifted-talented status and for investigating gender differences in manifestations of creativity and intellectual giftedness. In the proposed model, bullying serves as a mediating variable when considering the climate of the school and gender expectations on students' academic achievement as well as on the Creative, Gifted, and Talented (CGT) status and the quality of school life for these individuals.

***Keywords*:** Effects of bullying; models of resilience; gifted and talented students; high achieving students.

In 2004, a model was proposed (Hoover, Hoover, Simanton, & Dorheim) at a Lost Prizes seminar in Winnipeg suggesting that bullying may, under certain circumstances, prevent students from living out their intellectual and artistic potential. Hoover and colleagues argued that peer-on-peer aggression, filtered through schools' intellectual climate, gender expectations, and social skills might explain the loss of intellectual prizes. In this paper, we follow up on some of the claims made at that time.

Nearly a decade later, it is time to revisit this topic; using a comprehensive review of literature, we propose to explore the relationship between bullying and intellectual or artistic gifts and subsequently to propose a second, more comprehensive model that reasonably organizes current findings. We elect to emphasize empirical findings and avoid opinion pieces or polemics—unless these papers bring new, ultimately researchable ideas to the topic. We first lay out a brief definition of bullying; this is followed by an exploration of the magnitude of the direct association between bullying and giftedness, as well as indirect associations between bullying identification as gifted and talented mediated by gendered behavioral expectations as well as school climate. We address the following interrelated topics:

- Whether or not bullying, mediated by several individual and sociological factors, is differentially experienced by students with intellectual gifts;
- The degree to which intellectual climate of schools, operating through bullying, may diminish learning thus impacting manifestations of giftedness and artistic talent;
- Whether bullying, as it is currently understood, serves as a mechanism by which the school intellectual climate is managed by peers unintentionally or intentionally enforcing local behavioral standards;
- Whether bullying is differentially experienced by students with gifts and talents who display either social skills deficits or who take little interest in the school's social whirl; and

- Whether or not, or to what degree, masculinity and femininity affect giftedness through bullying.

Bullying

Since it is an emerging research field, no universally-accepted definition of bullying exists. However, many researchers and theorists start with a characterization of bullying as a situation wherein an individual experiences repeated attacks from one or more peers (paraphrased from Olweus, 1993). Olweus stipulated that perpetrators intend these attacks to harm or demoralize recipients. Others have claimed that bullying may not consist of entirely intentional attacks—that in the absence of meaningful feedback from targets, verbal playfulness and mild physical intrusions may be intended as humor or as efforts to initiate social interaction (Hoover & Oliver, 1996). In such cases, the reaction of the recipient constitutes the most salient definitional element.

Researchers tend to agree that bullying includes both physical and verbal attacks. Verbal attacks can be direct or can occur indirectly through gossip or via electronic means. Bullying's effects have been reviewed thoroughly elsewhere (Hoover & Oliver, 2006), but certainly include pejorative outcomes in the following life domains: social, cognitive/academic (Barnes, Belskey, Broomfield & Melhuish, 2006, see also this review), and health/wellness (Rigby, 2001).

Roughly speaking, four classifications of bullying participation can be inferred from large-scale population studies (Nansel, Overpeck, Pilla, Ruan, Simons-Morton, & Scheidt, 2001; Rose, Espelage & Monda-Amaya, 2009; Simanton, Burthwik, & Hoover, 2000); first, researchers observe young people who bully others but suffer bullying infrequently (13-20% depending on the characteristics of the sample). A second category is made up of students, so-called passive victims, who frequently experience bullying but rarely pick on others (9-15%). Finally, a mixed category occurs, individuals who pick on others but who also fight back on occasion, albeit ineffectually (bully-victims or provocative victims, 6-9%). A bystander group can be subtracted from the three studies cited above that includes from 60% to 70% of the students in a given school. Craig, Schumann, Edge, and Teske, (2012), provided statistics in a similar range for Canadian children and adolescents. Participation rates differ by gender and age; males tend to participate more as both bullies and victims, while incidence figures tend to rise during middle school and fall off again at the secondary level, though these generalizations differ in detail from study to study.

Bullying and Giftedness: General Findings

We start the review with an exploration of the direct relationship between gifted and talented status and peer victimization[1,2]. This topic is probably too broad to reveal much; thus, a second general theme suggests itself: the nexus between bullying and academic performance. We view the latter topic as a more fruitful approach to understanding the quality of school life for creative, gifted, and talented individuals, as well as for their parents and professional advocates.

Though surprisingly few studies exist and more are needed, several research teams have studied the relationship between bullying and academic achievement. As will be explored below, a reasonably clear trend has been observed for a bullying-heavy climate to reduce students' academic performance. Such achievement reductions probably reduce the number of young people identified as gifted and talented and negatively affect the quality of life for those who are identified. No clear mechanism has been established for a link between bullying and giftedness; one purpose of this review is to advance the parameters of a plausible and ultimately researchable model for understanding and studying the bullying of creative, gifted, and talented[2] (CGT) students.

Identification as Gifted as a Risk Factor for Peer Victimization

It seems reasonable to start by examining the overall relationship, if any, between bullying and giftedness or designation as gifted/talented. This topic can be put to rest fairly quickly as no clearly discernible statistical or research-based relationship of this nature is systematically observed; an excellent review of this topic is part of a recent paper by Peters and Bain (2011). The finding of no direct relationship between gifted/talented status and peer aggression appears to characterize the current state of affairs, despite persistent anecdotal accounts that intellectually able youth differentially experience peer aggression (Schuler, 2002). The relationship between bullying and

giftedness is multifaceted, with ***at least*** social skill level, school intellectual climate, and school gender expectations serving as key mediators.

Peters and Bain (2011) compared rates of victimization between students designated as gifted and talented versus a comparison sample of other high-achieving 9th- and 10th-graders. The two groups did not differ either on indices of bullying or victimization. While this is not a comparison of gifted versus average-achieving students, it does suggest that the gifted label does not place students differentially at risk for bullying. In fact, Peters and Bain (2011) noted that scores (on the dependent variable, digital video, they collected) of bullying and victimization, "…fell into the normal range" (p. 632).

No gender differences accrued between identified gifted and talented individuals versus other high achieving students; as is typical among high school students, Peters and Bain (2011) identified greater rates of verbal than physical bullying and victimization, but detected no statistically-significant differences between students identified as gifted and other high achievers in rates of bullying or victimization. These findings parallel Terman's venerable findings that students with intellectual gifts tend to adjust well to school (Terman & Oden, 1947).

Though ultimately the relationship between bullying and gifted/talented status remains complex, the correlation has been studied from within the gifted universe (c.f., Peterson & Ray, 2006a) or via qualitative investigations of the experience of bullying by high-achieving students (Peterson & Ray, 2006b). Significant percentages of CGT young people have either experienced bullying (67% of grade eight students), or have engaged in bullying others (33%, Peterson & Ray, 2006a). Gifted and talent students reported that bullying about physical appearance was most distressing during late elementary years through middle school. Peterson and Ray (2006a) reported that proportionately more males experienced victimization and engaged in harassment.

In a structural analysis (Peterson & Ray, 2006a), two bullying items factored into what was otherwise an ability-based latent construct (teasing about [1] grades and [2] intelligence). While the existence of a correlation between gifted status and bullying variables is suggestive, it does not, by itself, support the notion that gifted or talented status places young people at risk for bullying. It is important to recognize that students regularly identify teasing and harassment as bullying and that teasing shares the negative outcomes of other types of harassment (words are important; Hoover & Oliver, 2006). The finding could be an artifact of the finding that high ability middle-schoolers would more likely suffer teasing about manifestations of talent than would other students. This would work in the same way that students with disabilities are more likely than others to be teased about their perceived low abilities (Rose, et al., 2009). The confounding of status and bullying variables suggests that cluster analyses might prove useful in classifying subsets of the CGT population that might prove vulnerable to victimization or who might be expected to bully others. This is particularly salient when one considers the potential relationship between bullying, giftedness, and social behavior.

Talented pupils often express that they experience unique risk and that this risk is experienced on the basis of their abilities and the gifted label (Peterson & Ray, 2006b). Whether this feeling reflects an actual increase in risk may prove doubtful, but the phenomenon remains important for practitioners and advocates. Unfortunately, many CGT individuals attributed the peer victimization that they suffer to internal causes, thus potentially decreasing the actualization of their intellectual and creative endeavors. Such feelings probably correlate with risk in schools and communities with anti-intellectual social climates. Peterson and Ray (2006b) noted that advocates can help students respond positively to these negative experiences and feelings, a not- surprising result, given the learning and adaptability evidenced in this population.

A view emerges that gifted and talented students likely experience no more bullying, nor perpetrate harassment [of others] at rates higher than the general population and probably at a lower rate than students assigned formal labels (i.e., with emotional and behavioral disabilities). In addition, no overwhelming evidence exists that CGT individuals as a group suffer differentially from the bullying that they experience. In fact, given their learning characteristics, it remains likely that these

individuals may respond more successfully [than do others] to mentoring and counseling addressing peer harassment.

The lack of difference in rates of bullying and victimization between gifted and other students appears representative of existing quantitative results. However, the anecdotal findings of bullying victimization among CGT students (and their perceptions of risk) should not be ignored; perhaps a more complex model will support the untangling of these factors. We hypothesize that other influences affect creative, high-achieving individuals. The most probable mediating variables include: (1) the strength of local gender expectations; (2) manifestations of social skills; and (3) the climate of schools and communities. As we develop below, bullying appears to be a mechanism whereby potent, but sometimes unstated and subtle, social expectations are communicated and enforced.

Bullying and Academic Achievement

Schools and communities can support or inhibit the care and feeding of intellectual, creative, and artistic gifts; for example, many researchers have noted that within-school variability explains differences in achievement (Ma, 2008)—often more than does between-student variability. For one of many examples, see school belongingness (Goodenow & Grady, 1993). In other words, schools appear to possess local sets of customs differing significantly by buildings and programs. A disorganized school may produce an academic climate inhibiting educational attainment, thus reducing the likelihood that intellectual gifts receive the nurturance required for maximization of this crucial human resource—even to the point of systematically decreasing the number of youngsters formally referred and identified and who obtain differentiated supports. In such institutions, it is possible that educators' attention is turned to workday survival and thus students might not receive the levels of support they need to truly flourish. These social "rules" may differ for the case of athletic talent—primarily due to the extreme popularity of sports (O'Connor, 2012).

Though the research record is mixed, investigators have revealed that students at-risk of peer victimization and who undergo such trauma perform more poorly academically than their counterparts not at such risk (e.g., Beran, 2009; Beran & Lupart, 2009; Moore, Huebner, & Hills, 2012). Working in Canada, Beran et al., 2009, calculated a prediction model demonstrating that adolescents, displaying disruptive behavior and suffering peer victimization perform at systematically lower academic levels. The same is true among students perceiving educators as non-supportive, in addition to those experiencing parental estrangement. In another study with slightly younger Canadian adolescents; victimization and disruptive behavior together and separately predicted lower academic achievement (Beran & Lupart, 2009). Electronic bullying has been negatively associated with grades, another achievement indicator, among both bullies and victims (Moore, Huebner, & Hills, 2012).

Eccles and colleagues (1983) offered a structure, expectancy-value theory that may prove useful in organizing findings about a CGT student's reactions to perceived expectations of significant others in their environments. In this view, students integrate educational goals with their expectations of task success; students estimate their chances of success, in part, on perceptions of socializers' (parents, teachers) value systems (Eccles, et al., 1983; Wigfield & Eccles, 2000; Wigfield, Tonks, & Eccles, 2004). We may reasonably extend this to the expectations of peers, perhaps as transmitted by means of harassment.

Bullying, School Climate, and Academic performance

Though not axiomatic, it appears reasonably certain that disorder, broadly defined, and including bullying, systematically lowers academic achievement. In addition, it appears likely that the factors affecting academic achievement produce a host of secondary influences on identification of and services to school-aged CGT individuals. Two classes of outcome or dependent variables that should interest researchers come to mind: (1) the number of identified individuals perhaps indexed against expectations based on the population served; and (2) the indicators of satisfaction with life at school. School effects are explored in light of three related topics: (a) disorganization; (b) attendance issues; and (c) general intellectual climate.

Disorganized Programs

One might speak of generally disorganized schools as organizations wherein students experience low levels of perceived or actual safety characterized by uneven, ineffective approaches to curriculum and behavior management. Students-at-risk are likely overrepresented in such schools. Disorganization may be reflected in the physical surround, manifested in decrepit buildings, degraded classrooms, along with insufficient laboratory and library services (Soumah & Hoover, 2013; Uline & Tschannen-Moran, 2008). Perhaps this level of disorganization reflects the so-called Broken Windows Effect (BWE) as applied to schools (BWE; Coles & Kelling, 1996; Plank & Bradshaw, 2009). Disorganized schools certainly produce higher rates of peer harassment (Bradshaw &, Sawyer, 2009; Gendron, Williams, & Guerra, 2011; Goldstein, Young, & Boyd, 2008), accompanied by lower academic achievement levels.

Plank and Bradshaw (2009) reported that poor building conditions predict social disorder by means of increasing individuals' threat-based physical arousal. As with the original BWE theory (Wilson & Kelling, 1982), the operative mechanism may well be that disorder transmits a no-one-cares attitude. The causal mechanism worth exploring for the nexus between peer-on-peer aggression and giftedness is that schools with physically and socially disordered environments probably produce lower levels of academic achievement through lowering expectations traceable to the not-so-subtle message that significant adults, not to mention peers, do not care about wellness or academic success (Soumah & Hoover, 2013). Disordered environments may well inhibit students' willingness to admit to artistic and intellectual interests. If the Broken Windows Effect Model holds for school intellectual climate, practitioners may find that failure to see small instances of incivility will serve as an invitation for future bad behavior—especially those directed towards outward manifestations of intellectual and creative talents. Certainly, this is worth the consideration of researchers and educators.

Truancy & Non-attendance

Bullying operates on achievement partially through the mechanism of attendance and engagement; this would operate identically across levels of ability, except that resilience is somewhat related to intellectual performance and thus might serve as a palliative factor in the nexus between bullying and achievement (Baker, & Hoover, in review; Pinkus, 2009). Bullying and a general dislike for school strongly correlate with nonattendance (Atwood & Croll, 2006). Certainly, anything that makes life difficult for creative students will affect attendance and that this bullying-induced lack of engagement produces measurable achievement decrements.

Intellectual Climate and Other School-Based Variability

Among many school-based factors that have been studied is general intellectual climate. Schools differ on such variables as academic pressure, at both the teacher and the building level. So-called academic "press" is the real or perceived emphasis placed on achievement by a teacher at the classroom level or by teachers within institutions (McLaughlin, & Drori, 2000). Students, for example, can reliably identify teachers with high academic expectations; these outlooks correlate positively with value-added outcome measures (MET Project, 2013); similar variables can be detected at the school level. An emphasis on academic attainment could serve as an indicator of school-level pro- or anti-intellectual climate.

Other school-level influences appear to correlate with performance, thus potentially affecting the proportion of students identified as gifted and the perceived quality of school life for these individuals. McLaughlin, utilizing the *Schools and Staffing Survey* (SASS), identified behavioral indicators (especially behavioral problems as perceived by educators, perhaps best categorized as "disorder") as a school-level factor significantly predicting academic achievement for middle- and secondary-level schools, though the factor disappears when organizational aspects of the school are controlled. School size, teacher-perceived cohesion, and class size were other factors that may interest researchers studying the experiences of high-achieving students.

Educators can organize schools and classes in ways that enhance students' sense of belonging. School-belonging correlates in the expected direction with such outcome measures as disciplinary

climate, academic performance (Gonzales & Padilla, 1997), expectations of academic performance (Goodenow, 1991), teacher-rated student effort (Goodenow & Grady, 1993), and graduation rates (Ma, 2003). A low sense of belonging in a school probably decreases the number of students willing to be seen as different—including the willingness to overtly participate in artistic and academic endeavors. As we develop below, this factor likely interacts with gender and the nature of activities, for example, climate issues may reduce the proportion of young women identified as mathematically talented.

Dijkstra, Lindenberg, and Veenstra (2008) demonstrated elevated levels of negative outcomes when students experience bullying from their most popular peers. The salience of the popularity of bullies suggests that the intellectual climate in a school may well be set and then transmitted through the attitudes of the most popular students. It may be important for educators to reach the student-opinion leaders as part of the effort to improve the institution's climate.

In contrast with a direct relationship between bullying and CGT status, a reasonably strong effect appears to exist between school-level factors and intellectual performance. As can be seen in Figure 1, we suggest that this may well affect CGT status with bullying as an intervening variable. We propose that disorganized institutions and those with lower intellectual climate indices may produce such effects as lower levels of gifted-talented identification, poorer programming, fewer supports (and protections), and lower indicators of quality of school life expressed by high performers. An unhealthy school climate affected by bullying and/or victimization will likely be observed. That is, disorganized schools will likely place CGT students at more risk than do other institutions.

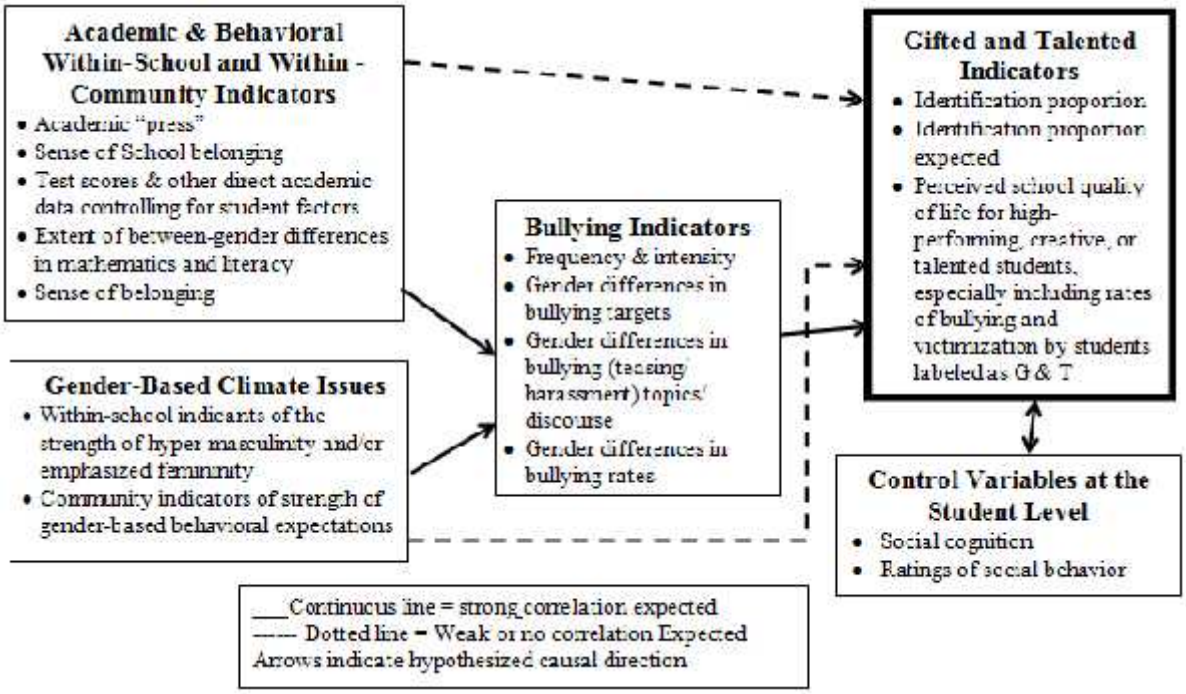

Figure 1: A preliminary research and causal model for the relationship between bullying and gifted-talented status.

Social- and Related Skills, Bullying, and Giftedness

Hoover et al. (2003) argued that individuals with Asperger Syndrome or other types of social skills deficits and who were also gifted more frequently experienced bullying on the basis of their interests in intellectual, technical, and artistic pursuits. In the intervening years, we have not found anything to contravene this contention; we still see variability in social cognition and behavioral skill deficits as significant predictors of bullying and victimization. Perhaps we could refer to this as the Sheldon Cooper Effect, after the popular character in television's *Big Bang Theory*. It is essential to

recognize that Sheldon reflects an erroneous stereotype held by many Americans about CGT individuals. That is, people in the general population and even many educators see social skill deficits and physical frailty existing as a function of giftedness (Moulton, Moulton, Housewright, & Bailey,1998; O'Connor, 2012), whereas we have long known that the opposite tends to be true (Terman & Odin, 1947). Thus, it is essential to reiterate that we see young people, who both manifest gifts and talents ***and*** who experience social skill deficits, facing more risk for bullying.

Successful programs have been developed to help gifted students analyze social situations and behave more appropriately. For example, Cohen, Duncan, and Cohen (1994) found that fourth-, fifth- and sixth-grade students who participated in a social skills intervention program received higher social desirability peer-ratings than comparable, untreated students. We have noted that CGT individuals respond well to assistance with feelings associated with peer harassment. Perhaps, ultimately, educative approaches ought to be developed around gifted and talented programs—especially in environments that may place these students in particular risk. Indeed, it may be necessary in challenging environments to inoculate all students (through the use of educational programming) against factors reducing the potential for students to manifest artistic and intellectual gifts. See also Evans's (2007) excellent argument that all factors associated with bullying are exacerbated in environments wherein adults do not intervene. A little advocacy goes a long way.

Language disorders. Roughly three times as many students with language disorders experience bullying than do their non-disabled counterparts (Knox & Conti-Ramsden, 2003). This suggests that behavioral decrements might differentially affect students with language disorders, particularly as these deficits affect pragmatics. Language disorders, particularly poor receptive skills, may produce greater perceptions of bullying by the misunderstanding of neutral or positive approaches as hostile. For example, Luciano and Savage (2007) found similar rates of bullying experienced by students with and without learning disabilities, but only once they controlled language skill levels.

It is important to recognize that both social and language skills among students identified as gifted will alter their risk of experiencing peer victimization. It is certainly possible to experience language problems along with status as gifted and talented, though it also plausible that gifted students with language disorders may be under-identified.

Gender Issues as Mediators between Bullying and Intellectual Achievement

At least two gender gaps are observed in the U.S. and many other nations. Young women and girls perform differentially lower in mathematics and science, while their male peers tend to achieve at lower rates in literacy (Ma, 2008; Skelton & Francis, 2011; NAEP, 2010). The gap favoring girls and young women in literacy is much larger and more ubiquitous internationally than are gaps favoring males in science and mathematics (Ma, 2008). In forty of 41 nations studied utilizing the *Program for International Student Assessment* (PISA, undated; Ma, 2008), females outperformed males. In fact, the magnitude of differences has created a situation where boys may be performing lower than girls and young women in overall academic achievement. Schott Foundation representatives (2012), for example, have noted that African-American boys remain singularly at risk for underachievement. Performance-based gender gaps accrue across expressions of interest, putatively objective test scores, and ultimately in employment fields.

Skelton and Francis (2011) conjecture that the low performance of North American and British boys in literacy may be tracked to hegemonic masculinity, which implies that traditional male gender roles serve as normative expectations. The ideal male role includes dominance of other males and the subordination of females. To the extent that role expectations in schools and communities would endorse this version of masculinity, we would expect to see more bullying of males and females who operate outside of such expectations. Greig and Hughes (2009) ironically lay out the social standard, by means of their evocative article title, "A boy who would rather write poetry than throw rocks at cats is also considered…wanting in masculinity" (p. 91).

Currie, Kelly, and Pomerantz (2006) pointed out that girls must negotiate a thin line between the dominant social identities in schools and their construction of individual selves that challenge these discourses. One of their respondents voiced this aptly, noting that, "You're supposed to be a

certain way. The other girls expect you to be that way. You go against them then they *hate* you" (p. 431). We surmise that the social and appearance discourses that constrict girls' intellectual and artistic experiences might align with the narrative that we have referred to as bullying.

It is highly likely that bullying may serve as a primary mechanism whereby local gender behavioral standards (involving school-level and community-level climate issues) are imposed, brought to school, in other words. Academic achievement differences in science, mathematics, and literacy suggest that the expression of intellectual gifts may systematically differ by gender as mediated by community attitudes. Gender performance differences are not innate—but socially-based norms foisted on young people through unthinking acceptance of myths about biological causation and the naturalness of restrictive social roles (Currie, Kelly, & Pomerantz, 2006).

In our model, bullying serves as a mediator between gender-based community and school norms and the intellectual climate of the school. The end results will affect the willingness and/or ability of students to manifest their potential—for boys differentially in writing and reading (Greig & Hughes, 2009; Skelton & Francis, 2011), for girls and young women in mathematics and science. The causal chain runs from community attitudes, through bullying, to academic and artistic achievement and, ultimately, to the proportion of children identified as gifted and talented. We potentially waste essential human resources in failing to critically examine the effects of hypermasculinity and emphasized femininity (Connell, 1987) on attitudes toward intellectual achievement.

Conclusion: A Research Model

No strong, direct link exists between risk for bullying and status as gifted and talented. However, the salient relationship between school climate and gender-based issues suggests that researchers will likely identify a more subtle relationship. Our prediction is that bullying rates in schools, as mediated by between-school and between-community differences, produce at least three integrated effects:

1. High rates of bullying and other types of systemic behavioral disturbances at the building or program level likely produce decrements in either or both (a) the numbers of students identified as gifted and talented or (b) the willingness of candidates to manifest high-risk behaviors related to their gifts and talents.
2. Related to point # 1.b., rates of bullying will predict aspects of perceived quality-of-school life among students identified as intellectually gifted, or who otherwise demonstrate high levels of creativity and unusual talents.
3. The above-predicted effects will interact with gender in gifted identification, and need for supports in mathematics and science among girls and young women, and literacy among boys.

Figure 1 represents our emergent model. It is meant to serve as an invitation to researchers to delve deeper into the degree to which bullying may serve the function of enforcing local norms and producing decrements in school climates likely to negatively affect students developing their singular creative and intellectual prizes. Due to its complexity, examining bullying and status as gifted and talented will likely require a combination of qualitative and quantitative approaches.

Footnotes

[1] Though by no means a convention in the research literature, we employ the term victimization in this paper exclusively to situations where the subject of the sentence receives bullying from others; that is, the person or group is the victim of bullying. We reserve the term bullying (as a verb), when not otherwise specified, for situations where the person or group picks on others. This is done to simplify wording and for no other purpose.

[2] As a convenience, we developed the acronym CGT (Creative, Gifted, and Talented) to refer to students, formally identified or not, that display traits typically associated with those receiving formal identification. When researchers have studied a formally identified population, we indicate this using the indicator, "identified as…".

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The Achievement Gap and the Education Conspiracy Against Low Income Children

Joseph S. Renzulli

Abstract

Despite changing rhetoric, fifty years of educational reforms have largely relied on deductive, didactic pedagogy focused on rote memorization and knowledge consumption. This article focuses on inductive, investigative approaches to schooling that lead to enjoyment, engagement, and enthusiasm for learning. The Enrichment Triad Model and Prism Model, for reversing underachievement, are based on students' strengths and interests and the promotion of joyful learning. As such, these counterintuitive approaches to school improvement offer promising alternatives to "drill and kill" approaches that have left vulnerable at-risk students bored and alienated. Our goals are to minimize boredom and to improve achievement and creative productivity by the infusing of enrichment experiences into any and all aspects of the curriculum. Judicious use of technology and professional development can help make enjoyable enrichment learning a reality, developing in young people an enduring passion for learning. Infusion of this type has been shown to improve the culture and atmosphere of a school, to expand the repertoire of teachers, and change the mindsets of students.

***Keywords*:** Enrichment Triad Model; creativity; student achievement; alternative education; achievement gap.

> *Nobody believes in action anymore, so words have become a substitute for action, all the way to the top, a substitute for the truth nobody wants to hear because they can't change it, or they'll lose their jobs if they change it, or maybe they simply don't know how to change it.*
>
> **John Le Carré, *The Russia House***

While a major challenge facing today's schools is the achievement gap that exists between advantaged and low income students, the ways we have addressed this problem have also produced flatline academic growth among our most able students, rampant boredom among students at all levels, and public dissatisfaction with an education system that is immune to anything but the superficial trappings of change. The National Assessment of Educational Progress (NAEP) reports in *The Nation's Report Card* in 2005 that half of all immigrant, minority, and low-income children never graduate from high school, and in many of our cities more than 30 percent of low-income students score at the lowest percentiles on national reading and math tests. We have addressed this achievement problem inadequately; indeed, the "collateral damage" has seriously undermined effective teaching and learning, in even our best schools. Many of our teachers are being deskilled, and outside of essential math, science, and reading courses, there is an erosion of creative curricula that include art, music, and drama. Experiential learning and a holistic vision of education have been undermined. Data juggling, test result falsification, making state tests easier, and outright lying on the parts of desperate administrators who will do almost anything to avoid being branded leaders of "failing schools" are outcomes of this short-sighted and narrow specialization. Even when we do see reports of test improvements, they sometimes mask other types of collateral damage such as increased dropout rates, de-emphasis of the arts, sciences, and social studies, and diminished matriculation to post high school education.

The Three Trillion Dollar Misunderstanding

How did we get into this mess? Why has the estimated three *trillion* dollars spent on school reform since the 1960s not made more of an impact (Miami-Dade County Public Schools, 2008)? We

have tried just about everything – smaller schools, year-round schools, longer-school days, single-sex classes, after school mentoring, school uniforms, vouchers, charter schools, school-business partnerships, merit pay for teachers, paying students (and even parents) for higher scores, private management companies and for-profit schools, takeovers by mayors and state departments of education, distributive leadership, site-based management, data-based decision making, and just about every scheme imaginable into which someone can insert the words, "standards-based," "accountability," or "brain-based." Every buzz word in a profession that already thrives on too much jargon eventually creeps into the repertoire of policy-makers, shifting the focus off student needs and appropriate pedagogy for meeting these needs and on to inflexible bureaucratic solutions that ignore individual learning needs. All of these suggested solutions, usually launched with much fanfare, endless and usually mind-numbing workshops for teachers, and little if any research or track record for success have been offered as "silver bullets" that can "save" our schools and raise the test scores of our lowest-achieving students. The sad fact is these schemes simply have not worked.

What do all of these reform initiatives have in common? Most are built on structural changes, designed by well-intentioned policy-makers or agencies (usually far removed from the classroom), and calculated to have an impact on entire school districts, states, or even the entire nation. More importantly, however, is that these structural changes have drawn mainly upon (and even forced) a low level pedagogy that is highly prescriptive and didactic, approaches to learning that emphasize the accumulation, storage, and retrieval of information that will show up on the next round of standardized tests. We have become so obsessed with content standards and test scores that assess mainly memory, that we have lost sight of the most important outcomes of schooling: thinking; reasoning; creativity; and problem solving skills that allow young people to *use* the information driven by content standards in interesting and engaging ways.

Are there Reasonable and Practical Alternatives?

Over the past decade the mainstream diet for the majority of low income and struggling learners has been dominated by a remedial and compensatory pedagogy that has not diminished the achievement gap, but, as research has shown, has actually contributed to its perpetuation (Ford, Howard, Harris & Tyson, 2000; American Educational Research Association [AERA], 2004). Many of these programs are designed to find out what a child cannot do, does not like to do, and sees no reason for doing, and then teachers are told to spend the majority of classroom time making sure the child concentrates on these programs to the point of boredom. This pedagogy of prescription and practice simply has not worked!

Documentation of this failure is plainly evident in one national report after another (National Assessment of Educational Progress [NAEP], 2005; Center on Education Policy [CEP], 2008), and yet we continue our search for yet another quick-fix through structural rearrangements of schools, rather than alternative pedagogical modifications that deal directly with the enjoyment, engagement, and enthusiasm that results from a more inductive and investigative brand of learning. The solutions offered by whatever new names we give them (e.g., Competency-Based, Outcomes-Based, Standards-Based) are always reiterations of the same pedagogy – the same drill-and-practice model for learning that simply has not worked. The universal criterion for accountability always remains the same, again with new names given to the same old achievement tests that mainly measure memorized factual information. It is the singular reliance on these tests for accountability, at the exclusion of other important performance-based outcomes that forces the pedagogy of prescription, a pedagogy that drives good teachers from the profession, and that prevents those teachers who remain from teaching creatively. Is it any wonder that some of our very best teachers are fleeing urban schools where prescription has become the almost universally practiced pedagogy?

Learning Theory 101: The Short Course

All learning experiences exist on a continuum ranging from deductive, didactic, and prescriptive on one hand to inductive, investigative, and inquiry-oriented on the other. Students who

have not achieved are subjected to endless amounts of repetitious practice material guided by the didactic model. Then, when scores do not improve, we often think that the obvious solution is to simply redouble our efforts with what has been popularly called a "drill and kill" approach to learning; an approach that has turned many of our schools into joyless places that promote mind-numbing boredom, lack of genuine student and teacher engagement, absenteeism, increased dropout rates, and other byproducts of over-dependence on mechanized learning. Proponents of popular but highly prescriptive reading programs frequently boast about test score gains, but the endless "drill and practice" only prepare students for taking tests correlated to the worksheets *rather than actually learning to read*, let alone enjoying reading, and making reading an important part of their lives (Reis et al, 2004). Many students subjected to over-prescription never pick up a book on their own. This is a sad commentary on how we have messed up the teaching of reading by turning the teaching of reading into the teaching of taking tests.

With this kind of track record should we not be smart enough to blend the benefits of an inductive and investigative pedagogy into a system that has mainly failed our at-risk populations? Should we not also be smart enough to note the rising dissatisfaction of middle class parents whose children are also becoming subjected to the same drill-oriented, test-prep curriculum? One high school student recently described her Advanced Placement (AP) courses as "…nothing more than *high-speed* test prep". Two Ohio students from an affluent school district wrote in a letter to their governor, "Schools once renowned for their unique learning programs are becoming nothing more than soulless factories that churn out those that can excel at standardized tests while discarding those who can't." Is it any wonder that a parent from a high status community speculated that there was indeed a sinister conspiracy afoot to close the achievement gap, and the conspiracy consisted of dragging down the scores of high-achieving students.

Research on the role of student engagement is clear and unequivocal. High engagement results in higher achievement, improved self-concept and self-efficacy, and more favorable attitudes toward school and learning (Herrington, Oliver & Reeves, 2002; Ainley, 1993). There is a strong body of research that points out the crucial difference between time-spent and time-engaged in school activities. In the recently published Program for International Student Assessment (PISA) study (Organization for Economic Cooperation and Development [OECD], 2007), the single criterion that distinguished between nations with the highest and lowest levels of student achievement was the degree to which students were engaged in their studies. This finding took into account demographic factors such as ethnicity and the socioeconomic differences among the groups studied**.**

The Most Important Outcomes of Education

The pedagogy of prescription has perhaps unintentionally, but clearly in terms of demonstrated results, withheld from low-income children the exact kinds of thinking skills that are necessary for successful participation in today's higher education and our growing global economy. The word, "perhaps" is used because I do not think there is a clandestine conspiracy on the parts of policy makers and the textbook/testing cartel to keep low-income children poorly educated thereby limiting access to economic mobility. However, make no mistake, neglect, mismanagement, and a lack of courage to challenge unsuccessful practices is the equivalent of a *bona fide* conspiracy.

If failed approaches have continued to produce dismal results, perhaps it is time to examine a counter-intuitive approach based on a pedagogy that is the polar opposite of the pedagogy that Pavlov used to train his dogs. Accountability for the truly-educated mind in today's knowledge-driven economy should first and foremost attend to students' ability to:

- plan a task and consider alternatives;
- monitor one's understanding and the need for additional information;
- identify patterns, relationships, and discrepancies in information;
- generate *reasonable* arguments, explanations, hypotheses, and ideas using appropriate information sources, vocabulary, and concepts;

- draw comparisons and analogies to other problems;
- formulate meaningful questions;
- apply and transform factual information into usable knowledge;
- rapidly and efficiently access just-in-time information and selectively extract meaning from that information;
- extend one's thinking beyond the information given;
- detect bias, make comparisons, draw conclusions, and predict outcomes;
- apportion time, schedules, and resources;
- apply knowledge and problem solving strategies to real-world problems;
- work effectively with others;
- communicate effectively in different genres, languages, and formats;
- derive enjoyment from active engagement in the act of learning; and
- creatively solve problems and produce new ideas.

These are the student engagement-oriented skills that grow young minds, promote genuine enthusiasm for learning, and, as our research has shown, increase achievement (Renzulli & Reis, 1985). Although student engagement has been defined in many ways, I view it as the infectious enthusiasm that students display when working on something that is of personal interest and that is pursued in an inductive and investigative approach to learning. It takes into account student-learning styles and preferred modes of expression as well as interests and levels of knowledge in an area of study. It is through these highly engaging approaches that students are motivated to improve basic skills and bring their work to higher levels of perfection. True engagement results from learning activities that challenge young people to "stretch" above their current comfort level, activities that are based on resources and methods of inquiry that are qualitatively different from excessive practice. Our research has shown that teaching students to think critically, analytically, and creatively actually improves plain old-fashioned achievement (Renzulli & Reis, 1997; Renzulli, 2008). Our guiding principle in this kind of learning is simply: *No Child Left Bored!*

Moreover, the key role of engagement cannot be overemphasized for students whose achievement has been hampered by limited experiences, resources, or supports. In a longitudinal study comparing time-spent versus time-engaged on the achievement of at-risk students, conventional-instructional practices were found to be responsible for the students' increased risk of academic delay (Greenwood, 1991). Another study reported important differences in achievement outcomes favoring engaged over disengaged students of similar ability (Greenwood, 1991). Hours of drilling on ACT test questions in Chicago high schools may be hurting, not helping, students' scores on the college-admission exam, according to a study released recently by a university-based research organization (Samuels, 2008). The Consortium on Chicago School Research (2008), based at the University of Chicago, found in their 2005 report that teachers in the 409,000-student district would spend about one month of instructional time on ACT test practice in the core classes offered during junior year. However, the ACT test scores were lower in schools where 11th grade teachers reported spending 40 percent of their time on test preparation, compared with schools where teachers devoted less than 20 percent of their class time to the ACT. The boredom factor was cited as an explanation for this seemingly counterintuitive finding.

Although focusing on the engagement-oriented outcomes listed above may be counterintuitive to the "more-practice-is-better" pedagogy; we need only look at the track record of compensatory learning models to realize we have been banging our collective heads against the wall and following an endless parade of failed reforms being forced through the schoolhouse door by people far removed from classrooms, schools, and local level decision-makers.

How did we allow committees of bureaucrats to write endless lists of content standards without equal or even greater attention to standards for good thinking and the kinds of authentic assessment that shows how good thinking is demonstrated? How did we allow textbook companies to "stuff"

their books with more and more mind-numbing practice materials that prescribe and dictate what teachers must do every minute of the school day? How did we give the test publishers the gun that is held against the collective heads of every superintendent, principal, teacher, and student in the nation? Even state-education commissioners and their agencies, some of which are responsible for buying into various silver-bullet solutions, are now being "held accountable" for low scores in their states.

If we are going to break the stranglehold that the perpetrators of failed practices have had on our schools and the lives of children, we need some leaders at all levels (federal, state, and local) courageous enough to explore bolder and more innovative alternatives that will provide all students with a more highly enriched diet – the kind of diet that characterizes learning in the nation's very best public and private schools. This is not to say that we should abandon a strong curriculum that focuses on basic competencies, nor should we forget to demand accountability data to evaluate returns on investment for alternate approaches to addressing the problem. We need to move the focus away from memorizing content and toward the kinds of thinking skills listed above. We need to develop accountability procedures (not just tests) that show us how well students are learning to *apply* their thinking to authentic problem-solving situations. This kind of accountability may not put the bubble sheet companies out of business, but it will help force the issue of building a richer school pedagogy.

We also need to infuse into the curriculum a series of motivationally-rich experiences that promote student engagement, enjoyment, and a genuine enthusiasm for learning. Common sense and our own experiences tell us that we always do a better job when we are working on something in which we are personally engaged, something that we are really "into," and that we truly enjoy doing. For instance, the demonstrated benefits in performance that result from extra-curricular activities are based on a pedagogy that is the polar opposite of the pedagogy of "drill and practice" (Kaufman & Gabler, 2004). How many *un*engaged students have you seen on the school newspaper staff, the basketball team, the chess club, the debate team, or the concert choir? Their engagement occurs because these students have some choice in the area in which they will participate; they interact in a real-world goal oriented environment with other likeminded students interested in developing expertise in their chosen area; they use authentic problem solving, interpersonal, and creative strategies; they produce a product, service, or performance that is evidence of the level and quality of their work; and their work is brought to bear on one or more intended audiences other than, or at least in addition to, the teacher (Renzulli & Reis, 1985). The engagement that results from these kinds of experiences exemplifies the best way to approach joyful and engaging learning; one that differs completely from the prescriptive and remedial education that are the main approaches to learning in low-income classrooms.

Is There a Way to Make Real Change Rather than the Appearance of Change?

Recognition of the achievement gap problem and the effect that failed solutions have had on schools that serve *all* of our young people have resulted in some very predictable activity. The usual national commissions and new rounds of federal, state, and foundation reports calling for "bolder and broader approaches" have at least recognized the existence of the crisis facing our schools; but we must be cautious of looking for approaches that emphasize the same structural solutions without primary consideration to the pedagogy which is at the core of any substantive changes in learning. We must also be cautious about seeking solutions from the same people and practices that caused these problems in the first place! Requiring all students to take *x* number of courses, raising passionate calls for more teacher and administrator training, rigorous standards-based curriculum, extending the regular school day and year, providing tutoring, homework helpers and summer school will not bring about substantive change unless we change *how* the required courses, tutoring, or summer school are taught. Let us take as an example the tutoring issue and the $595 million spent on this service in 2006-07. Findings on tutoring from three cities presented before the American Educational Research Association (AERA) (2008) support previous research about the effectiveness of tutoring (Arnott, Hastings & Allbritton, 2008). In Milwaukee, however, researchers found no improvements in the scores of students receiving tutoring. "One reason," says Patricia Burch of the University of Wisconsin-Madison, "is that, in many sessions, tutors used uninspired practices, such as handing out

worksheets. Researchers in L. A. found similar results." This example points out the disconnect between a perfectly good (indeed, ancient, and honorable) educational practice [tutoring] and the pedagogical way in which it was carried out.

Two approaches that have been used to make changes that serve challenged as well as traditionally high-achieving students are a pedagogical approach called The Enrichment Triad Model and an approach that guided research on underachieving students called The Prism Metaphor. The Enrichment Triad Model (see Figure 1) set out to transform high-ability students from lesson learners or consumers of facts to producers of new knowledge (Renzulli, 1977; Renzulli & Reis, 1997).

The model laid out three categories of experience: *Type I enrichment* consisting of general exploratory activities to expose students to new, exciting material not covered in the basic curriculum; *Type II enrichment* involving group-training activities to develop creative and cognitive skills and research, communication, learning-how-to-learn, and affective skills and; and *Type III enrichment* featuring the application of these skills to self-selected investigative and creative projects. More specifically, at the Type III level, children become actual investigators of real-world problems and target their work for real-life audiences. They produce creative products through the collection of raw data, the use of advanced problem-solving techniques, and the application of research strategies or artistic innovations that are employed by front-line people in various fields, albeit at a more junior level than adult investigators.

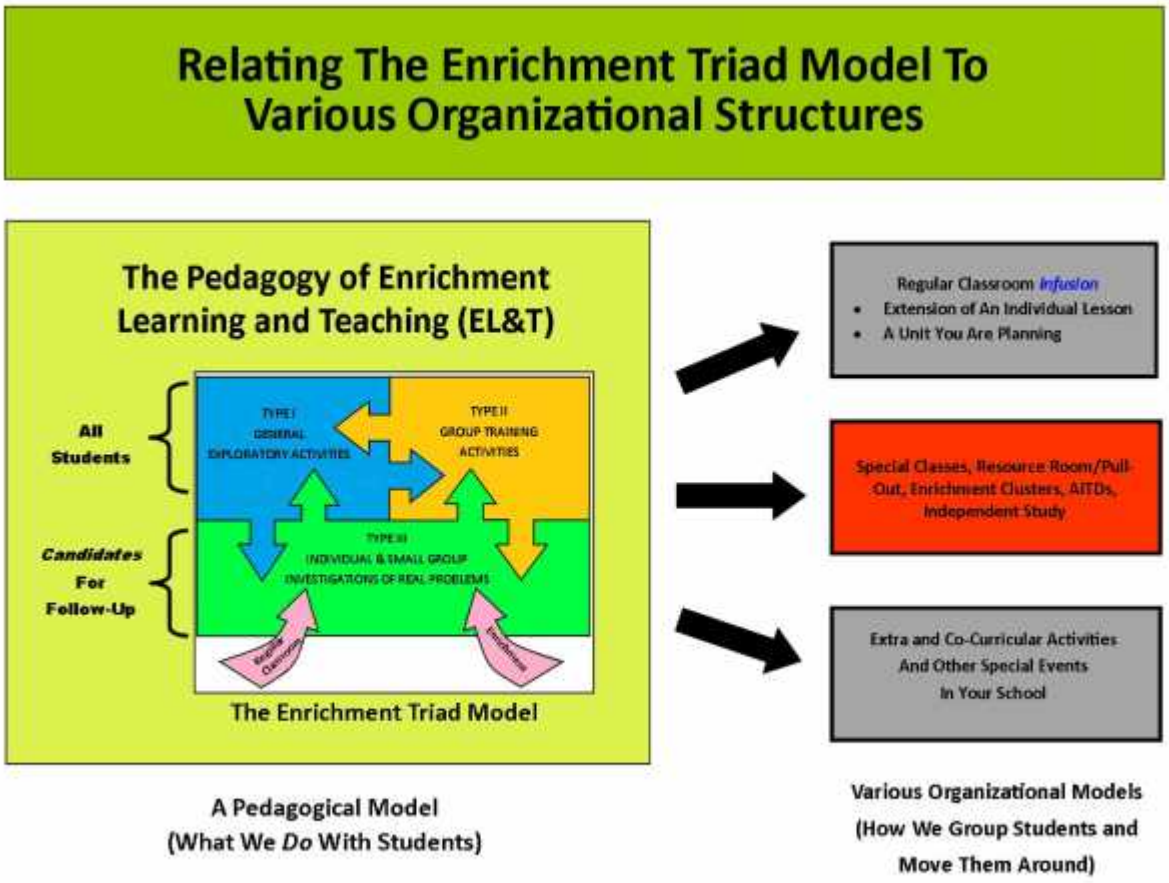

Figure 1: The Enrichment Triad Model.

Baum, Renzulli, and Hébert (1995) built upon this foundation to propose another highly original way to view and motivate reluctant children and youth. Specifically, their Prism Metaphor – presented schematically in Figure 2 – highlights the potential impact enrichment can have on underachievement. According to this visual metaphor, underachieving students are overwhelmed by learning and emotional problems, social/behavioral issues, and inappropriate curriculum. They are not moving forward, likely because interventions to date have used the wrong lens (i.e., traditional teacher-directed approaches) to focus the problem. However, once relevant Type III Enrichment activities, involving mentoring, real-world problem solving, and self-selected topics, are put in place, things change for the better. Indeed, just as a prism somehow converts nondescript white light into a magical array of colors, so can Type III enrichment inspire and lead underperforming gifted students toward positive outcomes and productivity. Although somewhat speculative, the optimistic undercurrent of this framework is uplifting.

Renzulli and his team went on to demonstrate the value of The Prism Metaphor in a tangible fashion by exploring the possibility of using Type III enrichment activities to reverse underachievement in talented children (Baum, Renzulli, & Hébert, 1995). In their study, twelve teachers, all trained in The Enrichment Triad approach, selected seventeen identified gifted students who were performing below potential in school.

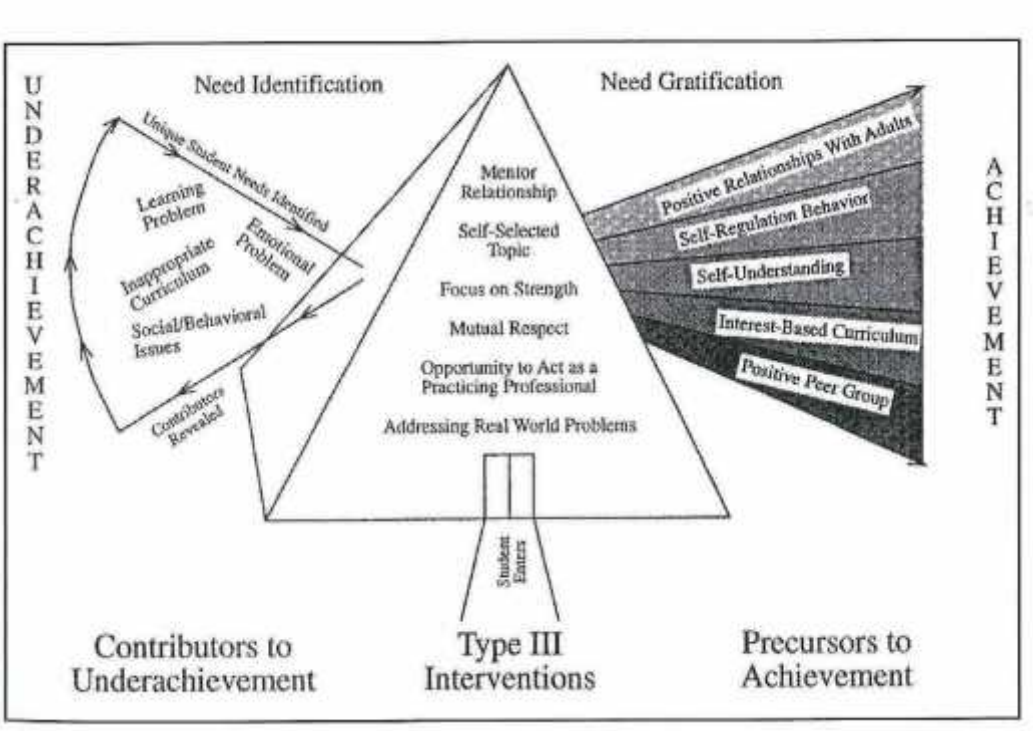

Figure 2: The Prism Metaphor for Reversing Underachievement (Baum, Renzulli, and Hébert, 1995). Used with permission of the National Research Center on the Gifted and Talented, The University of Connecticut.

The children, five girls and twelve boys, ranged in age from eight to thirteen. Each was guided through a Type III experience by the referring teacher, who took on the role of researcher. Rather than assume control of the learning process, the teachers became facilitators – helping students to focus problems, to secure necessary materials, to review and revise their work, and to overcome obstacles within the context of pursuing a topic that had great personal meaning. The teachers also assumed the roles of mentor and confidant to the students and, as such, discovered much about the personal lives, frustrations, interests, and dreams of their young students. In their extended role as

educators-researchers, the teachers also acted as participant observers, recording their observations systematically, reflecting upon their entries, and documenting effective strategies.

Three Things We Can Do To Create A 21st Century Pedagogy

Before describing three things we can do to change the pedagogy, a word is in order about the role of technology in the modern world. To a large degree, we have become what our technology has made us. We began communicating more effectively because of inventions such as the telegraph, the telephone, and the Internet; and travel became faster and more efficient with the inventions of the steam engine, the airplane, and jet engines. In his book, *The Power Makers: Steam, Electricity and the Men Who Invented Modern America* (2008), Klein documents the well-known economic principle that supply creates its own demand. Education changed dramatically when the technology evolved from books that families and the schoolmaster had at hand to textbooks from which all students could learn simultaneously. When schools gained the technology of copy machines, easily-reproducible workbooks and practice materials became a mainstay of the learning process. This technology has driven both what and how young people have learned for most of the past and present century. Students memorize factual material and engage in endless practice simply because such material is available. Supply creates its own demand!

Almost every area of modern life has made imaginative uses of technology, while in education we have settled for electronic applications of the same old technology that did not differ pedagogically from standard "drill and practice" forms of teaching (i.e., worksheets-on-line). These early generations of educational technology may have given teachers some extra "helpers," but because they were based on a knowledge-acquisition pedagogy the skills that students need for success in the 21st century are still only by-products of present-day models of teaching and learning.

How can we bring about the changes in the engagement-oriented pedagogy necessary to turn things around? Although I will not argue that technology without planned teacher involvement and technology-savvy teachers is the answer to our prayers, we now have the next generation of education technology that can give teachers the tools to do several important things to promote a high-engagement pedagogy. However, we must be careful not to use this technology to recreate electronic forms of the same old pedagogy we are trying to improve upon. This technology goes beyond the on-line, electronic encyclopedias, and courses-on-line worksheets that were the earliest applications of technology to classroom use. These applications did not differ pedagogically from the standard "drill and practice" forms of teaching.

Although it may sound clichéd, the advent of the Internet and easy access to most of the world's knowledge by young people is literally changing the time- honored learning theories that have guided curriculum and instruction for several centuries. Teachers and textbooks are no longer the gatekeepers of knowledge and the old curriculum paradigm that consisted mainly of to-be-presented knowledge is giving way to what I call just-in-time (JIT) knowledge. It is the kind of knowledge that students seek out when it is necessary to solve a problem, whether posed by the teacher or self-selected by a student (or small group) because of personal interest. Students will obviously need to learn the basic skills of the three Rs, but they will also need to learn the following technology skills of inquiry in order to make efficient use of JIT knowledge:

- the ability to identify trustworthy and useful information;
- the ability to selectively manage overabundant information;
- the ability to organize, classify, and evaluate information;
- the ability to conduct self-assessments of web-based information;
- the ability to use relevant information to advance the quality of one's work; and
- the ability to communicate information effectively in various genres and modes of expression.

This use of JIT knowledge, once the method of inquiry employed exclusively by scholars, researchers, and creative producers, is the paradigm that is now available to all young people and the paradigm that will create the motivation and engagement that has largely been lost when most of the

learning followed a "to-be-presented" curriculum and a brand of learning that minimized the sheer joy of finding-out things on one's own. So let us now look at three things we can do to apply this new generation of education technology to modern-day learning.

1. Assessment of Student Strengths. The first innovative use of this next-generation technology is that teachers can now get a comprehensive look at *all* the major characteristics of their students, characteristics that go beyond simply knowing a student's standardized achievement test standings compared to a norm-based reference group. Using a computer-generated student profile developed at the University of Connecticut, we are able to quickly and easily provide information about student interests, learning styles, and preferred modes of expression as well as how students perceive their strengths in the traditional academic subject areas (Reis & Renzulli, 2008). The simple assumption underlying the use of this technology-generated profile is that the more teachers know about *all* of these dimensions of the learner, the better able they will be to make decisions about what materials and activities have the highest potential for engaging that learner.

2. Matching Resources to Student Profiles. Although "differentiation" is an important contemporary goal of much of today's efforts to make learning more meaningful for young people, the sad fact is that most teachers simply do not have the time to seek out the resources that can accommodate the varied learning needs of a increasingly diverse school population. The second way technology can affect pedagogy is by giving teachers easy access to the wealth of enrichment and engagement-oriented material that is available through the Internet and through materials and activities that have been purposefully selected and placed into easily accessible databases. Now let us look at a little of the "magic" of combining these two uses of technology and why we consider this work to be a new generation of education technology. Through advanced programming techniques, a search engine can examine thousands of multiple classified (e.g., subject areas, reading level, state standards, interests, learning styles, and expression styles) high-engagement resources and match these resources to information about learner characteristics revealed in student profiles. This tool provides teachers with the kind of tool that allows for true differentiation based on individual student profiles, and the computer has done the heavy lifting. In view of the number and diversity of young people that teachers must deal with every day, it would be impossible to achieve this kind of personalized learning without the use of technology. What is even more important is that the easy availability of highly-engaging resources and the matching capability of the technology "forces" the kind of engagement-oriented pedagogy we are trying to infuse into the curriculum.

3. Teacher Training. The third thing we can do is re-examine the ways that we train teachers, especially already employed teachers who have not had access to the technology courses now routinely available in most undergraduate teacher-training programs. The research shows that most school-based professional development has had little or no effect on teachers' classroom behaviors. Most teachers can tell their own horror stories about sitting through endless hours of irrelevant workshops. Endless lists of glittering generalities, flashy slide shows, flavor-of-the-month "innovations," and strategies with absolutely no research support are delivered by entertaining, motivational speakers. I have no argument with a certain amount of professional development in general and content-specific-teaching strategies, and all teachers should be constantly improving their subject-matter competency, but the focus of professional development in a technology-driven pedagogy should be on the skills that allow teachers to help young people master the technology skills of inquiry listed above. The acquisition and application of these skills will turn our teachers into the proverbial "guides-on-the-side" rather than simply traditional disseminators of information which have characterized so much of our education system in pre-technology approaches to learning. This transformed role of teachers and approaches to instruction will bring about the sought- after differentiation and changes in engagement and motivation that have eluded us in reform efforts thus far.

Many national education leaders and politicians are describing the current challenges facing our schools as a crisis in the American education system. It will not be easy to turn around a school system whose leaders have made massive financial and policy investments in one particular brand of

learning, nor will it be easy to circumvent the powerful influence of the textbook and test-publishing industries that have thrived on a prescriptive curriculum and standardized test-driven approaches to accountability. But a gentle and evolutionary rather than revolutionary approach to school reform is possible if we begin to take advantage of the remarkable advances that have taken place in the information technologies, advances that have brought within reach the equivalent of a dozen teaching assistants in every classroom, all day, every day. These technologies now make it possible to quickly and easily assess students' interests, learning styles, and preferred modes of expressing themselves. What formerly took teachers weeks or even months to learn about student strengths can now be assessed in less than an hour through computer-generated profiles, and powerful search engines can examine thousands of high-end learning resources that *match* these resources to individual student profiles. True differentiation, much talked about but seldom achieved, can take place if we can let the technology do the hard work of finding and matching resources that are engagement- oriented rather than practice-oriented.

Dr. Leon Lederman, the Nobel Prize winning physicist (1988), recently said, "*Once upon a time, America sheltered an Einstein, went to the Moon, and gave the world the laser, electronic computer, nylon stockings, television, and the cure for polio. Today we are in the process, albeit unwittingly, of abandoning this leadership role."* Every school and classroom in this country has in it young people who are capable of continuing this remarkable tradition. However, the tradition will not survive without a national resolve and bold action on the parts of policy makers at all levels to change the pedagogy that drives instruction in classrooms that serve *all* of our young people. You do not produce future scientists and inventors such as Jonas Salk, George Washington Carver, Thomas Edison, Sally Ride, or Marie Curie by forcing them to learn in a one-size-fits-all "drill and practice" curriculum or by spending hundreds of hours preparing for state achievement tests. You do not develop the potential of thousands of Leonard Bernsteins, Aretha Franklins, or Miles Davis's without providing them with highly engaging opportunities in music that typically are only available in out-of-school opportunities and mainly to the children of the well-to-do. You do not develop world leaders such as Martin Luther King, Golda Meir, Eleanor Roosevelt, and Mahatma Gandhi by having them memorize endless lists of facts that today's technology-savvy young people can find *when they need them* using a few clicks on the web. You do not produce the next generation of talented writers such as Rachel Carson, Langston Hughes, and Tennessee Williams by having them spend endless hours completing mindless worksheets in preparation for the next round of state-mastery tests. It is only through expanding our pedagogy, engaging *all* students, and making imaginative uses of technology that America's schools will be able to truly engage our children and develop their creative potential, as well as their love of learning.

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About the Author

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Leadership and Capacity Building: Facilitating Change through Tri-level Partnerships

Eleoussa Polyzoi, Kathy Collis, Michael Babb

Abstract

In 2008, the Ministry of Education in Manitoba, Canada approved a $1.8 million grant for a major three-year pilot project entitled the Student Success Initiative (SSI) designed to support schools facing barriers to success. Six schools with lower-than-average graduation rates in Manitoba from urban, rural, and northern communities were invited to participate. This initiative is part of Manitoba's "All Aboard Poverty Reduction Strategy" whose aim is to improve student success in schools. In 2009, Fullan, Cuttress, and Kilcher identified eight drivers that are essential to promoting effective and sustainable educational innovation: (1) engaging people's moral purpose, (2) building capacity, (3) understanding the change process, (4) developing cultures for learning, (5) establishing cultures of evaluation, (6) focusing on leadership for change, (7) fostering coherence making, and (8) cultivating tri-level development. In this paper, Manitoba's SSI project serves as a reflection point for exploring Fullan et al.'s framework. It is used to inform the discussion around how government, university, and school division partnerships can enable and extend each of the drivers identified. We hope to shed some light on what has worked within the SSI project through tri-level collaboration and how this model can be used to further promote educational change and enhance leadership and capacity building for other schools.

***Keywords*:** Transformative education; tri-level educational partnerships; leadership models; effects of poverty and student achievement; student success initiatives; educational change.

Scope and Objectives

In 2008, Manitoba Education approved a $1.8 million grant for a major three-year pilot project entitled the *Student Success Initiative (SSI)* designed to support schools facing barriers to success. Manitoba Education is the official department name for the Ministry of Education in Manitoba, Canada that is responsible for kindergarten-to-grade-12 education in public and funded independent schools in the province. Six schools with lower-than-average graduation rates in Manitoba from urban, rural, and northern communities were invited to participate. This initiative is part of Manitoba's "All Aboard Poverty Reduction Strategy" whose goal is to improve student success in schools. More specifically, the SSI program was designed to: provide a framework for working in high poverty contexts, identify ways to help schools systemically identify students at risk of dropping out, develop essential strategies to support students academically and socially, and provide additional personnel to support the implementation of this project.

The SSI project, currently in its third year, provides professional and financial assistance for an SSI teacher/leader in each target school. The SSI teacher/leader facilitates a team of teachers, counsellors, and administrators in a weekly review of the progress of at-risk students who have been identified through a data tracking process called the Early Warning System (EWS). The EWS flags student absences of 10% or more in the first 20 days of a semester and identifies students who have failed either a core Math or a core English Language Arts course, or two or more other courses in a semester. As well, the EWS tags students with two or more suspensions over the year and students who have received an average grade of 55% or less in a semester. Specific interventions, e.g., credit recovery (honouring students' previous course attempts and covering only gaps in content upon their return to school), tutoring, extra class time, transition support (from middle to high school or from high school to the work force), and socio-emotional support through counselling, where needed—are all provided to promote student success. There is already evidence of the benefits of the SSI project at

the participating schools: greater student engagement (Dunleavy & Milton, 2008), increased credit acquisition rates, and higher numbers of graduates.

A unique aspect of the SSI project is the tri-level partnership among government, universities, and school divisions. This partnership supports a collaborative project leadership model, facilitates multiple support paths to project schools, and recognizes the distinctive assistive capacities of the three different partners. The co-authors of this article have all been involved with this project and have served in the roles of researcher-in-residence, consultative support, and local project leader within the schools. *Eleoussa Polyzoi* is the researcher-in-residence, providing guidance on research design, as well as on collection, analysis and interpretation of data. *Kathy Collis* is the founding Director of the Winnipeg School Division's Professional Learning and Leadership Centre for inner-city teachers and school leaders, providing guidance and encouraging reflective capacity and agency among teachers and teacher leaders working on the project. *Michael Babb* is the Principal and school leader of the largest SSI participating school in Winnipeg, Manitoba.

The SSI project serves as a reflection point for exploring how the framework, which identifies key drivers influencing change and innovation developed by Fullan, Cuttress, and Kilcher (2009), can be applied to Canadian schools (see Figure 1). This model is used to frame the discussion around how government, university, and school division partnerships can enable and extend each of the drivers identified. We hope to illuminate what has worked within the SSI model through tri-level collaboration and discuss how this model can be used to further promote educational change and enhance capacity building for other schools.

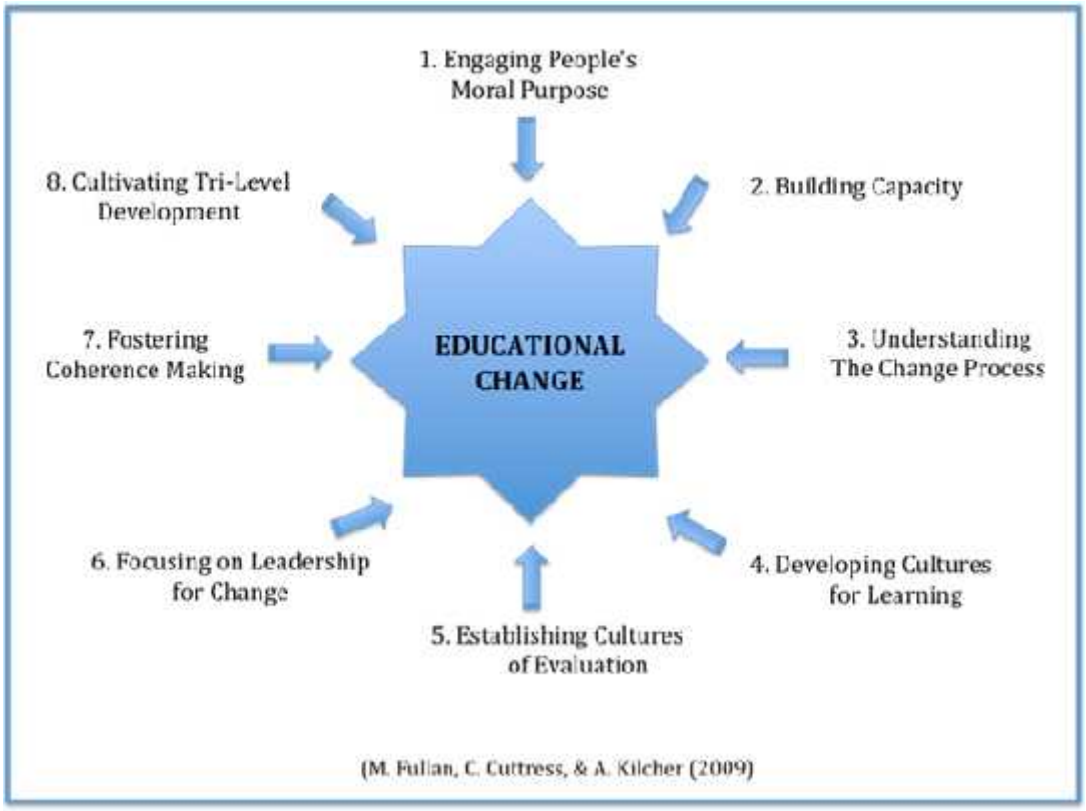

Figure 1: Eight Forces for Leaders of Change.

Three central questions were asked of each co-author in preparation for this paper: (1) How has the tri-level partnership been relevant for your work in affecting educational change for the SSI project? (2) What challenges have you experienced within this model? (3) What key lessons have you learned about tri-level partnerships in relation to Fullan et al.'s model? Responses are integrated in the analysis that follows.

An Examination of Leadership and Capacity Building Through the Lens of Fullan's Framework

Fullan et al., in *The Challenge of Change* (2009), identify eight drivers that are essential to promoting effective and sustainable educational innovation: (1) engaging people's moral purpose, (2) building capacity, (3) understanding the change process, (4) developing cultures for learning, (5) establishing cultures of evaluation, (6) focusing on leadership for change, (7) fostering coherence making, and (8) cultivating tri-level development. The Student Success Initiative Project in Manitoba provides a unique opportunity to examine how Fullan's drivers illuminate the influencing power of tri-level partnerships.

Driver #1: Engaging People's Moral Purpose:

The essence of any successful change leader is to fuel the energy and passion in others through action (Fullan, 2001). Moral purpose is an all encompassing construct that involves both ends and means. A critical end in education is to make a difference in the lives of students. The means to accomplish this end are equally important. Leading with integrity, fairness, and genuine relationship building is critical. Lewin and Regine (2000) refer to moral purpose as the "soul at work" both individually and collectively. In education, moral purpose involves being committed to the innovation—bridging the achievement gap between students who are disadvantaged and those who are not. Moral purpose is centre stage; the remaining seven drivers are vehicles for its achievement. When developing tri-level partnerships, the question becomes "**How do you build a collaborative moral purpose?"**

Sharing stories and experiences and finding common ground were critical to building a collaborative moral purpose for the SSI project, particularly with partners around the table whose backgrounds were so diverse. The importance of establishing a process for genuine discussion and sharing of experiences, thereby giving voice to each participant's unique "learning journey," cannot be underestimated. Told and retold from the perspective of the six different schools involved in the change process, these personal narratives, over time, contributed to the creation of common purpose, engagement, and commitment. As the conversations developed, a critical mass was able to achieve a breakthrough and gain momentum and energy to move into new cycles of learning (Fullan, 2005, p. 52; Rogers, 1995).

Within the SSI project, a variety of conceptual schemas were initially used to help align partners' moral purpose and vision. One school division shared the "Whole Child Philosophy" that resonated with the project partners. This philosophy outlines the belief that students need to be engaged, supported, challenged, healthy, and safe. It helped project leaders develop collaborative language surrounding what it means to support, inspire, and engage students. Understanding where students come from while truly honouring what they can become struck a chord with all of the partners. It helped participants cluster their understandings and interventions around specific common themes that could be measured both quantitatively and qualitatively. School administrators also recognized the importance of respecting individual teacher initiatives and building upon existing staff talents rather than insisting on a complete program change.

Driver #2: Building Capacity

Building capacity entails developing "policies, strategies, resources, and actions designed to increase people's collective power to move the system forward" (Fullan et al., 2009, p. 10). It also involves a new, shared identity and desire to work collaboratively for change. Building group capacity must be an ongoing process, but is not always easy because it requires that people work together in novel ways. This is why professional development at the start of an initiative is usually not enough to successfully carry the change initiative through. Capacity building must be extensive, responsive, and sustained. When developing tri-level partnerships, the question becomes "**How do you develop opportunities for synergistic capacity building among the partners?"**

Manitoba is home to a number of academic institutions, educational non-profit organizations, and universities. Accessing resources external to the Ministry extends the capacity of Manitoba Education to undertake such projects. Matching consultant expertise

with the project goals was key to the project's success.

Within the SSI, the Universities of Winnipeg and Brandon provided support through a "researcher-in-residence" model of service delivery. The researchers-in-residence, who were university professors with extensive research experience: (a) regularly visited participating schools to observe their programs, suggested directions for evaluation, and provided guidance as the project evolved; (b) recommended ways to integrate both qualitative and quantitative approaches to data collection, analysis, and interpretation to more firmly ground the schools' definitions of success; (c) emphasized the importance of linking data to the project goals as well as triangulating the data to obtain multiple perspectives on outcomes; (d) provided various resources (books, journal articles, reports) to the school team on a number of relevant topics; (e) helped draft the mid-term and final reports submitted to the Minister of Education; and (f) hosted meetings of the SSI team on the university campus.

Another central aspect of the SSI project was the ongoing support provided by the Winnipeg School Division's Professional Learning and Leadership Centre (PLLC). This institution, which provides professional development for emerging teacher leaders and administrators in one of the largest school divisions in the province, extended their mission to provide learning support for all partners and participants on the SSI project. During the all-day large SSI team meetings held once every three months, the PLLC generously shared critical information, helped preserve the focus on collective leadership, encouraged confidence and expertise, and facilitated group learning. The opportunity to explore educational issues, review resources relevant to the SSI project, and regularly meet and interact with other educational leaders (consultants, researchers-in-residence, and local project leaders within the schools) created trust in the change process, built a collective sense of purpose, and stimulated a genuine desire to see all students at the partner schools succeed. As the project's focus and processes became clearer, the learning cohorts at each of the schools began to take increasing ownership of the SSI vision. The PLLC effectively championed risk-taking and supported a climate that leaned into change rather than repelling it—in essence, appreciating the differences among the six schools, embracing resistance when it arose, and learning from it.

Driver #3: Understanding the Change Process

Understanding the change process is also critical to the success of any school initiative. Poor understanding negatively affects all the other drivers and increases the likelihood of failure. "Making change work requires the energy, ideas, commitment and ownership" of all stakeholders (Fullan, 2009, p. 11). However, understanding the complexity of the process of change is not always easy. Leaders sometimes resort to dictating the purpose and laying out the action plan for change because it seems easier, but this approach circumvents the ownership-building process critical to success. When developing tri-level partnerships, the question becomes "**How do you build common understandings around facilitating change?"**

While working in silos may allow individuals or groups to continue what they are doing with little need to move outside their comfort zone, it does not effectively move the collective change process forward. The complexity of the SSI project, from the basic logistics of implementation to the dynamics of re-culturing an entire school, was, at times, daunting for the local SSI teams. Attempts to initiate change were often met with systemic school barriers such as chronic student absenteeism, low student literacy rates, and poor parental involvement.

In cases like this, one might be tempted to gravitate to regressive change "archetypes" because they appear simpler and, therefore, more seductive. However, real change is neither static nor linear but complex and dynamic (Perkins, 2003, cited in Fullan, 2005, pp. 24, 47, 99-100; see also Fullan, 2006). Understanding the change process at a deeper level allowed the SSI partners to help one another and appreciate that the rate and pace of change may vary in different schools and for different reasons.

Fullan adds that, when dealing with change that is complex and non-linear, there is a paradoxical need for "slow knowing," (Fullan, 2001, p. 123). Claxton refers to this as "cultivating the ability to wait—to remain attentive in the face of incomprehension." (1997, p. 174). Change that is slow and "grown" is more successful than change that is ill conceived, rapid, and imposed. Hargreaves and Shirley (2009, p. 37) indicate that "building from

the bottom and steering from the top" is the best approach. School leaders at each of the SSI sites appreciated the wisdom of these words.

Driver #4: Developing Cultures for Learning

This driver involves promoting the sharing of knowledge and strategies among the change agents that nurture collective commitment to the innovation. Fullan (2005) also emphasizes the importance of "lateral capacity building" (where schools learn from each other within a given school division, or province, or even nation), which serves to extend the pool of ideas, and augment the collective identity of schools involved in similar innovations. Fullan (2009) cautions, "Good policies and ideas take off in learning cultures, but they go nowhere in cultures of isolation" (p. 13). When developing tri-level partnerships, the question becomes "**How do you cultivate a shared learning culture?"**

It is not unusual for pilot programs to be compilations of projects that are successful elsewhere. Our work at the Ministry of Education drew inspiration from successes elsewhere in Canada and the United States. For example, in the first year of the SSI project, all six SSI school teams in Manitoba travelled to Ontario to visit a model school, which served as inspiration for the Manitoba principals whose schools piloted the SSI project. Developing a model, partnerships, and procedures that work within our unique Manitoban context is always a complicated process involving ongoing changes, mid-course redirections, continuous program evaluation, and feedback from partners. The challenge of evolving and making our work more sophisticated and timely alludes to Fullan et al.'s tri-level partnership driver. The partnerships that have developed over the past three years of the SSI project have alleviated many of the challenges and frustrations typical to this process.

It is important to recognize that teachers, as learners, are at the centre of educational change. An active learning culture allows for personal transformation and responsive teaching. The SSI project provided teachers and all local SSI teams with the opportunity to study, learn, explore, and collectively share their successes and failures. While remaining true to the intent of the SSI project, the learning cohorts at each school were able to adjust and redefine their projects to better meet the needs of the students and for teacher learning to be enhanced. The role of the PLLC as a *key* partner in supporting the school teams in their learning and reflections cannot be underestimated. Mobilizing knowledge through frequent group sessions and reflective conversations served to increase local school ownership for capacity enhancement and action.

Driver #5: Establishing Cultures of Evaluation

A companion piece to developing a culture of learning is establishing a culture of evaluation. This is essential to deepening the meaning of what is learned. Investing in ongoing school assessment for learning, identifying promising ideas worthy of pursuit, dropping weaker ideas that lead nowhere, engaging in school-based self-evaluation, and facing the hard facts when it comes to accountability—all permit educators to use critical information to develop action plans and make necessary school improvements (Fullan, 2009). Developing analytical capacity and making strategic use of results is a useful skill to have. Technology can enhance a school's ability to store and analyze student achievement data over time in order to examine trends, generate solutions to emergent problems, and design appropriate strategies. When developing tri-level partnerships, the question becomes "**How do you build a culture of assessment and evaluation?**

This question raises the need for common data collection practices across school divisions. Currently, within Manitoba, there is no common software for capturing student records, and this complicates how data are collected regarding attendance, credits, suspensions, graduation rates, and other details related to student success. Consequently, for the SSI project participants, the use and sharing of data were cumbersome. However, the discussion around factors that contribute to student success and the clarification of what data to collect and for what purpose was beneficial in building a better understanding of what insights data may provide. One of the major strengths of the tri-level partnership was in the collection, management, analysis, and interpretation of the data at each of the target schools.

It is worth noting that the how and why of assessment and evaluation may not always be clear to individuals; thus, one often hears

conversations that are about "satisfying a mandated request" or responses that amount to more of a "flight or fight" response. However, reflection and data collection are fundamental to self-examination and school improvement. Admittedly, the SSI schools were not initially well prepared for this task. This is where expertise from the universities, province, and school districts helped teachers to look more critically at existing conditions and plan more strategically for the future. We are just now, as a system, becoming more comfortable with educational change because an assessment and evaluation "literacy" is just beginning to develop in Manitoba.

Driver #6: Focusing on Leadership for Change

The sixth driver of change involves knowing what kind of leadership is best to move the change initiative forward in a school. Principals who are great leaders not only improve student achievement but also develop the next generation of leaders who take up the cause and continue to push it further (Fullan, 2009). Sharing leadership with others yields higher student achievement. When developing tri-level partnerships, the question becomes "**What is the character of collective leadership and how does this differ from individual leadership that is needed for change?"**

The culture of change is typically full of anxiety, stress, and uncertainty. When executives are arrogant, inflexible, and resist teamwork, they fail (Goleman, 2000). Effective leaders show a combination of intellectual brilliance *and* emotional intelligence (Fullan, 2001, p. 71). Goleman (1998) identifies five aspects for emotional competence that help leaders succeed: (1) self-awareness (having a deep understanding of one's emotions, strengths, weaknesses, needs, and drives; people with strong self-awareness are honest with themselves and recognize how their feelings affect others); (2) self-regulation (managing one's own impulses and having the inclination to suspend judgment and to think before acting; (3) motivation (a strong drive to achieve, passion for the work, optimism even in the face of failure); (4) empathy (awareness of other's feelings); and (5) social skills (the ability to inspire and influence others, team work, and collaboration). In addition, great leaders are characterized by humility (Collins, 2001). Rather than focusing on their own success, they nurture it in others to ensure sustainability. Leadership is critical for enhancing the decision-making capabilities of others in the organization.

The character of collective or distributive leadership, however, is different from individual leadership. While it is important that leaders within a partnership have the characteristics of what Goleman refers to as emotional intelligence, additional collective leadership capacities are needed. Sustainable change requires leadership that builds the capacity of the entire school staff, and creates ownership of the ideas and values within the project as a whole. When a principal has knowledge and understanding of systemic change and supports and empowers the staff in that change, the teachers also become empowered and confident to affect change. When people work together in such a way that they pool their initiative and expertise, the outcome is a product or synergy which is greater than the sum of their individual actions. The learning environment of the school is too important to be left to the initiative of one person, the principal.

Driver #7: Fostering Coherence Making

The penultimate driver identified by Fullan et al. (2009) is fostering coherence making. Innovation that is too overwhelming or implemented in a piece-meal fashion is often compromised. Creating coherence involves providing ongoing clarity about how all parts of the innovation fit together. This driver involves cultivating capacity so that a culture of learning can generate coherence from the bottom up. When developing tri-level partnerships, the question becomes "**How do you foster coherence-making with multiple perspectives and political priorities?"**

Coherence-making is often the role of an individual working between and among levels in a system. How does one aspect of the work or multiple projects on different school campuses connect with one another? It is the role of the staff development consultant to have conversations with staff to help them "connect the dots," to see similarities in school initiatives or new mandates. Their role is also to help link new knowledge with prior knowledge so that the project is seen as a doable rather than insurmountable task. The Project Leader and Principal Education Consultant for the SSI project, the Director of the PLLC, and the researchers-in-residence helped staff see the

benefits of their work and feel valued and engaged. All partners on the project made every effort to create a learning environment that met the needs of their diverse learners. The bottom line was "… we all want the best for our students."

Driver #8: Cultivating Tri-Level Development: School or Community, District, and Province

The final driver of effective change involves system transformation at multiple levels. Change involves not only individuals but also entire systems and their interrelationships: the school or community, the district, and the province. When developing tri-level partnerships, the question becomes "**What models or frameworks support this multi-system approach?"**

Collaborative leadership builds stronger projects. Working with experts (university academics, graduate students, and professional learning support personnel) external to the Ministry of Education is invaluable because it provides multiple perspectives surrounding decision-making as well as collegial and project support.

Although greater learning emerges from the varied perspectives afforded through this tri-level partnership, this learning stance represented the steepest learning curve for many of the SSI team members. The learning mindset demonstrated by the team members helped the group move forward when expectations were not clear and when a pathway for working together was not readily evident. Trust and respect were key as individuals and, by implication, their organizations, developed relationships across different sectors and school divisions.

The tri-level partnership model adopted by the SSI project flourished because additional supportive conditions were in place. The role of hierarchies within school divisions and government were minimized allowing greater agency and responsibility to be assumed by the participants at the front line and eliminating a "them versus us" way of thinking. Opportunities for knowledge sharing were maximized allowing deeper reflection that comes from professional reading and writing. The PLLC helped the SSI teams take time to focus and balance theory, practice, and action allowing the discovery of new cycles of learning and collective action that propelled the group project forward. The SSI partners recognized that teaching could only change in sustainable ways if it happened with a strong voice from within rather than being mandated exclusively from above, a truth eloquently captured in Renzulli's concept of "a rising tide lifts all ships" (2001, p. iii). Equally important was the recognition of the unique challenges faced by SSI school leaders in the rural and northern communities, including professional isolation, fewer human resources, limited ability to attract new talented staff, and higher teacher transience—all of which make innovation more difficult in the remote versus urban areas.

Finally, paramount to the collective change process was the implementation of sound evaluation methods, grounded in relevant data and strategic analyses that effectively galvanized the change leaders to action.

Discussion: Key Lessons

The purpose of this paper is to examine ways in which tri-level partnerships can further the work of school improvement and reform. The key change drivers identified by Fullan et al. (2009) were applied to the experience of the SSI project in Manitoba, Canada as a reflection point. A number of insights emerged that may be useful to others who are contemplating system change with government, university, and school division partners within a collaborative framework.

1) Government, university, and school division partnerships can and do build a strong moral purpose and vision. However, this process takes time, effective relationship building, and a genuine desire to work together to improve student outcomes;
2) Building collective capacity is difficult and slow work. Patience, commitment, and persistence, along with accessing local resources, people, and expertise, help to shape this collaborative effort;
3) Forming collaborative understandings of the change process leads to greater success. Using common frameworks and templates, while simultaneously not over-simplifying processes and understandings, furthers engagement in school reform work. Building a sense of purpose that "we can do the work together" reinforces that effort;

4) Developing and embracing a culture of learning by both project participants and by lead partners is vital. Teams work more effectively when information is shared and successes and challenges are understood at a deeper level. Understanding the change process helps participants work with patience and persistence and not feel "bruised" when the going is slow or when one meets resistance;
5) Utilizing sound evaluation methods, grounded in relevant data and strategic analyses, helps to *operationalize* definitions of success and move the project to the next stage;
6) Distributive or shared leadership recognizes the expertise of multiple team partners and empowers the collective to engage in the change initiative rather than precariously leaving it in the hands of one leader;
7) Coherence-making of a tapestry of perspectives and political priorities entails constantly aligning and readjusting one's vision through reflective conversations. Being flexible and open to an evolving co-construction of the change project with one's partners helps maximize individual as well as group ownership and agency; and
8) Cultivating tri-level partnerships with government, school divisions, and universities to effect change brings capacity building to a new level. Collaborative learning builds stronger projects because it brings multiple perspectives to decision-making and collegial support of the project.

The Student Success Initiative in Manitoba has generated innovative strategies that have led to increased success rates for students facing additional barriers. It has had a positive impact on all participating schools. In the largest urban school, for example, graduation rates of students involved in the SSI project over the past two and one-half years, have increased eightfold, credit acquisition rates have increased by 68%, and intellectual engagement rates, as measured by the *Tell Them From Me* survey, have surpassed Canadian norms by 14%. In addition, academic supports provided through the SSI have allowed students to overcome setbacks that would have otherwise led to lost credits. Supporting students socio-emotionally has helped them keep connected to the school, making both school and life's challenges more manageable. The SSI teacher-other staff interactions have contributed to a success-oriented culture where teachers and students work together to resolve concerns and develop plans for success. The SSI has supported a wide range of courses over the project's tenure. Students have been challenged to move onto a successful track and are supported in their efforts. Many previously disengaged students have become involved in the life of the school and are more engaged in their studies. For some students, the SSI has provided a safe home base with people who believe in and encourage them to make healthy choices. The SSI has built resilience, hope, and resolve among students who were at risk of dropping out. Hopefully, SSI schools can tip the balance for these vulnerable youth so that life-long success is now within their reach.

Tri-level partnerships have been a pivotal piece of the SSI project. Partners from government, the universities, professional learning organizations, divisions, and schools suggest that the process of working closely with partners across Manitoba has been an inspirational one. Each of the drivers that Fullan et al. describe has been an important part of this collaborative process. Fullan (2001, p. 107) eloquently offers the following advice to educational leaders who are involved with change and innovation—advice that we have taken to heart. "Change is a leader's friend, but it has a split personality: its nonlinear messiness gets us into trouble. But the experience of this messiness is necessary in order to discover the hidden benefits — creative ideas and novel solutions are often generated when the status quo is disrupted." The process of working with others challenges this status quo and allows projects to support innovation in collaborative ways that yields the best results for distributive leadership and capacity building with the long-term goal of effecting successful system change.

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About the Authors

Eleoussa Polyzoi is Professor of Education and Director of Developmental Studies at the University of Winnipeg. She has published extensively in the areas of risk and resilience, leadership, capacity building, and comparative education. Currently, she is involved in a large multidisciplinary project examining respiratory health, housing conditions, and school absenteeism in First Nations communities—a study funded by the Canadian government's Collaborative Health Research Projects (CHRP) and conducted by a team of researchers from the Faculties of Education, Medicine, and Engineering. She is also the recipient of the University of Winnipeg's prestigious Erica and Arnold Rogers Award for Excellence in Research and Scholarship.

Kathy Collis is the founding Director of the Professional Learning and Leadership Centre for inner-city teachers and school leaders. She provides professional development support to the educators involved in the SSI project. She has worked in Manitoba schools for 25 years as a classroom teacher, as a curriculum consultant in Language Arts and Literacy for the Winnipeg School Division (the largest in Manitoba), and as a support teacher in Inner City Schools working on school improvement programs with school leaders and teachers. In her current role, Kathy works with 21 different schools. Kathy's passion in education lies in developing teacher leadership as well as deepening and extending the reflective capacity and agency of novice and experienced school leaders.

Michael Babb is the principal of one of the SSI participating schools located in a large urban centre in Manitoba. He has been involved in education for just under 30 years in a variety of capacities, serving as physical education/biology teacher, vice-principal, principal, and coach. He appreciates the extensive amount of time he has been able to work with young people in both curricular and co-curricular settings and is proud of the efforts that may have helped many move forward in their life's path, instilling confidence and hope along the way.

The Circle of Courage: Developing Resilience and Capacity in Youth

Larry K. Brendtro, Martin Brokenleg, Steve Van Bockern

Abstract

This article highlights the value of creating an educational climate that fosters resilience, motivation, and capacity building among learners who have been marginalized. Drawing on First Nations' teachings that encourage a holistic and affirming perspective of culturally diverse learners, the Circle of Courage model details the way the four foundations of self-esteem (significance, competence, power, and virtue) can be applied in different contexts. Connecting with troubled youth in positive ways to help them build emotional and social efficacy in addition to strategies that would improve teacher-student relationships are presented.

***Keywords*:** Circle of Courage Model; marginalized youth; building resilience; student achievement; motivation and social efficacy; effective teaching.

Everything should be made as simple as possible but not simpler.
Albert Einstein

With the explosion of knowledge in the 21st century, one must be cautious that what is most important in life is not obscured. Supporting our youth as they grow into adulthood should be uppermost in our minds. The Circle of Courage, is a model of youth empowerment that identifies the four vital signs for positively guiding youth through *belonging*, *mastery*, *independence*, and *generosity*. These growth needs are essential for well-being, being innate and a natural part of human development. In the simplest of terms, in order to thrive, young people must have opportunities to experience each of these aspects of the circle. It is within the community that these beliefs are enshrined and where the benefits of such a model will enrich the lives of all members.

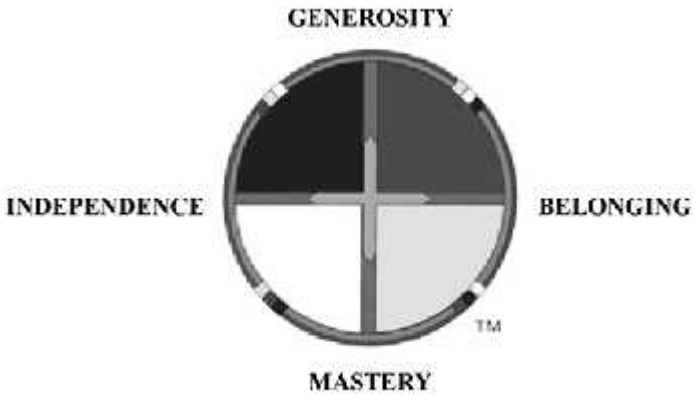

Figure 1: The Circle of Courage Model.

Research for our book *Reclaiming Children and Youth*, was drawn from both modern scientific thinking and the wisdom of indigenous cultures (Brendtro, Brokenleg, & Van Bockern 1990). Prior to colonization, Native Americans were able to raise respectful, responsible children without resorting to any form of harsh punishment. Through our research, we soon recognized that the principles of the Circle of Courage transcended cultural boundaries and further investigation revealed a congruence

with Stanley Coopersmith's (1967) four foundations of self-esteem—*significance*, *competence*, *power*, and *virtue*. Each of Coopersmith's markers for self-esteem can be paired with the values of the Circle of Courage. *First, significance is assured by* belonging**,** where children are accepted by caring adults and surrounded by positive peer interactions. In this environment, all members of a community are valued. *Competence is gained by opportunities to achieve mastery* in personal growth. However, the desire to achieve is never to better others, but to grow in knowledge and better one's self. Those with talents become models and mentors to support the learning of others. *Power is implicated in becoming independent.* Children are given opportunities to learn self-control, participate in decision-making, and develop power to resist negative peer influence. *Virtue is reflected in generosity.* Children are encouraged to help others and befriend those in need, which in turn fosters empathy, prosocial values, and proof of one's worth.

The Circle of Courage principles, portrayed by Lakota artist George Bluebird, were first presented in1988 at an international conference of the Child Welfare League of America. The model entered the professional literature in our book ,*Reclaiming Children and Youth: Our Hope for the Future* (1990) and in the journal *Reclaiming Children and Youth* with the inaugural issue in 1992 by Nicholas Long and Larry Brendtro. Training in the Circle of Courage is now provided through Reclaiming Youth International, a division of the Starr Global Learning Network. The remainder of this article highlights the research and application of the Circle of Courage.

Consilience: The Search for Truth

Amidst calls for evidence-based practice, how do we sort out what works from a mass of competing claims? We believe that the ultimate standard of truth exists in the construct of *consilience*, a time-tested principle from the philosophy of science (Whewell, 1847; Cory, 2000). Consilience brings together findings from diverse fields that converge to show powerful simple truths. Harvard socio-biologist E. O. Wilson (1998) calls for testing theories against knowledge drawn from the natural sciences, social sciences, practical experience, and ethical values. We put forth that the Circle of Courage is grounded in consilience being triangulated within three knowledge traditions: the vision of pioneers in reclaiming youth, child-rearing practices in cultures of respect, and modern research. These are described below:

Pioneers in Reclaiming Youth

Early leaders in education and youth work were incurable optimists who turned problems into learning opportunities. They embraced emerging democratic ideals and battled autocratic practices. Most notable was Johann Pestalozzi (1746-1827) of Switzerland. He created schools for street children traumatized by war, believing their hidden talents would flourish in a climate of kindness. Foreshadowing modern brain research, he saw that neither physical nor intellectual powers would develop without a loving and caring environment. This required meeting the needs of the whole child by teachings that addressed the head, heart, and hands. Practical strategies built character strengths of sympathy, gratitude, and joy. These were not little lectures about virtue but the hard work of putting love into practice (Brühlmeier, 2010).

By the early 20th century, this reclaiming ethos had spread world-wide. August Aichhorn [1878-1949[of Austria saw the behavior of wayward youth as an unmet need for love and belonging. Maria Montessori [1870-1952] showed that children from the slums of Rome had highly absorbent minds and could be motivated to mastery without punishments or prizes. Janusz Korczak [1878-1942] of Poland established self-governing schools with street children to nurture responsibility and independence. In Germany, Kurt Hahn [1886-1974] tapped the spirit of service in the belief that every young person needed some *grande passion*.

Under Hitler, progressive approaches to reclaiming youth ended. In a twist of history, many youth experts emigrated to North America and found fertile soil for their ideas. For example, Fritz Redl, trained in Austria by August Aichhorn, brought the reclaiming ethos to the University of Michigan Fresh Air Camp which became a laboratory for training leaders working with troubled youth (Redl & Wineman, 1951; Morse, 2008). In the same vein, German social psychologist Kurt Lewin showed how democratic leadership creates *positive peer cultures* in children's groups (Lewin & Lippitt, 1938).

Cultures of Respect

The bleak history of childhood in Western society (Aries, 1962), stands In contrast to itribal cultures that revered the young. Cultural psychologist Barbara Rogoff (2003) noted in her work that children are more strongly bonded to elders in traditional cultures, while at the same time they are given more opportunities to develop genuine independence. The Maori designation of child evokes images of "the face of god." Zulu sociologist Herbert Vilikazi (1993) described traditional African elders as virtual child psychologists who were astute about the needs of children.

Canadian anthropologist Inge Bolin (2006) has spent 30 years studying the culture of child-rearing in a pastoral "culture of respect" high in the Andes. She describes the children of Chillihuani as radiantly happy, respectful of authority, and kind to their peers. When they trek down their mountain in the Peruvian Andes to attend school with students from the low-land they achieve at the top of their class. The child-raising practices of this culture are an example of how meeting the growth needs throughout childhood is a precursor to flourishing in any culture.

Martin Brokenleg (2005) notes that for centuries, adults in Western culture have tried to rear respectful youth by training them to be obedient. However, measured against the true meaning of respect, it is clear that demanding obedience is setting very low expectations . Children need loving, caring, committed, and consistent adults if they are to blossom. Brokenleg urges communities and schools to rebuild the extended family of relatives who once surrounded every child.

The Science of Reclaiming

It is notable that two of the most renowned developmental theorists, Erikson and Aichhorn, were strongly influenced by their field studies of tribal peoples. Erik Erikson (1987), who was trained by August Aichhorn in Austria, wrote at length about his experiences observing the Lakota Sioux and the Yurok tribes. He proposed that basic needs, particularly trust, must be met if children are to reach their fullest potential.

Abraham Maslow studied child-rearing among the Blackfoot in Alberta, which impacted his hierarchy of human needs (1970). Maslow's higher levels of development overlap with the Circle of Courage growth needs belongingness, self-esteem, self-actualization, and self-transcendence. The latter, synonymous with the generosity principle, was suggested by Victor Frankl (1966) which Maslow later identified as the capstone of his hierarchy of needs. Unfortunately, Maslow died before this addition became widely known (Koltko-Rivera, 2006).

Resilience research also supports Circle of Courage principles (Brendtro & Larson, 2006). The premiere resilience researcher is Emmy Werner whose studies of children born in Kauai have been continuing for over fifty years (Werner & Smith, 2001). In a recent publication, Werner (2012) identifies all four principles of the Circle of Courage as central factors in resilient life outcomes.

Until recently, most theories of learning and behavior ignored the brain. But consilience requires that our approaches be informed by exciting new findings from neuroscience. Of particular importance is the new field of epigenetics, which is the study of how environmental events alter gene expression (Francis, 2011). This is a profound discovery, given that half of the human genes affect the brain . Further, adverse life experiences cause epigenetic changes that can be passed on for up to four generations. This relates to historic cultural trauma of indigenous populations whose traditions were devastated by colonial subjugation (Brokenleg, 2012).

For several years, we have been working to connect Circle of Courage principles with research in brain science (Brendtro & Longhurst, 2006; Brendtro, Mitchell, & McCall, 2009). There is now clear evidence that the brain has innate dispositions for these universal growth needs. In psychological terms, these naturally occurring tendencies are attachment, achievement, autonomy, and altruism, and each is linked to brain processes. Following is a brief description of the connections we have developed between the Circle of Courage principles and current findings in brain research.

*Attachmen*t: Children have brain-based motivation to bond with caregivers. Epigenetic research by Michael Meaney (2001) found that nurturing builds resilient brains, but lack of nurturing locks the stress reaction system into a mode of permanent alarm.

Achievement: Eric Kandel (2007) won the Nobel Prize by showing how long-term learning builds new pathways to store memories. We recall events that are repeated and those that are emotionally charged.

Autonomy. Albert Bandura (1977, 1997) described self-efficacy as the belief that one can exercise control in order to meet some desired goal. But expectation for failure or social rejection can create learned helplessness (Peterson, Maier, & Seligman, 1993). This pessimistic mindset is related to brain-based reactions of social defeat.

Altruism. Hans Selye (1978) first proposed that the antidote to stress was altruism or showing concern for others. New brain science shows that empathy and caring behavior are essential for human well being and happiness (Perry & Szalavitz, 2011).

These four elements are the focus of Positive Psychology. In an address to a Reclaiming Youth Conference, Chris Peterson (2012) noted that factor analysis of character strengths produces four dimensions parallel to the Circle of Courage. He labeled these as: *others* (belonging), *self* (independence), *mind* (mastery), and *heart* (generosity). The underlying premise of positive psychology is that while problems are real, the best remedy is to focus on one's strengths.

Building Circles of Courage

The Circle of Courage applies universally across age, setting, and culture. Here are a few examples of the wide range of programs that are applications of this model:

Positive Youth Development

The largest youth development organization is the century old 4-H Club which now operates world-wide. Rooted in experiential learning, the name 4-H comes from adding Health to Pestalozzi's triad of Head, Heart, and Hands (Subramaniam, 2002). Cathann Kress identified essential elements of 4-H programs as belonging, mastery, independence, and generosity (National 4-H Council, 2009). Researchers from the University of California (Heck & Subramaniam, 2009) note that these simple Circle of Courage concepts explain what other theories describe in more complicated and redundant terms. These essential elements have been applied to a full range of programs from violence prevention to character and talent development.

Research over the last decade has informed our understanding of the effects of family and social influences on the developing child. Through the work of Bronfenbrenner (1986), the problems of youth are now viewed as a disruption in the ecology of family, peer group, school and community. Parents as the life-span experts of their children can be a powerful force in positive youth development (Garfat & Van Bockern, 2010). Youth are strongly influenced by peers who can be a destructive process. Edmondson and Zeman (2011) studied school bully prevention policies in 37 states and proposed that the Circle of Courage be the standard for creating safe and respectful school climates. John Hoover views bullying at its core as a moral issue (Hoover & Oliver, 2008) and John Gibbs (2009) proposes that prosocial values can be developed through peer helping. Erik Laursen and Tom Tate (2012) have researched Positive Peer Culture programs as recognized evidence-based practices (James, 2011). Scott Larson is using Circle of Courage principles to transform troubled lives in faith-based youth work in justice settings (Larson & Brendtro, 2000). Professionals who themselves overcame troubled backgrounds offer unique insights into resilience and positive youth development (Seita, Mitchell, & Ameen, 1993; Brown & Seita, 2009).

Strength Based Interventions.

While problems are often seen as deficits and disorders in the young person, strength based philosophy views these challenges as learning opportunities (Long, Wood, & Fecser, 2001). Nicholas Hobbs (1982) pioneered the Re-ED ecological model which focuses on building supportive relationships through stimulating activities (Doncaster, 2011; Shepard & Freado, 2012). Children who have experienced trauma and loss need trust-building interventions (Bath, 2013; Steele & Malchiodi, 2011). The Circle of Courage offers a relationship-based alternative in lieu of programs that rely on excessive use of medications (Foltz, 2012).

Response Ability Pathways (RAP) provides practical training in the Circle of Courage model (Brendtro & du Toit, 2005). Individuals who work with children need to respond to their needs instead of react to their problems. There are three key goals of RAP training: 1) *Connect* – RAP teaches practical strategies to build trust, even with relationship-wary students. 2) *Clarify* – Problem-solving events offer opportunities for brief teaching moments to identify the private logic and goals behind behavior. 3) *Restore* – The focus is on building strengths and meeting needs by strengthening belonging, mastery, independence, and generosity.

To change the culture of a school, all who interact with youth should be provided with RAP training. RAP also gives parents and caregivers strategies to build and restore bonds of respect.

The Developmental Audit® is a specialized Circle of Courage training providing strength based assessment (Brendtro, Mitchell, Freado, & du Toit, 2012). The Audit is used by schools, courts, and treatment programs to develop positive plans for growth. Unlike deficit driven diagnosis, the Audit highlights strengths. The youth is the leading expert on his or her life and is enlisted in developing growth plans. Assessment is ecological in scope, encompassing relationships with family, school, peer group and community. The Audit addresses these two crucial questions: How do we best understand this behavior? And what is needed to produce positive outcomes?

Circle of Courage Schools.

Educational researchers Steve Van Bockern from the United States and Tim McDonald from Australia provide a blueprint for building Circle of Courage schools (2012). These principles are currently transforming public and private schools and leading the creation of specialized alternative programs. The model is being used in diverse cultural settings ranging from Native Americans (James, Brant, & Renville, 2012) to Maori and Pacific Islanders (Espiner & Guild, 2010). Since all children have the same growth needs, the Circle of Courage has universal applicability, whether the children are well-adjusted or struggling in high risk environments.Two recent studies describe the impact of Circle of Courage training in schools.

Improving Teacher-Student Relationships. Pennsylvania State University researchers studied the effect of RAP training in a largely rural school district. They compared RAP-trained teachers with colleagues who had not taken RAP (Forthun & McCombie, 2007). Following RAP training, teachers had less negative beliefs about student misbehavior, used fewer restrictive disciplinary interventions, and were more committed to creating an environment of mutual respect and trust.

Connecting with Troubled Students. Shields, Milstein, and Posner (2010) studied RAP training with staff serving students with emotional disability in Maryland's largest and most diverse school district. Students had high levels of life crisis and hospitalization and low graduation rates. Two years after RAP training, hospitalizations and alternative placements had been reduced by nearly half. The proportion of students who failed to graduate was cut in half, and incidents of harming self or others dropped 36%. A survey found that virtually all staff believed that RAP had provided practical ways to connect with challenging students and ways to better understand children in pain.

Whether gifted or academically challenged, children who feel unworthy and excluded are primed for failure. Many schools struggle valiantly to raise test scores but ignore the more potent force that Albert Bandura and colleagues call *social efficacy* (Bandura, Pastorelli, Barbaranelli, & Caprara, 1999; Caprara, Barbaranelli, Pastorelli, Bandura, & Zimbardo, 2000). Framed in terms of modern science, *prosocial behavior is the strongest predictor of academic success.* Specifically, this involves cooperating, helping, sharing, and consoling. This is the transformational power of the Circle of Courage school as described by Van Bockern and McDonald (2012):

Belonging: The universal longing for human attachment is met through relationships of trust and respect so that the child can say, "I am loved."

Mastery: The inborn thirst for achievement is nurtured and the child learns to cope with challenges and discovers "I can succeed."

Independence: The need for autonomy is nurtured by increased self-control and responsibility so that the child can say, "I have power to make decisions."

Generosity: The sense of altruism is nurtured by concern for others so that the child can say, "I have a purpose for my life."

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Adult Lost Prizes, Missing Aspirations, a 21st Century Education, and Self-Fulfillment

Don Ambrose, Valerie K. Ambrose

Abstract

Adults from deprived backgrounds face daunting barriers when it comes to the discovery of intrinsically motivating aspirations and the discovery and development of talents consistent with those aspirations. In contrast, privileged young people enjoy ideal conditions for establishing productive, purposeful life trajectories spiraling up toward long-term self-fulfillment. The barriers faced by the deprived are becoming even more formidable in today's highly complex, globalized, artificially social Darwinian socioeconomic system. Meanwhile, conditions in the 21st century are requiring a complex, difficult to acquire set of knowledge, skills, and dispositions, which include creative and critical thinking, interdisciplinary thinking, leadership, and purposeful self-development, among other abilities. Unfortunately, as with K-12 education, adult education programs are being forced to ignore the development of these 21st century capacities in favor of superficial, narrow, standardized, highly mechanistic knowledge and algorithmic skills. This article is intended to build awareness of the nature and demands of the 21st-century socioeconomic context, the dynamics of aspiration discovery and talent development, and the ways in which dogmatic ideology is pressuring education systems to ignore the needs of the deprived just when they require more instructional scaffolding than ever before to succeed in a highly complex, uncertain world.

***Keywords*:** Adult education; aspirations; democracy; dogmatism; globalization; lost prizes; neoliberal ideology; self-fulfillment; socioeconomic inequality; talent development.

As adult educators, we hope the education we are providing to our students will broaden their intellectual, ethical, and economic horizons and assist them in finding a rewarding life path. In reality, most of the teaching methods utilized in classrooms serving students with low literacy levels have "a heavy focus on decontextualized reading skills and very little attention to student 'potential' " (Williams, 2010, p. 36). This kind of education does not assist students in discovering aspirations and talents. Instead, it tends to lock them into low-level life trajectories while perpetuating oppressive societal class structures.

In essence, when they do pursue adult-learning opportunities, the approximately 24% to 31% of American adults who lack fundamental reading skills (Kutner, Greenberg, Jin, Boyle, Hsu, & Dunleavy, 2007) are receiving excessively mechanistic instruction that is not designed to discover and develop their motivations and deeper capacities. Equally disturbing, Wickins and Sandlin (2007) pointed out that the World Bank, which has become the single biggest funding source for international literacy programs, "positions literacy primarily in traditional functional terms related to the labor market and individual productivity" (281). Therefore, instruction for those with low literacy levels, both at home and abroad, focuses on narrowly conceived, superficial, basic-skills instruction that generates complacent, low-skilled workers, rather than personal empowerment through the discovery and development of aspirations and talents.

In a highly unequal 21st -century world plagued by the dominance of distorted social Darwinian ideology, the plight of deprived young people who turn into adult *lost prizes* needs more attention. This article represents an attempt to shed more light on the lost-prizes phenomenon by placing it in a large-scale context of a dominant, 21st-century trend toward greater socioeconomic inequality.

The analysis is derived from an extensive, interdisciplinary search for theory and research

pertaining to the discovery and development of aspirations and talents within influential socioeconomic, political, ideological, and cultural contexts. We draw from significant work in several disciplines to develop a model representing the dynamics of aspiration discovery and talent development, which, when interacting optimally, enable an individual to move vigorously toward self-fulfillment throughout the course of a lifetime.

After illustrating the dynamics of the model we connect it with a list of human capacities comprised of the knowledge, skills, and dispositions required for success in the 21st century. The list of capacities is derived from interdisciplinary analyses of contextual influences on human thought and action in today's world. Following a brief outline of these 21st-century abilities, we show where they reside on a *spectrum of human capacities*, which is based on a metaphor derived from the electromagnetic spectrum. This model becomes the basis for analysis of ways in which some trends toward greater socioeconomic inequality are suppressing aspiration and talent development, thereby creating more *lost prizes*. Stillborn human potential in deprived individuals and populations--the phenomenon of *lost prizes*---represents serious, widespread injustice and arguably one of the most virulent forms of human-rights abuse in the 21st century.

Finally, we close with some portrayals of flaws and opportunities in adult education for deprived populations. Programs developed to recover lost prizes have been spreading around the world (McCluskey, Baker, & McCluskey, 2005; McCluskey, Baker, O'Hagan, & Treffinger, 1995; Van Bockern, 2012). We need more initiatives like this but they will arise and thrive on a large scale only if educators and policymakers gain more big-picture awareness of the increasingly complex 21st-century globalized socioeconomic context and the ways in which aspiration discovery and talent development can align with that context.

The Virtuous Spiral of Aspiration Discovery-Talent Development-Self-Fulfillment

Educational research can benefit from occasional interdisciplinary excursions. A particularly important analytic framework comes from combining developmental psychologist Howard Gruber's work on creativity with analyses of self-fulfillment from the field of ethical philosophy. Gruber (1989, 1999) showed how creativity is much more than the instantaneous lightbulb moment of inspiration. Taking a long-term perspective, he used case studies of eminent creators to reveal ways in which their work was driven by lifelong, interest-based creative development through integrated networks of purpose-driven enterprises. An individual discovering and then pursuing such a purposeful life trajectory enjoys a growing, powerful sense of intrinsic motivation toward achievement of usually nebulous but compelling goals far away on the horizon of life.

Ethical philosophers have discovered dynamics similar to Gruber's findings about purposeful, long-term creativity. According to ethical philosophers Feinberg (1992) and Gewirth (1998), self-fulfillment is the apex of long-term human development, and it is not often achieved. An individual who can look back over her or his lifespan and honestly say that "this has been a life well lived thus far" can claim self-fulfillment. Unlike hollow, short-term gratification, which might be gained from outdoing the neighbors in a game of superficial materialism, self-fulfillment is the discovery of one's deepest, long-term desires (aspirations) and strongest capacities (i.e., talents). Self-fulfillment emerges from the discovery of compelling aspirations, which in turn encourage the individual to seek out and develop innate talents that are required for pursuit of the aspirations. The talent development further encourages strengthening of the aspirations, which then encourage further development of the relevant talents. The result is a virtuous upward spiral of impressive human development toward self-fulfillment.

One other aspect of this dynamic is especially important. True self-fulfillment ultimately leads to worthy, altruistic, ethically guided work in the world and has little or nothing to do with vainglorious egocentrism, which usually leads to an empty life spent on an ever-accelerating, materialistic, metaphorical gerbil wheel. The dynamics of aspiration discovery-talent discovery and development-self-fulfillment are portrayed in figure 1.

Figure 1: The dynamics of aspiration discovery, talent discovery and development, and self-fulfillment.

21st-Century Capacities

Following the Industrial Revolution, few individuals in developing nations thought much about self-fulfillment because they were locked into mindless, hyper-mechanistic work as assembly-line proletarians or as procedure-bound clerks in bureaucratic offices (Drucker, 1989). In contrast, socioeconomic and technological trends in the 21st century are bringing considerable change to the lives and work experiences of today's young adults. Socioeconomic globalization, driven by technology, is generating an array of challenging problems and opportunities that are influencing the life chances and life trajectories of young people today. Examples of these influences are listed briefly here (for elaboration see Ambrose, 2009, in press; Dede, 2010):

- Rapid developments in technology, which offer opportunities for unprecedented problem solving and pursuit of prosperity as well as unprecedented disasters;
- Exponential knowledge growth based on advances in technology and scientific networking;
- Resource depletion, especially in terms of petrochemicals, rare metals (required for modern technology), and arable land;
- The deregulation of globalized capitalism and the concomitant innovations and exploitation of the deprived in both developed and third-world nations; and
- The expansion of the power of elites in democratic governance systems, which is leading to the erosion of democracy in developed nations.

It will require considerable cognitive ability from individuals and nations to capitalize on these unprecedented opportunities and enormous problems. It will no longer suffice for the vast majority of the population to rely on memorization, algorithmic problem-solving, and extrinsic motivation. The 21st-century context now demands an impressive array of capacities, which include the following examples (see Ambrose, 2009, in press; Dede, 2010):

- Creative and critical thinking skills that enable individuals and groups to perceive,

generate insights about, and critically analyze large-scale problems and opportunities;
- Deep-level, interest-based exploration of academic subject matter, as opposed to superficial surface skimming of decontextualized facts and the acquisition of basic, algorithmic skills;
- A penchant for silo-breaking interdisciplinary thinking, which is required for navigation through the discipline-transcending conceptual terrain of complex problems and issues;
- Information technology skills and knowledge to grapple with information-rich, 21st-century problem-solving environments;
- Economic and entrepreneurial acumen for navigating the turbulent waves of change in the 21st-century globalized economy;
- Interpersonal, collaborative skills for participating in and sometimes leading unpredictably emergent problem-solving teams within and beyond formal organizations;
- Ethical awareness and personal and social responsibility so we can avoid harming each other severely in times of great change; and
- Intrapersonal self-discovery, which enables individuals to recognize their emerging aspirations and latent talents and then apply themselves to generating the virtuous upward spiral of mutually reinforcing aspiration growth and talent development toward self-fulfillment.

It is the last item on this list that might be the most important for individuals to achieve, especially in the case of deprived individuals. This upward spiral always has been desirable; it is crucial in today's complex, unpredictable, globalized 21st-century socioeconomic context. Unfortunately, generating the upward spiral is extremely difficult for those suffering from deprivation.

Socioeconomic Inequality as an Enormous Suppressor of Aspiration Discovery and Talent Development

Severe socioeconomic inequality always has suppressed the discovery and manifestation of talent and creativity. In times of relative stability, civilizations can get away with reserving the discovery and development of talents and creativity for an elite few. But in a rapidly evolving 21st-century environment that promises to swamp us with enormous problems, while also presenting unprecedented, high-potential opportunities (see Ambrose, in press), more widely distributed aspiration discovery, talent development, and creative intelligence are ethical musts.

A great deal of research has been done in multiple disciplines on the nature and extent of socioeconomic inequality in today's world. This literature is far too extensive for comprehensive treatment in this article so we have selected what we believe is most relevant to the creation of *lost prizes* through socioeconomic suppression.

Distorted, superficial philosophy is a big contributor to this phenomenon. For example, the literary works of pseudo-philosopher Ayn Rand have exerted powerful influence over corporate leaders, policymakers, and citizens, especially in the United States (Robin, 2011; Weiss, 2012). In Rand's (1964) ersatz philosophy of objectivism, extreme selfishness is promoted as virtuous while altruistic behavior is portrayed as an individual and societal character flaw. Rand interpreted society as a battle between the few highly motivated and talented, worthy members of the creative class and the far more numerous members of the lazy, untalented, parasitic class below them. Powerful decision makers who resonate with objectivist philosophy do all they can to support and encourage unfettered, entrepreneurial work and corporate initiatives while simultaneously discouraging or stripping away social safety nets for the rest of the population. These members of the elite automatically assume that those born into poverty are part of the worthless underclass that Ayn Rand disdained. When Rand's disciples are in positions of power, and many of them are today, the impoverished are more likely to become downtrodden *lost prizes* because the support systems that might help them rise out of poverty are dismantled.

The erosion of democratic governance in some developed nations also forces bright, underprivileged young people to become *lost prizes*. The healthier democracy becomes in the nation the better it nurtures the aspiration discovery and talent development of its young people, including those who are deprived. When a nation's governance becomes unhealthy and slides down a slippery slope toward either right-wing or left-wing totalitarianism the system reserves aspiration discovery and talent development for the children of the privileged

few insiders while denying rewarding educational and career experiences to those lower in the social strata (see Ambrose, 2005). When a nation becomes firmly entrenched in totalitarianism the aspiration development of the privileged few becomes insidiously warped toward unethical, vainglorious-egocentric hyper-materialism. Meanwhile, the aspiration development of most other young people in the nation is suppressed or crushed. Justifications for this unethical state of affairs come from the increasingly distorted, dogmatic ideology that rules the nation.

Historical examples of firmly ensconced left-wing totalitarianism include the Pol Pot regime of Cambodia and Stalin's Soviet Union while examples of extremist right-wing totalitarianism include Pinochet's Chile and Nazi Germany (see Ambrose, 2005). More interesting for our analysis is the phenomenon of democratic erosion in today's developed nations, with the United States providing a particularly worrisome example. Leading political scientists Hacker and Pierson (2005) have shown that American governance has shifted significantly rightward over the past several decades. Both major parties in the nation have moved rightward in a chase for corporate, plutocratic money, which is required to finance elections and influence public policy. The Republican Party has moved from a usually moderate, center-right position on the ideological continuum into extreme right-wing territory while the Democratic Party has moved from a usually moderate, center-left position into right-wing ideological territory. Consequently, the voters of the nation do not have much of a choice in elections and lack the power to exert much influence on the dominant ideology that shapes their lives.

Under these conditions, while their aspiration discovery and talent development is not as heavily suppressed or crushed as it would be in a firmly totalitarian nation there certainly is considerable suppression of the abilities of the deprived and some distortion of the aspirations of privileged young people in democratic nations facing significant democratic erosion. The eminent political philosopher Sheldon Wolin (2008) magnified these concerns by pointing out ways in which pervasive corporate control over our ideological systems has become firmly embedded in the globalized socioeconomic system. He used the term *inverted totalitarianism* in his portrayals of this increasingly totalitarian system that concentrates ever-more power in the hands of dogmatic, unscrupulous elites while leaving everyone else outside of the decision-making apparatus.

The most powerful and pernicious force behind the trend toward increasing socioeconomic inequality is the spreading dominance of neoliberal ideology and its intellectual cousin-distorted, neoclassical economic theory. Neoliberal ideology is a dogmatic belief system that pushes three of its useful, essential tenets into extreme intellectual territory. These tenets include: (a) elevation of the interests of the individual above that of the society; (b) economic freedom, or the unfettering of the individual to do entrepreneurial work in the marketplace; and (c) limited government, or the preference for deregulation to make room for entrepreneurial individualism. These tenets align well with the early ideas of the late 18th-century economist-philosopher Adam Smith who neoliberal ideologues and neoclassical economists laud as the iconic, primary founder of vigorous modern capitalism (see Fleischacker, 2004; Muller, 1995).

As is the case with the elements of most belief systems, these tenets themselves are worthy when they are not pushed too far. They were originally designed and implemented to free the peasantry of Adam Smith's era from the remnant shackles of feudalism and the concomitant exploitation of the masses by the European aristocracy of the time. Rather than working for long periods of time as indentured servants for the benefit of an undeserving, hereditary aristocracy, the common person of Smith's era began to enjoy at least a chance to discover and exercise latent aspirations and talents. The result was a flourishing, albeit imperfect 19th-century economy and the growth of a new middle class.

However, any belief system pushed too far into dogmatic, extremist territory can become harmful and oppressive. That has been happening with the spread of globalized neoliberalism over the past several decades (Ambrose, 2011; Giroux, 2012; Wolin, 2008). When individualism, economic freedom, and government deregulation are pushed too far they override and violate the equally virtuous tenets of liberal-progressivism, which include community, distributive justice, and regulation. An emphasis on community prevents

unrestrained, sometimes psychopathic individuals from gaining too much control over socioeconomic systems and manipulating them solely for their own benefit while abusing the rights of those less powerful. Distributive justice aims at ensuring that most or all of the rewards of a socioeconomic system do not flow into the hands of a select, privileged few and that those who do the front-line work in the economy enjoy at least some of the economic benefits. Government regulation is seen as valuable because it can prevent the abuse and exploitation of labor and the environment. Conversely, when the tenets of liberal-progressivism are pushed too far the emphasis on community, distributive justice, and government regulation erodes individual freedom.

A well functioning economy and system of governance requires a healthy, balanced, dynamic tension between these belief systems (see Ambrose, 2005; Bermeo, 2003; Gutmann & Thompson, 1996).

One particular body of work is especially relevant to our analysis of problems and opportunities in the 21st century. Social epidemiologists Wilkinson and Pickett (2009) brought together a large collection of research from multiple fields and used it to develop comparisons of the extent to which developed nations tolerate inequality and manifest health and social problems. Their findings are illustrated in figure 2, which arrays the developed nations considered in the study along two continua. The horizontal continuum arranges the nations from more egalitarian on the left-hand side to more unequal on the right-hand side. The nations also are arrayed vertically according to the severity of the health and social problems they face, with those suffering from more severe problems positioned at higher elevations on this dimension.

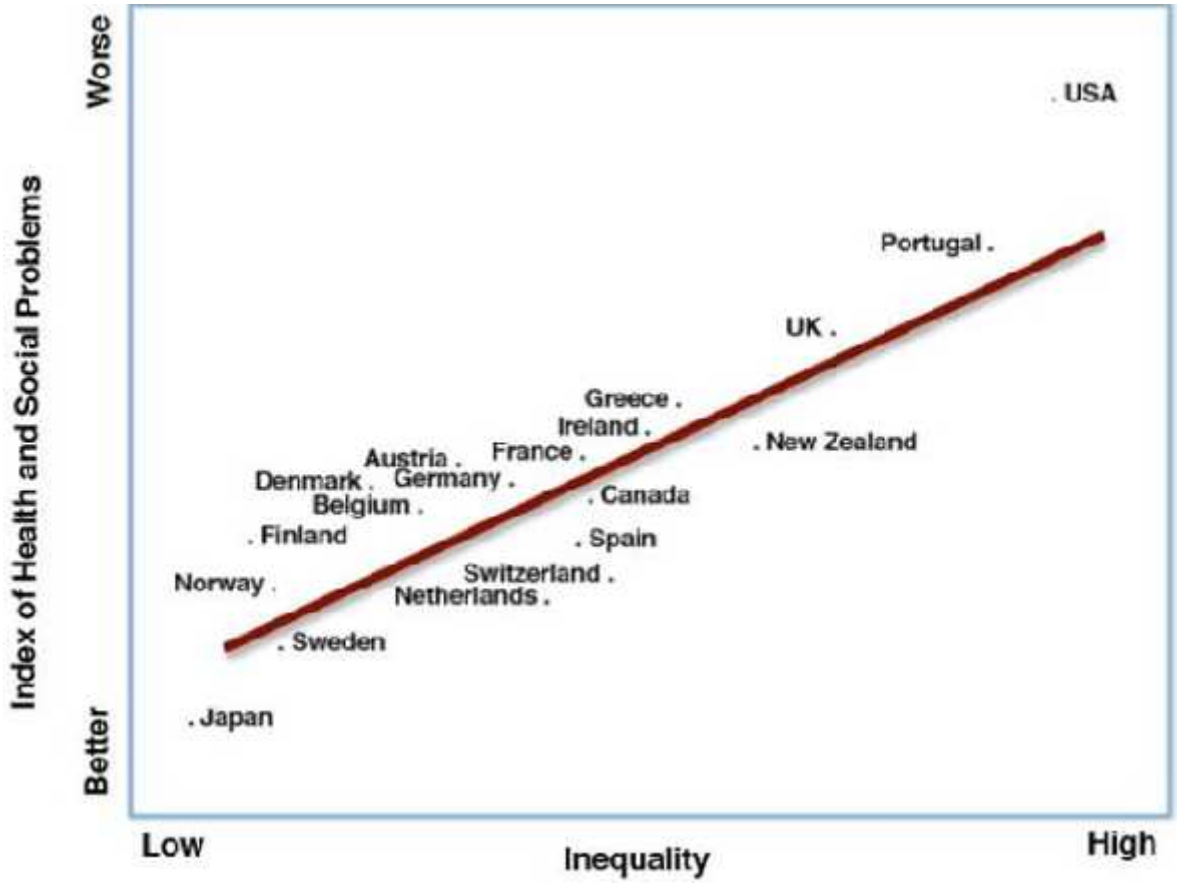

Figure 2: Health and social problems are worse in more unequal countries. Index of life expectancy, mathematics and literacy performance, infant mortality, homicides, imprisonment, teenage births, obesity, trust, mental illness (including drug and alcohol addiction), and social mobility. (adapted with permission from Wilkinson & Pickett, 2009).

The overall pattern is that the most unequal nations, especially the United States, exhibit health

and social problems far more severe than the more egalitarian nations such as Japan and Finland. Wilkinson and Pickett (2009) conclude that invidious social comparisons generate chronic stress, which aggravates health and social problems on a societal scale.

A look at some of the health and social problems under scrutiny reveals some ways in which impoverished youth in highly unequal nations are discouraged from discovering aspirations, which represent long-term motivational fuel for personal development. Here are some specific examples drawn from the health and social problems analyzed by Wilkinson and Pickett (2009). A highly unequal society plagued by severe, chronic stress generated by invidious social comparisons erodes the interpersonal trust that serves as a social and economic lubricant for the society. When trust erodes, those on the lower rungs of a steep socioeconomic hierarchy have much more difficulty gaining the trust of those above them and social mobility stalls out. Social mobility--the likelihood of a child achieving a higher level of socioeconomic success than her or his parents--is far healthier in egalitarian nations than it is in unequal nations. In spite of the popularity of the *American Dream*, deprived American youth have much less opportunity for climbing the ladder to success than do their peers in Japan, Norway, Finland, or other more egalitarian nations. Unfortunately, the Horatio Alger myth of pulling oneself up by the bootstraps is more of a myth in the United States than it is in other developed nations.

Other health and social problems from the Wilkinson and Pickett (2009) analysis also suppress the aspiration discovery and talent development of bright, deprived, young people. For example, unequal societies have far more cruel, punitive justice systems and incarcerate far more people in harsher conditions for much longer periods of time. The vast majority of those punished by these excessively severe justice systems are at the bottom of the socioeconomic ladder. Young children with caregivers and adult role models whose lives have been distorted or destroyed by an excessively punitive justice system will find the quality of their care and mentorship severely eroded in comparison with their more fortunate peers in the more egalitarian nations. When these unfortunate children mature they are likely to suffer the sting of excessively punitive justice themselves, especially if they come to view the justice system as unfairly stacked against them. In the long run, their aspiration discovery and talent development suffers. More dimensions and nuances of these suppressive influences on deprived young people can be found in Ambrose (2013). The overall effect of severe suppression of aspirations and talents in unequal nations it is to make the deprived less able to recognize the challenges of 21st-century macroproblems and the rays of hope embedded in the corresponding macro-opportunities.

Inequality Bleeding Adult Education of Vitality

Just when the deprived need a compensatory education that would enable them to perceive the large-scale, 21st-century problems that severely limit their life chances and the unprecedented opportunities that could enable them to discover and pursue lofty aspirations, K-12 education systems are becoming more stratified economically, especially in the most unequal nations. For example, myopic school-reform initiatives based on punitive accountability systems are leeching American public education of creativity and other 21st-century skills (see Berliner, 2006, 2012; Nichols & Berliner, 2007; Ravitch, 2010; Zhao, 2009, 2012).

Meanwhile, in a revealing ethnography, sociologist Shamus Khan (2010) showed how St. Paul's school in Concord New Hampshire, a lavishly funded elite school for privileged young people, is set up to nurture aspiration discovery, talent development, and other aspects of a 21st-century education. At least in terms of surviving in the threatening 21st-century the students at this school seem to need the development of high-level aspirations far less than their disadvantaged peers because they already reside securely at the stratospheric apex of an immensely stratified society. In Khan's words they are "children with multiple homes who chartered planes for weekend international trips, came from family dynasties, and inherited unimaginable advantages" (p. 3). These already privileged students enjoy the best aspiration development opportunities money can buy including interest-based, student-centered instruction, excellent mentorship, lavishly resourced independent study projects, and peer networks that will enable them to gain virtually any resources necessary for pursuit of future goals.

In contrast, in response to increasing demands for accountability, similar to those in the K-12 system, adult developmental education is becoming more standardized and, thus, hyper-mechanistic.

As a developmental educator, this article's second author has seen developmental education programs establishing ever-more prescriptive curricula that all instructors are expected to follow. For example, at one community college, all of the texts and assignments, even down to small daily assignments, are mandated to be the same across all sections of the courses. Decisions pertaining to curriculum and instruction are micromanaged; consequently, instructor autonomy is close to nonexistent. This kind of system leads to rigid instruction that cannot take into account the individual needs of students or the expertise of the instructors. This structure forces instructors to teach material in a decontextualized way, which leads to uninteresting, ineffective, and rather superficial instruction (Grubb, 1999). Consequently, this focus on decontextualized, passive learning of rudimentary skills does not address the complex cognitive demands of the enormous problems and opportunities of the 21st-century globalized socioeconomic context.

We can depict this narrowing of the curriculum for most students, especially the deprived, in the form of a *spectrum of human capacities*, which is based on the metaphor of the electromagnetic spectrum (see Figure 3). The spectrum, simplified and portrayed above the horizontal arrow in Figure 3, arrays energy along a frequency continuum. Before sophisticated detection instruments were available, people could perceive only the narrow band in the middle of the spectrum. This narrow band contains visible light, signified here as the rainbow colors--ROYGBIV. The other forms of energy on the spectrum (ultraviolet, infrared, x-rays, gamma rays, etc.) always were present and potentially useful but were unknown because they were undetectable.

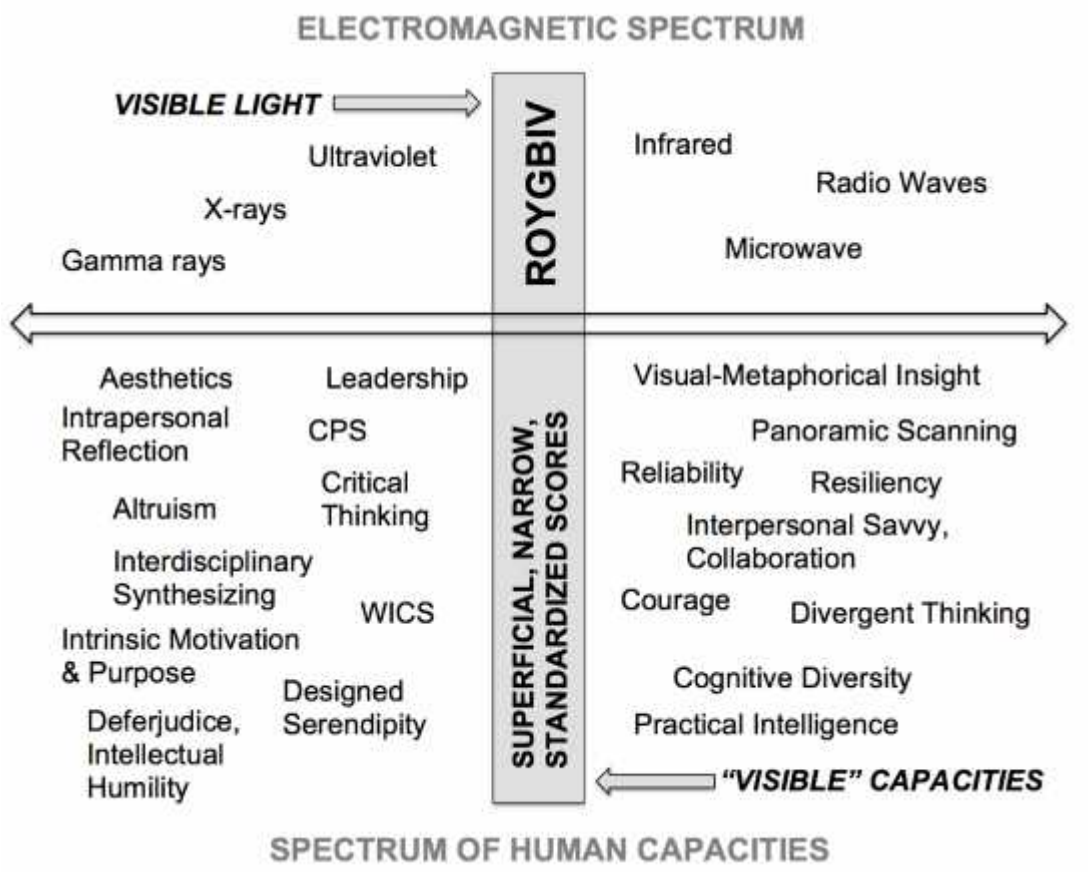

Figure 3: The spectrum of human capacities.

The spectrum of human capacities shows up below the horizontal arrow in Figure 3. It also includes a narrow band in the middle, which is comprised of superficial, narrow, scores on standardized accountability tests such as those employed in the United States for the purposes of the "No Child Left Behind" legislation throughout the first decade of this century. Outside this narrow band, on the periphery of the human capacity spectrum, we find an impressive array of abilities

consistent with and going beyond the list provided earlier in the 21st-century capacity subsection of this article. Abilities such as collaboration, creativity, critical thinking, purpose, intrapersonal reflection, leadership, panoramic scanning (big picture, long-range thinking, WICS (Wisdom, Intelligence, and Creativity Synthesized); see Sternberg, 2005), and CPS (creative problem solving; see Treffinger, Isaksen, & Dorval, 2006; Isaksen, Dorval, & Treffinger, 2011), among others, are on the periphery of the model because they are complex and expensive to measure. In contrast, the narrow abilities in the center of the human capacity spectrum are easy and inexpensive to measure through standardized testing. That's why they are used by ill-informed, dogmatic, sometimes disingenuous policymakers to hold educators accountable, unfairly so, for all the ills of persecuted education systems, which themselves are unfairly held accountable for all the ills of highly unequal, problem-plagued societies.

The unfortunate narrowing, standardization, and simplification of the K-12 and adult-education curricula forces most children and adult students into the narrow band of the spectrum, making the more impressive and 21st-century friendly abilities on the periphery inaccessible to them. The result is the suppression or crushing of embryonic aspiration discovery-talent development upward spirals toward self-fulfillment. Leading educational psychologist David Berliner (2012) coined the term *creaticide* to signify this systematic killing of creativity (and other important abilities) in the American education system due to overzealous, shortsighted, ill-informed, and dogmatic education-reform initiatives. Unfortunately, the *creaticide* Berliner highlighted in the K-12 system also is infecting adult education. Meanwhile, the lavish, student-centered education received by children of extreme affluence (see Khan, 2010), which is based on virtually unlimited funding, enables those who need it least to navigate in the rich periphery of the spectrum of human capacities in Figure 3, acquiring impressive skills for self-fulfillment and success in the 21st century.

Concluding Thoughts

Considering the complex challenges of the 21st-century socioeconomic, political-ideological, cultural context, students in both K-12 and adult education classrooms need individualized, contextualized instruction, not the superficial, standardized, hyper-mechanistic instruction they get from frustrated instructors whose hands are tied by shortsighted, narrowly conceived accountability systems. To the extent possible, their instruction must align with the creative and critical thinking, cognitively diverse interdisciplinary perspective taking, deep-level subject-matter exploration, interpersonal and intrapersonal development, and ethical awareness demanded by 21st-century globalization and illustrated on the periphery of the spectrum of human capacities in Figure 3.

The shortsighted, narrow minded, superficial vision generated by dogmatic thinking is an enormous barrier inhibiting appreciation and implementation of instruction conducive to development of these deeper, broader, and more complex capacities (for insights about dogmatism see Ambrose & Sternberg, 2012; Ambrose, Sternberg, & Sriraman, 2012). The simplified perspectives in the three figures in this article—the graphics showing the dynamics of aspiration discovery and talent development in figure 1, the enormous negative impact of socioeconomic inequality in Figure 2, and the expansion of human capacities in Figure 3, can help champions of lost prizes enlighten those who fall prey to the distortions of hegemonic neoliberal ideology and mindlessly buy into the *creaticide*-inducing education-reform rhetoric. We created the simplified messages in figures 1 and 3 so advocates of programs aimed at rescuing lost prizes could use them in communications with various constituencies. Wilkinson and Pickett (2009) created the messages in figure 2 for similar purposes.

Moreover, deprived students need the development of these abilities even more then their affluent peers who already have the supportive networks of privilege (see Khan, 2010) to help them thrive in the 21st century. One of the foundational tenets of adult education is Malcolm Knowles's concept of andragogy (1968), which includes a focus on, and honoring of, the adult learner's life experiences in the classroom. By not embracing these experiences and keeping instruction decontextualized and superficial, students are not utilizing one of their deepest wells of knowledge.

Similarly, creative and critical thinking skills need to be emphasized in these classrooms. In the second author's experience, most developmental-education students enter the classroom as passive learners. They believe what they read and do not question the assumptions and assertions of the authors. Decontextualized, rote learning does not encourage students to begin questioning or to engage with the material in a deep way; consequently, underprivileged lost prizes continue their

passive learning default patterns into college, when they do find ways to attend college, and then into their adult lives.

As Perin (2011) stated, "contextualization has the potential to promote short-term academic achievement and longer-term college advancement of low-skilled students" (p. 35). One of the main challenges that Perin saw in the implementation of contextualization is the need for instructors to collaborate across disciplines, which requires a willingness to do so on the parts of all involved and increased expenditures of instructional time and effort. However, in order for students to be successful in an interconnected, uncertain, ever-changing world, they need to be able to discriminate between biased and unbiased information, make connections between disciplines, and develop new ideas. Ironically, the very skills that students need in order to be competitive and fully participate in complex, 21st-century socioeconomic contexts are those that educators are unwilling or unable to practice themselves through lack of transdisciplinary knowledge, openness, support, and energy. Currently rigid developmental education structures tend to perpetuate a shallow, mechanical intellectual disinterestedness that will not stand adult students in good stead in an increasingly complex 21st-century globalized context. The big picture socio-contextual awareness we attempted to provide in this article might represent a step toward redressing these problems.

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Teaching and Applying Creative Problem Solving: Implications for At-Risk Students

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Abstract

We identify five reasons why it is important for at-risk students to learn and be able to apply Creative Problem Solving (CPS). CPS builds on both creative and critical thinking (in harmony with each other). The CPS Version 6.1™ framework incorporates guidelines and specific tools for generating ideas ("creative" thinking) and focusing ideas ("critical" thinking), and involves four components (Understanding the Challenge, Generating Ideas, Preparing for Action, and Planning Your Approach) and eight specific stages (Constructing Opportunities, Exploring Data, Framing Problems, Generating Ideas, Developing Solutions, Building Acceptance, Appraising Tasks, and Designing Process).

Teaching and applying CPS involves instruction in foundational tools, working on realistic problems and challenges, and dealing with real problems. Following this model, CPS can be incorporated in and across many curriculum or content areas, and more importantly, to a wide range of real-life opportunities and challenges. In some developmentally appropriate ways, CPS can be applied by individuals and groups across cultures and ages; it may also provide life skills that are vital for at-risk students now and in the future.

***Keywords*:** Creativity; creative thinking; critical thinking; Creative Problem Solving; thinking skills.

Our contemporary Creative Problem Solving (CPS) framework, known as CPS Version 6.1™ (Treffinger, Isaksen, & Dorval, 2006; Isaksen, Dorval, & Treffinger, 2011) builds on more than six decades of research, development, and field experience (e.g., Isaksen & Treffinger, 2004; Treffinger & Isaksen, 2005). CPS is used widely in many countries and settings. There are at least five important reasons for educators to ensure that today's students are learning and applying CPS (Treffinger, Schoonover, & Selby, 2013): these include:

Creativity and CPS are essential for success in the complex, competitive global environment in which individuals, teams, and organizations must operate today;

Creativity and CPS contribute to meaning, integrity, and satisfaction in career and in personal life;

Creativity and CPS help people become effective, autonomous, and competent in their relationships with others and in dealing with novel situations;

Creativity and CPS help people to deal effectively with the rapid pace, change, and unpredictability of modern life; and

Creativity and CPS expand the range of situations, goals, and challenges with which people can deal successfully.

Creativity and CPS are important in helping students *deal effectively, independently, and resourcefully with a wide variety of complex opportunities and challenges.* In preparing students for the increasingly complex challenges of the workplace, they *can also have a very powerful, positive impact on students' personal lives and careers.* Through knowledge of CPS tools and their ability to use them, students discover rich and varied new opportunities for personal growth and productivity, through which students discover and their passions, realizing and developing ways to be at their best. When people in a group talk about the best, most powerful learning experiences they have ever had, it is common for them to describe their encounters with creative learning. When people discover and use their creativity, they find that they feel healthier, happier, and more productive in a variety of ways (Treffinger, Schoonover, & Selby, 2013).

Engagement in creativity and CPS is demanding, but also rewarding. After a period of extended work on a creative project, or in a problem-solving group, it is very common for people to say, for

example, "I'm exhausted; I would never have believed thinking could be such hard work— but it was worth it!" They experience this paradox: they're "drained" from the amount of focus and effort they invested in their work, but at the same time, they're energized and excited by the results of that work, and they're eager to carry out their action plans or put their new ideas to work.

The importance of being truly engaged in what we do is consistent with the recent emphasis on positive psychology. Rather than focusing on disease, disorder, damage or disability, this new trend emphasizes the discovery and promotion of factors that allow individuals and communities to thrive (Seligman & Csikszentmihalyi, 2000). Experiencing engaging work is important for students and has also been found to be a key factor in productivity and profitability in the workplace (Harter, Schmidt, & Hayes, 2002; Harter, Schmidt, Killham & Agrawal, 2009).

Creativity contributes to our efforts to bring liveliness, excitement, and challenge to any work project— in school, or on the job. Educators and employers today are increasingly aware of the powerful benefits that come from creative engagement in a task, and students or employees who feel "ownership" in what they are doing will pursue it more energetically and diligently, over sustained periods of time. Creative learning engages people in tasks, and brings a sense of commitment and renewal to one's work. We need to help students to accept the challenges that extend beyond learning, recalling, and reciting facts or doing well on basic standardized tests. In education today, and particularly for at-risk students, we can help many students to become people who will be able to find, learn, and apply new knowledge to complex, novel, open-ended challenges; to make the most of the opportunities they discover or create in the future; and to proceed confidently and competently into outstanding accomplishments and productivity in the future.

It is possible to provide students today with *thinker-friendly* tools for creative and critical thinking, problem solving, and change management. When considering the role of CPS in education, however, it is also vital to keep an important fundamental principle always in mind*: the purpose for teaching CPS to students is to enable them to deal with complex, open-ended opportunities and challenges, as well as to engage them in meaningful ways in learning content and developing academic skills and expertise (extending beyond merely "covering the content").* CPS is not a set of tools and techniques intended to teach facts and information at the recall or recognition level. Nor is CPS aimed at preparing students for "high-stakes tests" that emphasize students' mastery of such information. People use and draw upon knowledge and information when thinking creatively and critically or solving complex, novel, open-ended problems, of course. But CPS is not a set of tools for acquiring or amassing that knowledge as much as a set of sophisticated tools for applying and extending knowledge in powerful ways. With that caution in mind, recognize that CPS tools are *proven* (having been used successfully for more than six decades and supported by extensive research), *portable* (readily learned and applied across a variety of situations by people of all ages), *powerful* (able to produce important changes in one's life and work), *practical* (applicable to everyday problems as well as complex, long-term challenges), and *positive* (capable of being used constructively and collaboratively by groups as well as able to be applied individually). [For expanded explanations of each of these terms, you can also download the free PDF file on CPS Version 6.1™ from www.creativelearning.com.]

Our approach builds on two foundational concepts: creative thinking and critical thinking. Figure 1 presents our definitions of these terms (Isaksen, Dorval, & Treffinger, 2011; Treffinger, Isaksen, & Dorval, 2006).

Creative Thinking. Encountering gaps, paradoxes, opportunities, challenges, or concerns; then searching for meaningful new connections by *generating* —

- many possibilities;
- varied possibilities (from different viewpoints or perspectives);
- unusual or original possibilities; and
- details to expand or enrich possibilities.

Critical Thinking. Examining possibilities carefully, fairly, and constructively; then *focusing* your thoughts and actions by —

- organizing and analyzing possibilities;
- refining and developing promising possibilities;
- ranking or prioritizing options; and
- choosing or deciding on certain options.

Figure 1: Definitions of Creative and Critical Thinking.

Basic Guidelines and Tools for Generating and Focusing Options

Both *generating* (using creative thinking) and *focusing* (using critical thinking) also involve learning and applying specific guidelines (attitudes and habits of mind that support effective thinking) and tools. In CPS, building on our basic definitions, we also identify two basic sets of tools: one for generating options and another for focusing our thinking.

Generating Options

Individuals or groups use these tools to produce many, varied, or unusual possibilities, to develop new and interesting combinations of possibilities, or to add richness and detail to new possibilities. When using these tools, it is important to follow four basic guidelines (Isaksen, Dorval, & Treffinger, 2011; Treffinger, Isaksen, & Dorval, 2006). These are:

1. *Defer Judgment*. When generating options, separate generating from judging, directing effort and energy to producing possibilities that can be judged later.
2. *Seek Quantity.* The more options a person or group can generate, the greater the likelihood that at least some of those possibilities will be intriguing and potentially useful.
3. *Encourage All Possibilities.* Even possibilities that might seem wild or silly might serve as a springboard for original and powerful new connections.
4. *Look for Combinations.* Increase the quantity and quality of options by building on the thinking of others and by seeing new combinations.

There are many tools for generating options. Brainstorming is an example of a generating tool and in fact, is probably the most widely known tool. Unfortunately, it is also often a commonly misused tool, and frequently is incorrectly equated with the entire CPS process, rather than being understood as one tool (among many) for generating options. Brainstorming is widely misunderstood and both researchers and practitioners have often ignored the specific procedures that enhance its productive use (Isaksen & Gaulin, 2005).

Other basic generating tools include: SCAMPER, Force-Fitting, Attribute Listing, and the Morphological Matrix. For more information about these tools and their educational applications, see: Treffinger and Nassab (2011), Treffinger, Nassab, Schoonover, Selby, Shepardson, Wittig, and Young (2006), or Treffinger, Schoonover, and Selby (2013).

Focusing Options

The focusing set includes several tools for analyzing, organizing, refining, developing, prioritizing, evaluating, or selecting options. Focusing also involves four broad guidelines (Isaksen, Dorval, & Treffinger, 2011; Treffinger, Isaksen, & Dorval, 2006), which are:

1. *Use Affirmative Judgment*. When focusing their thinking, examine options carefully but constructively, placing more emphasis on screening, supporting, or selecting options than merely on criticizing them.
2. *Be Deliberate.* Consider the purpose or need for focusing: to select a single solution, to rank order or prioritize several options;to examine ideas carefully with very detailed criteria; to refine or strengthen options; or to create a sequence of steps or actions. Each purpose may involve deliberately selecting and applying a specific focusing tool.
3. *Consider Novelty.* When seeking a novel or original solution or response, focus deliberately on that dimension when evaluating possible solutions.
4. *Stay on Course.* Keep the goals and purposes of the task clearly in sight and ensure that the options are evaluated in relation to their relevance and importance for the goal at hand.

There are also several basic focusing tools, including: ALoU, Hits and Hot Spots, Paired Comparison Analysis (PCA), the Evaluation Matrix, and Sequencing (SML). For more information about these tools and their educational applications, refer to Treffinger and Nassab (2011), Treffinger, Nassab, et al., (2006) or Treffinger, Schoonover, and Selby (2013).

The overwhelming historical emphasis of CPS has been on generating many, varied, and unusual alternatives. In part, this is one reason that brainstorming was often confused with CPS. A

major concern in our work has been to productively balance the generating with focusing guidelines and tools in order to create new and useful outcomes from CPS. We see generating and focusing as complementary, not oppositional, operations. The basic tools for generating and focusing options can be applied independently, and they can easily be incorporated into a variety of content or curriculum areas or linked to content standards (Treffinger, Schoonover, & Selby, 2013).

CPS Components and Stages

The CPS Version 6.1™ framework (Isaksen, Dorval, & Treffinger, 2011; Treffinger, Isaksen, & Dorval, 2006) involves four components, with eight specific stages. These components and stages are illustrated in Figure 2. We will explain each stage briefly.

Understanding the Challenge Component

This component involves three stages that contribute to clarity in defining a constructive goal or direction for problem solving. The three stages are *Constructing Opportunities, Exploring Data,* and *Framing Problems.*

Constructing Opportunities. This stage involves identifying a broad or general goal for your CPS efforts. Keep in mind three key characteristics of an opportunity statement: Broad (a general need, wish, or goal), Brief (concisely worded), and Beneficial (points in a positive or constructive direction). Very often people think of a "problem" as negative or "wrong" (a situation we describe as "WIBAI," or "wouldn't if be awful if…"), feeling worried, dissatisfied, frustrated, or unhappy. But CPS can also begin with tasks that are viewed in a positive way— a wish, a hope, a dream (referred to as a "WIBNI" statement, for "Wouldn't it be nice if…?"). Even when one begins with a WIBAI, CPS is more productive when the starting point is converted to look at the WIBNI.

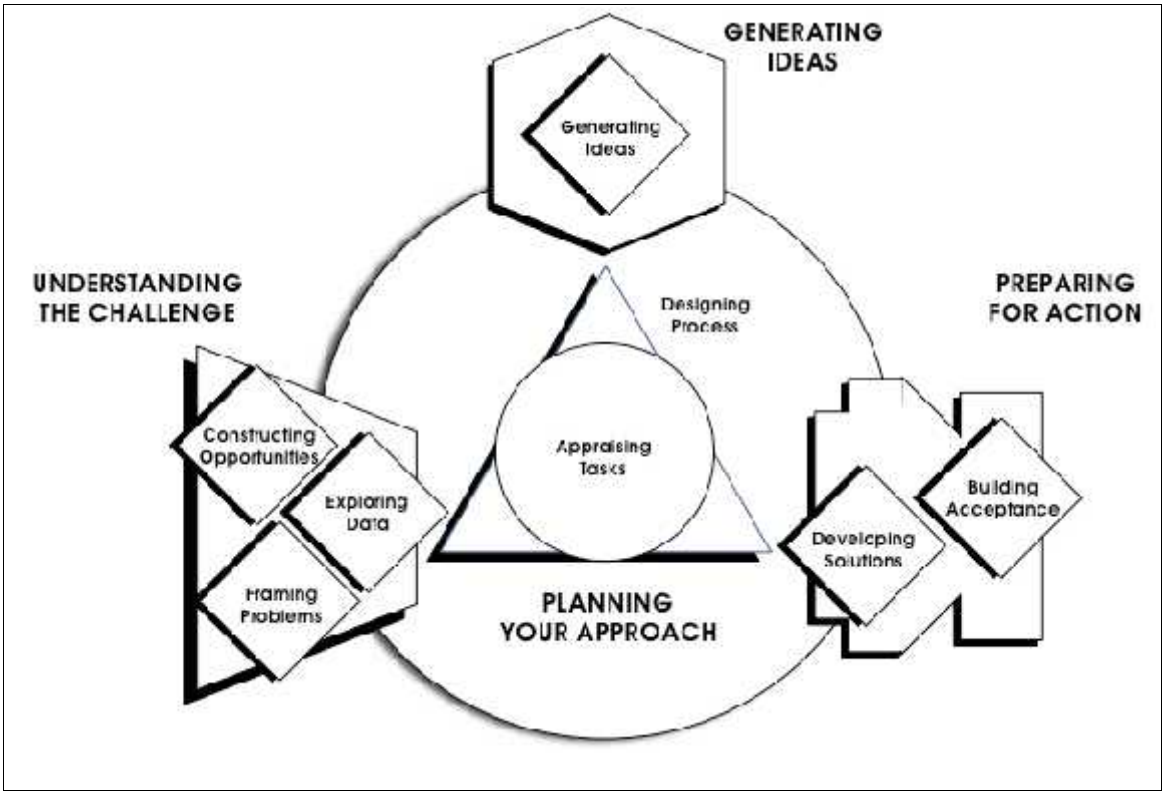

Figure 2: CPS Version 6.1™ Framework.

Exploring Data. Exploring Data is another stage in the Understanding the Challenge component of CPS. In this stage, problem solvers identify the important data in a task or opportunity statement, in order to refine their understanding of the situation and gain greater insight into the situation. This may involve:
• Know and Need or Want to Know;
• 5W's and an H (Who, What, When, Where, Why, and How); and
• From "current reality" to "desired future state".

Framing Problems. This stage involves formulating a specific problem statement to guide one's search for ideas, by posing questions that challenge you to look forward and search for many, varied, and unusual possibilities. Framing Problems involves identifying and then choosing problem statements that contain:
• Invitational stem: IWWM ("In what ways might…") [HM, "how might…" or H2, "how to");
• Clarity of ownership (who?); and
• Verb and action ("Do what?")

Generating Ideas Component

This component includes one stage of the same name. *Generating Ideas* involves searching for many, varied, original, or detailed ideas for dealing with or responding to an open-ended task. In carrying out this stage, problem solvers begin with an effectively worded, invitational problem statement, and then use one or more generating tools to produce a rich set of ideas for possible solutions. Before exiting this component, problem solvers also use one or more focusing tools to narrow down the list of options to those that are most promising or interesting (even if those options will need additional refining and development in order to become effective solutions).

Preparing for Action Component

This component consists of two stages, *Developing Solutions* and *Building Acceptance.*

Developing Solutions. The *Developing Solutions* stage helps problem solvers transform ideas into promising solutions. Its principal tasks include:
• Using the stem, "What I see myself doing…" This stage helps problem solvers to move from interesting or attractive ideas to workable solutions, keeping in mind that there is a difference between a "good" idea and a "useful" solution.
• Choosing a strategy and applying tools to determine whether to implement a few promising solutions, cluster or group a few promising possibilities to develop, or to undertake a detailed, careful analysis with criteria

Building Acceptance. The *Building Acceptance* stage involves assessing factors that will support or inhibit successful implementation and the development of a specific Plan of Action. It involves considering both *assisters* (people, places, resources, times, places that will help carry out the solution successfully) and *resisters* (people or other factors that might inhibit or interfere with successful action). This stage also involves constructing a specific Plan of Action. Effective Action Plans include at least one step that the problem solver(s) will carry out within 24 hours, and then other actions classified as "Short, Medium, or Long Term" steps. This classification depends on the nature and requirements of the situation.

Planning Your Approach Component

This CPS component includes two specific stages, *Appraising Tasks* and *Designing Process. Planning Your Approach* is a "management" or metacognitive component through which problem solvers monitor, manage, and modify (as necessary) their CPS efforts in real time (i.e., prior to and during their problem solving efforts). This component distinguishes the contemporary CPS framework from previous versions as well as from many other "problem solving" models. Many other models treat "process" as a fixed, linear, prescriptive order of steps or stages— each of which is

always deployed, and which are always in exactly the same sequence. Instead, our CPS framework, taking into account the real-world needs and behaviors of problem solvers and research on constructivist and cognitive models, treats process as a natural, dynamic, and flexible selection and application of the components, stages, and tools that problem solvers need in order to deal successfully with the actual (and often changing) tasks at hand.

CPS Version 6.1™ (Treffinger, Isaksen, & Dorval, 2006; Isaksen, Dorval, & Treffinger, 2011) provides effective problem solvers with an extensive set of tools upon which they can draw, rather than a rigid set of steps to be learned and followed mechanically. In this approach, we also recognize that all people do not learn or apply any process in exactly the same way, and that individual and group differences are valuable and not sources of "error" to be avoided. Appraising a task and designing an approach allows problem solvers to consider these individual differences as well as the conditions, climate, or context within which CPS will be applied.

Appraising Tasks. This stage guides individuals or groups in examining people, content, context, and methods in order to assess the appropriateness of CPS for use with a specific task. It includes four important factors: people, context, content, and method. For example, people, one important element of Appraising Tasks, involves using information about creativity characteristics (e.g., Treffinger, Young, Selby, & Shepardson, 2002) and problem-solving styles (Selby, Treffinger, Isaksen, & Lauer, 2004) to customize or personalize effective applications of CPS. In addition, considering the climate may also influence the importance of and approach taken for the task (Isaksen, 2007; Isaksen & Ekvall, 2010).

Designing Process. There are many change methods. When CPS is deemed to be an appropriate choice, the *Designing Process* stage guides specific choices of components, stages, and tools. Since we approach CPS as a natural, flexible process, rather than as a fixed sequence of steps, problem solvers use this stage to guide their decisions about where to enter and exit the CPS framework, and to assess which components, stages, and tools may be most appropriate for their purposes. This is not a "one-time, one-shot" stage, but since one's needs change as work on the problem evolves, it is an on-going or continuous monitoring of process. Throughout their work on a task, problem solvers need to be aware of their immediate goals and purposes, the process they are using, whether or not their choices are functioning effectively and as desired, or whether they may need to refocus or redirect their efforts and process choices. Designing Process involves "keeping your eyes on the process while you are using the process," and being ready to consider adjustments that may be needed as you become aware of the need.

Learning and Applying CPS in Many Settings

CPS can be used successfully by individuals, teams or small groups, or larger groups, for a wide range of problems or challenges, including: personal or professional problems, people problems, product problems, or planning problems. CPS has been used across many ages, from children five or six years of age in the primary grades (e.g., Keller-Mathers & Puccio, 2000) to adults. With any age group or in any setting, the challenge of learning and applying CPS effectively involves several dimensions (Treffinger & Feldhusen, 2000; Treffinger, Schoonover, & Selby, 2013). These are summarized in Figure 3. Three general dimensions must always be considered: 1) the context or environment for teaching and learning; 2) metacognitive skills (monitoring, managing, and modifying your thinking while you are in process); and 3) personal characteristics (including cognitive abilities, specific talents and interests, personal characteristics, and style preferences, for example).

Within these three broad dimensions, our recent research has highlighted the significance of personal creativity charcateristics (Treffinger, Young, Selby, & Shepardson, 2002; Treffinger & Selby, 2012; Treffinger, Schoonover & Selby, 2013) and problem solving style (e.g., Treffinger, Selby, & Isaksen, 2008; Treffinger & Schoonover, 2012) as important factors in effective problem solving as well as in teamwork, collaboration, project-based learning, and differentiation of instruction.

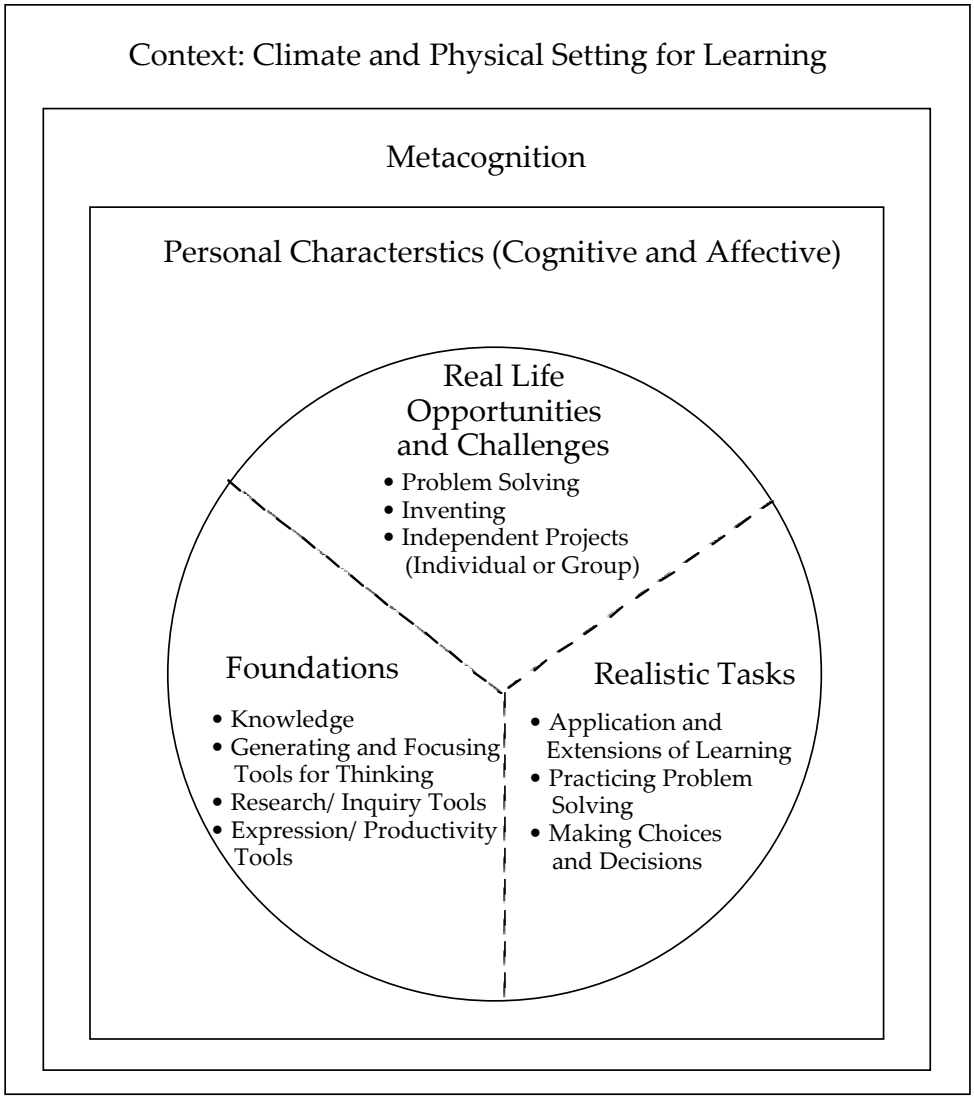

Figure 3: Model for Teaching and Learning Productive Thinking.
(Treffinger & Feldhusen, 2000; Treffinger, Schoonover, & Selby, 2013)

As illustrated in the circle in the center of the model in Figure 3, there are three important dimensions of teaching and learning: the foundations; realistic tasks; and real-life opportunities and challenges.

Although instruction or training in CPS might often treat these as sequential (from foundations to realistic to real-life), it is not necessarily always the case that they follow such a pattern. There may be many instances, for example, when work on a real-life problem clarifies the need for new "foundations," tools, or skills. For simplicity of explanation, however, we will summarize each of the three dimensions, beginning with the foundations.

Foundations

As a foundation for CPS, it is helpful for people to learn basic tools for generating or focusing options and for process management. Many of the tools can be learned quickly and easily through the use of contrived exercises or "content-free" activities that draw upon the common, everyday experiences familiar to most people. These direct instructional efforts may not represent the person's actual context for applying and using the tools—the domain or content area in which the person works—but they often help people recognize that the tools can be applied in a variety of different contexts. Direct instruction can always be followed, or even accompanied by, deliberate efforts to

practice and apply the tools in context-relevant applications.

Realistic Tasks

The foundational tools certainly can become more valuable and powerful when they are incorporated into the CPS framework. In the "realistic" dimension of the model, the primary goals involve learning and practicing the CPS components and stages. They may take the form of simulations, case studies, video clips or dramatizations of brief scenarios, or printed exercises. Realistic practice problems are intended to use content that will be of interest to the students, even though it is not of direct personal importance or consequence. The goal is to provide problems that are sufficiently engaging to be motivating for the group, but not so intensely involving that the group's investment in solving the problem makes it difficult for them to learn and practice appropriate CPS tools. No one expects that anyone will actually use or do anything with the solutions that are created, because the problems are imaginary. Thus, we describe them as "realistic" problems, rather than as real problems. For example, Treffinger (2000) provided a collection of 50 sample problems suitable for use with children and teenagers. The importance of working with realistic practice problems might be summarized through three key words:

- competence—knowing CPS;
- confidence—belief in your ability to use CPS successfully; and
- commitment—seeking opportunities to use CPS.

Even though our contemporary CPS framework is flexible and non-linear in nature, educators often find that it can be helpful for students to view and practice the process components of *Understanding the Challenge*, *Generating Ideas*, and *Preparing for Action* and their six stages in a linear approach before learning and applying the *Planning Your Approach* component and its two stages. This enables students to build their understanding of each component and stage and its contributions to CPS so they can subsequently engage successfully in "taking the process apart" and applying CPS in more flexible ways.

Real Life Opportunities and Challenges

No one learns CPS simply as an interesting academic exercise, or just for the opportunity to do "practice problems" that are contrived and provided by a teacher, trainer, or workshop leader. The reason most people learn CPS is to increase their ability to think productively, creatively and critically, in situations that really matter in their life and work. Unlike the contrived, practice problems sometimes employed in the realistic dimension, real problems are the authentic opportunities, challenges, and concerns people encounter in real life. Real problems are situations that you really care about; you feel strongly about them, and you want to be able to solve them. You intend, without any doubt, to put the solutions to work and carry out your results.

Working on real problems, not just realistic exercises, is the eventual goal of any instructional or training program in CPS. The most powerful educational applications of CPS involve opportunities for students, working individually, as a team or small group, or as a class, to identify and solve real-life problems at home, in school, or in their community. Teachers, administrators, parents, community leaders, and students can work collaboratively to engage in such real-life problem solving. In many schools today, there may already be an emphasis (and sometimes even a requirement) for participation in community service projects or "service learning." CPS offers a powerful set of tools to make service projects experiences that transcend routine "helping tasks" and provide students the deeper learning and satisfaction that come from making a difference for others.

Importance and Value of CPS for At-Risk Students

Some students who are different from the mainstream of the student population encounter a variety of challenges and obstacles to personal and academic success, and are often characterized as "at-risk students" (National Center for Educational Statistics, 1992). These students often experience low achievement and failure in school and may often become school dropouts. In the extreme, they may encounter higher incidence of delinquency, disciplinary action, and lower self-esteem (e.g., Ender & Wilkie, 2000).

At-risk students have found little stimulation, challenge, or success in school and have become disillusioned, disenchanted, or "demotivated," removing themselves

emotionally, psychologically, and physically from school, from learning, and even from a productive role in society (cf., McCluskey, Baker, Bergsgaard, & McCluskey, 2001; McCluskey & Treffinger, 1998). Unfortunately, there has frequently been greater emphasis on negative or unproductive characteristics and behavior than on the social and environmental factors that have contributed to placing students at risk, and more attention to what is wrong than to how to guide students and redirect their efforts in more constructive ways. Hixson (1993) argued that: "the focus of our efforts… should be on enhancing our institutional and professional capacity and responsiveness, rather than categorizing and penalizing students for simply being who they are."

As Torrance (1974) and Cramond (2005) argued, it is an error to view differences among people as problems or deficits; often they can be assets. Studies of "at-risk" young people have revealed strengths and talents that should not be overlooked or undervalued (e.g., McCluskey & Treffinger, 1998). Recommendations for effective educational programs for at-risk children and youth frequently emphasize the importance of providing realistic or real-life learning experiences, engaging students in high-interest, practical experiences and activities, and emphasizing active, hands-on engagement— all hallmarks of CPS in educational settings (cf., Treffinger, In Press). When at-risk youth have been guided in learning and applying Creative Problem Solving tools and methods, they have frequently discovered ways to deal with problems and challenges in constructive, forward-looking, and even dramatically life-changing ways (e.g., Baker, 2008; McCluskey, Baker, Bergsgaard, & McCluskey, 2001; Place, McCluskey, McCluskey, & Treffinger, 2000).

For educators and parents as well, guiding and facilitating students in learning and using CPS skills can be richly satisfying— bringing a sense of excitement and renewal from the experience of empowering young minds. The students who learn CPS today will become the adults on whom our world depends for health, quality of life, peace, and justice in the future. Could there be any higher calling?

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The Amphitheater Model for Talent Development: Recognizing and Nurturing the Gifts of our *Lost Prizes*

Ken W. McCluskey, Donald J. Treffinger, Philip A. Baker, Kevin Lamoureux

Abstract

Back in the early 1990s, three Manitoba School districts launched the *Lost Prizes* project to reclaim talented, at-risk high-school dropouts. Despite their unique gifts, these relationship-resistant youth were disenchanted, disillusioned, and disconnected. Many had major substance abuse problems and were engaged in serious criminal activity. At the time, in an attempt to focus our efforts and delineate strategies that might be effective with this group, our team of educators developed the Amphitheater Model for Talent Development. It has undergone revision over the years, but its emphasis has always been on equity, flexibility, and guiding practical interventions to identify and nurture the talents of all students, including those who have been hitherto marginalized. In this article, we discuss briefly the original *Lost Prizes* initiative (where Creative Problem Solving and mentoring were used in combination to turn around young lives), summarize more recent follow-up and current programs, and describe the Amphitheater Model itself.

***Keywords*:** Amphitheatre model; talent development; enrichment education; barriers to learning; Lost Prizes initiatives; mentoring.

When we first formulated the Amphitheater Model to guide our work more than two decades ago (Lamoureux, 2008; McCluskey, Treffinger, & Baker, 1995, 1998), we were concerned that gifted education had become, in a sense, stuck in antiquity. The social context of education was shifting markedly during that era. Just as photos-from-film were soon to give way to digital-camera downloads on computer monitors, the days of lecture-only instruction were starting to recede into the rear-view mirror of history.

The Times They Are A-Changin'

We felt it then, and even more so now. The children of the recent past and of today can be considered "digital natives," in that they were born into the age of new technologies (Prensky, 2001). For them, it is natural to turn to the Internet, iPods, iPads, and laptops to gather information in quick, effective fashion. They can employ calculator applications on cell phones to do their math, call upon ubiquitous spell-check programs to edit their written work, and even bypass keyboarding by "talking out" their school essays using dictation software. While "digital immigrants" (those of us born before the ever-burgeoning technological wave) struggle to keep pace, many of the new generation actually view e-mail as outdated. Instead, they communicate seamlessly via social networks: Now it is *Bebo*, *Facebook*, *Flickr*, *Friendfeed*, *Friendster*, *Hi5*, *LinkedIn*, *LiveJournal*, *MySpace*, *Twitter*, texting, and blogging that serve as the new media for obtaining and disseminating information (Anchan, Svenningsen, Tucker, Tucker, & Laube, 2013). It may not all be positive (Bauerlein, 2008), but it is the new reality. For good or for ill, young people are flocking to online networks en masse, and they are doing a tremendous amount of communicating through these sites (Boyd, 2008). And who knows what's coming next.

Many students who, from birth, have been exposed to entertaining, stimulating, and time-saving technology (including DVDs galore, life-like video games, and virtual programs), are not

going to be engaged by traditional ways of doing things. It is simply unrealistic to expect them to sit still for hours on end listening to old-fashioned lectures. The lecture method still remains a part of the process, but learning overall has become much more active and interactive. It is time to begin thinking about moving forward, rather than back, to basics.

There are real ramifications for enrichment programming. Not long ago, technology, higher-order thinking activities, and differentiated instruction were largely considered the province and prerogative of gifted education. Today, however, they are part of our educational world taken for granted and open to the majority of students. For gifted education to stay static in the face of such change would be a prescription for self-destruction. If we hope to remain relevant, our discipline has to adapt to the new realities and become part of the evolution. Yet, according to many, gifted education continues to remain narrow, inflexible, dogmatic, and resistant to change (Ambrose, Sternberg, & Sriraman, 2011).

Without doubt, there has been some encouraging movement in recent years. For example, the Renzulli Learning System – a web-based program developed at the University of Connecticut – informs users about Renzulli's seminal work in gifted education, identifies interest areas of participants, teaches how to use the Internet efficiently, and offers a substantial assortment of guided research projects for students of different ages (www.renzullilearning.com). The required annual site license allows teachers and parents to partake in the process, and provides a mechanism for students to pursue their interests and engage in motivating enrichment activities at various grade levels. While making real-life enrichment experiences available to many, this comprehensive programmatic option also gives high-ability individuals in particular plenty of opportunity to explore their passions, stretch their limits, and strive for higher levels of thinking and doing.

That said, although progress has been made in pockets, gifted education overall has been rather slow to respond to the shifting societal conditions and context. The ways of getting and sharing information are indeed changing at an extraordinary pace. The Internet has nourished global education (Anchan & Halli, 2003), and today's virtual communities allow young people to interact with peers and educators worldwide to make connections, solve problems, and create projects collaboratively and cross-culturally (Pascopella & Richardson, 2009). Global citizenship is no longer a vague, ethereal concept; it has become very tangible for teachers and learners in the new world order. To accommodate such change, gifted education must do far more to become more challenging, more inclusive, and more global.

There is another area in which gifted education has responded quite slowly. Technological advances, the rise of the profit-at-all-costs mantra, and other modern-day developments have caused, at least in part, some concomitant philosophical and behavioural changes among what appears to be a significant part of the population. More precisely, many talented people seem to be achieving personal success at the expense of others and of society in general. This possibility of misdirected talent is an important reason to build the teaching of morality, values, and ethics into gifted programming (Ambrose & Cross, 2009).

An Inclusive Approach to Talent Development

The Amphitheater Model for Talent Development pulls together some of the work done by members of our own team (McCluskey, Treffinger, & Baker, 1995, 1998). Shown in Figure 1, it represents a synthesis of several approaches: the McCluskey-Walker (1986) Integrated Enrichment Model, the Talent Identification and Development in Education (TIDE) overview (Feldhusen, 1995), and the Levels of Service (LoS) framework (Treffinger, Young, Nassab, & Wittig, 2004; Treffinger, Young, Nassab, Selby, & Wittig, 2008), including the specific "indicators of excellence" to guide enrichment programming.

In our view, the outcome-directed Amphitheater Model embodies the principles of differentiated instruction, in that it embraces diversity, emphasizes inclusion, and focuses specifically on teaching, learning, and talent development. The circular epicenter of the Model depicts what should be a major goal for educators worldwide: to create classrooms where all learners can discover and develop their strengths and talents as fully as possible.

To achieve this objective, it is necessary to have a solid base. The following five building blocks or *Foundations* in Figure 1 highlight specific areas of primary importance in the new educational context:

Foundation 1. Valued Outcomes and Authentic Assessment. One of the unfortunate and unintended results of the "no child left behind" movement was that the primary educational goal in large numbers of school districts became to build the skills of as many students as possible to a certain "acceptable" level. This objective must change. Rather than striving merely to develop basic, minimum competencies, should we not be working to maximize talent development? Part of challenge ought to be to identify worthwhile educational targets for students, educators, and community partners and to assess outcomes in a meaningful manner. Today, perhaps more than ever before, learning must be realistic, genuine, and authentic. Teachers have to move away from emphasizing memorization and rote learning of facts, and towards providing students with the opportunity to apply their knowledge to fit the times. We must value not only the knowing, but the doing as well.

Taking this perspective has implications for the evaluation of learning outcomes. If the goal is for students to acquire, demonstrate, and apply knowledge, standardized testing on its own is an inadequate method for assessing growth. Said simply, tests do not necessarily measure skills, productivity, or potential (Feuerstein, 1979; Gardner, 2000; Marzano & Costa, 1988; McCluskey & Walker, 1986; Treffinger et al., 2008). Accordingly, assessment must become more dynamic and authentic, and shift from being test-based to performance-based. When students are engaged through creative, real-life activities and given the chance to explore important issues in the manner of practicing professionals, assessment has to focus on longitudinal observations, portfolio development, and product quality and outcomes (Baum, Renzulli, & Hébert, 1995; Hart, 1994; Renzulli & Reis, 1997; Slavin, 2012; Treffinger et al., 2008).

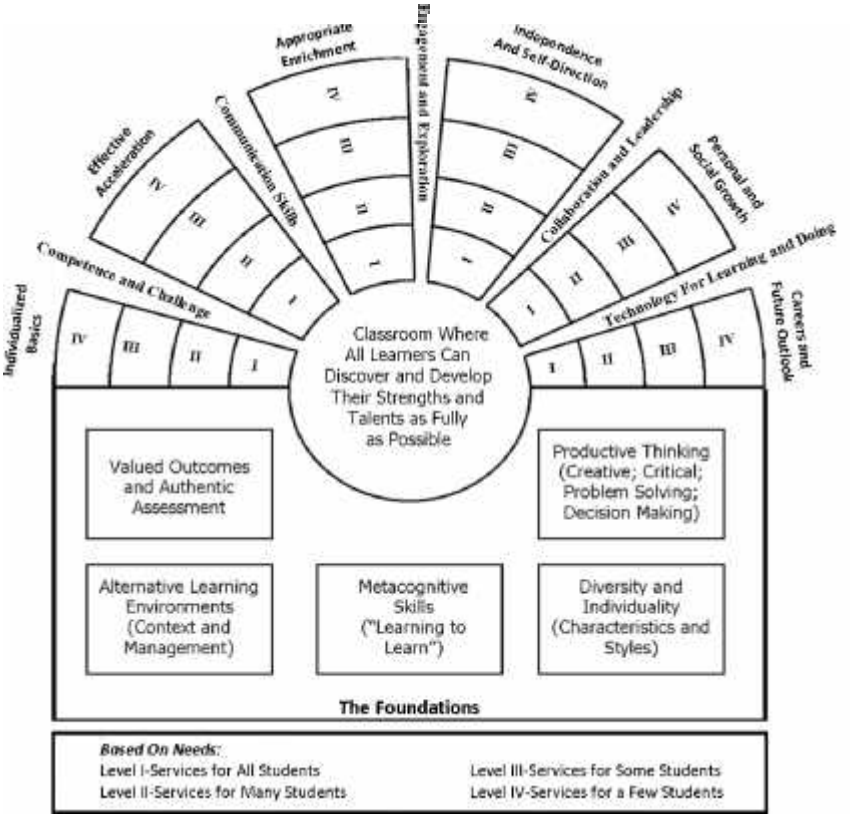

Figure 1: The Amphitheater Model for Talent Development. Used with permission of the Center for Creative Learning.

Foundation 2. Alternative Learning Environments. Not all learning takes place in school. Educators must seek out and use varied contexts beyond the typical classroom: "We would do well to consider education as taking place within an 'ecosystem of learning,' in which many components contribute to the goals of success and productivity and interact in interdependent ways. In addition to schools and classrooms, education is influenced by what happens in homes; at computers on the Internet; in community workplaces; in churches, museums, and theaters; on athletic fields; and in correctional facilities, youth homes, and health care centers" (McCluskey & Treffinger, 1998, p. 218).

Restricting instruction to inflexible, whole group, in-class routines is limiting and often inhibiting to talent development. It is necessary to individualize: For part of the day at least, different students can do different things at different times. Encouraging cooperative activities and creating learning centres can turn a classroom into a "learning laboratory." By using excursions and "field trips" in inventive fashion and, as mentioned, providing research opportunities for students to become real-world investigators, educators will make true enrichment more attainable (Baum, Renzulli, & Hébert, 1995; McCluskey & Walker, 1986; Renzulli & Reis, 1997). Accessing material resources in the community (e.g., museums, universities, heritage buildings, and unique environmental settings) and "person-power" from without (e.g., volunteers, parents, and mentors) should be part of what a school is about. When designed appropriately, group and individual project work should extend and flourish outside the walls of the classroom. It becomes a matter of managing instruction in flexible ways to meet a variety of student needs.

Foundation 3. Metacognitive Skills. The information explosion and resulting paradigm shift in education dictate that students should not rely solely on material imparted directly by the teacher. On the contrary, they must move from memorization and regurgitation of facts to consciously analyzing their own abilities, monitoring their own thoughts and behaviour, and making choices about their own learning. If young people actively reflect upon their interests and preferences, if they know their strengths and weaknesses, and if they understand their personal and creative style, they will be better positioned to make informed decisions and to structure tasks and situations to their advantage.

Metacognition, or "thinking about thinking" (Armbruster & Brown, 1984), helps students reflect upon such things before, during, and after problem solving (Barrell, 1991). Teaching children to learn through self-awareness, task analysis, and systematic problem solving will set the stage for the development of responsibility and a passion for lifelong learning (Lamoureux, 2008). In fact, metacognitive strategies can and should be taught (Costa & Kallick, 2009; Osman & Hannafin, 1992; Perkins, 1995; Ritchhart, 2004). To illustrate, Creative Problem Solving (CPS) (Isaksen, Dorval, & Treffinger, 2011; Treffinger, Isaksen, & Stead-Dorval, 2006) – a powerful approach to teach problem-solving techniques (and build a "toolbox" of strategies) – can be used to enhance curriculum engagement across subject areas in early, middle, and senior years classrooms.

Foundation 4. Diversity and Individuality. Feldhusen (1995), Gardner (2000), and Sternberg (1997) argue that there are many types of talents or "intelligences." There have been many well-known instruments developed to identify different learning, personality, and creative styles, including the Myers-Briggs Type Indicator (Myers, McCaulley, Quenk, & Hammer, 1998), the Kirton Adaption-Innovation Inventory (Kirton, 1976), the Learning Styles Inventory (Dunn, Dunn, & Treffinger, 1992), and VIEW (Selby, Treffinger, Isaksen, & Lauer, 2002). While certain educators have concerns about the validity of some of these theories and inventories, at a broad level at least it seems intuitively obvious that people do indeed exhibit markedly different ways of thinking, reacting, and behaving. Almost any coach will acknowledge that you can't treat all athletes the same. And sensitive teachers know that you won't reach all students by using only one approach.

Since different children learn differently, diversity is a plus in the classroom. To put it succinctly, varying class activities and expectations increases the chance that all students will have their needs met. When they become more attuned to their own preferences and styles, children and adolescents (and adults) can adjust, adapt, and learn more effectively. In order to nurture and develop the diverse talents of the widest possible range of students, educators must individualize in creative, flexible ways.

Foundation 5. Productive Thinking. If students are to learn to confront issues, make their own decisions, and think critically and creatively, teachers need to emphasize problem solving in everyday situations. For students to develop self-efficacy, their thinking must go somewhere; it must at times be functional, practical, and crowned by concrete outcomes (Sternberg, 1997).

In short, students must have an opportunity to accomplish specific goals, experience success, and acquire a degree of mastery (Brendtro, Brokenleg, & Van Bockern, 2002; Lamoureux, 2008). Various programs, including TIDE (Feldhusen, 1995), the Schoolwide Enrichment Model (SEM) (Renzulli & Reis, 1997), the LoS approach (Teffinger, Young, Nassab, & Wittig, 2004), the Circle of Courage strength-based model of youth empowerment (Brendtro, Brokenleg, & Van Bockern, 2002), and CPS (Isaksen, Treffinger, & Dorval, 2011; Treffinger, Isaksen, & Stead-Dorval, 2006) have long histories of building these ingredients into the mix.

Figure 1 also shows five threads or *Strands* emerging from the epicenter and from the building blocks:

Strand 1. Competence and Challenge. Programming for enrichment demands that we stretch students by encouraging them to think creatively and go beyond basic memory tasks. Although the term "higher order thinking skills" (and Bloom's *Taxonomy of Educational Objectives* itself) has perhaps been overworked through the years, there is still no denying that teachers can guide students to greater levels of accomplishment by exposing them to challenges that involve analysis, synthesis, and evaluation (Bloom, Englehart, Furst, Hill, & Krathwohl, 1956).

The literature examining differences in style and approach between "expert" and "novice" problem solvers indicates that experts take a broader view in perceptual organization and spend more time making plans, breaking problems down into component parts, and monitoring progress (cf. Woolfolk, Winne, & Perry, with Shapka, 2009). Echoing previous comments concerning metacognition, many of the strategies, tools, and methods used for expert problem solving are decidedly teachable. To help young people produce original ideas by drawing from and using information, integrating and reconfiguring the material, seeking new combinations, and applying the emerging understandings to new situations is to personify a talent development approach. And to help them be successful in such higher-order ventures is to give them a sense of competence and mastery (Brendtro, Brokenleg, & Van Bockern, 2002; Smith & Lamoureux, 2004; Sternberg, 1996, 2006).

Strand 2. Communication Skills. Another goal for educators is to move past the "teacher talks – student listens" straight jacket (Woolfolk, Winne, & Perry, with Shapka, 2009, p. 442), and to provide support for students to express themselves, their questions, their concerns, and their ideas in many forms and through various media. Capable communicators listen, speak, read, write, and employ a variety of tools for personal expression. Students take more control of their own learning when they are given opportunities to explore strategies of reading, pre-writing, and creative and critical thinking, including options such as questioning, brainstorming, clustering, and webbing. When they integrate and connect such information among subject areas, teachers and their students can foster intellectual growth in an enriching, stimulating climate (Baker, McCluskey, Large, Gemmell, Sadowy, Wood, & Bevis, 1989; Brownlie, Close, & Wingren, 1988).

Strand 3. Engagement and Exploration. If educators are to take advantage of the natural curiosity of children and youth, they must allow them a voice. Students need to have input, and to some extent their work should be based on their own interests. There are inventories, such as The Interest-A-Lyzer (Renzulli, 1977), that can help teachers assess student interests. Good old-fashioned conversation and brainstorming can point the way as well. Not surprisingly, if schoolwork is tied to their passions, students have a personal investment in the content, processes, and outcomes. By definition, when they are driven by internal factors such as satisfaction or enjoyment, students are more likely to be engaged and produce high-quality work. Intrinsically motivated individuals explore problems with vigour and intensity and seek out and persist with challenges (Deci & Ryan, 2002). Curiosity, exploration, and risk-taking are sources of intrinsic motivation, but all require the freedom to make mistakes. Since mistakes are, by definition, part of learning, educators must be malleable enough to create supportive,

safe environments where students can take creative chances without fear. In such environments, discovery and self-directed learning will thrive (McCluskey & Walker, 1986; Renzulli & Reis, 1997; Treffinger, 1975; Treffinger et al., 2008).

Strand 4. Collaboration and Leadership. One necessary element of personal growth and well-being is for young people to become confident, self-reliant, and independent (Brendtro, Brokenleg, & Van Bockern, 2002). At the same time, however, there is also a need for teamwork and collaboration. Learning does not take place in isolation; in an enriched setting, students acquire skills to help them interact, communicate, and work together.

The cooperative learning literature illustrates how two (and more) heads can often be better than one when students learn to work productively in pairs, small teams, and large groups (Johnson & Johnson, 1994). If properly thought out and structured, cooperative learning can be effective with even highly diverse student groups (Baker & Clark, 2010). Talented individuals who understand the importance of working with others cooperatively, collaboratively, and creatively often contribute to organizations and society by taking on and redefining leadership roles (Isaksen, 2000; McCluskey, 2013). Clearly, then, students across the spectrum in our schools should be encouraged to develop their leadership skills.

Strand 5. Technology for Learning and Doing. As time goes by, information technology is likely to have an ever-increasing impact on all of us. It certainly can be argued that "computers are the future" (LaBerta, 2011). However, there is a need to go down the technological road with caution. Random, unguided exposure isn't always positive and skills children acquire on computers through general use will not necessarily translate into future competency (Friedman, 2005; Van Tassel-Baska, 2007). Technology offers great promise, but it is neither magical nor the be-all and end-all of education. Further, it must be recognized that some disadvantaged people have less access to technology than others in society. "Computers may be capacity extenders. Capacity building is a human struggle" (Anchan & Katz, 2003, p. 123). Responsible programming means that we take pains to ensure that appropriate and enriching instruction is provided to children in information technology, digital communication, and use of social media.

Embedded within Figure 1, the next component of the Model describes four necessary *Levels of Service for Effective Programming* (Treffinger, Young, Nassab, & Wittig, 2004; Treffinger et al, 2008). At **Level I**, the focus is on expanding learning opportunities *for all students*, in part by integrating higher order and creative and critical thinking strategies into the regular instructional package. Examples of Level I experiences include exposure to new topics (e.g., fine arts and foreign languages), general exploratory activities (e.g., guest speakers, field trips, and learning centres), and independent projects. Lamoureux (2008) provides another illustration where a teacher, in introducing a unit on global sustainability, might kick things off by asking an official from an environmental agency to visit and speak with the class. All students can hear and benefit from the message. They can all also participate in follow-up activities such as constructing, using, and maintaining a school compost bin.

At **Level II**, the emphasis is still on broad-based and inclusive services, but *for many students* rather than for all. Here there is a shift towards extending enrichment experiences beyond basic exploration. Not all students will be involved at this level, but any might become engaged based on their interests. Level II possibilities include participation in programs such as Future Problem Solving, Odyssey of the Mind, Junior Great Books, science fairs or invention conventions, band, theatre, debating, curriculum compacting, and after school, weekend, or summer enrichment courses. Such opportunities should be available to a large percentage of the class. To continue with the environmental example, many students may become genuinely passionate about the topic and actively involved in recycling projects.

Once teachers and students reach the higher levels, greater attention is paid to individual needs and characteristics. Participation is based less on voluntary self-selection and more on diagnostic planning. At **Level III**, the emphasis is on extending programming *for some students* to provide an appropriate challenge for those who exhibit interest, perseverance, and ability. Possibilities might include more focused follow-up sessions with guest speakers, intensive

individual or small group projects or thematic modules, art, drama, or music lessons, community problem solving, credit by examination, peer teaching, and university enrichment mini-courses. Returning to sustainability, some students may express an interest in reducing carbon emissions. In response, the teacher could call upon environmental scientists to set up special workshops at the local university. Individual or collaborative student projects might be part of the process.

Level IV involves individually designed options *for a few students* who have demonstrated unique abilities and talents. Activities here are carefully developed and put in place only after thorough consideration of relevant data and planning meetings with students and participating teachers, parents, and mentors. Level IV experiences might involve dual enrollment, advanced courses (perhaps at university), intensive work with mentors, conducting research or service projects, presentations to outside agencies, and subject or grade acceleration. Going back again to the environmental unit, an especially capable, committed student might be paired with a mentor for a term to undertake a major sustainability project such as assessing the eutrophication of an endangered lake, proposing a possible plan of action to reclaim it, and presenting that plan to government.

The final dimension of the Amphitheater Model depicted in Figure 1 involves six *Indicators of Excellence* (Treffinger, Young, Nassab, & Wittig, 2004; Treffinger et al., 2008):

Indicator 1. Individualized Basics. In various fields of human endeavour, we typically recognize that people are different. For example, we do not usually expect bankers to be poets, artists to all paint the same pictures, 300-pound offensive linemen to run 60 yards down field to receive passes from the quarterback, or the Dixie Chicks to sound like Marilyn Manson (McCluskey, 2000). Yet, even though it is, in a sense, undemocratic, many educators insist – in the name of equality – that we should treat all students the same. But they are not all the same. True fairness involves differentiating instruction and taking into account the personal and social context of each student. Individualized enrichment means basing instructional and curricular decisions on students' characteristics, creative styles, and prior experience and achievement.

Indicator 2. Effective Acceleration. All school subject areas should be fluid and allow opportunities for flexible grouping and continuous progress. In other words, rather than being stuck in a rigid pass-one-grade-get-to-go-to-another system, students should be able to move through the curriculum at a pace commensurate with their accomplishments and talents. The let-the-children-be-children folk wisdom notwithstanding, educational decisions should be based on fact, not myth (Feldhusen, Proctor, & Black, 1986). And the preponderance of longitudinal research consistently shows that allowing high-ability children into school early and/or permitting grade acceleration can be extremely beneficial for academic, intellectual, emotional, and social growth (Colangelo, Assouline, & Gross, 2004; Gross, 1993; Proctor, Felhusen, & Black, 1986; Van Tassel-Baska, 1986).

Indicator 3. Appropriate Enrichment. As discussed earlier, enrichment can take place at many levels. In an enriched classroom, students are able, independently or collaboratively, to pursue their own interests, learn and apply problem-solving strategies, and identify and explore real-world issues (Renzulli & Reis, 1997; Treffinger, 1998).

Indicator 4. Independence and Self-Direction. Part of enrichment programming must involve creating a classroom and school environment that helps students become independent learners (Brendtro, Brokenleg, & Van Bockern, 2002; McCluskey & Walker, 1986). The teacher won't always be there: Talented students should be encouraged to develop self-reliance and to set challenging yet realistic goals, identify resources and opportunities, plan and put those plans into action, complete tasks, evaluate products, and share information with others (McCluskey & Walker, 1986; Renzulli & Reis, 1997; Treffinger, 1975).

Indicator 5. Personal Growth and Social Development. The learning environment and curriculum should be structured to foster high levels of self-esteem and confidence among

students. There must be success experiences. As well, young people must learn to recognize and respect the strengths and needs of others (McCluskey & Walker, 1986; Treffinger, Nassab, Schoonover, Selby, Shepardson, Wittig, & Young, 2003).

Indicator 6. Careers and a Futuristic Orientation. Career exploration is a critically important, but often neglected piece of the enrichment puzzle. In today's world, the job situation is shifting rapidly. Career opportunities are suddenly shutting down in some areas and, just as quickly, opening up in others. As a consequence, students must learn to cope with the new realities and to become adaptable, lifelong learners. They must also acquire a vision, the ability to predict future conditions and trends, and the willingness to prepare and ready themselves for the new realities of tomorrow (Csikszentmihalyi & Schneider, 2000; Treffinger et al., 2003). By giving students a sense of purpose and direction, it is possible to reclaim and refocus even at-risk, relationship-resistant individuals (McCluskey, Baker, O'Hagan, & Treffinger, 1995; McCluskey, with Baker et al., 2012). One part of the process should be for educators to guide students in developing Individual Growth Plans outlining creative styles, school and outside interests, past experiences, and personal goals and the practical steps necessary to achieve them (Feldhusen, 1995).

We should mention that the Amphitheater Model has been criticized in some quarters for being "too complex." However, since the concepts and strategies involved are complicated – and since we have no desire to "dummy down" the process – we remain unapologetic. We're pleased that it has been employed, with modifications, as an "organizer" and "cognitive map" for students. It has also been used as a programmatic guide and anchor in several international projects designed to develop the talents of at-risk students, essentially – we have been told – because of its pragmatic emphasis on flexible facilitation, self-direction, and fairness.

In concluding this segment, it is also important to note that we are not suggesting that others import and apply the Amphitheater Model directly to their own educational contexts. Programming for children and youth, especially at-risk ones, is a complicated business. There are many variables to consider: the needs of the students, the characteristics of the school, the strengths and weaknesses of the staff, the nature of the community, and so on. And all these are in a constant state of flux and change. Basically, then, since no two programs are perfectly alike, no approach can fit them all. To seize impulsively upon one model from another place is actually the antithesis of creativity. It is far preferable for educators to be eclectic, to analyze various frameworks, to take what seems reasonable from several sources, and – after trying things on for size and making adjustments – to design their own unique model for their own unique setting.

Equal Opportunity for All

There was, and in many places still is, a tendency to select students for gifted programs predominantly on the basis of their scores on formal IQ (or other) tests. In our view, though, such old school, traditional approaches to identification exclude many disadvantaged individuals who have been marginalized for a variety of reasons. All too frequently, due to their unfortunate life circumstances, the talents of such at-risk students are missed, masked, or ignored simply because they and their families lack the social and cultural capital that sets the stage for success in school and in later life (Bersgaard & McCluskey, 2013). To put it succinctly, the playing field isn't even close to being even.

Tonemah (1992), in his research with Native American students, observed that educators too frequently concentrate on remedial programming at the expense of identifying and developing talent. Along the same lines, Torrance, Goff, & Satterfield (1998) spoke out against the notion that zeroing in on deficits somehow benefits troubled children and youth. They asserted rather that it is successful behaviour that motivates and allows students to maximize potential. In their view, the goal should be to build strengths, skills, and abilities; not to waste energy by ignoring the positives and over-emphasizing deficiencies.

Take, for example, a high-octane ADHD child. Parents and teachers confronted with the challenges of hyperactivity often, naturally enough, struggle just getting through each day. But if the focus is all on handling problems and managing the negatives, it's easy to miss a lot of "good stuff." Unfortunately, although usually well-intentioned, this sort of day-to-day survival

approach is limiting and restrictive. Caregivers who pay close attention, seek to identify the strengths of the child, and become "talent spotters" are likely to create more enriching, potential-enhancing environments (McCluskey & McCluskey, 2001; Young, 1995).

Relationship-resistant, behaviourally challenging, "tough bright" students do not usually find their way into gifted programs, which tend for the most part to be reserved for the teacher pleasers (McCluskey, with Baker, Bergsgaard, Glade, Lamoureux, McCluskey, & Wiebe; Peterson, 1997). The same is true for youngsters from minority groups (Sisk, 1993) and for children of poverty (Social Planning Council of Winnipeg, 2011; Renzulli & Park, 2000). Relatedly, the incredible talents of young people who turn to gang and criminal activity often go totally unnoticed. Yet how much talent does it take to become a successful member or leader of a youth gang? Should gangs be considered a "cesspool or talent pool" (Baker, McCluskey, & McCluskey, 2003)? Without doubt, life in a gang can be aversive, destructive, and downright evil at times. Nonetheless, not just anyone can survive in such a setting – it takes talent. The challenge becomes redirecting such talent into more socially appropriate pursuits.

Actually, the late Robert B. Parker hit the nail on the head in *Double Deuce*, one of his fictional *Spenser* mysteries (first published in 1992). In this novel, a teacher offered the following description of members of a youth gang: "They are often quite ingenious. They function barely at all in school, and the standard aptitude tests seem beyond them, and yet they are very intelligent about surviving in fearful conditions. They are often resourceful, they fashion what they need out of what they have. They endure in conditions that would simply suffocate most of the Harvard senior class" (Parker, 2005, p. 221-222).

What a pity not to identify and build upon such talent! The monetary cost of missing out on this potential has been well documented (cf. McCluskey, with Baker et al., 2012). Besides, as we've noted elsewhere, there is also the less quantifiable social cost of what might have been: "What is the cost of a symphony unwritten, a cure not discovered, a breakthrough not invented? In today's complex world, and in preparing for tomorrow's certainly more complex one, we can scarcely afford such waste of 'talent capital' and human potential" (McCluskey & Treffinger, 1998, p. 216).

Like the Amphitheater approach, the model developed by Matthews and Foster (2006) considers the shifting paradigm in gifted education and, in essence, rejects elitist, non-inclusive approaches to enrichment by matching educational provisions and adaptations to each child's unique needs. Of course, the ultimate goal should be to create schools that focus on talent development for all (Renzulli & Reis, 1997; Treffinger, 1998; Treffinger et al., 2008).

Talent Development for *Lost Prizes*

As indicated at the outset, some two decades ago the Lord Selkirk, Sunrise, and Interlake School Divisions in Manitoba designed and established *Lost Prizes*, an undertaking developed to "reclaim" at-risk, talented high-school dropouts who had basically been lost to the system. Most of the youth in question had withdrawn from school or been shown the door, and several had drug and alcohol issues or run afoul of the law. *Lost Prizes* presented a mechanism for educators in the divisions to reconnect with these students, awaken their dormant creative potential, and inspire them to do something more productive with their lives.

Essentially, *Lost Prizes* is a hybrid approach that weds theory and practice from both the at-risk and enrichment domains. For this reason, we believe, it has received a fair amount of enduring attention in the literature (McCluskey, 2011; McCluskey, with Baker et al., 2012; McCluskey, Baker, & McCluskey, 2005; McCluskey, Baker, O'Hagan, & Treffinger, 1995, 1998). In any case, during phase one of the initiative, a facilitator worked directly with the young people in an off-site setting. Classes featured career awareness, various types of strength-based interventions, and Creative Problem Solving (CPS) training (Isaksen, Dorval, & Treffinger, 2011; Treffinger, Isaksen, & Stead-Dorval, 2006).

Part of the problem with the troubled youth in question was that they tended to get "stuck" in negative, maladaptive response patterns. They would fight, flee, fool, freeze, or whatever, often without thinking, and make the same mistakes over and over again. Once these unengaged individuals acquired a broader array of CPS problem-solving strategies – a toolbox of skills if you will – they became better equipped to make more reasoned educational, career, and

life decisions. As part of the process, the students were asked to consider how to progress from their "current reality" to a "desired future state." They mapped out individual growth plans to help themselves identify and move towards goals. In phase two, these participants gained concrete experience through on-the-job placements, where – supported by empathic, philanthropic mentors from the business community – they had an opportunity to encounter and deal with real-life problems.

The *Lost Prizes* mission was a successful one. Specifically, once their talents were noticed, appreciated, and nurtured, 65 percent (57/88) of the former at-risk ne'er-do-wells turned their lives around by obtaining full-time employment, returning to high school, or entering post-secondary programs at community college or university.

A similar approach was used in the Northern Lights project to increase graduation rates among vulnerable Aboriginal students (McCluskey, O'Hagan, Baker, & Richard, 2000), and to reduce recidivism among inmates in Second Chance (Place, McCluskey, McCluskey, & Treffinger, 2000).

A Final Word and Update

By 1999, the initial *Lost Prizes* and related made-in-Manitoba spin-off ventures had come to an end, but interest in the undertakings remained. Related programs were established and continue to thrive in the three founding divisions. And a couple of years ago, faculty at the University of Winnipeg (UW) partnered with educators in the field to launch a one-year *Lost Prizes* project at Sisler High School and an ongoing initiative at the Manitoba Youth Centre.

We were surprised to find, after being asked to do several presentations for Reclaiming Youth International, the World Council for Gifted and Talented Children, and the International Centre for Innovation in Education, that there was a great deal of interest in using the *Lost Prizes* approach to engage talented, troubled young people in other parts of the world. In the spirit of global citizenship, then, we have tried to reach out to a variety of partners, with the result that we are now working to put *Lost Prizes* programs and training centres in place in Kenya, Thailand, Haiti, and other countries.

Everyone involved in *Lost Prizes* outreach understands the importance of preparation and hands-on training. To meet this need, UW faculty members have created 25 three-day foundation and support courses to help those working with high-ability, at-risk populations acquire basic and more advanced competencies (participants can select and complete five of these courses to earn a *Lost Prizes* certificate, and 10 for an advanced certificate). Subject to university approval, these courses may be counted as electives toward the Bachelor of Education degree or, alternatively, toward a Post-Baccalaureate Diploma in Education.

As an aside, we are not attempting to establish a global franchise or charge exorbitant consulting or tuition fees. Our intent is simply to be supportive, share our work with interested parties, and deliver services at cost. In keeping with the Freirean principles of praxis (Freire, 1970), we are taking the time to talk with our international partners, to consider their on-site conditions, and to adapt plans to fit the local needs (cf. McCluskey, with Baker et al., 2012). We're entirely focused on developing something positive, collegial, and sustainable – something that will provide tangible encouragement, engagement, and enrichment to a population that often receives "none of the above."

In summation, *Lost Prizes* brings together and blends theory and practice from both the at-risk and gifted education realms. The goal of the program has always been to improve the talent identification process and nurture the gifts of highly capable, but disconnected children and youth. It is our hope that, through the Amphitheater Model and *Lost Prizes*, many talented young people who have been thus far marginalized will now have the opportunity to realize their potential and set out on a path to make incredible contributions to societies around the world.

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The United Nations Educational, Scientific and Cultural Organization (UNESCO) Associated Schools Network: Teaching for Social Justice and Transformative Education

Ira Udow, Heather Syme Anderson, Karen Magro

Abstract

The United Nations Educational, Scientific and Cultural Organization (UNESCO) Associated Schools Network is an international organization that can help teachers and students learn more about practical ways to apply social justice themes at an academic, personal, social, and global level. Learning processes are holistic and multi-dimensional within this context. Different strands of transformative learning theory that include individual perspective transformation, planetary-global transformative education, non-western ways of knowing, and emancipatory teaching reflect key UNESCO themes. Specific examples of perspectives of social justice held by teachers, administrators, and counsellors and adult learning centres from Winnipeg, Canada are highlighted. This article emphasizes the importance of extending ways of knowing and learning that have the potential to create more dynamic and culturally-inclusive learning environments. Implications for curriculum innovation and creative educational leadership will be addressed. This article is framed from the perspectives of a principal, teacher, and researcher.

***Keywords*:** United Nations Educational, Scientific, and Cultural Organization (UNESCO); transformative education; critical literacy; educational innovation; teaching philosophies; interdisciplinary approaches to teaching and learning.

Being a UNESCO School: An Elementary School Principal's Perspective

Ira Udow

"What does it mean to be a UNESCO school?" is the question prospective parents will inevitably ask midway through the tour of our school. As we walk through the hallways decorated with children's artwork and visit the busy classrooms in action, I explain the philosophy of our school highlighting the relationship between best-educational practices and educating students to live sustainably with a strong moral and social consciousness.

I point out to these families the physical structures of our child-friendly classrooms in which trapezoid and round tables are arranged in groups to promote cooperate learning activities where learners work together productively in a positive, non-competitive environment; the wide variety of children's literature that captures and extends upon the children's inquiring minds; the assortment of math materials to support their mathematical computations; the many hands-on objects, both found and purchased, to further their scientific explorations.

I explain the paradigm shift in education towards a more learner-centered approach to teaching that acknowledges and supports students' individual needs and that celebrates diversity in an inclusive environment. It is an environment in which learners achieve success when the purpose for learning is known and meaningful; an environment in which students are empowered to be facilitators of their own learning, to take ownership of and actively participate in the learning process, as critical thinkers

and problem solvers.

This shift in educational practice directly supports our school's mission of encouraging active democratic citizenship within our student body. Developing and strengthening their basic numeracy and literacy skills are essential for future success. It is also important for our students to know how to use these skills as responsible members of their community. We want them to recognize and appreciate the culturally-diverse mosaic in which they live, to understand the environmental changes currently taking place, and to be aware of the social and economic issues facing marginalized segments of our society. We also want them to know that they have the power and responsibility to take action to affect positive change.

I tell these parents that being a UNESCO school is about developing a deep culture of peace. To further clarify, I provide some historical background. "The United Nations Educational, Scientific and Cultural Organization was established in 1946 with the purpose of contributing to world peace and security. The UNESCO vision promotes collaboration among the nations through education, science, and culture, and to further universal respect for justice, for the rule of law, and for human rights and fundamental freedoms, which are affirmed for the peoples of the world, without distinction of race, sex, language, or religion."

Canadian schools that join the UNESCO Associated Schools Network make a commitment to support the ideals of UNESCO through four **pillars of learning** and four **areas of study,** in order to contribute to a local, national, and global culture of peace.

Pillars of Learning*	**Areas of Study**
Learning to know	*World Issues and the Role of the UN*
Learning to do	*Peace and Human Rights*
Learning to be all that one can be	*Intercultural Learning*
Learning to live together sustainably	*Education for Sustainable Development*

(*Established by the UNESCO International Commission on Education for the 21st century.)

Expectations for membership in the Canadian Associated Schools Network has been established by the Canadian Commission for UNESCO and includes two levels: *Candidate Schools* and *Member Schools.* Candidate Schools are interested in joining the network and are working towards the deep cultural shift that signifies a UNESCO school. Member schools have demonstrated a sustained commitment to the ideals, values, work, and principles of UNESCO.

UNESCO Associated Schools are expected to build support and commitment to the values, work, and principles of UNESCO from the school administration, the school district administration, the staff, the student body, and the parents/community and establish partnerships with other UNESCO schools locally, nationally, and internationally.

The question remains, "What makes a UNESCO school distinct from other schools that involve their students in similar social justice activities as evident in the number of schools in attendance at the 'We Day' events?" UNESCO schools recognize that it is essential to develop innovative teaching and learning experiences that engage the learners in active and participatory learning while learning how to ask critical questions, and learning to clarify one's own values. They also understand the need for thinking systemically, and valuing the power of collaboration and dialogue involving multi-stakeholders from diverse backgrounds.

As an example of what this looks like in practice, I describe a Cultural Diversity Program in which five elementary UNESCO Associated Schools participate in a partnership of learning that extends across their school boundaries. Now into their seventh year, five Winnipeg, Manitoba, Canada schools, Niji Mahkwa Aboriginal School, Al Hijra Islamic School, St Emile Catholic School, John Pritchard Public School and Brock Corydon School's Dual Track English and Hebrew Bilingual Program provide a rich learning context enabling Grades 5 and 6 students to engage in intercultural dialogue.

The Cultural Diversity Program is designed to recognize and give significance to the students' personal and cultural identities while encouraging knowledge, understanding, appreciation, and respect of other people's religions and cultures. Each June, Grade 5 students from the five schools,

participate in interactive workshops facilitated by the provincial representative of the Canadian Centre for Diversity and by high school students trained to take on leadership roles in this topic. These workshops are followed up with the same students, now in Grade 6, participating in a Pipe Ceremony, and visits to a Mosque, Synagogue and Church where they dialogue with the clerics in each of the houses of worship. Classroom discussions and exposure to cultural-diversity literature throughout the school year provide continued learning experiences. In addition, student representatives from each school come together to collaboratively develop action plans related to joint social justice and environmental sustainable initiatives.

Participation in the Cultural Diversity Program offers elementary students the opportunity to actively explore their own cultural identities and to begin the life-long journey towards understanding and respecting other cultures and religions. They are engaged in critically examining their own cultural traditions, values, and beliefs, becoming aware of the cultural and religious tensions and conflicts that exist in their community and in other countries, and collaborating with children from different backgrounds in dialogue and joint ventures to envision a sustainable peaceful coexistence. By examining current events, students are discovering the economic and social-cultural impact of decisions made. Intercultural dialogue and collaborative decision-making and planning engage the students in authentic, real-life contexts and create awareness of what they can do for themselves and with others to construct more sustainable futures.

The students are learning to work cooperatively with people from other cultural and religious backgrounds and to realize they have the right and the responsibility to take action as community and world citizens in developing sustainable plans that will impact on their own lives and the lives of others into the future. The intent is to have students develop the values, attitudes, and knowledge necessary for a healthy and peaceful coexistence.

Encouraging Transformative Learning: A Teacher's Perspective

Heather Syme Anderson

Integrating the areas of study of United Nations Educational, Scientific and Cultural Organization (UNESCO) into a language arts or artistic classroom is one of the easier fits for innovative education. This section will begin with language arts and move to digital photography as the subject areas into which educators can achieve excellence through innovative programming.

First, though, I'd like to address what it means to be a UNESCO school. In theory, it means that the school where I work has successfully attained the accreditation as being officially recognized as a UNESCO school by meeting and sustaining specific standards over time. This designation is not, however, what it really means to be a UNESCO school. For me, it has everything to do with making specific and explicit connections between what happens in my classroom and school to the UNESCO areas of study. Those areas of study are (a) ASP.Net and UN priorities; (b) education for sustainable development; c) peace and human rights; and (d) intercultural learning. While some of these areas might seem like seamless fits for language arts and the arts, to forge these connections in explicit ways, and ways that are conducive to social justice is not seamless. It is with these seams that I now wish to turn.

Teaching English Language Arts (ELA) affords opportunities to select texts for study that encompass the globe and all of its global concerns. Such a subject area is bursting at the seams with content and curricular fits with the UNESCO areas of study. Take, for example, one literature unit that I teach using the choice memoirs of *A Long Way Gone: Memoirs of a Boy Soldier* by Ishmael Beah*; As Nature Made Him: The Boy Who was Raised as a Girl* by John Colapinto*; I, Rigoberta Menchu: An Indian Woman in Guatemala* by Rigoberta Menchu*; and Angela's Ashes* by Frank McCourt. Students are asked to select one memoir and read it with an eye towards social justice concerns related to race, class, gender, and sexuality. We then take on the lenses of the UNESCO areas of study to probe the seams of these texts so as to expand the students' understandings of the world and our role as a UNESCO school in aiming for a better world. This kind of classroom activity is not limited to memoirs; it happens with fiction, interviews, film study, campaign production, and any other manner of text study.

Applying the UNESCO areas of study into digital photography is an area where additional

innovation was needed. One direct entry route was through the study of award winning photojournalism photography including such Pulitzer Prize winning shots as Kevin Carter's harrowing image of the Somali toddler being eyed by a vulture of the same size. This approach to education has significant impact when combined with discussions about ethical photography and photography for social justice. Without question, my students come to see their own photography work differently because they have considered the role of the United Nations (UN) and education for all in the context of global and local conflict.

My aim with such tasks in language arts or photography is to have students recognize the seams that bind our world together socially, environmentally, and politically are on the verge of tearing. I want students to think critically and ethically about whether the next steps are to repair those seams, or to have them split entirely and allow something new to emerge as a social reality. My job, as an innovative educator, is not to answer that question for them, but to help students see the intricate and intertwined ways in which the world is sewn together and their duty in directing the needle of the future.

Connecting Educators' Conceptions of Social Justice with Transformative Learning Dynamics: A Researcher's Perspective

Karen Magro

My current qualitative research explores the way two UNESCO Associated Schools' teachers and administrators view social justice themes and the way their students can connect personal, social, and global issues in meaningful ways (Magro, 2012). I used semi-structured interviews lasting one to two hours to record the teaching and learning perspectives about teaching social justice within the UNESCO framework over a one-year period (January, 2012-May, 2013). The educators' conceptions of social justice and their approach to teaching were then compared to different strands of transformative learning theory.

Theoretical Background on Transformative Learning Theory

Parallels between the teachers' perspectives on social justice, their approach to curriculum design and assessment, in addition to specific teaching and learning strategies applied in the classroom, reflected many of the themes drawn from transformative learning theory. Theories of transformative learning have been applied extensively in different educational contexts such as literacy development, counselling, health education, planetary sustainability, cultural adaptation and intercultural awareness, and professional development. (Merriam & Grace, 2011; Mezirow & Associates, 2000; O'Sullivan, 2002). Transformative learning is rooted in significant personal and social change. A key difference among the applications of transformative learning theory is the emphasis placed on psychological and individual change in comparison to transformative social activism, political change, and critical global awareness. Edward Taylor (2008) writes that the multiple theoretical conceptions of transformative learning theory have "the potential to offer a more diverse interpretation of transformative learning and have significant implications for practice"(p.7). Culture, ethnicity and race, the role of spirituality, planetary sustainability, positionality, emancipatory teaching, and non-Western ways of knowing, represent new themes or strands that have emerged since Jack Mezirow's (1981) initial description of perspective transformation. Common themes shared by these perspectives include critical reflection; creativity; self-knowledge; the reverence for life; democratic discourse; and the balance of attaining collective and personal goals. In essence, a fundamental shift takes place in the way they see themselves and the world (Mezirow & Associates, 2000; Merriam & Grace, 2011). Taylor (2008) points out that despite the advances of transformative learning theory, more research is needed into the way it is applied and translated into the classroom.

The UNESCO themes of social justice can be linked in several ways to the different strands of transformative learning. Edmund O'Sullivan (2002) and Bud Hall (2006), for example, present a more global and planetary perspective of transformative learning. Systemic and structural barriers that reinforce poverty, racism, sexism, war, work degradation, human rights' violations, and ecological

devastation need to be examined from a critically reflective stance. Alienation and dispossession, note O'Sullivan (2002), are the fallout of globalization. Alternative lifestyles and ways of thinking are needed to counteract the negative impact of planetary devastation and rampant globalization:

> Transformative learning involves a deep, structural shift in the basic premises of thought, feeling, and …such a shift involves our understanding of ourselves and our self-locations; our relationships with other humans and the natural world; our understanding of power in interlocking structures of class, race, and gender; our body-awareness; our visions of alternative approaches to living; and our sense of the possibilities for social justice and peace, and personal job. (p.11)

Recognizing the urgency of addressing global issues, Hall (2002) explains that over 100 million people are refugees, forced to flee their homeland and living against their choice in countries in which they were not born (United Nations High Commissioner for Refugees [UNHCR], 1995). People are losing a vital connection to each other, the natural world, and themselves. In his paper "The Right to a New Utopia", Hall (2002) captures the tension of our world today:

> In fact, the kinds of lifestyles and consumer patterns that fuel the global market utopia are a cancer for the planet. In the insightful work entitled *Our Ecological Footprint*, William Rees outlines a method for determining the percentage of the world's resources that we use as individuals, as communities, or as whole nations. His complex formula points out that if the entire world were to achieve the same levels of growth and development that characterize most lives in rich countries, we would need four entire planet's worth of energy resources to satisfy these demands. Clearly we are on an ecological collision path between a Utopia of the rich and the carrying capacity of a still-fragile planet. (pp. 38-39)

Hall (2002) emphasizes that a transformative education can encourage the "release of our creativity and imagination" and help us to become as Paulo Freire noted, "agents in our own history" (p. 44). A "new utopia" is inspired by indigenous knowledge and can be found in local community gardens, in individual and family choices to live more simple lives, and in the still growing "green economic development movement" (p.45). Reinforcing this perspective, Miller (2002) suggests that a "meaning-centered curriculum" would not only address the needs and aspirations of students, but it would examine ways to reduce problems like poverty, conflict, mental illness, homelessness, racism, and social injustice. Learning cannot be compartmentalized and viewed solely from a cognitive process. "From a spiritual perspective, learning does not just involve the intellect; instead, it includes every aspect of our being including the physical, emotional, aesthetic, and spiritual" (p.243).

In "The Project and Vision of Transformative Education" Edmund O'Sullivan (2002) further suggests that educational institutions at all levels need to play a pivotal role in fostering a sense of community. For instance, educational initiatives can focus on bioregional studies that would help students develop a greater awareness of place. Bioregional studies would involve a study of the land, the history of the community that has occupied a particular region, and the histories of the people in each bioregion. O'Sullivan explains that "education for the purpose of cultivating a sense of the history of an area enables people to have loyalties and commitment to their place of their dwelling" (p. 9). Creating an awareness of a sense of locality and place can correct and transform global inequities and a lack of resources. It can also encourage human ingenuity and self-direction. From this perspective, personal change and progressive social change are interwoven.

Non-Western Ways of Knowing and Learning

Transformative teaching and learning from a non-Western perspective enables educators to extend their teaching practices and perspectives with creativity and a sense of cultural inclusion. This perspective of transformative learning theory examines the relevance of race, class, gender, and [dis]ability identity in relation to education (Johnson Bailey & Alfred, 2008; Dei, 2010; Ntseane, 2007). The common characteristics of indigenous knowledge include recognizing the interdependence of humans and the natural world; a reverence for elders and their wisdom; a respect for the community and for future generations; and a sense of sharing

responsibility, wealth, and resources within communities, both locally and globally. This holistic view embraces spiritual values, traditions, and practices. Making the connection to formal educational contexts, George Sefa Dei (2010) explains that a school system that fails "to tap into youth myriad identities … is shortchanging learning. Identity is an important site of knowing. Identity has in effect become a lens of reading one's world…the role and importance of diversity in knowledge production is to challenge and subvert the dominance of particular ways of knowing" (pp. 119-120). Sefa Dei (2010) further highlights this point when he states that a "pedagogy of language liberation" would empower learners to tell their stories and learn about their heritage, history, and culture in interconnected ways. Spirituality "is about a material and metaphysical existence that speaks to an interconnection of self, community, body, mind, and soul" (Dei, 2010, p.120).

Johnson-Bailey and Alfred (2006) developed a framework for transformative teaching that is rooted in teacher self-awareness, social justice, consciousness raising, and developing a safe classroom climate that encourages connection, creativity, dialogue, and respect:

> Each class we teach has varied instructional modes (printed materials, audio, WebCT (Course Tools) components, video presentations guest lecturer, collaborative and individual projects) and a range of other ways in which students can participate…Perhaps the most often used and most successful building block of our transformational teaching is the use of dialogue, an informal conversational approach for verbal exchanges and discourse—a more formal, linear, and directive methodology. It has been our experience that multiple voices, whether ordered as discourse or free flowing dialogue, produce a symphony of ideas and lay groundwork that supports an environment where change is possible. (p. 47)

Empancipatory teaching and empowerment (whether it be in the form of helping students develop greater self-confidence or helping them gain the academic and social skills needed to succeed in college and in a career), self-direction, and lifelong learning were overall educational goals.

Research Findings

The teachers and administrators who have participated in my study express a need for learning to extend beyond the traditional classroom and the acquisition of "functional literacy". Their approaches are also consistent with emerging critical literacy areas such as inter-textual studies, cultural studies, and ethnography (Magro, 2012). The educators' perspectives speak to a need for educators to connect with the larger community of learners, not only in the Winnipeg, Manitoba, Canada locale, but internationally. Transformative education, from the perspective of these educators, involves responding to the economic, technological, political, and social changes that have taken place in recent years in ways that are relevant and potentially empowering for their students. The participants in my ongoing study spoke of the importance of education to change lives along individual, local, and global dimensions. Learning is seen as holistic and multi-faceted. When I asked the participants to describe their role in the school, they identified themselves as a "problem solver", "guide", "advocate", and "cultural mediator." One principal associated the image of a "key" to his own role as a facilitator who "opens doors" to potential projects and new ways of thinking and learning. He further explained:

While our teachers are at different stages in their learning and their careers, they have valuable skills, patience, and creativity. They may not directly state it, but most value the ideals outlined in the UNESCO Earth Charter. I look for qualities such as commitment, caring, and the ability to connect with challenging students. It is important to have most of the teachers 'on board' when a school decides to embark on a project such as growing a community garden and then donating the food to a local charity. The success and planning of so many of our UNESCO initiatives have started with teachers who come to me with great ideas. I help them organize the parameters in realistic ways that will be acceptable to all the students, the teachers, and the parents in the communities.

This principal emphasized a transformative vision of education:

Education is not information; rather, I see it as the formation of positive beliefs, values, and attitudes that will empower individuals to participate in society. Education is a powerful agent of change but learning must move beyond the four walls of a school. I provide

opportunities for the teachers and students to become aware of the link between peace and justice. Peace is just a word without justice. We engage our learners in community projects that are linked to environmental protection and intercultural appreciation. I think that more reflection among educators is needed: What are schools for? What is really going on? Diversity is a fusion of horizons but this process does not occur automatically. Teachers, administrators, and students need to be more involved in experiential learning that links social problems with solutions.

This administrator emphasized that his school was actively involved in activities that promoted a greater awareness of diversity and social justice for specific occasions such as International Women's Day, International Day to Eliminate Racism, National Aboriginal Day, International Human Rights Day, and the International Day of Disabled Persons.

The approach to learning and teaching that the educators in the following interview excerpts hold is holistic; the UNESCO themes are embedded in the mission of the school, in the curriculum, and in the specific teaching and learning practices applied:

The UNESCO themes of social justice are embedded in our school and in the curriculum for all subjects. It is not an "add on" nor is it simply about "fund raising" to build a school in another part of the world. Without helping students respect themselves and care for each other, initiatives such as food drives and building a new school in a developing country will be limited. At our school, we start with an emphasis on self-awareness and a developing of basic interpersonal skills like listening and empathy. We also encourage the value of local initiatives like community gardening and helping students meet and dialogue with children and elders from communities that they might be very unfamiliar with.

We are also living in a world that is rapidly becoming smaller and many people live in conflict. The UNESCO themes provide a more creative means of dialoguing that enables students to see beyond themselves in more reflective ways. For instance, social media like Facebook may have many benefits, but it is also a Pandora's box. How can we help students navigate the dangers? Emotionally and cognitively, we are bombarded with images and "information" that many people do not question. This creates anxiety and confusion. I try to encourage students to question and critically examine what they see and read. The quote that best sums up my approach to integrating the UNESCO themes is from Mahatma Gandhi: 'Become the change you want to see.'

Many of our students come from disenfranchised backgrounds. They have experienced hardship in some form or other. They may be from a war-torn family or they may have had a traumatic childhood just growing up here in the city. A piece of their lives is missing in some way. They have just been divorced, they just got out of jail, or they are getting off drugs. You meet amazing students here who have been excluded from society in some way and they see our school as having a key to living a more purposeful life. Beneath each jacket, there is a hidden treasure, and you have to be able to see the potential in each student. I have seen students' lives transformed in different ways. You will see students who start at a basic level of literacy and then a few years later are graduating from Grade 12 and ready to start a university program with confidence and hope.

The teachers and administrators emphasized the need to create a school climate that empowered students to take personal initiatives. They linked the curriculum to the students' diverse backgrounds, and they created opportunities for students to be involved in decision-making, evaluation processes, and specific learning projects.

Mirrors and Windows: Developing a Transformative Curriculum

One of the UNESCO Earth Charter tenets highlights the application of art, poetry, fiction, and non-fiction that reflect social justice and planetary sustainability (Arias, 2008; Gruenwald, 2004). These courses can be both a "mirror and window" that have the potential to empower students personally and academically. Anna, an English teacher at a large secondary school in Winnipeg, explained that social change begins with personal change. In the "Perspectives of War" unit, students examine the nature of war from different voices, the voice of a child, and a soldier. Anna explained that reading memoirs like Khalid Hosseini's (2007) *A Thousand Splendid Suns* and Mende Nazer's (2004) *Slave* can encourage a greater awareness of human rights and democracy voices of children in war, soldiers, the struggle against

oppression, and the concept of "freedom fighters". The work produced by the students at the UNESCO Schools reflected a balance of individual and global awareness. One student at an adult learning centre was generously sharing recent writing projects he had developed. Roger designed a comprehensive research proposal to create a "dedicated, volunteer-based storm/flood planning emergency response agency in Manitoba." Another research paper he completed focused on the topic: "Fear is the primary barrier against a true global community." He referred to J. Rifkin's *The Empathic Civilization.* Analyzing the way North American society has responded to living in a post 9/11 world, this student argued that fear is a basis of racism, gated-communities, organized crime, and acts of terrorism. He emphasized that "we need to find 'global' solutions if we are to refer to the 'residents of Earth' as a single-unified people in search of peace and universal values."

Personal narratives, memoirs, and journalistic accounts as part of English curricula provide opportunities for students to broaden their global and cultural perspectives. "No longer is the curriculum simply the novel or facts to be learned, but rather, the students and their teacher together using books, other authentic resources, and their own opinions and experiences create a 'living curriculum' as a true community of learners"(Wolk, 2009, p.667).

Reimagining the Curriculum: Expanding Voice and Vision

An interesting observation in my research is the way in which content in curriculum areas such as English Language Arts (ELA) and Social Studies is being reconfigured and reconceptualized in more creative ways to address personal and global issues. Ecoliteracies and inter-textual studies are among the emerging areas in critical literacy (Bruce, 2011; Glasgow & Baer, 2010). Texts become powerful vehicles for students to explore contemporary issues that impact their lives. Interdisciplinary approaches and experiential and place-based learning are ways to promote critical literacy and transformative or deeper-level learning. Through self-directed and collaborative learning projects, students are encouraged to make connections between the perspectives they read about and the perspectives they have about issues in their own lives: poverty, discrimination, human rights, and planetary sustainability. Heather Bruce (2011) emphasizes that ELA teachers need to re-imagine and redirect the focus of teaching classic and contemporary texts in a way that promotes:

> Empathy for both human and nonhuman species, for the soil, water, and air in which all of life depends…English teachers specialize in questions of vision, values, ethical understanding … Our expertise in addressing the aesthetic, ethical, and sociopolitical implications of the most pressing human concerns of our time enable us to reach toward and embrace environmental problems.(pp. 13-14)

Along similar lines, Shamsher, Minnes Brandes, &Kelly (2008) identify a range of strategies to address diversity and social justice across the curriculum. Some of these strategies include:

- Spotlight or make visible the perspectives of marginalized and disenfranchised groups;
- Brainstorm reasons for omissions in textbooks or other resources. Whose voice is heard? Whose voice is absent? Why? Who is represented? Why?;
- Challenge assumptions in books, films, advertising, music videos, etc. through critical questioning;
- Link discussions and assignment choices to students' diverse backgrounds;
- Create opportunities for students to find and share their own personal narratives and histories;
- Identify the challenges and barriers that the students are currently experiencing and explore solutions to these barriers;
- Connect assessment to students' experiences of social justice (assessment for learning); and
- Role model critical thinking by challenging taken-for granted oppression and encourage students to question problematic assumptions. Help students to learn to recognize situations where some individuals are privileged and others are disadvantaged and marginalized (adapted from Shamsher, Decker, Minnes Brandes, and Kelly, 2008, pp. 17-18).

The *Teaching for Social Justice* curriculum framework developed by Shamsher, Decker, Minnes Brandes, and Kelly (2008) provides educators with both a practical and theoretical base to apply social justice themes to their teaching. Shamsher et al. (2008) emphasize

that "social justice is a philosophy that extends beyond the protection of rights. Social justice advocates for the full participation of all people, as well as for their basic legal, civil, and human rights" (p.2). In their document "Making Space," Shamsher et al (2008) emphasize that educators in all content areas should be able to find ways to promote:

- awareness and understanding of the diversity that exists within our society—differences that are visible (e.g., race, ethnicity, sex, age, physical ability) and differences that are less visible (e.g. culture, ancestry, language, religious beliefs, sexual orientation, gender identity, socioeconomic background, mental ability);
- support for the achievement of social justice for all people and groups—particularly in ensuring that people's backgrounds and circumstances do not prevent them from achieving the full benefits of participation in society, and in addressing injustice faced by those who historically have been and today frequently continue to be marginalized, ignored, or subjected to discrimination, or other forms of oppression. (p. 1)

Conclusion and Discussion

The different perspectives of transformative learning theory presented in this paper have the potential to provide educational practitioners and researchers with a creative foundation for reflecting on curriculum content, teaching and learning strategies, and the preparation and professional development of teachers. The conceptions of learning among educators that emerge suggest a more inclusive and broader understanding of learning that balance personal and social change. The educators in my studies conceptualize the classroom as more than a place that conveys knowledge. Education can "awaken and renew… transform and deepen life" (Wilhelm and Novak, 2011, p.8).

While the capacity for transformative change exists, it is not always inevitable. Edward Taylor (2008) stresses that transformative learning is much more than a series of activities (e.g., reflective journals, experiential learning); it involves "educating from a particular worldview, a particular educational philosophy" that may or may not be shared by other colleagues (p.55). He further writes:

> One area in particular is the student's role in fostering transformative learning. What are the student's responsibilities in relationship to the transformative educator? Second, there is a need to understand the peripheral consequences of fostering transformative learning in the classroom. For example, how does a student's transformation affect peers in the classroom, the teacher, the educational institution, and other individuals who play a significant role in the life of the student? Furthermore, there is little known about the impact of fostering transformative learning on learning outcomes (e.g., grades, test scores). Definitive support is needed if educators are going to recognize fostering transformative learning as a worthwhile teaching approach. (p. 13)

The readiness of the learner, the philosophy of individual teachers, "unwritten" policies, and institutional norms and expectations, in addition to assessment protocol impact transformative learning. Teachers and counsellors, in particular, can play a vital role in assisting learners to become more critically reflective and open to choice and change. Rather than viewing themselves as an "enforcer of institutional norms," teachers might begin to see themselves more as an advocate for students (Taylor, 2008). The challenges we face as a world today place a greater urgency on educational systems to provide new direction and focus. The voices of the teachers, administrators, and counsellors in my studies indicate a strong interest and commitment in bridging schools with the community at many different layers. Their voices speak to an *intentionality* among educators to build stronger bridges between themselves, their learners, and both the local and global communities. Alternative education contexts are being created as rigid boundaries between schools as the sole site of learning and learning experiences in the wider community are breaking. These shifts offer potential new opportunities for transformative learning. Further research in this area will deepen our understanding of the important role of education as a catalyst for transformative change.

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Profiles of Creativity:

A Case Study of a Creative Personality

Hava Vidergor

Abstract

The study aimed at unfolding the personal creative characteristics of an educator in the field of gifted education, and examining creativity as expressed in childhood and its transformation into adulthood creative approach and outcomes. The study focused on Dr. Erika Landau, the pioneer of gifted education in Israel, an internationally renowned scholar and educator, and the founder of the Young Persons' Institute for the Promotion of Creativity and Excellence. Data concerning the different categories of personal creative characteristics were collected via semi-structured interview and analysis of documents. Findings suggest creative characteristics detected in childhood were mainly openness and courage to explore ideas, and listening to one's inner voice. The full range of categories was detected in adulthood.

***Keywords*:** Creativity; personal creative characteristics; creative thinking, Erika Landau.

Definitions of Creativity

Creativity includes producing an original and useful product which is suitable for the field or area it is designed for (Sternberg & Lubart, 1999). Perkins claims that creativity is a result that is original and appropriate and fits the cultural context upon which it is based (Perkins, 1981). In creativity there is importance for the interaction between the individual, the product, and the environment (Czikszntmihalyi, 1990). The creative individual solves problems, designs products, or defines novel questions in a field or area that was considered new but became acceptable in the same cultural context (Gardner,1993). Mau (1997) makes the distinction between two types of creativity: (a) real time creativity–connected to improvisation, immediateness and something done at the same moment; and (b) multi-level creativity–connected to time needed for generating and choosing ideas.

Lubart (1999, 2008, 2010) and Sternberg & Lubart (1995) suggested a multivariate approach considering the creative process as an interplay between two modes of action: divergent-exploratory thinking, and convergent-integrative thinking. They define creativity as ability to produce novel, original work that is contextually relevant in a task context. Therefore, creative productions can be conceived in nearly every domain. The ability to produce creative work is conceived as a partly domain specific skill, so people with high ability to be creative in one domain (such as art) will not necessarily have the same level of creative ability in another domain (such as science) because the specific nature of creativity varies with the field (Lubart & Guignard, 2004). Creative potential refers to a latent ability that may not yet have been expressed. When creative potential is activated and called into play in a task, the result is a creative production. Each person can be described by a profile on the cognitive and conative factors, with the additional contextual factor. It is the combined action of several abilities and traits in a favorable context that characterize the highest levels of creative potential and ultimately is required for the expression of this potential in actual productions (Sternberg & Lubart, 1995; Lubart, Mouchiroud, Tordjman & Zenansi, 2003).

Creative Thinking

Erika Landau (2002) proposed a model for developing creative thinking in gifted children. Her model combines and balances logic and imagination. It addresses 4 dimensions: (a) ideas; (b) thinking; (c) communication; and d) self. According to this model creative thinking is finding the balance between narrow categorization of ideas and free flow; convergent thinking and divergent thinking; interpersonal communication and intrapersonal; and objective formulation and subjective reaction. Figure 1 illustrates the creative thinking model.

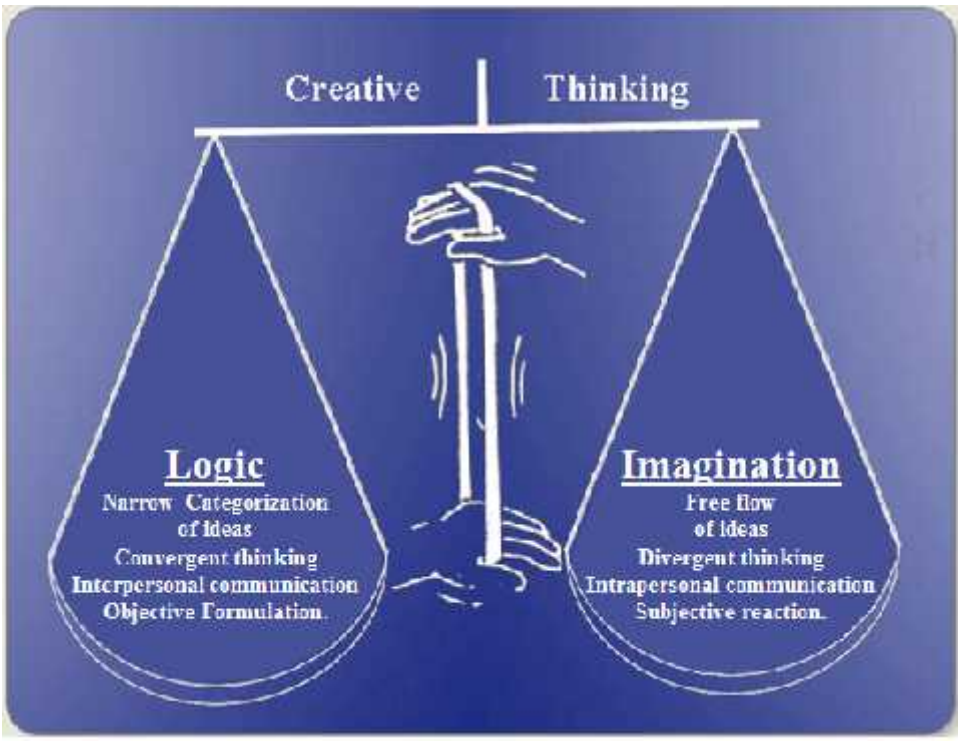

Figure 1: Creative thinking model (Landau, 2002)

Personal Creativity Characteristics

Three categories of characteristics emerge from studies on creativity: 1. Cognitive characteristics; 2. Personal characteristics; and 3. Biographical events. Cognitive characteristics are connected to the way people think using problem solving and associations (Treffinger, Isaksen, & Dorval, 2000). Personal characteristics are connected to values, temperament and motivation, which are all related to the application of thinking (Mac Kinnon, 1978). Biographical events are connected to experiences that lead the person to creative achievements (Gardner, 1993; Csikszentmihalyi, 1996; Sternberg, 2000). The combination of the characteristics is very complicated as they do not appear in the same extent and no person possesses all of them. Many of the characteristics can be learned and nurtured, and it is very difficult to predict which students will be creative, but still they need to be supported and creativity needs to be developed (Treffinger, Young, Selby & Shepardson, 2002).

Personal creativity characteristics are further divided by Treffinger et al (2002) into four categories: (a) generating ideas; (b) digging deeper into ideas; (c) openness and courage to explore ideas; and (d) listening to one's inner voice.

- **Generating ideas:** (a) fluency; (b) flexibility; (c) originality; (d) elaboration; and (e) metaphorical thinking.
- **Digging deeper into ideas:** (a) analyzing; (b) synthesizing; (c) reorganizing and modifying; (d) evaluating; (e) seeing relationships; (f) desiring to resolve ambiguity-bringing order or disorder; and (g) preferring or understanding complexity.
- **Openness and courage to explore ideas:** (a) aesthetic sensitivity; (b) high levels of curiosity; (c) playfulness; (d) capacity of fantasy and/or imagination; (e) risk taking or thrill seeking; (f) open to feelings and emotions/shows emotional sensitivity; (g) problem sensitivity; and (h) sense of humor.
- **Listening to one's inner voice:** (a) awareness of creativeness; (b) need for or demonstration of autonomy/task oriented behavior; (c) independence of thought; and (d) interest in reflective thinking/introspective.

(Cramond, 1995; Davis, 1998; Csikszentmihalyi, 1996; Gardner, 1993; Perkins, 1981; Guilford, 1959, 1987; Renzulli et al, 1976; Smith & Faldt,1999; Starko, 1995; Sternberg, 2000; Torrance, 1962; Torrance & Safter, 1999).

Focus of Study

The study attempted to examine the creative characteristics of an innovator in the field of gifted education focusing on creativity and the creative approach. It is aimed at unfolding a better understanding the connection between personal characteristics of creativity expressed in early childhood and adulthood.

Method

Participant

The focus of this study was Dr. Erika Landau**.** Dr. Erika Landau, an Israeli psychotherapist and researcher in Creativity, Giftedness, and Education, was born in Romania in 1931. After four years in concentration camps, she made Aliya in 1947. Dr. Landau possesses a BA degree in Psychology and History from the Tel Aviv University and a Ph.D. in Psychology and History of Art from the Ludwig Maximillian University in Munich, Germany. In 1968, Dr. Landau founded "The Young Persons Institute for Promoting Creativity and Excellence"- Israel's first center for gifted children, a non-profit association to help talented and gifted children to cope with their problems. The institute strives to develop creative thinking, according to the unique creative approach, that Dr.Landau developed, based on meeting thousands of children and studying the subjects. Up until now, more than 40,000 children attended the program; the Institute works with about 800 children each semester. The Institute is located on the Technical College Campus of the Tel Aviv University in Ramat Aviv engaging enrichment and nurturing children starting from kindergarten through ninth graders and deals in particular with the promotion of the Ethiopian children. The Institute also operates a number of branches in several cities around Tel Aviv. Landau taught psychotherapy as a Supervisor at the Dept. of Psychotherapy at the School of Medicine, Tel Aviv University. She also published several books, which were translated into 12 languages, and dozens of articles in different scientific journals.

Data Collection and Instrumentation

A semi-structured interview with the participant enabled collecting information on creative characteristics as illustrated by stories from earlier childhood and creative approach in adult life (Appendix A). Key documents in the form of books, articles, personal and institute website were gathered to complement the stories and the creative approach.

Data Analysis

Qualitative Data Analysis was used for the thematic analysis of the semi-structured interview using the personal creativity characteristics model by Treffinger et al (2002): (a) generating ideas; (b) digging deeper into ideas; (c) openness and courage to explore ideas; and (d) listening to one's inner voice. Sub-categories suggested by researchers were used and in some cases were combined**.** Documents were read several times and emerging themes were recorded and divided into specific categories. The thematic analysis was performed in the level of short chunks of sentences, forming a personal narrative.

Procedure

The interview was conducted individually, recorded and transcribed, and documents relating to the subject were collected.

Results

Early Life: Surviving the Holocaust as a Child.

As a child Erika Landau experienced a horrifying situation of surviving in the camps during the Second World War. The interview and documents analyzed yielded characteristics in mainly two categories:

(a) openness and courage to explore ideas; and (b) listening to one's inner voice. It is based on

the memories as recounted by her in the interview and written in her book "Giving Sense". The additional two categories of characteristics: (a) generating ideas; and (b) digging deeper into ideas, may have been present but did not come up in the stories relating to the Holocaust.

Openness and Courage to Explore Ideas

High levels of curiosity and aesthetic sensitivity. Erika mentioned two very distinctive events where her aesthetic sensitivity and high level of curiosity were involved. One had to do with a certain painting and the other with music.

"One of the moments of grace I experienced was with an art history teacher, by the name of Dr. Rappaport. Instead of warm clothes he took to the camp reproductions of Renaissance paintings. To the light of an oil lamp he showed me the pictures of Leonardo da Vinci and Botticelli. One painting that I remember very well is the Return of Judith to Bethulia. Dr. Rappaport showed me the painting and said: You see Erika, there were always young Jewish girls who suffered, but they survived."

Judith was a Jewish woman from the town of Bethulia. The town was threatened by the King Nebuchadnezzar's Assyrian army under the command of Holofernes. Judith came up with a plan to save the town. She managed to sneak into Holofernes' camp outside of Bethulia and pretended to defect to their side. She seduced Holofernes, chopped off his head and brought it back to Bethulia. When the Bethulian soldiers showed the Assyrians Holofernes' head, they retreated. The painting shows her coming back with the chopped head of Holofernes.

"I was nine when our piano teacher recommended me and two other friends of mine to take part in a competition. My father was abroad and my mother got ill, but there was a good feeling of belonging and togetherness with the other competitors and their parents. Waiting for the decision of the jury, eyes met, hands touched, sharing hopes and giggles. When the first prize was announced I walked up to the stage bewildered, shook hands with strangers turned around bowed to the public and looked for a pair of eyes to share my embarrassment … but my friends looked down and their mothers had narrow lips. Later my friends bunched in a group, did not invite me to join them. I was an outsider, not wanted. I hated the prize I had once coveted. I felt lonely for the first time and very often since."

Playfulness and capacity of fantasy and/ or imagination. Erika pointed out that what kept her alive was her ability to fantasize and daydream. Her daydreams involved music and the vast of arena of knowledge out there she was ready to absorb.

"I survived by daydreaming. In the cold nights when even sleep avoided me, I thought and dreamt with open eyes. I saw myself and my fingers on the piano and played and played till the morning came. In another repeated daydream I was standing in front of school, and near me was standing a man with no face. We were waiting for the results of exams. I knew there was a world of knowledge to learn from. My mother taught me all she remembered about poets, music and other things. I had a feeling inside me that I must survive to learn."

Risk taking and open to feelings and emotions/shows emotional sensitivity. As a child Erika recalled an incident when she went against her father's commands risking herself and her family as she showed emotional sensitivity feeling deeply for a boy in the camp and knowing she could do something to help him:

"With the morning the suffering began with breaking the ice over the water to wash ourselves. To this we were very attentive, to keep clean because dirt brought lice. The louse was the most frightening being in our life. They brought the sickness, the illness of which many died and only a few survived."

"Many years later, after a television talk, a man called and reported he woke up one day in the camps, after this illness and around him all were dead. He walked out on the street of the camp, everybody avoided him, because he was uncombed and people were afraid of his lice. He was weak and sat down, and cried in his despair. A girl came up to him and asked why he was crying. He told her about his illness, and the fact that his parents did not move and now "nobody wants to speak to me." "But I speak to you" said the girl and smiled. And seeing me on television he recognized my smile. And in spite of those sad memories I was glad that I had helped that desperate child. Who, according to him, got strength out of my smile. Yet, at the same time, guilt feelings came up. What about those I had not smiled at? Those, that life too had not smiled at them? And those that died of hunger, sickness

and pain. Why did they have to die? In what were they bad or wrong and I was good and right?"

Emotional sensitivity and problem sensitivity. Erika drew on her experience in the camps showing emotional sensitivity and at the same time being aware of the fact that the human being she was trying to help was suffering from a problem she had faced after the Holocaust:

"Many years later, during the Yom Kippur War, I was asked to help a young man, who for three days did not react, did not speak, just lying there with wide open eyes without seeing, without movement. The only thing I knew about him was, that he was the only survivor of a tank that was hit. I sat down, held his hand and tried to remember what had I studied. What did I know about how to help him? From my brain I received no answer, but from the depth of my guts came the words: "you feel guilty that you are alive and your friends had to die". He turned his head and asked "How do you know?" "For I feel guilty too, that my friend died in the Holocaust and I am alive". He pressed my hand. And I understood that my suffering got some sense. That from my suffering I could help a young man..." (De-Nur, 2000).

Listening to One's Inner Voice

Awareness of creativeness. As a child in the camps, Erika was not aware of her creativity, but actually practiced it to try and save her parents' lives:

"At that time I did not know that it was creativity. No one spoke about creativity.

I had a happy childhood. I was love and gave love. Suddenly came Hitler and took the family (mother, father my sister and me) to concentration camp. My parents got sick with typhoid and had very high fever. At 10 years old, I walked out, very sad, searching for something. I saw a big potato. I took the potato and cooked it and made a whole meal. The water in which the potato was cooked became soup. The outer part (the peel) I cut into small pieces and made some kind of schnitzel and served it with the potato. My mother was not conscious, but my father, who could not speak, looked at me with his big eyes and said thank you. His smile was a reward for me."

Independence of thought. Erika as a 10 year old child had decided to go and look for food for her sick parents. "Nobody told me to do it. I saw my parents were sick and I thought of looking for some food to strengthen them." When she found the potato she thought of a way of turning it into a whole meal, just using her own initiative and creativity. An additional case where Erika showed independence of thought was approaching the boy with lice, although she knew it was risky and forbidden. She sat with him because as a person she understood the meaning of being alone and without support, and she thought she could help this boy. She did so in spite of what she had seen and heard around her, feeling she could make a difference:

"I remember, the anger of my father, seeing me with a boy with lice. And when I did not want to leave the boy, feeling his despair, my father in his anxiety tore me away. This was the only time in my life that my father had been rude with me. And in spite of those sad memories I was glad that I had helped that desperate child."

Interest in reflective thinking/introspective. Erika showed introspective ability which helped her ease her suffering during a very stressful event. She knew she was not allowed to cry and found within herself a way to cope:

"I was 12 years old and quite tall compared to my classmates. The Ukrainians came into the house. They were the worst. They took people away, killed people, and violated the women. When they came into the house my mother pushed me into a hole/niche in the wall and pushed a cupboard against me. There I was crying quietly and standing in the dark hole. My feet hurt because I could not move, as the stone wall had spikes that hurt my flesh. Suddenly I made a small movement and for a second it did not hurt. Then I moved another finger and another, and this way I could ease my suffering. Many years later I came to the conclusion that in a surrounding, as narrow as it is, you can find alternatives – you can give a child some alternatives."

Adult life: The Creative Approach

As an adult Erika Landau developed a creative approach for teaching gifted children. Analysis of the interview and documents generated characteristics in all four categories: (a) generating ideas; (b) digging deeper into ideas; (c) openness and courage to explore ideas; and (d) listening to one's inner voice.

Generating Ideas

- Fluency; (b) flexibility; (c) originality; (d) elaboration; and (e) metaphorical thinking.

Originality. The first time Erika came across the term "creativity" made her tackle this subject and be the first to write a book about how to teach creativity to gifted and talented children:

"Writing my doctoral proposal at the University of Munich in the 1960's I found the word creativity in a UNESCO document. They said there that when the Sputnik was sent by the Russians, Americans came to the conclusion that it must be something else not only knowledge and intelligence, but it must be creativity. This was the first time I encountered the word. My book on creativity, which was published in 1969 and translated into 12 languages, was the first one. I saw there is a way to teach children to look at creativity."

Erika formed a very unique approach to creativity and teaching creativity to gifted children:

"The creative approach challenges the personality at its whole. The problem is approached from all aspects of the personality: intellectually, emotionally and socially. The problem is seen in its course of a process and not in its static position in time and space. The creative approach flows in time and space, present, past towards the future. The creative approach makes learning an experience and each experience is a building block of the personality. It does not burst or brake frames, but tries to find alternatives within the given frame. It is transferable and can be learned. Creativity enriches life, and makes it more interesting, more enjoyable, and more beautiful. It gives life meaning –"my meaning".

Erika was the first to offer programs and courses for gifted children identified by her in 1968 in Israel. She had founded the Institute which she has been running for almost 45 years now:

"In 1968, I founded "The Young Persons Institute for Promoting Creativity and Excellence"- Israel's first center for gifted children, a non- profit association to help talented and gifted children to cope with their problems. The institute strives to develop creative thinking, according to the unique creative approach, I developed, based on meeting thousands of children and studying the subjects. .Up till now, more than 40,000 children attended the program; the Institute works with about 800 children each semester. The institute started as an educational experience in the Tel Aviv Museum. I started teaching creative thinking. I had to teach them (the children) to ask questions. Students (mostly from elementary school) take creative thinking and other interdisciplinary courses like humor, neurotransmitters, technology and science, and archaeology. When the story of cloning "Dolly" was published in May we started a course in September. Teachers at the institute are mostly former students."

***Elaboration*.** Elaborating on the creative process, Erika came to the understanding that children need to be taught how to ask questions:

"The most important aspect of education is the way of asking questions. It is through questioning that the individual looks for himself for his own individual way towards the solution. Thus I prepare the partnership of the student to develop the creative approach to their life."

"I usually start from the present and insist on looking at what is happening "here and now", and only after seeing what is really happening do I ask the causal question WHY? The question "What can I do and what is in me to do about it" is the reformulation of the depressive, causal question "Why is this happening to me?" into an active, creative question: It is the new beginning from an infantile-disturbed into a mature and creative being. This change in form and tense of asking the question is the change from the deterministic approach to the security and freedom to choose the creative alternative."

Digging Deeper into Ideas

Analyzing and synthesizing. She also looked deeper into ways of tackling and solving problems that could be taught, analyzing the process of finding creative solutions and what prevents us from doing so:

"Life is a perpetual search for different ways to find and to solve problems, to feel free to choose among them, to dare to try them out and be responsible for your choice. One of the biggest obstacles to finding creative, original and innovative solutions is our acquired stereotyped and mechanical ways to solve problems. In our desire to be loved, liked and accepted, we tend to speak and behave in terms we know a priori will please the society."

"Looking at the situation from different angles, we can work ourselves up to different alternatives and the ultimate choice of the most relevant alternative to the real situation is the product of intellectual, emotional and social

participation of each student. It is a combination of inner abilities with outer challenges, interaction of outer logic and inner fantasy, intellect and emotions according to the social needs of the individual in the society."

Reorganizing and modifying. In her approach to teaching gifted and talented students she dug deeper into the problem and recognized relationships between the personal behavioral characteristics of the children and the encouragement to develop and express creativity:

"I first look for the strength in my student "I strengthen the strength" in order to give them the force to confront their weakness. One needs courage in order to confront one's weaknesses: it is much easier to hide behind social conventions and walk trotted ways others went than try out individual ways according to one's own potentials with the risk of failure. We are allowed to make mistakes, what we should not do is not learn from them. Failure could be a good beginning of something new."

Openness and Courage to Explore Ideas

***High levels of curiosity and aesthetic sensitivity*.** Erika offered a course in creative thinking to gifted children interested in arts in the Tel Aviv Museum:

"The institute started as an educational experience in the Tel Aviv Museum. I started teaching creative thinking. I taught them to experience, to look at things from different angles, and to ask questions."

***Risk taking and open to feelings and emotions*.** For the child to be himself and secure taking risks, a special open atmosphere needs to be created:

"We must create an atmosphere for the gifted child which conveys security, so that he dares to be his outgoing, warm, participating as well as his bright, dominating and will feel the inner freedom to venture into a wider world without the perpetual need to compete, to be constantly admired, and always be best. We need to create an atmosphere which will enable him to play and experiment, invent and create, love and share for his own good, as well as that of society."

***Shows emotional sensitivity and problem sensitivity*.** The biggest problem in the education of children, according to Erika, is the gap between the higher intelligence and the lower emotional maturity. Because parents and school challenge mostly the intellectual aspect in the child's personality. She went on to elaborate on how the child's emotional abilities need to be challenged:

"To challenge their emotional abilities, is as, or even more important, than the challenge of their intellectual abilities. Children should be taught: a. to look at the matter from all aspects of their personality: intellectual, emotional and social aspect; and b. to ask questions and become aware that each question has different answers and each answer could be asked with continuous questions such as: "What more?, what else could be done?, or could be seen?" to see any concept in its process. To flow in their thinking, to defer judgment as opposite to think in static terms that leads to deterministic, rigid and narrow conceptions."

Listening to One's Inner Voice

***Awareness of creativeness*.** Erika reported she had found a method for freeing the creative potential and developing a creative attitude in children that will make them aware of their creativity and help them in real life situations:

"To understand the different stages in this creative process, to activate bipolar thinking (imagination and logic, subjective and objective, intra- and interpersonal communication) to know the theoretical aspects, to experience the practical exercises - are the helpful conditions to free the creative potentials buried sometimes under layers of habits and inhibitions. These conditions could help to develop the creative attitude, to become a general factor in the personality which will find the creative solutions in any existential or learning situation. Most of all we need this attitude in the very frequent crisis-situations in our present life. The future might find us unprepared; therefore we must learn how to create new ways, new reactions, and new solutions."

***Demonstration of autonomy and independence of thought*.** To demonstrate individual and independent thought or autonomy, based on Erika Landau's approach, the child needs to gain confidence in himself and believe that he can conquer all obstacles and be productive:

"The aim of education is to give the individual the confidence that he has the strength, not only to adapt himself to the

demands of the environment, but also to go out and meet its challenges. It is the acceptance of the student's anxiety; to help him to live actively in the present in spite of this anxiety and insecurity - thus preparing him for his independent creative future."

Interest in reflective thinking/introspective. Stressing the experience and feelings that go with it is a major factor in the creative approach. Making meaning of an experience is performed via reflective thinking and introspection:

"I revised the aim of education. I came to the conclusion that when things are connected with feelings or a certain person that you love or hate, you will remember. This is the basis to look at things with brains, with feelings and with social interaction. For me education is not only the aim of knowing. To learn is to experience with many senses. When gifted experience they do not forget; they feel it, they think about it, and reflect on it. Then they can transfer what they had learned to other areas."

Personal Creative Characteristics in Childhood Transformed into Adulthood Creativity and Outcomes

The most significant event she had experienced as a child learning from Dr. Rappaport about the painting of Judith and remembering his words, had struck a cord and lead her to the deep realization of new path she would like to take:

"Years later I went to see this painting in the Uffizi Museum in Florence. I imagined it was a big picture, but it was very small. I stood in front of the picture and understood the legacy. I realized I must answer the curious children's questions. This was the turn from creativity to taking care of gifted children."

Erika is a very introspective and reflective person. She has always been thinking of making meaning of what happened to her as a child in the camps. As an educator and therapist she is for speaking about the dark times and that is why she published her book named: "Giving Sense". Directing these questions into finding answers and doing for the benefit of others is very significant for her. This is something she would like to instill in her children:

"With time I dared to see that suffering was not in vain. Suffering could give another meaning. I think I am a better person because I taught myself to give. This is what I also teach the children, and especially to give to our country, because for me, Israel gave me back my feeling of being a human being."

Her experience in the camps taught her to deal with a variety of situations:

"Creativity for me is not a state but an attitude of living and surviving. We are partners in our destiny, without our participation, stating and choosing alternatives, there is no real life."

"The ability to cope with the future is in us. We have only to free it … and learn how to use it creatively."

As a person Erika is just like the children she teaches. She never ceases to ask herself questions. These questions are turned into positive ways of coping:

"I never give up. I am ready for surprises and go on asking what else? How else can you cope? You lose something and look for new ideas. You do not regret what happened. You ask questions like what can I do about it?"

She redirected her suffering to create an educational approach to help children who resembled her. She actualized herself and became an innovator and leader in the field of gifted education in Israel and the world because she understood that:

- "An up-to-date, innovative society needs conscious, daring, creative, flexible and self-actualizing individuals. To actualize one-self means to function according to ones' abilities…to become ones' potentials Life is a perpetual creative process."

Discussion

Early Life

As a child Erika showed characteristics of personal creativity in two main categories: openness to explore ideas; and listening to one's inner voice. There are no indications of the other two categories of generating ideas, and digging deeper into them, which may result from being quite young and facing hardships that people sometimes try to forget.

Openness to explore ideas. As a young child she was very open to explore new ideas in very dark times. She showed high levels of curiosity and wanted to "swallow the world" and its vast

knowledge. She was also drawn to aesthetics and was interested in painting and was already acknowledged as a good pianist winning first prize in a competition. She had the capacity for fantasy and imagination, which turned out to be lifesavers, as she sunk into daydreaming, creating a better life for herself and focusing on future ambitions. As a 10 year old child she showed emotional sensitivity and compassion towards other children knowing she could help them survive. She was also aware of her feeling of guilt because she survived**.**

Listening to one's inner voice. Erika was not aware of her creativity but was actually practicing it when she cooked her parents a whole meal from just one potato. Deciding to look for food and trying to prepare it on her own showed great independence of thought. She also practiced creative ways of coping with the suffering by being introspective and finding the strength within her when forced to stand for hours in a niche in the wall.

Adult Life

As an adult Erika expressed personal creativity in all four categories:

Generating ideas. She proved to be very original writing about creativity in the 1960's and developing a unique approach for teaching gifted children. Being the first to found an institute, identifying and catering for gifted and talented children made her the innovator and pioneer in Israel in this field. Courses offered at the institute were revised to suit the evolving model and became more interdisciplinary with time.

Digging deeper into ideas. When she analyzed, synthesized, sand modified her approach, she thought about the obstacles for finding creative solutions. She came to the conclusion that creativity was a combination of inner abilities and this is what she has to look for and develop in her students.

Openness and courage to explore ideas. Possessing a high level of curiosity and aesthetic sensitivity, she started offering a course on creative thinking for children. While exploring the idea she came to the conclusion that the atmosphere created for the gifted needs to be secure in order to enable them to experiment and invent without competition and judgment. She focused on all aspects of personality: intellectual ability or problem sensitivity (asking questions and looking at things from different aspects); as well as emotional sensitivity.

Listening to one's inner voice. Developing the awareness to creativeness and actual creative attitude is at the heart of Erika's approach. She believes gifted children who gain confidence in their strengths to meet challenges and make meaning of an experience will better remember and be able to transfer whatever they have learned. Listening to her inner voice and reflecting on her long-term experiences with the gifted she has revised her aim of education including intellectual, emotional, and social interaction.

Personal Creative Characteristics in Childhood Transformed into Adulthood Creativity and Outcomes

Erika Landau is an example of a case of possessing personal creative characteristics in childhood, which were developed and actualized by strong introspective and reflective abilities, into an innovative approach to educating gifted and talented children. The inner voice helped her create meaning to her suffering and transform it into a positive innovative outcome which has helped thousands of children. Generating and digging deeper into ideas, openness and courage to explore those ideas and listening to the inner voice, which she has been practicing all her life, have turned into an approach for teaching creativity to gifted children.

Limitations Suggestions for Further Research

The study examined one case of personal creativity characteristics expressed in childhood, encountering unique and horrifying situations, and aimed at establishing a connection to adulthood creativity and creative approach to educating gifted children.

A major limitation of this study was the focus on a single participant. Given that data were collected by self-report the participant's answers reflected her perception and interpretation of events, thoughts, and outcomes.

A deeper examination of the personal creative characteristics and comparison of several case studies will shed more light on similarities and differences in translating and transforming characteristics possessed by children into adulthood innovative outcomes. Focusing on case studies related to a certain area like education will enfold similarities. On the other hand, examining case studies from different fields of knowledge could lead to a better understanding of certain creative characteristics needed to succeed in those areas.

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Appendix A
Interview Questions

1. Please relate to your experiences as a child during the 2nd World War.
2. How did you show creativity as a child?
3. How did you show creativity as an adult?
4. Explain the creativity model you have developed. (What are the characteristics of a creative child/adult? How was the model received in Israel? In the world?)
5. How does your model relate to models developed by Piirto and others?
6. How did you get the idea to open a center for developing creativity in children? (How did you start? What courses were offered? How did it develop? What are the future directions? What are some special achievements of your center (awards) and of individual children?)
7. What are your insights on developing creativity then and now?
8. What is the required direction the education of talented children should take to prepare children for a better future?

About the Author

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Serving At-Risk Students at John G. Stewart School

Kevin MacKay

Located in Winnipeg, Manitoba, on the grounds of an Adolescent Treatment Centre, John G. Stewart is one of 43 schools in the River East Transcona School Division. This grade 6-10 public school is located on Knowles Centre grounds and is an alternative educational facility serving the needs of all 32 residents of Knowles Centre and 20 of the most challenging students from within the River East Transcona School Division.

Following a January, 2008 training session on Life Space Crisis Intervention (Long, Wood, & Fecser, 2001), the staff of John G. Stewart School embarked on a journey to adopt the principles of Reclaiming Youth International's Circle of Courage approach (Brendtro, Brokenleg, & Van Bockern, 2002). Other strength-based interventions, including Creative Problem Solving (Treffinger, Isaksen, & Stead-Dorval, 2006), *Lost Prizes* (McCluskey, Baker, O'Hagan, & Treffinger, 1995), and Response Ability Pathways (Brendtro & du Toit, 2005) were also incorporated into our approach.

Though many of the principles, attitudes, and programs were already in place, the decision to fully embrace and push the envelope came after a full day staff discussion. Being positive and understanding was the path forward!

As an alternative school, we had the flexibility to adapt some bureaucratic directives to create what we felt was best for our at-risk students. This article offers an overview of a small sample of some features of the program that make us unique and effective in dealing with this population.

Program

Upon first entering the school, each new student spends their first three or four visits dealing with only the adults in the building. This allows staff to establish the first relationship with every new child. During these initial meetings, the following occurs:

- Students are tested for their current math and reading abilities;
- Students are interviewed by Student Support Team members;
- Students complete a safety review in the Creative Arts area; and then
- Students are gradually integrated into a class through specialty areas like Physical Education and Creative Arts prior to beginning full days in the classroom.

Decisions on where (i.e., which classroom) to place students are based on age and abilities. All grade 6 students, and academically lower grade 7 and 8 students, are assimilated into Room 2. Academically capable grade 7 and 8 students go to Room 3.

Academically-weak high school students work on all core subjects year round and complete courses at their own pace, while academically-capable ones are in either Room 5 or 6 working on two high school credits in each 13-week term. In each term, we also have four students in the Culinary Arts Program taking two of the eight available culinary courses. For our academically-challenged students in Rooms 2 and 4, there is a real focus on numeracy and literacy skills. The academic students, on the other hand, work more on meeting the provincial curriculum outcomes.

Each morning, there is a 15 minute meeting among all school staff, Knowles Centre therapists, and unit supervisors. The agenda is simple:

- Who do we expect at school that day?
- Is there anything that we should know before students arrive that morning?
- When will the therapists meet?
- Which therapist will work with a particular student?
- What were the big events from the day before?
- How much time is needed to share information about student conflicts or issues?
- Is there any news to share about field trips, special events, personal notes, or student conferences?

This meeting prepares the staff to interact with students on a day-by-day basis. For example, discovering that a student's home visit was cancelled elicits empathy from the staff and puts them in a position to be supportive, not confrontational.

Immediately following the meeting, the school doors open and children are all greeted by their first names as they enter and head to their classrooms. We feel it is very important that every adult knows every child's name and that all children understand that they are known among staff. This is a starting point in building a climate of support and belonging in the school.

As students move down the hallway, some will stop by the TV (that displays pictures of the previous school day) to see if they are on the screen. Others will walk by and engage in friendly conversation with preferred staff or get involved in friendly banter with the Phys. Ed. teacher. Many of the Day Students will head to the Library, where they can obtain a quick breakfast consisting of cereal and fruit before heading to their first class. When students carry issues into school, it is generally quite noticeable and our Student Support Team members quickly spring into action to initiate a conversation, which allows each student time to share and vent prior to attempting the academics for the day.

After one of over 50 variations of our national anthem is played, classes begin. Each is only 30 minutes long to accommodate students with attention difficulties. Teachers in every classroom understand the importance of attaining mastery. Lessons and assignments are differentiated to allow each individual student a chance to experience some level of success. The low-enrollment classrooms allow the teacher and educational assistant to monitor and support the learning. All classrooms have tactile activities available for students when they have completed their work. Examples include class puzzles, doodle art posters, Lego, and classroom libraries for students whose preference is to read.

One of many hands-on activities.

Since we value and realize that rigorous physical activity will bring on feel-good endorphins, we have committed to providing each student a Phys. Ed. class each morning, and another each afternoon. In the morning, two classrooms are combined, and in the afternoon we have unisex Phys. Ed. classes with middle years boys, high school boys, and all the girls having their own classes. The Phys. Ed. specialist uses weekly 15 minute runs and beep tests to chart individual fitness levels. Students achieving a personal best are acknowledged and rewarded. Many low-level aerobic games and exercises are available on a regular basis. This allows students to burn off that extra energy, frustration, and anger. The unisex Phys. Ed. is particularly good for the girls, who very much enjoy lifelong activities like yoga and dance.

Middle years students, have a daily class in the Creative Arts area. Creative Arts is a high school options course where students can choose to work on individual projects such as wood burning, plastics, soapstone carving, wood carving, and airbrushing, or on larger school-wide carving projects. The latter projects take hundreds of hours to complete and, when the task is done, the large carvings are given as gifts to other schools or organizations.

Carved during the 2012-2013 school year

Students take great pride in presenting these carvings, knowing they will be displayed proudly and prominently throughout the city. This activity is part of the generosity dimension of the Circle of Courage philosophy (Brendtro, Brokenleg, & Van Bockern, 2002).

Our last learning environment is in the kitchen at Knowles Centre, where the Culinary Arts Program was started through a joint initiative in 2010. Each 13-week term has four students joining the John G. Stewart Teacher/Chef. The Chef and students are responsible for providing lunch to all the students, coffee break snacks for all the Knowles' employees, and suppers for both residences on the grounds.


Chef Jeff and student preparing the salad

Culinary Arts has been a win-win-win program from its inception. Students are able to earn high school credits, and they learn about healthy eating, standards of cleanliness, expectations for employability, and other practical skills. They also benefit from receiving a low fat, low sugar, well balanced, and nutritious meal each day. This healthy diet, combined with the rigorous Phys. Ed. Program, has helped reduce behavioural incidents; we all see an increase in the number of students doing well in school, and our number of Eagle Award points has grown from 378 in 2008-09, to 481 in 2010-11, to an incredible 542 in 2011-12.

Highlights

The staffs of John G. Stewart and Knowles Centre benefit because they are dealing with fewer behavioural issues, and the students in turn gain because they are better able to cope in stressful or anxious moments.

All of the learning environments are reinforced by school-wide awards. These include positive reward programs such as the Attendance Honour Roll (students attending school 90 percent or better in a term enjoy an afternoon at the local YMCA), Bear Awards (students who "get caught doing something good" are rewarded with a certificate and a chance to win a pizza lunch with four other students and a staff member), and Eagle Awards (students completing 85 percent or more of their classes each week receive a certificate at the weekly celebration assembly). Further, students who earn between nine and thirteen points in a term receive a reward. Eleven points or higher earns a trip in a limousine to a local Pizza Place where lunch, complete with dessert, is enjoyed with other qualifying students and a staff escort.

The Student Support Team working in Room 1 is comprised of a teacher and two child and youth care workers. Each student, based on their place of residence, is assigned to one of the team members, who is responsible for building the initial relationship with that young person and for helping him or her settle into the school. The Support Team member also sees any student who is asked to leave the classroom. Teachers radio ahead and explain the circumstances around the dismissal from class. All three members of the Support Team use the Life Space Crisis Intervention model to defuse conflict and assist the student in returning to class successfully at some point during the day. It is during these periods of crisis when we are best able to help students acquire new skills to handle recurring problems and issues in their lives (Long, Wood, Fecser, 2001). Students can, at any time, request to see their Student Support Team member to alleviate a stressful or anxious time, or as a positive reinforcement for completing their assigned work promptly. Many students arrive at school with emotional baggage from their outside lives. It is not uncommon for them to ask and see their support worker the moment they walk into the building. Once they have unloaded their "baggage," they are more able to attend to their schoolwork.

To conclude, the success of John G. Stewart School is based on the dedication and empathy of each individual staff member, our shared service goals with Knowles Centre, and a complete team approach designed to make students feel like they belong. All faculty and staff support students in a manner that helps these young people manage their emotions and their lives in an independent way. Faculty and staff also provide ample and varied opportunities for students to develop mastery and to be generous to others, not only in the school, but also in the community at large.

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About the Author

Kevin MacKay is currently in his 9th year as Principal of John G. Stewart School. He began his career at Knowles School (the predecessor to John G. Stewart) in 1987 as a classroom teacher, but left after a spell to teach in another setting. However, bored of regular school and frustrated with having to deal with at-risk kids with little or no support, Kevin happily returned to John G. Stewart four years later as a counsellor. And there he has chosen to remain. Kevin earned his Bachelor of Education degree and Post-Baccalaureate Certificate in Special Education from the University of Manitoba. An accomplished soccer coach with 10 Provincial Championships and one National Title to his credit, he has always been fascinated by human development, behaviour, and relationships. Kevin lives in Winnipeg with his wife, adult daughter, and teenage son.

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The Student Learning Portfolio Mentorship Program: A School Division/Government/University Partnership

Rick Smith, Alan C. Wiebe

The Youth Justice Education Intake Initiative (YJEII) was established and initiated in May, 2008 in response to recommendations of an Education Review of the Manitoba and Agassiz Youth Centre classrooms. The project, funded by Manitoba Education in partnership with Interdivisional Student Services of the Winnipeg School Division, is located at the Manitoba Youth Centre (MYC) in Winnipeg.

Objectives

The intent of this project is to enhance student learning in Manitoba Youth Correction classrooms and provide student service supports and information for the successful transition of incarcerated youth back to their community school or work placement.

At present, the YJEII team – consisting of 3 Education Coordinators, 1 School Reading Clinician, 1 School Psychologist, and 2 Educational Assistants – serves adolescent students who are residents of the Manitoba or Agassiz Youth Centers. Team members assess the students' learning needs and identify appropriate educational interventions to help the youth improve their overall learning skills and school performance, both at the centres and in their home school, with particular emphasis in the area of literacy. Further, the YJEII team members assist in the development of Learning Profiles consisting of academic and clinical assessment information. Another important part of the work requires connecting with school divisions and identifying contact personnel when a student is either transitioning into custody or back into the community. The Coordinators are required to provide and maintain support and resources to the Justice teachers whenever possible.

Mentorship and Portfolios

The mentoring component of the project was developed in 2010 as part of a partnership among the Youth Justice Education Intake Initiative of the Winnipeg School Division, Manitoba Justice, and the University of Winnipeg's Faculty of Education. The University of Winnipeg (UW) has a long history of reaching out to the community and supporting at-risk young people through mentoring (McCluskey & Mays, 2003; Lamoureux, McCluskey, Wiebe, & Baker, 2008), and of incorporating problem solving and talent development into the process (Feldhusen, 1995; Treffinger, Isaksen, & Stead-Dorval, 2006). And MYC and UW personnel make extensive use of various strength-based interventions in their programming to reclaim talented, at-risk students or "lost prizes" (Brendtro, Brokenleg, & Van Bockern, 2002; Brendtro & du Toit, 2005; McCluskey, Baker, O'Hagan, & Treffinger, 1995).

In the current Student Learning Portfolio Mentorship Program, portfolio development is the key strategy used by UW mentors when supporting students from within the Manitoba Youth Centre. MYC students are matched with the UW pre-service teachers who are entering their final year of

study. The student "mentees" are selected and referred to the YJEII by the MYC Education Coordinator and classroom teachers.

The University of Winnipeg mentors are selected by the Faculty of Education's Mentorship/Community Outreach Coordinator based on a set of pre-determined criteria. The University, YJEII, and MYC work cooperatively to provide the following:

- Mentor orientation to the Manitoba Youth Centre,
- Training/Professional Development in Learning Portfolio models,
- Mentor supervision and evaluation,
- Materials such as leather portfolios, plastic sheet protectors, and flash drives,
- Space/time for oral presentations of Learning Portfolios to family members, institutional staff, and other invited guests, and
- A year-end (June) review meeting involving representatives from all project partners.

Throughout the year, students are regularly identified by Justice or Education staff as potential Learning Portfolio candidates. Once selected and matched, the mentors and mentees begin the process of "relationship building" by creating e-portfolios using a prescribed computer PowerPoint program. Students receive instruction from their mentors on how to assemble their portfolios, which should include a title page, definitions, table of contents, letter of introduction, resume, education/career goals and plan, skills/knowledge inventory, documentation index and proof/verification of learning, and a portfolio rubric. Other areas in the portfolio include "Books I Have Recently Read" (in which the youth are, in fact, encouraged to record the books or magazines they have read) and a "Circle of Support" page (which suggests that students identify people who might provide learning and emotional support in the future).

Upon completion of the program, each student receives a leather 3-ring binder to house a hard copy of his or her Learning Portfolio, as well as an electronic copy (on flash drive) of the e-portfolio to use for future academic or workplace purposes. The Learning Portfolio highlights the term "Show What You Know," and includes samples of the student's "best work" along with other samples of formal and informal documentation.

Project Outcomes

MYC students/mentees explain that the experience gained through constructing a portfolio can be a very positive and reflective means to measure their growth in areas of physical, social, and emotional development. In addition, the portfolio also provides a place to house both formal and informal pieces of documentation supporting their skills and abilities. It's tangible evidence of their talents. And for their part, the UW mentors consistently speak of how much connecting with and discovering the talents of at-risk young people has affected them personally and professionally. Indeed, they feel the experience has prepared them to be better teachers.

The pre-service teacher mentors encourage the youth to "Collect, Select, Reflect and Project" – to identify, assess, and use their unique skills, abilities and life experiences. As well, mentors emphasize to their mentees that the portfolios are always "a work in progress" that can be adapted to meet changing needs or circumstances.

All the students are given the opportunity and encouraged to share their Learning Portfolios in public presentations to a small group of invited guests that often include family members, Justice staff, and other youth. In many cases, these intimate presentations offer the young people a genuine chance to demonstrate their growth in self-esteem, showcase their personal strengths or talents, and reflect on their life experiences and future needs in order to ensure successful transition.

The mentors focus on working with the students to teach them successful "learning strategies" that can be applied and generalized to other practical situations in their lives. Special emphasis is

placed on balancing educational, personal, and career goals. The mentors can suggest that copies of the Learning Portfolios be made available to Justice personnel such as judges, lawyers and probation officers, as well as to school administrators, social agency personnel, and parents. This portfolio sharing sometimes has a profound impact on how these individuals view the youth.

In summary, over a 3-year period, this program has seen 15 mentors build and foster positive relationships with their "student partners" through the development of Learning Portfolios. During this time, the collaborative undertaking has grown and gained momentum with positive feedback coming from the mentees and mentors alike, school division staff, Justice officials, university personnel, and other professionals.

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About the Authors

Rick Smith is an Education Coordinator with the Winnipeg School Division. After earning his B.Ed. degree from the University of Winnipeg in 1990, he went on to teach at all grade levels and major subject areas from elementary through to adult education. As the Team Leader of the Youth Justice Education Intake Initiative, Rick has recently partnered with UW to develop a mentorship program using learning portfolios to assist incarcerated youth in transitioning back into school or workplace settings. In 2009, Rick received the prestigious PEARL award for his contributions in connecting communities by advancing the recognition of Prior Learning. He currently resides outside the city on his hobby farm training horses in the principles of "natural horsemanship." Rick's present endeavours include developing research and practical applications using equine training to assist youth in recovering from the residual effects of adverse life events.

Professor Alan Wiebe is currently the Mentorship/Community Outreach Coordinator at the University of Winnipeg. He has worked in many capacities helping to develop programming for "at-risk" youth in Manitoba, and served in the public school system as a regular classroom teacher, alternative program director, and counsellor. Alan, who teaches courses such as Education Today, Issues with At-Risk Children and Youth, and Mentoring At-Risk Youth, has done many presentations on the international stage (including major sessions in Jerusalem, Nairobi, and Ulm, Germany). He has written and co-edited articles, chapters, and books emphasizing the power of reaching out to vulnerable populations through mentorship, and he is lead editor of the forthcoming text, *Mentoring for Talent Development in a North American Context*. In recognition of his outreach efforts, Alan was awarded the Clarence Atchison Award for Excellence in Community Service at UW's 2010 Convocation.

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The Infinity Program (TIP): Student-Centred Programming for Personal Development

Kari McCluskey, Chris McCluskey

TIP taught us that we're all equal. I changed judgement to curiosity…instead of judging, I question because everyone is different. It was more than a school, it was a community. I learnt how to do things on my own…things I never thought I could.

Kayla Bernard
TIP Graduate

The Infinity Program (TIP) is a divisional off-campus alternative program servicing the three high schools of Interlake School Division in Stonewall, Manitoba, Canada. TIP serves high school students referred by teachers, parents, or community agencies. Ideally, of course, it would be preferable that students remain in their home school environment with sufficient supports to facilitate success. However, when all avenues of intervention have been exhausted without positive results, other options must be explored, including off-campus programming and a referral to The Infinity Program (which was, by the way, named by the students).

Intake, Relationship-Building, and Responsibility

Entry into this alternative setting is determined through a consultation process between the referring parties and TIP staff to determine eligibility and level of need of each student in question. Integrity of the program is built on the philosophy of relationships and respect. Development in both these areas is essential in creating opportunity to provide academic and social-emotional supports to disengaged youth who have not found positive connections or successes in their regular school, community, or home environments. Due to a wide range of factors and influences, including substance abuse, peer problems, or a dysfunctional home situation, some of these youth have become angry, adult-wary, and relationship-resistant, to the point they are now biting the hands that didn't feed them (Brendtro, Van Bockern, & Clementson, 1995).

Experience has shown that once relationships and a sense of belonging have been established, academic progress and improved day-to-day behaviour follow as a natural consequence (Brendtro, Brokenleg, & Van Bockern, 2002; Gharabaghi, 2008). Respect is not demanded of students entering TIP. Rather, it is demonstrated and, in turn, usually reciprocated.

Students are made aware from the outset that they are the ones responsible for what they will get out of their TIP experience. If they choose to embrace the program, take advantage of the available supports and opportunities, and find success, the credit for achievement is theirs to own. Conversely, if they make no effort to engage and the bottom falls out, there will be no one to blame

but themselves. It should be said that intensive efforts are required by staff to ensure appropriate supports and nurturing are in place. However, since the ultimate objectives are independence, self-efficacy, and confidence in goal setting and decision making, it is up to each student to do their own "heavy lifting."

Individualized Programming

One of our aims at TIP is to employ adaptive, malleable, strength-based programming in our in-the-trenches work with disenfranchised students, rather than the inflexible, deficit-based, linear approaches so often used with this population. Long steeped and trained in the traditions, theory, and practice of *Lost Prizes* (McCluskey, Baker, O'Hagan, & Treffinger, 1995; McCluskey, Baker, & McCluskey, 2005), Creative Problems Solving (Isaksen, Dorval, & Treffinger, 2011; Treffinger, Isaksen, & Stead-Dorval, 2006), and other strength-based interventions such as the Circle of Courage (Brendtro, Brokenleg, & Van Bockern, 2002), Developmental Audit (Brendtro & Shahbazian, 2004), Life Space Crisis Intervention (Long, Wood, & Fecser, 2001), and Response Ability Pathways (Brendtro & du Toit, 2005), we felt comfortable reaching out to these unengaged youth. It was clear from the start that, since their academic levels, personal issues, and behaviours were very different, programming would have to be highly individualized.

Figure 1 illustrates how, from intake, the process of building an individualized program around the student begins and progresses. It is a core belief of TIP staff that young people will rise or fall to the level of expectations placed upon them. Therefore, from the beginning, expectations are set high. What that looks like will vary for each individual based on their experiences, behaviours, and where they are at currently in their own level of growth and development. For example, the goals for student "A" whose school attendance has been extremely sporadic for a number of years will be very different from the expectations for student "B" who is dealing with bullying issues but intent on achieving a timely graduation. Importantly, the individualized goals are set not only to offer a challenge and motivation for change (in an upfront, non-condescending manner, critical to maintaining credibility), but also to allow for success experiences that the students can take credit for and build upon. The young people are expected to become involved in and gradually take charge of identifying and developing their own talents (Feldhusen, 1995).

Additional supports are put in place as necessary. In some cases, it is recommended that prior services be continued after transition into the program, such as maintaining connections with the divisional addictions counsellor. Not only does this provide continuity of a positive (and often much needed) adult relationship, it also avoids overlap in service delivery. Comfortable space is available on site for students to meet with social workers, probation officers, and other caregivers at their convenience. If students choose to keep those contacts separate from their school experience, that is also respected.

Academics are approached, wherever possible, by experiential and project-based learning, with the focus on personal strengths and interests. This portion of the program must definitely be individualized in order to maintain value to the student and the goals they see for themselves. Academic programming should have flexibility and fluidity, since personal growth and interests may change over time. Community resources such as preschool programs, recreation facilities, and resource centres are also seen as academic tools for providing dynamic programming. Learning both inside and outside the classroom is designed to build on cross-curricular outcomes, as well as to expose students to new experiences, activities, lifestyles, and ideas. By providing access to new community groups and introducing low or no-cost activities, generosity through service learning and healthy living through activity are encouraged. These community connections also serve to build "bridges" and working relationships in the student's after-school life as well. Mentoring has been shown to be an effective tool in helping "at-risk" young people turn their lives around (Lamoureux, McCluskey, Wiebe, & Baker, 2008), and we often call upon mentors to connect with the students,

provide some additional direction, and offer support during the various community outreach activities.

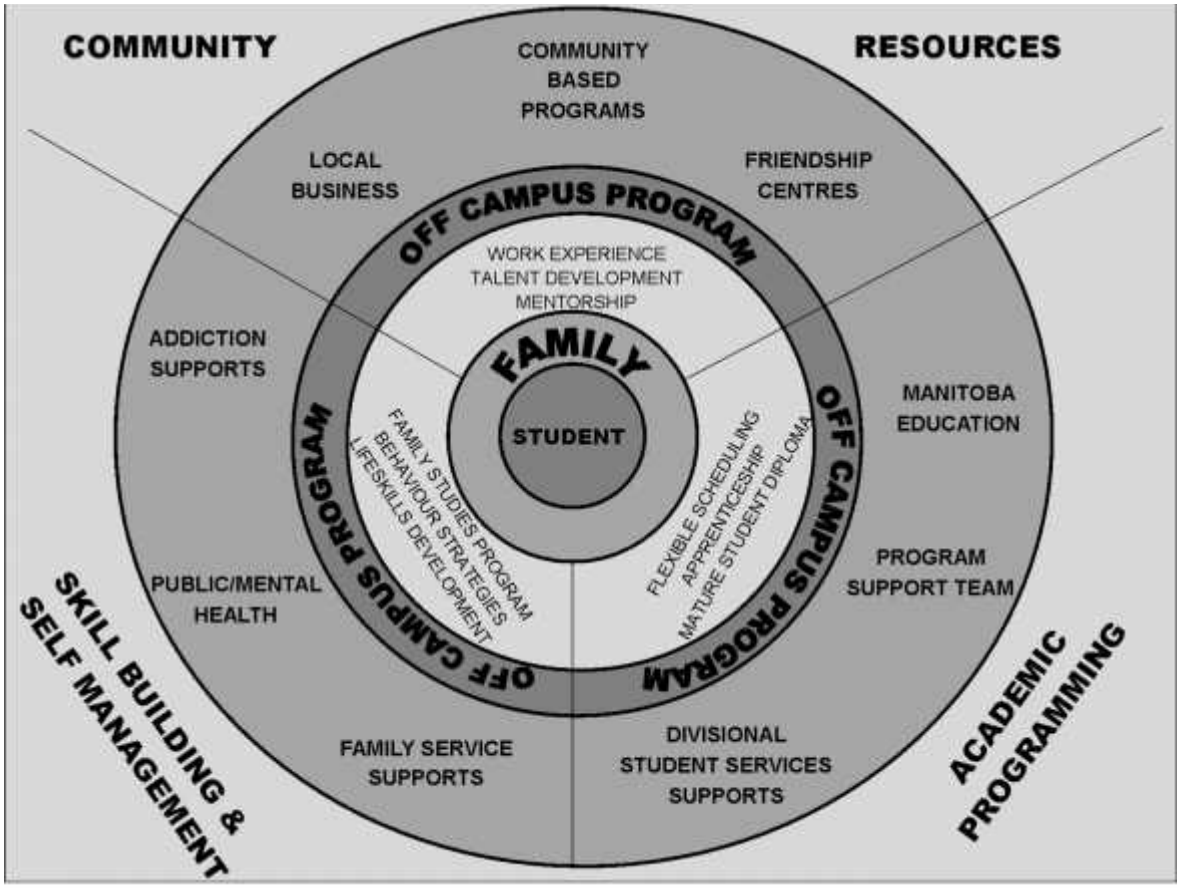

Figure 1: Student-Centered Program Development and Support

Service learning is a powerful tool to teach respect, altruism, and responsibility (Cress, Collier, Reitenauer, & Associates, 2005; Greenleaf, 2002). As such, it is an essential piece of our programming. In fact, service opportunities are offered frequently, and TIP students have become a valuable resource to be called on when there is a need for extra hands for packing Christmas hampers, serving lunch at a soup kitchen, or assisting at preschool programs. The benefits are three-fold: students have a chance to practice altruism; teen-weary adults get to know the generous, hard-working young people in their backyard; and adult-resistant teens connect with members of the community who are potential employers and references. In the spirit of global citizenship (Kaldor, 2003; Nussbaum, 1997), many of our TIP projects are developed to raise funds for needy schools and students in other countries. Whatever the undertaking, these service projects give TIP students the opportunity to take on the role of helpers, rather than always being the "helpees" (McCluskey, 2000).

Figure 2 further illustrates the student-centred approach designed to develop or repair connections among three key areas of each student's life: home, school, and community. Building relationships between the home and school, wherever possible, is a key component for student growth. Indeed, strong relationships between school staff and parents not only help in setting consistent expectations for the students, but also make it easier for parents to access potential services. Involving parents in celebrating their child's success further builds the bond between home and

school. Unfortunately, some cases do not have a happy ending, for sometimes family members are unable to overcome their own struggles. In such instances, extra efforts are made to prepare the young people for the responsibilities of adulthood and to provide adequate support for their transition out of high school.

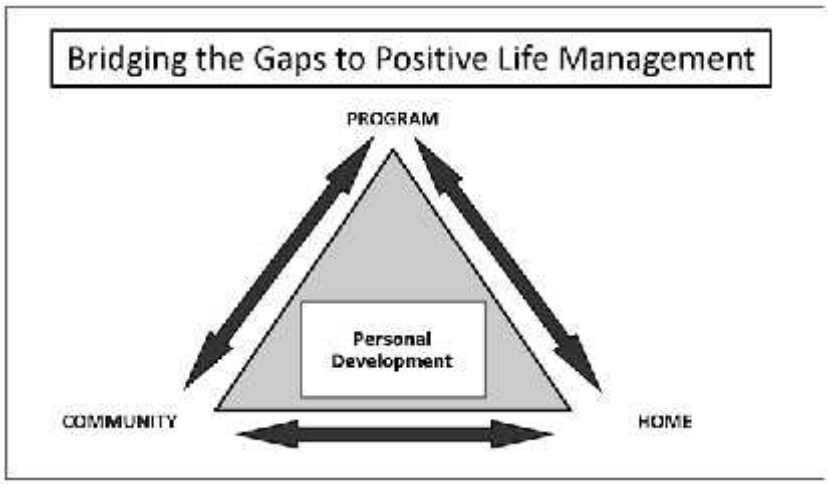

Figure 2: Life Management for Personal Development.

Outcomes

Patricia Crockatt, Alternative Education Administrator, notes, "TIP offers an environment and philosophy that simply doesn't exist within traditional high school settings where they have one view of success – graduation. TIP's definition is infinite."

Success at The Infinity Program is determined by a student's ability to move on. Measures of success are diverse, and may take the form of academic achievement, smooth transition back into the home high school, and/or entrance to a post-secondary institution. In other cases, success may be obtaining a full-time job. And in still other instances, it may be defined as developing parenting skills.

Transition supports are put in place for students as they return to divisional schools or enter college or university. Such support may involve helping with course selection and scheduling, advocating on behalf of the student, or arranging follow-up meetings to reduce anxiety and monitor progress. As independence grows and "takes the lead," however, supports "step back." Students naturally feel some trepidation as they spread their wings and leave the program. However, usually the sense of empowerment, ownership, and achievement overcomes any fear or reluctance. Wherever a TIP student's path may take them, the door is always open to return for additional supports, rewriting a resume, or just to say "hello".

I used to get the feeling I was looked down on when I had an opinion. At TIP, they talk to us. When we graduate, they're there. Some teachers, when you're out of their class, they're done.

Greg Cormier
TIP Graduate

TIP helped me find who I was. I'm happier than I've ever been. Words can't describe how thankful I am to have gotten accepted into that program....people should take those teaching habits and bring them to the high schools. It changed my life.

Nichole Short
TIP Graduate

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About the Authors

Kari McCluskey is the Community and Program Liaison Worker for The Infinity Program (TIP), an alternative education initiative in the Interlake School Division, Stonewall, Manitoba, Canada. Trained in counselling, behaviour management, and re-engagement strategies for young people, Kari emphasizes building meaningful relationships with unengaged children and youth through programming efforts focused on academics and altruism. Furthermore, her active engagement in international partnerships brings a strong focus on global citizenship and social justice to her students. In addition to her work with unengaged students, Kari teaches Post-Baccalaureate Diploma in Education (PBDE) courses at the University of Winnipeg, where she also serves part-time as the *Lost Prizes* Coordinator.

Chris McCluskey has been an educator for many years in the province of Manitoba, where he has had the opportunity to teach and develop programs in various school districts. For well over a decade, Chris has focused primarily on working with unengaged students of all ages. His training in many of the strength-based disciplines gives him the extensive knowledge and groundwork to successfully facilitate the flexible programs at TIP. Chris also teaches in the Post-Baccalaureate Diploma in Education (PBDE) program at the University of Winnipeg. As well, he is actively involved in coaching at all levels, particularly basketball and football.

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Standing on the Shoulders of Giants:

Taisir Subhi Yamin, Ken W. McCluskey

Isaac Newton, borrowing a metaphor apparently first used by Bernard of Chartres back in the 12th century, employed the phrase "standing on the shoulders of giants" to acknowledge that his accomplishments were built largely upon the efforts of pioneers from earlier eras. Likewise, much of our work at the International Centre for Innovation in Education and *Lost Prizes* International is grounded in the theories, research, and programs laid down by eminent colleagues who have now passed on.

We felt it was appropriate to recognize these notable thinkers in our *International Journal for Talent Development and Creativity*. This inaugural issue honours John Feldhusen and Ruth Noller. Both John (for decades the elder statesman of gifted education at Purdue University) and Ruth (referred to by some as "the mother of mentoring") were at the table when a trio of Canadians (McCluskey, Baker, and O'Hagan) joined with Don Treffinger and Scott Isaksen at the Center for Creative Learning in 1992 to develop the original *Lost Prizes* project. John contributed in many ways, most importantly by incorporating Individual Growth Plans and his Talent Identification and Development in Education (TIDE) model into the mix. And Ruth made certain that mentoring was a major part of the initiative. John and Ruth both seized the opportunity to come to Winnipeg to present at conferences, to train educators and community partners, and to work directly with talented, at-risk students. They had a powerful and enduring impact on all of us involved in the program.

In short, *Lost Prizes* owes a tremendous debt to John Feldhusen and Ruth Noller. Here Don and Scott pay tribute to their colleagues and friends.

A Tribute to Dr. John Feldhusen

Donald J. Treffinger

Those who work today in the field of gifted education and talent development are the beneficiaries of the decades of pioneering work of many dedicated scholars. The late Dr. John Feldhusen was one such ground-breaking leader in educational psychology who inspired both researchers and practitioners. A Wisconsin native, John earned his undergraduate and graduate degrees at the University of Wisconsin. He served on the faculty of Purdue University in West Lafayette, Indiana for four decades, until his retirement as the Robert B. Kane Distinguished Professor of Educational Psychology and Gifted Education. John was the founder of the Purdue Gifted Education Resource Institute in 1977 and continued as its director until 1995. A prolific scholar, he published more than 300 articles, chapters, and books, and was well-known for his work on talent development and the Purdue Three-Stage Model of Gifted Education. John served the World Council for Gifted and Talented Children (WCGTC) as Editor of *Gifted and Talented International*. He also served the National Association for Gifted Children (NAGC) in many roles: Board Member, President, and Editor of the *Gifted Child Quarterly*, and he held leadership positions with the American Educational Research Association and the American Psychological Association. His many recognitions and awards included the Distinguished Scholar Award (1983) and Distinguished Service Award (1985) from NAGC, the International Award for Excellence in Research from the WCGTC (1997), and the Mensa Lifetime Achievement Award (2002).

John was a mentor for numerous graduate students, many of whom provide leadership today for gifted education throughout the world. He was a tireless advocate for the recognition and development of strengths and talents among people of all ages – from young children in the elementary school to aspiring faculty colleagues.

John also instituted programs that brought thousands of pre-college youth to the Purdue campus for a variety of advanced learning experiences. As the developer of the TIDE (Talent Identification and Development in Education) model, he was an early advocate of the importance of seeking and nurturing many talents and strengths among students at all ages. He became a leading advocate for talent development, and carried its banner forward in research, in programming in the public schools, and in presentations throughout the world.

At a more personal level, John and his wife raised two daughters who have gone on to become highly successful professionals in the business world. Those who knew John and Hazel well understood that they were partners in work as well as in marriage. Together, they took enormous pleasure in travelling to conferences, meeting with people, and visiting teachers and students in their schools and communities. As a husband and father, John Feldhusen personified solid family values. And as an educational leader and scholar, he established high expectations, created a climate with a powerful work ethic for all, and always modelled that same commitment to excellence in his own life.

A Tribute to Dr. Ruth B. Noller

Scott G. Isaksen

Every so often, if you are very fortunate, you come across someone who quietly – yet deeply, has a tremendous effect on your life. I met the late Dr. Ruth Noller in 1970, while I was an undergraduate student enrolled in the experimental Creative Studies Project at Buffalo State College. It was my first semester in college and in this unique educational program. One of our class requirements was to read 13 articles and write a short 2 to 3-page paper for each over the semester. I turned my first typewritten paper in on the second Tuesday of the class. On Thursday, Ruth (my professor) returned our papers and I was just a little shocked to see that she had written almost as much as I had – with pencil. There were comments, questions, and even suggestions about follow up reading I could do! Well, you better believe that the next paper I wrote was much more carefully considered.

It was quite clear to me that this professor was serious, rigorous, and someone I wanted to get to know much better. In fact, if it weren't for Ruth, I would have withdrawn from the Creative Studies Program. My initial reaction to all that divergence and novelty stuff was that it was pretty fluffy. It was the credibility that Ruth brought to the class that kept me going.

During that first year of college, Ruth and I would have frequent meetings to discuss the readings, papers, and life. She knew I was from Long Island and was an Episcopalian, so she invited me to attend her family church. She also connected me to her two sons so they could show me around

Buffalo. Toward the end of the second semester, she told me all about the Creative Problem Solving Institute (CPSI) and then asked if I wanted to help. So she created the opportunity for me to move a lot of desks and chairs around, and to have lunch with J. P. Guilford, Don MacKinnon, Moe Stein, E. Paul Torrance, Don Treffinger, and many others. I was even able to attend their sessions – as long as all the other logistics were taken care of.

My dream was to be a teacher, so Ruth and I had many conversations about learning. When I finished the program she helped me integrate Creative Problem Solving into the curriculum, and encouraged me to enter the Master of Science program (before it was even officially approved!). We maintained our relationship over the years. Ruth then encouraged me to apply for the professorship in Creative Studies to be created after she retired. She joined my dissertation committee, giving us the opportunity for rich conversations (and lots of edits for my dissertation). She accepted the role of supervising my doctoral internship at the College, giving us the chance to work together for a full year before she retired.

I have learned that I was not the only person Ruth influenced. Ruth was a world-class mentor, a "meta-mentor." Many of her mentees have "paid it forward," and have found opportunities to mentor others.

Ruth's journey into the field of creativity and mentoring was an interesting one. She had been teaching math at the University of Buffalo for two years when she entered the Naval Reserves in 1944 as a mathematics/engineering officer. One of her first assignments was working as a computer programmer at Harvard on the first modern-age computer, invented by her commander just a month earlier. Ruth was later recognized as a pioneer for her work with the 60-foot-long mainframe that was used to make complex calculations. One night, while working with Grace Hopper, they took a moth out of a relay and entered the now famous phrase: "We debugged the computer" into the logbook.

Under the mentorship of Grace Hopper, Ruth realized that she was more of a "people-person," so she returned to Buffalo after the war to resume her career as a math professor. It was during this period that Ruth came into contact with Sid Parnes and was involved in one of the early efforts to develop Creative Problem Solving into an instructional program. She was able to blend her computer programming expertise and her newly formed interest in creativity to assist with the Programming Creative Behavior project within the Buffalo Public Schools, laying the foundation for the unique instructional program at Buffalo State College. She was named Associate Director of the Creative Problem Solving Institute in 1966, and served as its Co-Director until she retired in 1982. That same year she was awarded the title Distinguished Service Professor in recognition of her notable academic and educational efforts.

Given Ruth's proclivity for mathematics, she developed a well-known "formula" for creativity: Creativity is a function of knowledge, imagination, and evaluation – a wonderful way to describe this multi-faceted concept.

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Aside from her academic pursuits, Ruth enjoyed collecting bells – she had more than 2,300 of them from around the world – and was a member of the American Bell Association.

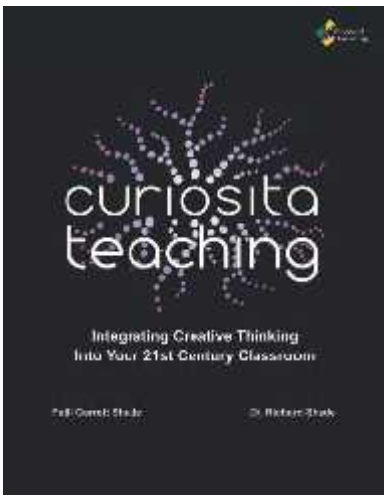
So many of us in the creativity field have gained from Ruth's work – mostly behind the scenes – to bring a more creative trend to education. She was a wonderful teacher, a gifted musician, an international presenter, a global networker, a committed wife and mother, a prolific thinker, writer, and editor, and most of all – an exceptional mentor to many!

Book Review:

Curiosita Teaching: Integrating Creative Thinking into Your 21st Century Classroom

Patti Garrett Shade, Richard Shade

Book Review by Sandra K. Linke



Curiosita Teaching is a practical creativity program that allows all students to grow creatively! Curiosita Teaching is the narrative that supports teachers as they teach creativity and teach creatively. The s focus on bridging the gap between research, theory, and practical application. Under the umbrella of creativity, this engaging resource provides the flexibility and structure to integrate creativity into the curriculum. This book provides many rich resources that include differentiated instruction, the application of multiple intelligence theory, backward planning, and based-based learning activities. The sequential approach in this book includes resources,, activities, and an organizational plan to develop and implement creativity in the classroom. Well organized lessons enable students to gain the basic skills to understand and apply the creative process.

This book addresses learning and expression styles and the components of creativity. Guidelines and product-based unit planning are included; in addition, the book offers a CD includes over 240 pdf templates for classroom activities. In the introduction of this book, the authors describe the first of the seven da Vincian principles as *Curiosita*, "an insatiable curious approach to life and an unrelenting quest for continuous learning - comes first because the desire to know, to learn, and to grow is the powerhouse of knowledge, wisdom, and discovery." The authors point out that all children enter public education with a natural dose of curiosity, a prerequisite for creative thinking. A worrisome speculation is that by the age of seven, children are using only 10% of their creative ability. Sadly, by the age of 40, most adults are about 3% as creative as they were at age seven.

The first chapter defines both the conception of creativity and the conception of innovation,. A rationale for introducing *Curiosita Teaching* to support the integration of creativity into schools is highlighted. The Curiosita Teaching Program™ (CTP) provides the organizational framework for instruction and curricular design needed to make creativity an integral part of all teaching and learning. It presents educators with the materials and resources to seamlessly merge the 3R's and the 4 C's in their classrooms. These include: creativity fan model; creativity introductory scope and sequence*;* creative attribute learning log*;* creativity curriculum organizer*;* creativity lesson planner; creative product planning templates*;* creativity multibilities philosophy; creativity alignment to CCSS; and over 250 activities and extensions. In addition, Garret Shade & Shade address a number of key questions: How can we afford the time to encourage students to question, to speculate, to create? How can we prepare our students to be open to serendipitous, creative learning experiences? How can

we develop learning environments where standards and creative thinking co-exist? How can we better understand the effect creativity has on a collaborative team environment? How can we help students internalize the statement "…whether you believe you can or believe you can't, you're probably right?" Finally, how can educational professionals provide multiple opportunities for students to demonstrate learning by creating new products?

Other questions the book explores include: How can education best meet the evolving societal need for creativity? How does teaching creativity support real world needs? Why is there a need for creativity in the schools? What conditions support the development of the creative learning environment? What strategies, techniques, and tools can teachers use to support the development of the creative learning environment? How can teachers design curriculum to include creativity in student learning? Why is it important to assess creativity? How do we measure creativity in our students?

The Curiosita Teaching Program™ integrates the necessary ingredients of creativity and infuses them into all areas of teaching and learning. It is built around looking backwards at what worked for learners and what we saw in our classrooms. Highly creative individuals can now be recognized as one of the diverse learning populations. Their thinking often does not fit with the norm, nor is it easily understood or appreciated by their peers and teachers. Exploring creativity as part of all learning opens new doors for all diverse populations. Some students in these populations do not have the skill sets to express their high levels of thinking in words or written communication. Creativity has a strong visual-spatial component that somewhat levels the playing field for these learners. Adding creativity to the learning process is a tool that supports the acceptance and understanding of diverse learners.

Curiosita Teaching helps students develop the skills and attitudes necessary for the challenging 21st century life and work requirements. Educators can apply a comprehensive approach tocreate inclusiveclassrooms where multiple dimensions of student creativity can be developed.In their book, the authors introduce the philosophies and initiatives that contribute to the design and development of ***Curiosta Teaching*** **Program™**. For instance, The Multibilities Philosophy was created to provide adefinitive awareness of the characteristics students need to be successfully creative.Teachers can use this model to help support student knowledge growth.

This book is especially beneficial for gifted coordinators, researchers, teachers, and other practitioners involved in providing services for gifted, talented, and creative students in diverse educational contexts. In addition, it is designed to give both educational professionals and parents the theoretical and practical information needed to meet the exceptional needs of the gifted, talented, and creative students. It presentsteachers with excellent practical resources that can shape a successful and enriching education. This book is easy to read as the authors have blended their own informal personal style with their theoretical and practical analysis. Key ideas are illuminated for the reader in a compelling way.The structure of the book also allows for easier navigation by the reader. Each chapter summarizesthe key points which are then elaborated within the text. It concludes with suggestions, plans, andtemplates. Furthermore, it is designed to be a practical and accessible resource for staff development and capacity building. Curiosita Teachingis a must-have for those who want a guide that makes a connection between research and practical action in gifted education.

Reference:

Garret Shade, P. & Shade, R. (2011). *Curiosita teaching: Integrating creative thinking into your 21st century classroom*. Marion IL. Pieces of Learning.

Submission Guidelines

Manuscripts submitted to the **IJTDC** should contain original research, theory or accounts of practice. Submission of a manuscript to the **IJTDC** represents a certification on the part of the author(s) that it is an original work, and that neither this manuscript nor a version of it has been published previously nor is being considered for publication elsewhere. If accepted by this journal, it is not to be published elsewhere without permission from the **IJTDC**. However, conference papers included as part of conference proceedings may be considered for submission, if such papers are revised in accordance with the format accepted by this journal, updated if need be, and full acknowledgement given in regard to the conference or convention in which the paper was originally presented.

Electronic submission

Authors should send the final, revised version of their articles in electronic form. Submit the final version to the journal's editorial office.

All submitted papers are assessed by a blind refereeing process and will be reviewed by at least two independent referees. Therefore, avoid clues in the text which might identify you as the author. Authors will receive constructive feedback on the outcome of this process. Please note that the process will take two to three months in duration.

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Should consist of a maximum 200 words on a separate page. The abstract must, if the result of empirical research, briefly outline theoretical basis, research question(s) (in one sentence if possible), methodology and instrumentation, sample(s) and pertinent characteristics (e.g., number, type, gender, and age) as well as the main findings of the study (if applicable include statistical significance levels). Also, include conclusion and the implications or applications.

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