

Interview (2):

# Importing Conceptual Gemstones from Diverse Fields: An Interview with Interdisciplinary Scholar Don Ambrose

**Taisir Subhi Yamin**

The International Centre for Innovation in Education (ICIE)

---

**Don Ambrose, Ph.D.**, is professor of graduate education at Rider University in Lawrenceville, New Jersey, USA, and editor of the *Roeper Review*. He has initiated and led numerous interdisciplinary scholarly projects involving eminent researchers and theorists from various fields including gifted education, general education, creativity studies, cognitive science, ethical philosophy, psychology, political science, economics, law, history, sociology, theoretical physics, and critical thinking. Examples of topics addressed by the many books he has published include interdisciplinary explorations of creative intelligence; the moral-ethical dimensions of giftedness; 21st-century globalization and its effects on creative intelligence; innovative, holistic education for the gifted; and applications of complexity theory to high ability. Don serves on the editorial boards of many major journals in creative intelligence fields, and for several book series. He has won many international, national, regional, and institutional awards including the National Association for Gifted Children NAGC distinguished scholar award, the outstanding book chapter award from the American Creativity Association, and the ICIE creativity award. Books just published and currently under construction include *Conceptions of Giftedness and Talent* (with Robert J. Sternberg), a volume on *Transformational Giftedness* (with Robert J. Sternberg and Sareh Karami), and an exploration of *Creative Constraints* (with Catrinel Tromp and Robert J. Sternberg). Other books in development describe new creative and critical thinking strategies Don invented based on constructs from various academic disciplines. He has done invited keynote presentations throughout the world.

---

**TSY: Can you explain what motivated you to enter the field of gifted studies?**

**DA:**

Examples of exceptional creative intelligence started pushing me toward the field from an early age. I grew up on a farm/ranch in the Western Canadian prairies. Both of my parents were highly creative. My mother was artistic and wise. Whenever she had a spare moment, which was seldom, she would draw beautiful portraits of imaginary people. She was also exceptionally compassionate and altruistic to the point where kids would come to our home to get informal “counseling” from her. When this started we (her children) were somewhat annoyed because we mistakenly thought they were coming over to play with us. My father was highly inventive. He had to keep a variety of large, complex machines running (tractors, cultivators, combines, etc.), and whenever



they would break down he would come up with Rube Goldberg-like inventions to get them working again. Decades earlier, his dad had transitioned from being a Grenadier Guard at Buckingham Palace to an immigrant homesteader in the Canadian prairies. He had to invent ways to survive in this new role. One of his inventions was a piece of farm machinery that he used to enhance his own productivity. Someone else “invented” the same machine a couple of decades later and it became widely used after that.



My brothers Clint, Ray, and Doug demonstrated impressive mechanical talents. Those talents certainly bypassed me. My sister Kathy developed very strong interpersonal and organizational abilities. Later, my wife Ann turned out to be an excellent example of Robert Sternberg's (2005) practical intelligence. She generates extremely well-conceived practical plans for the solution of complex problems.

Our children round out the story of family giftedness. Our son Brian combines philosophical wisdom with brilliance in technological innovation as well as college-level athletic coaching expertise. Our daughter Valerie is an outstanding college instructor who inherited the wisdom and compassion of my mother. Her husband Todd is a highly intelligent urban planner with a diverse academic background including expertise in business and the natural sciences. And last but certainly not least, little four-year-old granddaughter Sienna is very bright, immensely imaginative, and speedier than an Olympic sprinter. In my childhood, these family examples sensitized me to the presence of brilliance in others, and they continue to do so today.

When I went to graduate school seeking advanced expertise in leadership I worked with scholars of giftedness and creativity who shifted my direction toward gifted studies. The tipping point of my transition toward this field came when I took a graduate course, “Theories of Creativity,” which required us to read large volumes of scholarly material on creativity each week and come back the following week with it turned into visual metaphors (drawings or paintings with the symbolism representing academic concepts). As an amateur artist, I thrived on this process.

My brilliant doctoral advisor, LeoNora Cohen, was the course instructor. She also was the organizer of several international theory summit conferences that brought together over 20 of the world’s top creative intelligence researchers at a resort setting near the summit of Mt. Hood, Oregon with the purpose of unifying theories of creative intelligence. The participants included eminent psychologists and philosophers, a pioneering neuroscientist, an economist, a theoretical physicist, and representatives of other fields, so it was an interdisciplinary group.

That posed a problem. They had to understand the work of their collaborators but they didn't have the time to study all the concepts and terminology in diverse fields. So Dr. Cohen came up with a solution. She asked me to be an “interdisciplinary, theoretical translator” who would read articles produced by all of the participants and turn the work of each member of the team into a visual metaphor, with the symbolism in the drawings representing the key ideas, theories, and research findings. So I produced large drawings with brief story-like legends and bullet points describing what the symbolism in the images represented in terms of research and theory. We posted these images around the conference rooms as if in an art gallery so the participants could wander around during breaks, look at the drawings, read the legends, and get familiar with the work of their peers. This helped streamline the idea -sharing by making concepts from diverse fields more available to all of the participants. Figure 1 shows an example of a visual metaphor with a brief, bullet-point description of the meaning in the symbolism. A more extensive description of the symbolism would provide more detail about the research findings and theories from the academic literature that are embedded in the image (for more on visual metaphor see Ambrose 2009b, 2016a; 2021a).

**Visual metaphor synthesizing several thousand pages of research on interdisciplinary creativity**  
(from Ambrose, 2021a)

The symbolism:

- translucent sphere of reality where creativity takes place
- outer (objective, rational) & inner (subjective, intuitive, intrapersonal) zones
- inner zone contains fountainhead of wisdom & lightning strikes of creative, intuitive insight
- outer zone includes atmospheric “levels of analysis” layers (near ground level = practical application; higher levels = research, theory, & philosophical analysis)
- amoeba-like ground creepers build frost patterns (knowledge bases of academic & professional fields) on the surface; many ground creepers are immobile while some are moderately productive following shallow, dogmatic valleys to hide from the freezing zeitgeist winds above
- creatively intelligent giants grow in rational height, intuitive depth, & interdisciplinary breadth; from great theoretical & philosophical heights they discover paradigmatic patterns within and beyond the fields that most ground creepers can't understand.
- and so on...



**Figure 1:** Example of a visual metaphor with explanation of the symbolism. From Ambrose (2021a).

Some of the theory summit scholars thought the visual metaphors were very helpful while others thought they were useless. But for me, this was a major, transformative event because it pushed me toward interdisciplinary scholarship. I love the idea of discovering concepts in diverse fields and pulling them together, and I've been doing that ever since.

**TSY: When did you start working in this field?**

**DA:**

If we interpret the term “work” loosely I've been investigating giftedness and talent since I was old enough to read books and articles about creativity and invention. In terms of real work, I did

some practical development and implementation of gifted programs in Western Canadian school systems while starting formal research into creativity and giftedness in graduate school.

**TSY: What kind of major challenges did you face?**

**DA:**

Growing up in the prairies provided some significant barriers, as well as advantages. One barrier arose from academia being so far away. After graduation from high school I worked as a laborer in pipeline construction, which entailed hard, physical work for 17 hours a day, 7 days a week. So scholarship pertaining to creative intelligence was invisible, far over the horizon.

After that, I went to college and worked for a while in the K-12 education system, mostly as an administrator; consequently, I got a late start working at the college level. Virtually all contemporaneous researchers in creative intelligence fields were halfway around the academic track before I got off the starting line. But that also represented an advantage because my work in the real world, especially as a laborer on the farm and in construction, enabled me to see giftedness, creativity, and talent in places that others usually ignore. For example, while most associate giftedness with lofty positioning in academic settings I also see it in deprived populations. One example was a heavy equipment operator in one of the construction sites where I worked. The operator maneuvered his gigantic machine like Michelangelo used his sculpting tools to create the famous David statue. While the construction worker never would have been considered for a gifted program, he had strong intuitive and aesthetic sensibilities that made his work “artistic” and immensely effective. He also was an outstanding mentor. Meanwhile, I've come across a lot of “gifted,” elite legacy admissions who consider themselves brilliant even though they are rather dull-witted. So my unusual start enabled me to develop some ironic comparisons between “nongifted brilliance” and “gifted mediocrity” (see Ambrose, 2021b for elaboration on these distinctions).

Another major barrier, which persists to this day, is the tendency for scholars to confine themselves within the knowledge bases of their fields. When I started working in higher education I was advised to choose a research trajectory that was clearly defined and limited to a particular area of the conceptual terrain in the field. Going beyond that limited patch of territory would endanger my chances for promotion and tenure, as well as the chances that I would be able to influence the field. Of course, I ignored that advice and wandered out into the conceptual terrain of scores of disciplines, looking for conceptual gemstones that could be brought back and integrated into creative intelligence fields.

**TSY: How did you become involved internationally?**

**DA:**

Collaboration with the aforementioned theory summit participants kickstarted my international adventures. After that, the international explorations accelerated while I initiated and produced edited book projects, journal articles, and then started journal editing. For example the *Roeper Review* has become more international over the years, so now about half of the articles submitted come from outside the USA. After building a track record of interdisciplinary scholarship, I began to receive invitations to do keynote presentations in various parts of the world (Europe, Middle East, Australia, New Zealand, South America, throughout North America, etc.). Interacting with leading scholars in these venues led to more international collaborations.

**TSY: Can you please describe some of your notable accomplishments?**

**DA:**

Virtually all of my work in the field revolves around the aforementioned interdisciplinary exploration with emphases on big-picture thinking and ethical awareness. Most of my collaborative book projects involve prominent scholars of giftedness and creativity who are asked to analyze large-

scale issues and phenomena through the lenses of their impressive knowledge bases. But the projects also include contributions from “outsiders” and the importation of theories and research findings from outside fields. The outsiders are prominent researchers and theorists from diverse fields, many of whom seem to have little or no connection to gifted studies.

In one example (Ambrose & Cross, 2009), we explored the moral-ethical dimensions of giftedness and talent development by pulling together insights from leading scholars of giftedness and creativity, along with analyses from prominent researchers and theorists in military history, political philosophy, legal studies, economics, critical thinking, and theoretical physics. Another book described the rare, immensely valuable moral-ethical contributions of the Roeper School in Michigan (Ambrose, Sriraman & Cross, 2013). This unique, laudable school for the gifted emphasizes holistic development with special attention to ethical awareness, so the graduates go on to do powerful, altruistic work in the world, while developing strong intellectual capacities and talents, and becoming self-actualized.

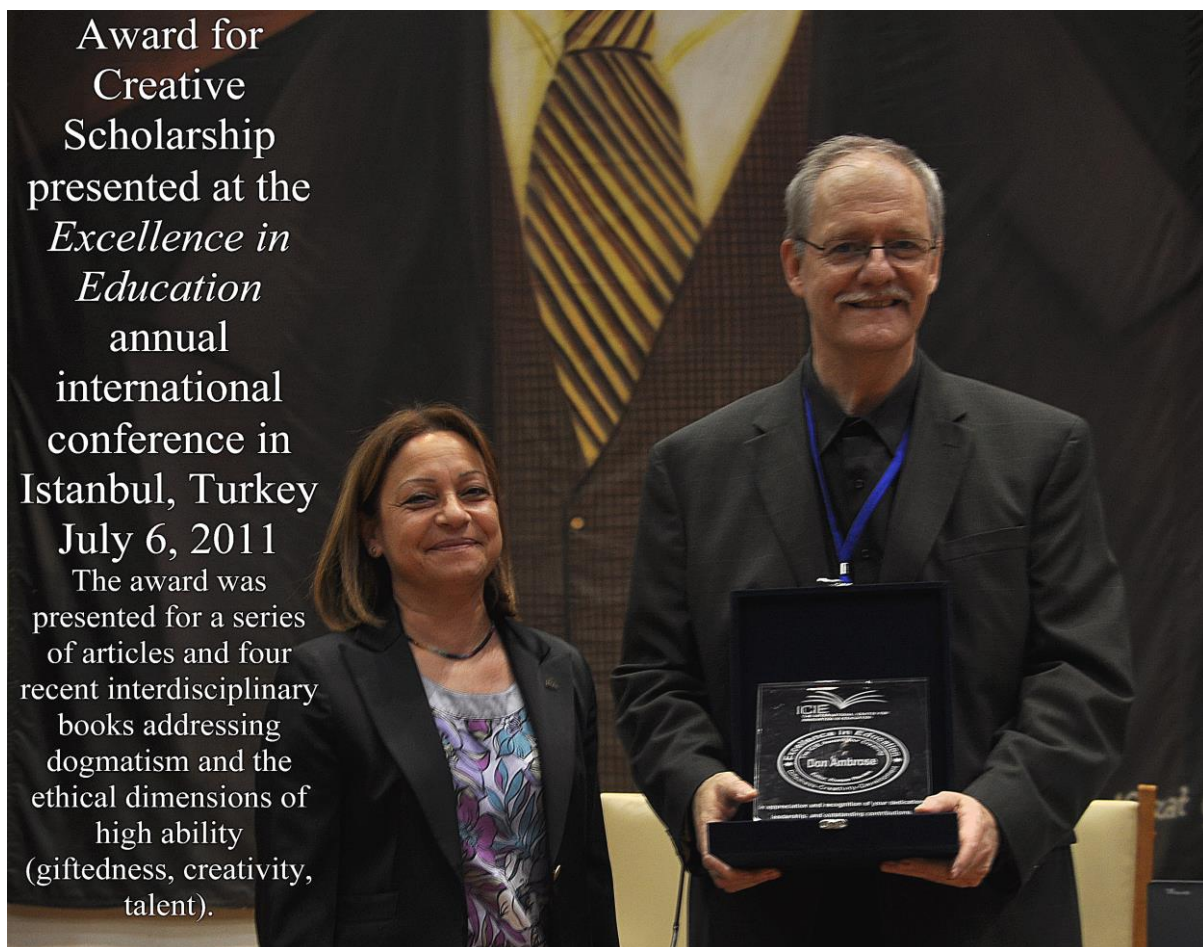
Other book projects have involved leading scholars of creativity and giftedness in explorations of large, difficult contextual issues that constrain or distort the development of creative intelligence. For example, I worked with Robert Sternberg and Bharath Sriraman on the development of edited books on dogmatism, which arguably is the world’s biggest problem because it causes most of our other problems (Ambrose & Sternberg, 2012; Ambrose, Sternberg & Sriraman, 2012). Dogmatism is any blend of narrow-minded, shortsighted, superficial, rigid thinking. It is the primary force behind climate change, the erosion of democracies and the ascendance of totalitarianism, ethnic conflict up to and including genocide, and a daunting array of other devastating conditions. Gifted, creative minds easily can be trapped within dogmatic thought frameworks and when this occurs severe damage is the result, because a brilliant, self-deceiving, evil mind can produce enormous harm.

In other examples, Robert Sternberg and I collaborated on two edited books dealing with the impact of 21<sup>st</sup>-century globalization on creative intelligence (Ambrose & Sternberg, 2016a, 2016b). We determined that humanity needs to make a significant leap forward in cognitive evolution and ethical awareness to address the effects of globalization; otherwise, we will find ourselves in the “Hobbes trap.” Thomas Hobbes was a pessimistic 17<sup>th</sup>-century philosopher who claimed that humans left to their own devices would create lives for themselves and for others that are poor, nasty, brutish, and short (1985/1651). Without this evolutionary leap forward, the misery of the Hobbes trap will be our fate. Arguably, events in the year 2020 and 2021 suggest that we are well on our way into the trap because authoritarian populism is on the rise around the world, leaders in large parts of the world have not dealt effectively with the coronavirus pandemic, mass extinctions are underway, and climate change is ramping up wildfires and hurricanes while producing a climate refugee crisis. These books on 21<sup>st</sup>-century globalization were attempts to elevate the thinking of professionals and policymakers above everyday mundanities so that they could help bright young minds adapt to the complexities of today's world.

Other book projects have dealt with more specific topics derived from outside disciplines. For example, in one project we explored ideas from complexity science, which is an interdisciplinary field addressing the structure and dynamics of complex adaptive systems (Ambrose, Sriraman & Pierce, 2014). Just one example of an insight derived from this project is the way in which complex systems such as intelligent human minds can be trapped within excessive order, or excessive chaos, or find their way into a highly productive zone of complexity produced by the dynamic tension between chaos and order. Among the many implications for giftedness and creativity are the injection of more choice and freedom into excessively ordered instructional environments, and more creativity producing constraints into excessively chaotic classrooms.

Another book, which wasn't a collaborative effort, exemplifies what I am attempting to achieve through interdisciplinary work. In this book (Ambrose, 2009a) I analyzed 87 theories and research findings from 29 academic disciplines and professional fields, and connected them through the process of creative association to show how a concept from one field can influence a concept in

another field. For example, in one of the 87 conceptual syntheses I connected the concept of root-metaphorical world views from linguistics and philosophy with theories about the gylanic pockets in prehistory and patriarchal conquests described by feminist theorists. The four root metaphors (mechanism, organicism, contextualism, and formism) are conceptual lenses for the perception of reality (Ambrose, 2016a). For example, if you are a mechanistic thinker you strongly favor reductionism and see everything as machinelike, including the human mind. But if you are an organicist you perceive holistic-systemic-integrative connections while resisting reductionism. The connection I made between these concepts is the idea that entrapment within excessive mechanism prevents a more balanced view of creative intelligence from emerging. That balanced view would blend together insights from the four worldviews, as seemed to be the case in the more feminist societies that emerged in some locations in the ancient world. A realization like this could help us bring more ethical creative intelligence into 21st-century societies.



In addition to these and other book projects, I've been moving the field toward more interdisciplinary thinking through book chapters, journal articles, keynote presentations in many locales, and my editorship of the *Roeper Review*. Many of the publications and presentations explore events, phenomena, and large-scale contextual forces that are revealed by scholarship in diverse disciplines and then establish implications for the development of giftedness, talent, and creativity. For example, while investigating various 21st-century issues, I show how democracies can strengthen or erode, and discuss the need for the gifted to become more aware of democratic erosion and its pernicious effects (2019c; for some other examples of interdisciplinary explorations of creative intelligence see Ambrose, 1996, 2006, 2011, 2012a, 2012b, 2015, 2016, 2017a, 2017b, 2018, 2019a, 2019b).

As for the editorship of the journal, we've run special issues along these lines. For example, one special issue on the neuroscience of giftedness included insights from leading cognitive scientists on the optimal functioning of the brain-mind system (Kalbfleisch, 2008). Another brought insights

from diverse disciplines into analyses of the impact of socioeconomic inequality on giftedness (Cross & Borland, 2013). Another way I bring interdisciplinary thinking into play is through a very brief section in the introduction to each issue of the *Roeper Review*. I conclude each Editor's Desk introduction with a description of a research finding or theory from an outside discipline and its possible implications for giftedness, talent development, or creativity.

Yet another development in the *Roeper Review* is the inclusion of an "ask the expert" feature in each issue. This feature pulls together the aforementioned domain-specificity and interdisciplinary thinking. Each interview delves into the knowledge, skills, motivations, and experiences of a highly accomplished domain-specific expert. The interviewees have included a Hollywood movie videographer, federal judge, nuclear engineer, ecotoxicologist, artist-restaurateur, ecological economist, entrepreneurial lighting designer, Olympic gold medalist figure skater, orchestra conductor, pediatric cardiologist, psychiatrist, mathematician, president of a leading academic publishing company, and Pulitzer Prize winning New York Times journalist, among others. Readers can appreciate the nature of domain-specific expertise while also expanding their thinking beyond the borders of our field.

**TSY: Can you please explain some of the strengths and limits of "Gifted Education?"  
What do you wish that the researchers in this field would know?**

**DA:**

Having served as a journal editor for 15 years, I'm well aware of the conceptual landscape of the field. The scholars and practitioners have done a lot of impressive work in a wide variety of areas including theory development, research trajectories, and practical innovations.

Of course, as with any field, there is considerable room for improvement. For example, there is a need for more connection making among levels of analysis. I've used the term *telescoping* to signify making more connections to the ability to navigate through four levels of the field, which include practice, research, theory, and philosophy (Ambrose, Van Tassel-Baska, Coleman & Cross, 2010). I metaphorically portrayed this as traveling from the ground level of practical work (e.g., practitioners tilling the practical "soil"), up to the level of research (e.g., surveyors using their theodolites to analyze the conceptual terrain), to the level of theory (e.g., groups of practitioners and researchers following theoretical leaders into new conceptual valleys), and finally the level of philosophical analysis (e.g., surveying the terrain from various philosophical mountaintops).

The higher levels of telescoping provide panoramic views of the field but they lack awareness of detail, and the reverse prevails at the lower levels. If we can get professionals in our field to make more connections throughout these levels of analysis they will be less likely to become trapped within one level. For example, theorists won't cling dogmatically to a single perspective, and practitioners will be more open to new ideas about curriculum and instruction.

Another area that needs improvement is attention to the aforementioned interdisciplinary connection making. Doing interdisciplinary work always has been important but it has become more so in the 21st-century. For example, a past president of the National Science Foundation in the United States argued that the new way of doing science entails international, interdisciplinary collaboration (Suresh, 2013, October). Other prominent scholars outside our field also have magnified the importance of interdisciplinary idea sharing (e.g., Morson & Schapiro, 2017; Nielsen, 2011; Page, 2017; Root-Bernstein, 2014).

But interdisciplinary work shouldn't be confined primarily to STEM. Fields addressing creative intelligence should be promoting it more vigorously because the relevant phenomena are not confined within the borders of psychology or education. Unfortunately, there are some countertrends working against it. Both the fields of gifted studies and creativity studies, which overlap to some extent, have strong arguments for domain-specific expertise influencing their direction (see Baer, 2015; 2016; Olszewski-Kubilius, Subotnik & Worrell, 2017; Subotnik, Olszewski-Kubilius & Worrell, 2011). The work on domain specificity is important and valuable; however, it can push the minds of

professionals in toward silo thinking. An academic discipline or professional field can become a silo, insulated from outside knowledge. If work on domain-specific expertise encourages us to value knowledge -building within our field it can incline us to confine our thinking within the walls of our own silo.

Fortunately, such confinement doesn't have to occur. We can invigorate domain-specific expertise while also engaging in interdisciplinary exploration. In a recent paper I metaphorically portrayed this as navigating through “Creative Intelligence City” with work inside the walls of high-rise buildings representing the development and use of domain-specific expertise, and traveling throughout the city to visit and connect the various domain towers representing interdisciplinary exploration (Ambrose, 2019b). We can and should do both.

If we travel throughout *Creative Intelligence City*, here is just one of thousands of concepts that can be pulled from other domain towers into the gifted studies high -rise to enrich our thinking. A leading geologist argues that 21st-century societies are plagued by “chronophobia,” which is a tendency to think in the short term only and ignore long-term phenomena and their implications. A society suffering from chronophobia is metaphorically trapped on “the island of now” with bodies of water separating it from the long-range future and past (Bjornerud, 2020). Consequently, decision making is dominated by short-range priorities and the society suffers in the long run. The results are gigantic 21st-century macroproblems such as climate change and resource shortages (for elaboration on macroproblems see Ambrose & Sternberg, 2016a, 2016b).

### **TSY: What are your plans for the next year?**

**DA:**

I have a lot of projects underway. Along with a couple of colleagues, Robert Sternberg and I have been working on three books, one published just now and the other two likely to come out in 2022. We just completed the edited book *Conceptions of Giftedness and Talent*, which includes insights from many of the leading creative intelligence scholars from around the world (Sternberg & Ambrose, 2021). In another book we are inviting leading researchers and theorists to develop ways to push the field away from transactional giftedness toward transformational giftedness (Sternberg, Ambrose & Karami, in press). The former entails developing one's talents for one's own benefit while the latter means developing and employing one's abilities for the betterment of the world. Given the threats that come from the aforementioned gigantic 21st-century macroproblems, transformational giftedness is desperately needed in the world's socioeconomic and political systems so that humanity can survive and perhaps thrive in the decades to come. The third editor of this book is Sareh Karami, an up and comer who has developed highly creative perspectives on wisdom. In another book, Bob and I are collaborating with Catrinel Tromp, a visionary psychologist at my university who is an expert on the ways in which constraints can strengthen creativity. We are producing a book on the nature and dynamics of creative constraints (Tromp, Sternberg & Ambrose, in press).

Another project that is consuming much of my attention has to do with new creative and critical thinking strategies. Throughout my interdisciplinary explorations I keep discovering theories and research findings that can be turned into new strategies. Consequently, I've been pulling these strategies together into a volume that is nearing completion (Ambrose, 2021a). So far, the book includes 54 creative and critical thinking strategies. About half of them are strategies that others have created and used within and beyond education to strengthen the workings of the human mind. I've developed new insights about the use of these strategies. The other half of the book comprises strategies I've invented. I provide a brief overview of each strategy, outline its step-by-step process, give examples of its application to various topics, and suggest the best ways it can be used to strengthen student learning and professional problem-solving.

Here are brief descriptions of the nature and purpose of a few of the new strategies:

- *Undermining Your Own Position.* Few of us can escape our own dogmatism; however, those who are willing and able to seek evidence that undermines their own positions on issues can



develop new, refined, more accurate, and more powerful perspectives. This enables them to become stronger, more authoritative experts.

- *Panoramic Timeline Impact Analysis.* Map an ongoing, long-term phenomenon onto a vertical timeline showing beneficial and harmful effects of the phenomenon over years, decades, or even centuries. The positive effects appear in a line graph extending to the right of the timeline and the negative effects extend to the left. Conclusions can be drawn about the overall consequences of the phenomenon.
- *Moral-Legal Overlap Analysis.* Mapping human actions, individual or group, onto a graph with the horizontal dimension showing a continuum from illegal to legal and the vertical dimension showing a continuum from immoral to moral. The process recognizes that legal systems in nations don't always align well with morality and ethics. For example, an illegal action can be ethical and a legal action can be immoral. Productive arguments can ensue about where a particular action should be placed.
- *Merit, Earned or Unearned.* Categorizing individuals or groups according to the extent to which their actions in the world are meritorious, unworthy, or psychopathic. The individuals or groups can be identified as cases of earned merit, unearned merit-slothful incompetence, or unearned merit-psychopathic predation. The strategy enables us to more accurately determine the presence of impressive ability and ethical, creative work in the world.
- *Personal Responsibility Determination.* Ideas about personal responsibility have shifted over time, making us more likely to be selfish. The deterioration of the concept of personal responsibility inspired this critical thinking strategy. Participants in the process analyze examples of behavior in the real world, literature, the professions, history, philosophy, and other arenas. They decide where individuals or groups end up on a personal responsibility continuum and consider the implications.

In addition to these examples, here are the names of some of the other new strategies: The Invention Machine; Metaphorical Analysis; Chaos-Complexity-Order Analysis; Worldview Analysis; Metapattern Analysis; Altruistic Analysis; Aggressive-Assertive-Passive Analysis; Macroproblem Analysis; The Continuum of Consent; Intellectual Spectrum Analysis; Visual Metaphor, Images of Wide Scope; and Artistic Story-Hypothesis Generators.

**TSY: You have been working with a number of scholars. Can you share with us some memories about these people?**

**DA:**

I've been fortunate enough to collaborate with many highly creative, visionary, ethical scholars within and beyond the fields of gifted studies and creativity studies. I've worked frequently with the eminent psychologist Robert (Bob) Sternberg. Some of our projects are mentioned earlier in this paper. Bob exemplifies creative intelligence. He comes up with new, high-impact ideas so frequently that it seems as if he is an entire university concentrated within one person. He seems to work 24/7, 365 days a year. I'll get up at 5 AM to share edits on a paper with him, only to discover that he sent me his own revision 2 hours earlier. In just one example of the intensity of his work, we were putting together a book project and I sent him a chapter I had received from a collaborator. Knowing that he was on a trip to Europe with his family I didn't expect a response for a few days. But I received his reaction to the chapter within an hour, and it was 4:30 AM where he was. He said he edited the paper as quietly as possible in the hotel room while trying not to awaken his family. Along with his great sense of humor, the thing I like most about Bob is his ethical awareness. Most of his recent work aims at creating a better world and making creatively intelligent minds more ethical.

Another highly ethical scholar is Tracy Cross. He and I have collaborated on multiple projects. Tracy has outstanding leadership skills. His brilliance, self-effacing demeanor, and terrific sense of humor make others want to listen to his ideas and follow his advice. Jennifer Reidl Cross, Tracy's better half and another frequent collaborator in many of my projects, also does highly impressive, creative, visionary, ethical work in the field.

The leaders of two influential, impressively ethical organizations also come to mind. Taisir Subhi Yamin, General Director of the International Center for Innovation in Education, has done much to spread knowledge about ethical creative intelligence around the world. He has done this through a wide variety of leadership initiatives and the production of many books, journal issues, and other publications. One other thing that really stands out is his willingness and ability to promote ethical giftedness and creativity in dangerous parts of the world that have been plagued by large-scale conflicts and the aftermath of foreign invasions.

A group of scholars from the University of Winnipeg in Canada also has carried out a considerable amount of important, ethical work around the world. Through their Lost Prizes initiative they have discovered and developed impressive talents in deprived, troubled, often incarcerated young people, while showing the rest of us how to do the same. Ken McCluskey stands out as a leader of this group which includes many other visionary altruists such as Karen Magro, Andrea McCluskey, Ken Reimer, Alan Wiebe, Phil Baker, John Anchan, Joe Goulet, Kevin Lamoureux, Kari McCluskey, and Chris McCluskey.

Finally, LeoNora Cohen (mentioned earlier in this interview) was my advisor when I was a doctoral student, and we collaborated on various projects after I entered higher education. Nora is an inspiring, immensely creative individual who has transformed many minds for the better, mine included.

If I've done anything of value in my career it's primarily due to the strong, positive influences of these intellectual and ethical giants. My admiration for them is boundless.

---

## References

- Ambrose, D. (1996). Unifying theories of creativity: Metaphorical thought and the unification process. *New Ideas in Psychology, 14*, 257-267.
- Ambrose, D. (2006). Large-scale contextual influences on creativity: Evolving academic disciplines and global value systems. *Creativity Research Journal, 18*(1), 75-85. doi:10.1207/s15326934crj1801\_9
- Ambrose, D. (2009a). *Expanding visions of creative intelligence: An interdisciplinary exploration*. Hampton Press.
- Ambrose, D. (2009b). Visual metaphor. In B. Kerr (Ed.), *Encyclopedia of giftedness, creativity, and talent* (pp. 926-928). Sage.
- Ambrose, D. (2011). Dymorphic capitalism and the aberrant development of creative intelligence. In E. N. Shelton (Ed.), *Capitalism in business, politics and society* (pp. 119-130). Hauppauge, NY: NOVA.
- Ambrose, D. (2012a). Dogmatic neoclassical economics and neoliberal ideology suppressing talent development in mathematics: Implications for teacher education. In L. J. Jacobsen, J. Mistele, & B. Sriraman (Eds.), *Mathematics teacher education in the public interest: Equity and social justice* (pp. 83-97). Scottsdale, AZ: Information Age.
- Ambrose, D. (2012b). The optimal moral development of the gifted: Interdisciplinary insights about ethical identity formation. In T. L. Cross & J. R. Cross (Eds.), *Handbook for counselors serving students with gifts and talents* (pp. 351-367). Waco, TX: Prufrock Press.
- Ambrose, D. (2015). Unmeritorious meritocracy: The ascendance of psychopathic plutocracy in the globalized 21st-century. In M. Fitzgerald (Ed.), *Psychopathy: Risk factors, behavioral symptoms and treatment options* (pp. 61-73). Hauppauge, NY: Nova.
- Ambrose, D. (2016a). Avoiding dogmatic traps in creativity and education through awareness of worldviews and visual metaphor. In R. A. Beghetto & B. Sriraman (Eds.), *Creative contradictions in education: Cross-disciplinary paradoxes and perspectives* (pp. 55-73). Springer.
- Ambrose, D. (2016b). Borrowing insights from other disciplines to strengthen the conceptual foundations for gifted education. *International Journal for Talent Development and Creativity, 3*(2), 33-57
- Ambrose, D. (2017a). Revealing and overcoming the dogmatism of sterile certainty in mathematics education. *ZDM, 49*(7), 1009-1021.
- Ambrose, D. (2017b). Interdisciplinary invigoration of creativity studies. *Journal of Creative Behavior, 51*, 348-351. <https://doi.org/10.1002/jocb.205>.
- Ambrose, D. (2018). Giftedness in a context of 21st-century globalization. In B. Wallace, D. A. Sisk, & J. Senior (Eds.), *The SAGE Handbook of Gifted and Talented Education*. Thousand Oaks, CA: Sage.
- Ambrose, D. (2019a). Giftedness and wisdom. In R. J. Sternberg & J. Glück (Eds.), *The Cambridge handbook of wisdom* (p. 465-482). Cambridge University Press. <https://doi.org/10.1017/9781108568272.022>

- Ambrose, D. (2019b). Interdisciplinary exploration and domain-specific expertise are mutually enriching. In R. A. Beghetto & G. E. Corazza (Eds.), *Dynamic Perspectives on Creativity* (225-243). Springer.
- Ambrose, D. (2019c). The erosion of democracy: can we muster enough wisdom to stop it? In R. J. Sternberg, J. Glueck, & H. Nussbaum (Eds.), *Applying Wisdom to Contemporary World Problems* (pp. 21-50). Palgrave-Macmillan.
- Ambrose, D. (2020). *Visual metaphor: Large amounts of academic content translated into memorable drawings and paintings*. Book manuscript in preparation.
- Ambrose, D. (2021a). *Instructional strategies for thoughtful, engaged, 21st-century learning*. Book manuscript in preparation.
- Ambrose, D. (2021b). Interdisciplinary exploration guiding conceptions of giftedness. In R. J. Sternberg & D. Ambrose (Eds.), *Conceptions of giftedness and talent* (pp. 1-20). Palgrave-Macmillan.
- Ambrose, D., & Cross, T. L. (Eds.). (2009). *Morality, ethics, and gifted minds*. Springer.
- Ambrose, D., Sriraman, B., & Cross, T. L. (Eds.). (2013). *The Roeper School: A model for holistic development of high ability*. Rotterdam, The Netherlands: Sense.
- Ambrose, D., Sriraman, B. & Pierce, K. (2014). A Critique of Creativity and Complexity Deconstructing Clichés. Sense DOI: 10.13140/2.1.1771.2649
- Ambrose, D., & Sternberg, R. J. (Eds.). (2012). *How dogmatic beliefs harm creativity and higher-level thinking*. New York, NY: Routledge.
- Ambrose, D., & Sternberg, R. J. (Eds.). (2016a). *Creative intelligence in the 21st century: Grappling with enormous problems and huge opportunities*. Rotterdam, The Netherlands: Sense.
- Ambrose, D., & Sternberg, R. J. (Eds.). (2016b). *Giftedness and talent in the 21st century: Adapting to the turbulence of globalization*. Rotterdam, The Netherlands: Sense.
- Ambrose, D., Sternberg, R. J., & Sriraman, B. (Eds.). (2012). *Confronting dogmatism in gifted education*. Routledge.
- Ambrose, D., VanTassel-Baska, J., Coleman, L. J., & Cross, T. L. (2010). Unified, insular, firmly policed or fractured, porous, contested, gifted education? *Journal for the Education of the Gifted*, 33(4), 453–478.
- Baer, J. (2015). The importance of domain-specific expertise in creativity. *Roeper Review*, 37, 165–178.
- Baer, J. (2016). Domain specificity of creativity. Academic Press.
- Bjornerud, M. (2020). *Timefulness: How thinking like a geologist can help save the world*. Princeton University Press.
- Cross, J. R., Borland, J. H., & (Eds.). (2013). Social inequality in gifted education [special issue]. *Roeper Review*, 35(2).
- Hobbes, T. (1985). *Leviathan*. Penguin. (Original work published 1651)
- Kalbfleisch, L.. (2008). The cognitive neuroscience of giftedness [special issue]. *Roeper Review*, 30(3 & 4).
- Morson, G. S., & Schapiro, M. (2017). *Cents and sensibility: What economics can learn from the humanities*. Princeton University Press.
- Olszewski-Kubilius, P., Subotnik, R. F., & Worrell, F. C. (2017). The role of domains in the conceptualization of talent. *Roeper Review*, 39, 59–69.
- Nielsen, M. (2011). *Reinventing discovery: The new era of networked science*. Princeton University Press.
- Page, S. E. (2017). *The diversity bonus: How great teams pay off in the knowledge economy*. Princeton University Press.
- Root-Bernstein, M. (2014). *Inventing imaginary worlds: From childhood play to adult creativity across the arts and sciences*. Rowman & Littlefield.
- Subotnik, R. F., Olszewski-Kubilius, P., & Worrell, F. C. (2011). Rethinking giftedness and gifted education: A proposed direction forward based on psychological science. *Psychological Science in the Public Interest*, 12(1), 3–54.
- Sternberg, R. J. (2005). The triarchic theory of successful intelligence. In D. P. Flanagan & P. Harrison (Eds.), *Contemporary intellectual assessment: Theories, tests, and issues* (pp. 103-119). New York, NY: Guilford Press.
- Sternberg, R. J., & Ambrose, D. (Eds.). (2021). *Conceptions of giftedness and talent: Worldwide perspectives*. Palgrave MacMillan.
- Sternberg, R. J., Ambrose, D., & Karami, S. (Eds.). (in press). *Transformational giftedness: Identifying and developing gifted children who will make the world a better place*. Palgrave Macmillan.
- Suresh, S. (2013, October). To tap the world's vast and growing potential for new ideas, we need new rules. *Scientific American*, 309(4), 60.
- Tromp, C., Sternberg, R. J. & Ambrose, D. (in press). *The paradox of constraints on creativity: An interdisciplinary exploration*. Brill/Sense.