

# Entrepreneurship, Thinking, and Economic Self-Reliance

By Ronald K. Mitchell, Adam D. Bailey, and J. Robert Mitchell

*“The best thing a society can do to increase its prosperity is to wise up.”<sup>1</sup>*

**M**ancur Olson’s bold assertion speaks directly to a question at the heart of economic self-reliance (ESR): Why do some people succeed economically while others do not? The concept that “For as he thinketh in his heart, so is he” (Proverbs 23:7, King James Version) provides foundational logic for the idea that ESR is rooted in thinking; and it also lays the foundation for us to investigate how increasing ESR requires society to “wise up” economically. In our research on entrepreneurial thinking we have investigated *thinking-based* enablers and disablers of ESR, looking for best practices.

We observe within society that ESR begins with the success of transactions—the set of exchanges that produce “provisions in store for an uncertain future.”<sup>2</sup> We suggest that understanding the underlying structure of economic transactions can support improvements in ESR, just as an understanding of underlying structure of the planetary model of the atom or the double-helix model of DNA supported the advance of inanimate and animate science. In its simplest form, an economic transaction occurs when an individual creates some work that is purchased by other persons. This basic structure of transactions is represented in Figure 1.

Thus, for individual “transactors,” ESR can be defined as *the production of works that others purchase sufficient to enable the accumulation of provisions in store for an uncertain future*. By logical extension, this model provides an ideal vantage point from which to identify ESR best practices because it illustrates in-process attention to transactions as the basic building blocks of ESR. Accordingly,

we report three cases of self-reliance-enhancing possibilities for improvements in the thinking of individuals about the works they create for other persons with whom they interact.

## Enhancing Entrepreneurial Thinking in Individuals

We suggest that the first step for individuals as potential “transaction creators” is to study thinking that invokes ESR—the patterns of thinking that, through altering attitudes of mind,<sup>3</sup> can alter lives. Such examination of thinking has been termed metacognition—thinking about one’s thinking. The first example we cite concerns efforts to help students reflect productively on the principles and patterns of the value-creation process by learning through a metacognitive teaching approach.

The underlying premises for this approach suggest that thinking about thinking can be deliberately practiced in an entrepreneurial context and that such metacognitive thinking will lead to increased value-creation expertise by facilitating self-reflection, understanding, and control of a person’s own entrepreneurial thinking. To substantiate the underlying benefits of this approach, we draw extensively from a study by Mitchell, Gustavsson, Smith, Davidsson, and Mitchell.<sup>4</sup>

During the years 1997 to 2003, 233 university students enrolled in a four-month, metacognitively-based entrepreneurship program (the experimental group). Before and after levels of their value-creation expertise were compared to those of sixty-seven business students who enrolled in a different entrepreneurship course but did not receive the metacognitive approach (the control

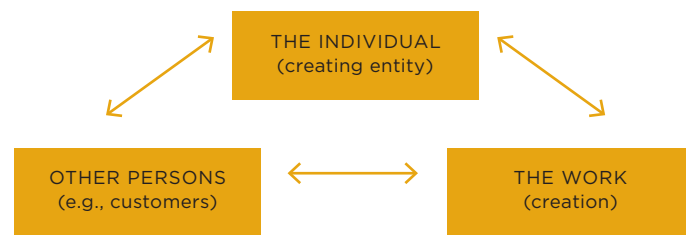


group). In comparing the value-creation expertise levels of both groups, the authors found that students who were exposed to this metacognitive experience gained more value-creation expertise than those who were not.

*Background:* Metacognition includes both an awareness of thinking and an understanding of strategies to change thinking. There is reason to expect that deliberate interactions between prospective entrepreneurs and actual entrepreneurs can increase novices’ expertise.<sup>5</sup> Cognitive psychology theory would suggest that it may be the metacognitive focus of the interactions between novices and experts that is important; and that the path to becoming an entrepreneur is not itself special, but is in fact general—rooted in the cognitive systems created by deliberate practice.<sup>6</sup>

The teaching approach used for the experimental group required that metacognitive thinking be deliberately practiced in an entrepreneurial context to increase individual value-creation expertise. This was done by (1) enabling students’ participation in metacognitively-based experiential exercises and (2) teaching them how to examine their thinking processes by making their own entrepreneurial “scripts” explicit (i.e., drawing

Figure 1: Structure of Economic Transactions



Source: Csikszentmihalyi (1988), Gardner (1993), Mitchell (2003)

flowcharts of their thinking sequences). The students in the experimental group were coached in the mental-flowcharting process.<sup>7</sup> Then they experienced the scripts-in-action of experts (entrepreneur-mentors), for the purpose of “thinking-about-thinking,” when they interviewed these experts in depth and transcribed these interviews to solidify the advice they had received. This process required the students to think metacognitively in developing an understanding of their own thinking and the thinking of their mentor. The question—whether individuals (with a view to improving their understanding of the value creation part of ESR) who engage in metacognitive exercises (in the form of coached flowcharting) would be more likely to gain value-creation expertise than students who do not engage in metacognitive exercises—was then tested.

**Test results:** In this study, the measure of value-creation expertise levels captured the extent to which participants possessed expert arrangement, willingness, and ability scripts at the beginning of the target semester and at the end. This was done using the script cue recognition-based summed interval scale method.<sup>8</sup>

The experimental manipulation of entrepreneurial metacognition used here accords with the three necessary facets of the metacognitive self-control theory:<sup>9</sup> (1) motivation

to implement correctional goals, (2) conscious awareness of the source of bias and the magnitude of its influence on judgment, and (3) time and opportunity to make necessary cognitive adjustments.

The findings<sup>10</sup> support the idea that the use of metacognitive elements in the learning experience increased expertise beyond the impact of traditional entrepreneurship education. A significant entrepreneurial-thinking increase in the metacognitive experimental group was found. What, then, are the implications of these findings for practice?

If, as was demonstrated, (1) the generation of value-creation thinking in the minds of individuals depends upon a process that is generally accessible to any individual and (2) the specific interventions needed are metacognitive in nature, then it may be that the new-value-creation activities based in the “specialness” paradigm (e.g., entrepreneurship awards and business plan competitions)—which suggest that ESR is only for the special few—may be wrong. Increased ESR may follow increased *thinking about entrepreneurial thinking* if metacognitive learning is made widely available.

Current thought about entrepreneurship—which arguably affects current entrepreneurship policy—may overlook our largest constituency:<sup>11</sup> those individuals who are not

entrepreneurs but want to become entrepreneurs. By assisting individuals to alter their own cognitive practices *through thinking about that thinking*, those who seek to expand ESR may assist many more individuals in enhancing their value-creation expertise. People *can* alter their lives by altering their thinking.<sup>12</sup> Both pre- and post-experience examples may include thinking flowcharts produced from entrepreneurship internships with active learning components, entrepreneurs’ thinking flowchart evaluations of failed ventures, or pre-venture flowcharting. Accordingly, we suggest that large ESR dividends are possible from small investments in the relatively simple directed-thinking practice offered by thinking flowchart-based exercises due to their strong metacognitive impacts.

#### Better Thinking and Venture Creation Work

People often assume that the “work” of venture creation is restricted to those who have the advantages of personal and financial resources. To directly challenge this assumption, some colleagues at Syracuse University conceived and conducted a “Disabled Veterans Venture Boot Camp.” Through a recorded interview with organizers Mike Morris and Mike Haynie, readers can get a first-hand feel for this “works-focused” best practice in ESR. In the interview Professor Haynie described the program—the demographics, its outcome focus, the participants themselves, and the results. The text that follows in this section is quoted from that interview. Professor Haynie states:

**Demographics:** “In this first class, I had students ranging in age from twenty-two to fifty-three. I had all four branches of military service.

I had Hispanic students, African American students, Caucasian students. I had students with four years of high school; I had one student with two master’s degrees and some students with college experience. And those students were all equal in the context of this program. I mean all equal in terms of how they were thinking about what this program meant to them. It didn’t matter where they came from or what their past experiences were. It was almost like hitting a reset switch for all of them.”

**Outcomes:** “We focused on two outcomes. One was tools—very traditional. One of the things that this particular group didn’t have was entrepreneurial tools because they were in the military—several were career military. They did not have the traditional business toolbox. They did not have training in how to build a financial statement, marketing plan, business plan, etc. So there was one outcome. But for me, a much more important outcome was efficacy. It was helping them foster a belief in themselves that they could actually go out there and do this (i.e., create a business).”

**Participants:** (The participants, disabled veterans, were individuals who had faced both the trauma of war and the trauma of returning home disabled.) “There has to be something that gets them through this trauma. It is different for everyone; you know it’s very idiosyncratic. I think disabled veterans are uniquely attracted to entrepreneurship and to business ownership because of the idea of having sole custody of their lives—finally. In the military you have sole custody of nothing. Your life is not your own. And you know, that is nothing compared to when you are in a special circumstance like being wounded in combat; then you

truly have no control over anything. And the whole idea of entrepreneurship to these folks is really powerful.

So we ended up with a group of students through this selection process that were highly motivated to start a business. To give you a quick example, there was a young lady in the class who was an army sergeant but only twenty-four years old; she had a 127 mm rocket explode eight feet from her. Basically, it pulverized her entire right side. She spent two years in the hospital. In the army, she was a helicopter and Humvee mechanic. She wants more than anything in the world to open a high-end auto repair shop. She is so focused on that goal, and interestingly, it is that goal that keeps her going. It is the thing that is helping her move past her horrific injury and trauma.”

**Results:** “I think it was, in a sense, an identity transformation. For a very long period of time, these folks were soldiers; I think that on some level you have to understand the culture of the military to really get what I am saying. The Marine Corps has a saying: Once a Marine, Always a Marine. All of this was

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ripped from these people overnight. Martin (name has been changed) is twenty-five; he is a Marine. He had an IED (improvised explosive device) blow up his vehicle. The vehicle rolled on top of him, and he was pinned under it for six hours before they could get it off of him. All of a sudden, he was not a Marine anymore, and the kid was lost. The correspondence that I receive from him now indicates that he has found a new identity. His identity is an entrepreneur—he starts businesses.”

This report suggests that venture-creation work—the “works”-creating process—is not restricted to those who have the advantages of personal and financial resources, and it can be significantly improved by gaining venture-creation thinking skills. In this case, once the veterans were able to see themselves as entrepreneurs—persons who create works for others—they exercised initiative and created the new “works,” the new businesses they had imagined. This suggests that progress can be made toward ESR through skill-building thinking that enables even those with limited resources to create new business ventures. In practical terms this success further legitimizes and highlights the importance of the outreach function in universities, in NGOs, and in government-supported programs.

#### Better Thinking and the Venture Creation Environment

As a basic element of ESR, transaction creators focus their work on the “other persons” in the environment. For some, the “others” element is very direct: a focus on customers. For others, the work is intended to

change the venture creation environment so that multiple “others” can benefit. In a Native Think Tank that one of the authors was invited to join,<sup>13</sup> participants set out to make a difference in the institutions that affect the ESR environment. The Think-Tank group came together for three years (1999–2001) and was motivated by a unifying curiosity: Why are Native communities economically impoverished, and how can these communities find and follow a pathway to prosperity and cultural

well-being? To this end, members examined their own experiences with on-reserve economies, particularly in the Northwestern region of British Columbia.<sup>14</sup> The group then considered these experiences within a more global context, reviewing the work of authors, such as de Soto<sup>15</sup> and Mitchell and Morse<sup>16</sup>, in light of the results of a Harvard project published in *American Indian Economic Development*.<sup>17</sup> The analysis discovered previously unconnected patterns and systems that are at the core of what ails Native economies and, more

was first investigated, followed by ways to create increases in both the market system and on-reserve entrepreneurship. This led to the consideration of changes in the economic model that would encourage entrepreneurial thinking and the needed changes in capital-formation levels that come from viable property rights. Finally, the Think Tank addressed the key governance initiatives that were necessary for the on-reserve economic climate to be more favorable—to replace the present destructive institutions with constructive ones. The

Helpfully, the Think Tank's conclusions about a beginning point to achieve ESR (reached independently) were concurrently validated in a study of seventy-two former colonies throughout the world, which analyzed the relative importance for economic growth of various factors.<sup>19</sup> This research concluded that the creation of good institutions is the predominant reason for economic success, and therefore, the first challenge for "other"-focused development economics is to get from bad institutions to good. This is precisely the conclusion that the Think Tank drew in its own deliberations—the conclusion that acts as the foundation for the approach recommended (and summarized in Figure 2).

Thus, the Native case suggests that venture-creation "others" include both specific purchasers in a socioeconomic transaction and a broader institutionally relevant constituency. Our assertion here is that both sets represent an important element of ESR. In fact, until the institutionally relevant "others" are considered, attempts to engage specific "others" are likely to be ineffectual. An understanding of ESR requires both specific thinking (e.g., about customers) and general



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thinking (e.g., about the relevant institutions and to whom are they relevant). In the Think-Tank illustration, changing the institutions required changing the underlying thinking, and this had to happen before entrepreneurship could lead to ESR: prosperity and cultural well-being.

**Conclusion**

It is one thing to be told to "wise up" and quite another to know how to do so. In this article we have chronicled three instances where better thinking—improving entrepreneurial cognition—has taken place in individual "transaction creators," in the "works" creation process, and among the "others." We believe that this approach may well apply as an ESR best practice in many developing economies globally. **ESR**

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 12 William James, *The Principles of Psychology* (New York: Holt, 1890).  
 13 Clarence Nyce, *Masters in Our Own House: The Path to Prosperity* (Terrace, BC: Skeena Native Development Society, 2003).  
 14 From this point forward, all references to native people, aboriginal people, Native, etc. should be assumed to apply to the Northwestern BC area unless otherwise noted; however, it appears likely that some of our insights and conclusions will apply more generally.  
 15 Hernando de Soto, *The Mystery of Capital: Why Capitalism Triumphs in the West*

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importantly, conceived new ideas to change those patterns to achieve the Think Tank's definition of ESR: prosperity and cultural well-being. This approach is illustrated in Figure 2. As these deliberations progressed, the Think-Tank group worked right to left in the diagram shown in Figure 2: from the desired end point toward the necessary beginning point. To increase ESR and to decrease dependency, the relationship between prosperity and cultural well-being

Think Tank prepared a report for the Canadian government that included proposed legislation and made the report available to all interested Native communities.<sup>18</sup> This allowed each community to identify the steps that they could take themselves: first, governance institutions; second, property rights; and third, entrepreneurial thinking. In this sense, the Think Tank acted as an "institutional entrepreneur," an increasingly recognized type of contributor to ESR.

Figure 2: The Think Tank Approach

