

Building Leaders in Secondary Education: An Initial Evaluation of an Entrepreneurial Leadership Development Program

K. Mark Weaver
University of South Alabama

Eric W. Liguori
California State University, Fresno

Kristy Hebert
Advance Innovative Education

George S. Vozikis
California State University, Fresno

ADVANCE Innovative Education (a 501c3 non-profit organization) and Louisiana State University operate a 3-year training program for high-potential educators seeking certification as school principals. Given the ongoing need for schools to operate with maximum efficiency, the program focuses on training educators to think and behave entrepreneurially. This research note begins to evaluate the effectiveness of this program's summer institute aimed at immersing participants into the world of entrepreneurship. Specifically, pre- and post-training assessments were conducted after a five week intensive residential training program using the population of program participants. Results showed that program participants had higher levels of entrepreneurial intent after completion of the training program, and that their attitudes towards venturing were also more positive.

INTRODUCTION

It is no secret that nationally our primary education system is in dire need of reform. It's even less a secret that the state of Louisiana is lagging nearly every state with regard to the quality of student primary education. Thus, Louisiana is scrambling to re-design their schools with the goal of increasing key performance indicators (i.e., improved graduation rates, higher test scores, balanced budgets, etc.). Recognizing that change does not come easy, and that strong leadership will be required at all levels (especially the school level) a public-private alliance was formed by local social entrepreneurs, community leaders, and education officials. The alliance, named Advance Innovative Education (AIE), hosts a variety of programs targeted at school improvement. One AIE initiative, Redesigning Lessons Re-envisioning Principals (RLRP), focuses primarily on the training and development of principals in Louisiana. The logic: different, reformed, and improved school requires leaders who think more

innovatively and behave more entrepreneurially; thus new and novel educational leadership training programs are necessary.

The RLRP initiative is a partnership between AIE and the Colleges of Business and Education at Louisiana State University. The full RLRP program encompasses a three year intensive training and mentorship curricula. \$3.1 million in grant funding was secured from the U.S. Department of Education in 2008 to implement and evaluate the RLRP leadership development program, and eleven principals have been certified to date. The RLRP program began with a pilot group in 2009, and is presently recruiting for Cohort III, members of which will begin the program in summer 2011 with a 5-week residential summer institute in Baton Rouge, LA. This research note seeks to evaluate the effectiveness of the summer institute, rather than the entire three year RLRP program. As such, we evaluate the institute on two fronts (viz., the entrepreneurial intentions and attitude towards venturing of program participants).

This brief note progresses as follows. First, an overview of the RLRP summer institute is presented. Next, hypotheses are offered and evaluated using the population of program participants via pre- and post-training assessments from the summer 2010 institute. Lastly, discussion, conclusion and practical implications are offered.

RLRP SUMMER INSTITUTE PROGRAM OVERVIEW

The summer institute (SI) brings together leading faculty and subject matter experts from around the country for over 135 hours of classroom and interactive instruction. Residents attend class daily, dine together with faculty, have nightly and weekly homework assignments as well as a variety of other extracurricular activities to participate in (e.g., focus groups, school board meetings, evening guest speakers, site-visits, 1:1 mentoring sessions, etc.). In sum, nearly all of the SI participants' non-sleep time is focused on immersing them into a cultural blend of entrepreneurship and education.

The Interstate School Leaders Licensure Consortium (ISLLC) standards serve as a basis for the summer curricula. It is to these standards, defined by the Council of the Chief State School Officers, that each RLRP graduate will be certified as a K-12 principal. Appendix A provides a full listing of each ISSLC standard. Each SI course is in alignment with and addresses at least two ISSLC standards, with several addressing three or four standards. Courses are spread out evenly across the 5-week timeframe, with each week having a central theme. The following sub-sections outline the material covered in each of the five weeks.

The Challenge of Educational Reform

The first week introduces Residents to the concept of social entrepreneurship as a process of developing innovative educational organizations to address critical issues in educational reform. Residents will explore the concept of "principal as social entrepreneur" and their beliefs in relation to personal vision, leadership, and school management.

Schools as Organizations

Week Two coursework facilitates an understanding of social enterprise and its application in successful schools. Residents will compare and contrast public education and the corporate world to gain an understanding of the difference between traditional and entrepreneurial school organization.

Student Achievement

In the third week, the cohort will investigate core concepts, principles, theories, and processes of instructional strategies, classroom management, and teamwork needed to recognize educational constraints and opportunity for change. Residents will research the purpose, history, and effects of national and state requirements and standardization.

Resource Ingenuity

The fourth week explores the concept of social entrepreneurship as a process of developing innovative educational organizations. Residents will be able to acquire resources through educational theory and policy, entrepreneurial partnerships, educational law, larger educational structures, and technological networking.

Accountability

The fifth week increases understanding of performance assessment, expectations, and requirements as outlined by the No Child Left Behind Act and the Louisiana Board of Elementary and Secondary Education.

THEORY & HYPOTHESES

Central to much of the aforementioned SI curricula is the notion that primary schools can be thought of as social enterprises, capable of generating revenues, controlling outcomes, and innovating. Liñán and Chen (2009) note that the literature has increasingly begun arguing that intentions play a crucial role in the decision to begin a new firm. Yet, the decision to become an entrepreneur (or edu-preneur in the case of primary school teachers and administrators) remains both a conscious and voluntary one (Krueger et al., 2000). Shapero (1984) described entrepreneurship as a “very pervasive and profoundly human process,” (p. 21) noting that it is the “the premier expression of resilience, creativity, and initiative taking” (p. 39). Given the human component of this argument, and that organizations themselves lack the ability to think (Felin & Foss, 2005), it is prudent to study the individual as the catalyst of entrepreneurial action. In doing so, this study focuses specifically on evaluating whether SI participant’s individual level of entrepreneurial intent and attitudes toward venturing were improved after completion of the SI.

Entrepreneurial intentions can be defined as individuals’ states of mind that direct experience, attention, and ultimately action toward a business concept (in this case social enterprise; Bird, 1988). Intention’s place in the literature is well established: they are considered to be the immediate precursor of behavior (Bird, 1988, 1989; Krueger, Reilly, & Carsrud, 2000; Krueger & Brazeal, 1994). Ajzen (1987) and Ajzen & Fishbein (1980) note the study of intentions toward purposeful behavior are critical if we are to understand the antecedents, correlates and consequences of that behavior. If scholars are to fully understand the outcomes associated with the integration of social enterprise into schools the study of intentions is a logical place to begin. The study of intentions models provide scholars a better understanding of the entrepreneurial process (Krueger, 1993). Likewise, intentions are critical to understanding the overall entrepreneurial process given intentions establish key initial characteristics for new enterprises (Bird, 1988; Katz & Gartner, 1988; Krueger & Carsrud, 1993). Thus, knowing whether or not an entrepreneurial training curriculum increases intentions is arguably the best way (in the short term) to measure individual propensities to engage in entrepreneurial behavior (i.e., intent to foster social enterprise within an educational institution).

Attitudes toward venturing, specifically as a component of entrepreneurial and generalized self-efficacy, has been shown by recent research (Florin, Karri, & Rossiter, 2007; Mueller & Goic, 2003; Zhao et al., 2005) to be elevated by training interventions and entrepreneurial education. Given both the education and training components of the SI curriculum, it is logical to expect that exposure to this curriculum will elevate participant attitudes toward venturing.

In accordance with the preceding paragraphs, we posit that individuals, having gained increased efficacy via their exposure to the SI curricula, will have higher levels of entrepreneurial intentions and improved attitudes toward venturing after completion of SI than they had the morning of SI Day 1. Thus, the following two hypotheses are offered:

Hypothesis 1: Program participants will have higher levels of entrepreneurial intentions (H1a: personal attitude; H1b: perceived behavioral control; H1c: subjective norm) after completion of the RLRP program than before beginning the program.

Hypothesis 2: Program participants will more positively view business venturing in the school system, as evidenced by higher attitudes toward venturing post RLRP program completion than before beginning the program.

The study of psychological variables in this manner (viz., pre and post assessment of a training intervention) is not new to entrepreneurship or psychology. In fact, several examples exist in the literature that evaluate the effectiveness of entrepreneurial education programs in a similar manner (cf., Baughn et al., 2006; Cox, Mueller, & Moss, 2002; Ericson, 2002; Florin et al., 2007). Thus, confidence can be found in this approach.

METHOD

Data & Sample

The population of program participants were assessed both pre and post the five week intensive summer institute. Participation in the training evaluation process was completely voluntary, and 100% of the participants chose to be included in the study. Each program participant was employed full-time as a primary school teacher (or teacher / administrator in training) in a large southeastern state. Participants were 96% female, 66% African American, and averaged 38.6 years of age (range 19-72) and 7.2 years tenure within their respective schools.

Two surveys were administered, one at the beginning of day 1 of the RLRP summer institute and one two months into the school year following completion of summer institute. The response rate was 100% across both survey administrations. To ensure candor, participants were assured that individual responses would be kept confidential and that only aggregate data would be reported.

Measures

Entrepreneurial Intent

Sixteen items from Liñán and Chen's (2009) entrepreneurial intention questionnaire (EIQ) were used to assess entrepreneurial intent. This measure utilized a seven-point Likert-type scale anchored "1=total disagreement" and "7=total agreement." A representative item is "Being an entrepreneur implies more advantages than disadvantages to me." Higher scores reflect higher levels of entrepreneurial intent. The internal-consistency estimate of reliability was $\alpha = .76$.

Attitude Toward Venturing

Three items adapted from McGee et al. (2009) were used to assess attitude toward venturing. This measure utilized a seven-point Likert-type scale anchored "1=total disagreement" and "7=total agreement." A representative item is "In general starting a business is worthwhile." Higher scores reflect higher attitude toward venturing.

RESULTS

Table 1 presents means, standard deviations, mean differences, and 95% confidence intervals for each variable. Independent *t*-tests were performed to examine the differences in each variable pre- and post-the RLRP summer institute. Hypothesis 1 stated that participants would have higher levels of entrepreneurial intent upon completion of the summer institute than they did before beginning the program. Specifically, participant attitudes towards venturing (H1a), perceived behavioral control (H1b) and subjective norm (H1c) were expected to be higher upon completion of the program. Results showed that scores on each of the three dimensions of entrepreneurial intent were significantly higher ($p < .05$) post completion of the summer institute than they were before the individuals were exposed to the curriculum. Thus, Hypothesis 1 was supported.

Hypothesis 2 stated that participants will more positively view business venturing in the school system, as evidenced by higher attitudes toward venturing post RLRP program completion than before beginning the program. Results showed that participant's attitudes towards venturing were significantly higher ($p < .05$) post completion of the summer institute that before the participants began the program. Thus, Hypothesis 2 was supported.

TABLE 1
MEAN DIFFERENCES AND DESCRIPTIVE STATISTICS

Study 1							
Measure	Pre-training		Post-training		Mean difference	95% confidence interval	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
ATT	5.04	.83	5.87	.82	.83	.49	< diff < 1.15
PBC	3.63	1.11	4.55	1.07	.92	.62	< diff < 1.20
SN	4.93	.92	5.89	.66	.96	.61	< diff < 1.31
ATV	3.07	.36	4.36	.85	1.29	.25	< diff < 2.33

Note. N = 16. diff=difference; ATT=attitude; PBC=perceived behavioral control; SN=subjective norm; ATV=attitude toward venturing.

The three entrepreneurial intent dimensions possessed the smallest mean differences (.83, .92, .96, respectively), indicating this variable was less influenced by the summer institute curriculum relative to attitude toward venturing with a mean difference of 1.29. Overall, however, the mean differences of each of the three dimensions of entrepreneurial intent were relatively similar in magnitude, indicating that no one sub-dimension was differentially affected by the training program.

DISCUSSION & CONCLUSION

The SI program did successfully elevate both the entrepreneurial intentions and attitudes toward venturing of the program participants. Getley (1979) helped define the term entrepreneurial drive when he wrote: “[my aim is] to generate ideas on how we can increase the valuable combination of qualities, skills and attitudes which I have called entrepreneurial drive. I have used this term because I cannot think of a better one to describe the drive that some people have to create things, the determination that they have to achieve real progress, and the tenacity which is shown by them to change things despite massive opposition” (p.19). Both intention and attitude toward venturing are components of entrepreneurial drive; a term that captures the essence of the overall entrepreneurial objective of both the RLRP program and the summer institute.

Aguinis & Kraiger (2009) argued that successful training has benefits at three levels: individual, organizational, and societal. Going forward, positive outcomes at all three levels can be expected. First, given the hands-on approach to the RLRP program as a whole, and especially post SI, participants will actively continue to take risks, brainstorm and explore new ideas, and engage in enterprising behaviors under the supervision of their mentors. This entrepreneurial experience should enhance participant overall self-efficacy, and ultimately lead to more enterprising behaviors in the school. At the organizational, schools should begin to see a return-on-investment on the enterprising behaviors of their staff. This may come in the form of extra discretionary income (from school store or vegetable garden proceeds), increased community support (from outreach or fundraising initiatives), or even through positive media coverage that generates awareness of the schools' enterprising efforts and successes.

At the societal level, communities will benefit from the increased entrepreneurial culture instilled in students participating in the enterprising efforts at the school. It has been long recognized that entrepreneurial climate is fostered by experience, education, culture, family, values, and observance of

others (Shapiro, 1975, 1984). By having schools (and then by proxy educators and students) engage in enterprising behaviors society benefits from the experience these individuals gain, the enterprising culture that is developed, the value of enterprise that is instilled, and the confidence that is generated when they see someone else try something new and succeed.

REFERENCES

- Aguinis, H., & Kraiger, K. (2009). Benefits of training and development for individuals and teams, organizations, and society. *Annual Review of Psychology, 60*(45), 1-74.
- Ajzen, I. (1988). *Attitudes, Personality, and Behavior*. Chicago, The Dorsey Press.
- Ajzen, I. (1987). Attitudes, traits, and actions: Dispositional prediction of behavior in personality and social psychology. *Advances in Experimental Social Psychology, 20*, 1-57.
- Ajzen, I., & Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, NJ: Prentice-Hall.
- Baughn, C., Cao, J., Le, L., Lim, V., & Neupert, K. (2006). Normative, social and cognitive predictors of entrepreneurial interest in China, Vietnam and the Philippines. *Journal of Developmental Entrepreneurship, 11*(1), 57-77.
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review, 13*(3), 442-453.
- Bird, B. (1989). *Entrepreneurial Behavior*. Glenview, IL: Scott Foresman.
- Baughn, C., Cao, J., Le, L., Lim, V., & Neupert, K. (2006). Normative, social and cognitive predictors of entrepreneurial interest in China, Vietnam and the Philippines. *Journal of Developmental Entrepreneurship, 11*(1), 57-77.
- Cox, L., Mueller, S. L., & Moss, S. E. (2002). The impact of entrepreneurial education on entrepreneurial self-efficacy. *International Journal of Entrepreneurship Education, 1*(2), 229-247.
- Erikson, T. (2002). Entrepreneurial capital: The emerging venture's most important asset and competitive advantage. *Journal of Business Venturing, 17*(3), 275-290.
- Felin, T., & Foss, N. (2005). Strategic organization: A field in search of micro-foundations. *Strategic Organization, 3*(4), 441-455.
- Florin, J., Karri, R., & Rossiter, N. (2007). Fostering entrepreneurial drive in business education: An attitudinal approach. *Journal of Management Education, 31*(1), 17-42.
- Getley, R. (1979). Entrepreneurial drive. *Industrial and Commercial Training, 11*(1), 19-23.
- Katz, J., & Gartner, W. (1988). Properties of emerging organizations. *Academy of Management Review, 13*(3), 429-441.
- Krueger, N. (1993). The impact of prior entrepreneurial exposure on perceptions of new venture feasibility and desirability. *Entrepreneurship Theory & Practice, 5*-21.

Krueger, N., & Carsrud, A. (1993). Entrepreneurial intentions: Applying the theory of planned behavior. *Entrepreneurship & Regional Development*, 5, 315-330.

Krueger, N., & Brazeal, D. V. (1994). Entrepreneurial potential and potential entrepreneurs. *Entrepreneurship Theory & Practice*, 18(3), 91-104.

Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). "Competing models of entrepreneurial intentions." *Journal of Business Venturing*, 15(5-6), 41-432.

Liñán, F. and Y.-W. Chen (2009). "Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions." *Entrepreneurship Theory & Practice*, 33(3), 593-619.

McGee, J. E., M. Peterson, et al. (2009). "Entrepreneurial self-efficacy: Refining the measure." *Entrepreneurship Theory and Practice*, 965-988.

Mueller, S. L., & Goic, S. (2003). East-West differences in entrepreneurial self-efficacy: Implications for entrepreneurship education in transition economies. *International Journal of Entrepreneurship Education*, 1(4), 613-632.

Shapero, A. (1975). The displaced, uncomfortable entrepreneur. *Psychology Today*, November, 83-88, 133.

Shapero, A. (1984). The entrepreneurial event. In C. A. Kent (Ed.), *The Environment for Entrepreneurship* (pp. 21-40). Lexington, MA: D.C. Heath & Company.

Zhao, H., Seibert, C., & Hills, C. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90(2), 1265-1272.

APPENDIX A

ISLLC Standard 1: An education leader promotes the success of every student by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by all stakeholders.

Functions:

- a) Collaboratively develop and implement a shared vision and mission
- b) Collect and use data to identify goals, assess effectiveness & promote learning
- c) Create and implement plans to achieve goals
- d) Promote continuous and sustainable improvement
- e) Monitor and evaluate progress and revise plans

ISLLC Standard 2: An education leader promotes the success of every student by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth.

Functions:

- a) Nurture and sustain a culture of collaboration, trust, learning, and high expectations

- b) Create a comprehensive, rigorous, and coherent curricular program
- c) Create a personalized and motivating learning environment for students
- d) Supervise instruction
- e) Develop assessment and accountability systems to monitor student progress
- f) Develop the instructional and leadership capacity of staff
- g) Maximize time spent on quality instruction
- h) Promote the use of the most effective and appropriate technologies
- i) Monitor and evaluate the impact of the instructional program

ISLLC Standard 3: An education leader promotes the success of every student by ensuring management of the organization, operation, and resources for a safe, efficient, and effective learning environment.

Functions:

- a) Monitor and evaluate the management and operational systems
- b) Obtain, allocate, align, and efficiently utilize human, fiscal, and technological resources
- c) Promote and protect the welfare and safety of students and staff
- d) Develop the capacity for distributed leadership
- e) Ensure teacher and organizational time is focused to support quality instruction and student learning

ISLLC Standard 4: An education leader promotes the success of every student by collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources.

Functions:

- a) Collect and analyze data and information pertinent to the educational environment
- b) Promote understanding, appreciation, and use of the community's diverse resources
- c) Build and sustain positive relationships with families and caregivers
- d) Build and sustain productive relationships with community partner