

*AERA 2008 – Division A: Administration, Organization, and Leadership*

## **Entrepreneurial Leadership: Comparing the Practices of an Entrepreneurial Principal and an Education Entrepreneur**

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### **Abstract**

How do “entrepreneurial” school leaders approach innovations, and how is this process similar or different from that of a business entrepreneur? We address this question by comparing findings from the in-depth case-studies of two subjects – the principal of an urban elementary school who radically transformed his school, and the founder and COO of an education-based for-profit company. A systematic analysis of the practices each individual used at specific stages of the process of implementing a new venture revealed interesting similarities and differences. This suggests that the field of entrepreneurship can provide valuable inspiration and contributions to educational leadership, yet adaptations will be needed.

### **Introduction**

The field of educational leadership has seen a growing interest in *transformational leadership* (e.g., Leithwood, 1992; Leithwood & Jantzi, 2005) as well as *entrepreneurial leadership* (e.g., Hentschke & Caldwell, 2005), as a result of recognizing that today’s school leaders are increasingly expected to improve their organizations by implementing innovations that can result in greater learning for their students. This presentation aims at contributing to our knowledge of entrepreneurial leadership by exploring the similarities and differences between the practices of entrepreneurial leaders in school settings versus those who operate in business settings. We will pursue this goal through the systematic comparison of how two such leaders – the principal of an urban elementary school who radically transformed his school, and the founder and COO of an education-based company – approached the implementation of specific innovations that added value to their organizations and their clients.

While connections between entrepreneurship and school leadership (and especially transformational leadership) are beginning to be recognized in the literature

(e.g., Eyal & Kark, 2004; Hentschke & Caldwell, 2005; Saboe, Kantor & Walsh., 2002; Vecchio, 2003), there is still very little research on (a) whether and how school leaders are using entrepreneurial skills, attitudes and processes to improve their organizations and the services provided to their students, families, and broader communities, and (b) how school leaders could better capitalize on findings from the field of entrepreneurship. This presentation is intended to begin to address these gaps.

### **Theoretical framework**

The theoretical framework informing this presentation comes from a synthesis of different disciplines that have studied entrepreneurship, including economics (e.g., Schumpeter, 1934; Casson, 1982), business (e.g., Bygrave & Zacharakis, 2004), psychology (e.g., Blockhaus, 1982), sociology (e.g., Thornton, 1999), and more recently education (e.g., Boyette & Finlay, 1993; Brown & Cornwall, 2000; Fisher & Koch, 2004; Hill, 2003; Hentschke & Caldwell, 2005; Hess, 2006; Leisey & Lavaroni, 2000). While there is no agreed-upon definition of entrepreneurship (Bygrave & Hofer, 1991), there is considerable support in the current literature for conceiving of entrepreneurship not just as “starting a new business” but rather more broadly as the process of *transforming ideas into enterprises (i.e., sustainable initiatives) that generate economic, intellectual and/or social value* (Green, 2005). This broader interpretation of entrepreneurship is of particular interest to the field of educational leadership, especially as we strive to develop school leaders who will be “agents of change” within their institutions by initiating sustainable innovations to the benefit of the institution, students and communities they serve.

While early research on entrepreneurship studied either the traits/characteristics of entrepreneurs (Brockhaus, 1982; McClelland & Winter, 1969) or the context in which entrepreneurship took place (Casson, 1982; Kirzner, 1979; Schumpeter, 1934), more recent studies on entrepreneurship challenge this artificial dichotomy to offer a more comprehensive approach to study entrepreneurship, one that focuses on entrepreneurship as a *process* (Baron & Shane, 2005; Timmons, 2004). At the core of the “entrepreneurial process” is the development of enterprises or innovations through a process that involves some specific steps or components (Timmons). A number of attitudes, behaviors and skills have been identified in the literature on entrepreneurship as supporting these

various components – and, thus, the effectiveness and success of the specific initiatives undertaken by the entrepreneur.

Assuming the broader definition of entrepreneurship identified above, in this study we will examine the practices employed by an entrepreneurial principal and an “education entrepreneur” (i.e., someone who founded and led a for-profit business in education) as each initiated a number of major innovations. More specifically, we have tried to identify practices that each subject used at each of the following “stages” of the process of initiating a specific innovation (adapted from Baron & Shane, 2005):

1. *Coming up with ideas for a new innovation/enterprise.*
2. *Evaluating whether the idea generated is worth pursuing.*
3. *Making detailed plans for the innovation/enterprise.*
4. *Gathering the necessary resources (both human and financial) to launch the innovation/ enterprise.*
5. *Implementing and monitoring the plan.*
6. *Ensuring long-term sustainability (if and when appropriate).*

### **Methods and data sources**

The two case-studies analyzed and compared in this paper were part of a larger research project including the case-studies of other “entrepreneurial educators” (a term we will be using to indicate “educators who engage in transforming ideas into enterprise that generate economic, intellectual or social value”). Each case-study subject was chosen because of their track record as an educator who had successfully initiated innovations that added value. Ralph Spezio is the former principal of an elementary school in the Rochester City School District, who over the 17-years of his leadership was able to “turn around” one of the poorest urban elementary schools into a place that truly attended to its children’s needs. Donna Thompson, a former history teacher and COO of a company specializing in providing support for professional meetings with a focus on increasing participants’ learning that she and a partner took over and “turned around” from near bankruptcy.

An exploratory case-study approach was chosen because such a methodology is considered to be especially appropriate when context is important, multiple data sources are used, and theoretical propositions guide data collection and analysis (Yin, 2003). All these elements were present as we aimed at gaining a better understanding of how entrepreneurial educators in general, and school leaders more specifically, could make use of entrepreneurial practices to be more effective in pursuing their mission.

A rich set of qualitative data was collected for each case-study to examine *how* the subject “transformed ideas into sustainable initiatives that added value” (Green, 2005) as part of her/his job. In order to do so, we designed the following sequence of interviews:

- 1) A preliminary interview with the subject, to gather background information and to identify particular innovations s/he initiated.
- 2) A second interview with the subject, focusing on examining how s/he went through the various stages of the “entrepreneurial process” in the case of a few specific initiatives.
- 3) A third interview with the subject, focusing on gathering information about the attitudes, behaviors and skills s/he perceived as most important to accomplish her/his mission, as well as characteristics of the environment that most affected her/his performance.
- 4) Interviews with at least one of the subject’s close collaborators, to gather their impressions about the attitudes, behaviors and skills demonstrated by the subject as well as to triangulate information provided by the subject on specific events.
- 5) A fourth interview with the subject, to follow-up on specific issues raised by previous interviews and their preliminary analysis.

In addition to the verbatim transcripts of the interviews described above, we also collected and examined relevant artifacts documenting the activity of each subject.

All these data were coded through an iterative process using conceptual categories derived from the literature on entrepreneurship, yet also allowing for new codes to emerge as a result of the analysis (see Appendix A for the final set of codes employed to code all the data); a “case-study database” (Yin, 2003) was also prepared for each subject by synthesizing the key information collected with respect to each of these categories. To

minimize errors and biases and, thus, meet standards for validity and reliability, we systematically triangulated data obtained from multiple sources, used detailed protocols to guide each interview, employed a team of at least two researchers to code the data collected, and did a final “subject check” by asking the subject to review and provide feedback on the completed case-study data-base and/or a first write-up of the case-study.

### **Key findings**

#### ***Entrepreneurship in action: Concrete example of initiating innovations***

Both case-studies confirmed that effectively initiating and carrying out value-adding innovations was at the very core of these subjects’ activity – and success. The following stories are offered to give a sense of how each subject went about this process, as well as provide a context for the findings reported in the following section. We chose to present the story of the education entrepreneur first to provide readers from the education field a better image of what characterizes the activity of a more “traditional” entrepreneur, and thus make it easier to see the parallel with the “entrepreneurial practices” we recognized in the principal portrayed next.

#### *The case of an education entrepreneur*

A former history teacher, Thompson decided after several years of teaching to join a small firm providing professional development services for companies; soon after, as the company was on the verge of bankruptcy, she and a colleague decided to buy the company and turn it around – and they did! Twenty years later, the company is very successful, having reached 35 employees and met their financial growth goals each year. As taking on a failing business, turning it around and growing it is one of the classic examples of developing an enterprise, how she and her partner did this provides us with insights on the entrepreneurial process as traditionally defined.

As Thompson and her partner realized that the company they were working for was in financial trouble and likely to close, they had only about a week to decide whether there was something they could do about it. The company had over half a million dollars of debt, but they thought they could turn it around by changing its focus and organizational structure because of two main compelling reasons. First, they knew the company had a good reputation and clientele, as well as valuable assets in terms of

equipment and materials. Second, they believed there could be a great demand for specialized service in organizing productive conferences for professional organizations and corporations, based on their observations of how badly run and unproductive most of the meetings they attended were. Third, as a former teacher, Thompson could see that she could apply her pedagogical knowledge and experience to this adult learning situation and provide better learning opportunities for the participants, and by doing so enable the meeting organizers to better achieve their goals.

Although taking on a company with such a big debt would look to most as a big risk, Thompson and her partner realized that if they did not do anything they would be out of a job anyway, and furthermore, based on their personal experience and knowledge of the market, both had a lot of confidence in their vision, their ability to carry it out and the market opportunities for well-organized meetings. As they had so little time to make their decision, and there was no need to seek external funding (as their price for taking on the company would essentially be to assume its current debt), Thompson and her partner never put together a written plan, although they carefully discussed many details before they made their final decision and offer to the owners.

As they refocused the company to organizing certain types of meetings, Thompson and her business partner also hand-picked among the existing staff those whose skills fit the new focus and whose attitudes could help turn the business around. These employees were offered an opportunity to stay on – although with a substantial salary cut until Thompson and her partner were able to resolve the company’s debt. To ensure that the staff would be committed to the success of the company and to reducing expenses as much as possible, however, Thompson and her partner also devised a compensation system including some profit sharing that would provide a strong incentive to commitment and value-added contribution (based on a Wall Street journal article Thompson had read).

Immediate and drastic reduction of expenses was also called for in order to reduce the huge debt they had assumed. In addition to the already mentioned temporary cut in staff’s salaries, Thompson and her partner agreed to forego any personal draw against the company for the first several months. It took the company about a year before it repaid the debt and started to earn profits. After that, though, they continued to be very careful

with their hiring, spending, and cash flow, and ran a very efficient operation by setting concrete financial goals each year and monitoring progress on a consistent basis.

The story, however, does not end with this initial success. The drive to grow the company and make it increasingly successful led Thompson and her partner to set higher and higher sales goals each year. But even with the higher sales goals, they did not accept every new and potential opportunity for new contracts and new business, but rather carefully examined all potential new business to ensure a good fit and consistency with their overall goals. They also were very alert to the market and their competition, as they realized that continued success was dependent on remaining on the cutting edge and differentiating their company from the competition. Over the years, this led to the initiation of a number of innovations within the company. One technology-based innovation in particular significantly changed the nature of the company's services and took Thompson's company to a new and different level. With the realization that technology was changing the way meetings could be run, they decided to take on the challenge and fold in this new assistive technology. This meant acquiring a third partner who had expertise with technology and how to implement it within the meeting-planning business. It also meant hiring new staff to support the technology implementation as well as the changes to client products and services, and even changing the name of the company.

#### *The case of an entrepreneurial principal*

Ralph Spezio's decision to become a school administrator after 15 years of being a successful classroom teacher was motivated by the desire to exert a bigger influence and impact on more children (what he referred to as "multiply the effect"). He certainly achieved this goal, as over the 17-years of his leadership as principal he was able to "turn around" an urban elementary school notable for 99% of its student population and their families living in poverty. Creating a turn around involved a number of innovative and often unconventional initiatives, including the physical construction of a pre-school building on existing school property, creating a health clinic within the school, establishing a special collaboration with a local college to prepare the kinds of teachers his school needed, changing nearly the entire staff of the school over time and starting a local movement to control lead poisoning. In what follows, we will only be able to

briefly report on a couple of these initiatives, to give a flavor of his practice as a relentless initiator of innovations that could address his students' needs and put them in a better position to achieve success.

A first example of Spezio's risk-taking and ability to build partnerships happened early on in his principalship. Spezio had immediately recognized the need to enhance the early childhood education program at his school as a way to "level the playing field" for his students. However, his initial request to add a pre-school program to his school was denied on the grounds that he did not have enough room for it. To solve this problem, he set out to actually build a pre-school on his campus! Making this dream a reality took incredible vision, perseverance, risk-taking and collaboration. He looked for and secured funding from a major corporation in the city. He recalled visiting a top executive in the corporation, whom he knew, and from the executive's office window, Spezio pointed out his school. As the two continued their discussion, Spezio presented his idea and said, "If you can help me get a building, I promise you, I will put a first rate program there." He then partnered with a nearby technical school in the district to have high school students build the frame structures for the new pre-school and move it to his campus when it was ready. Once the building was delivered, Spezio chose a Montessori pre-school program based on extensive analysis, and his newly founded Montessori school was the first pre-school in the state to receive national accreditation. Securing support from the district office for this initiative was not easy, but he was passionate about providing an environment that would allow his students to achieve. He also knew that without the support offered by a high-quality pre-school program his students had little chance to succeed. And as many entrepreneurs do when confronted with obstacles atop a committed and passionate belief, Spezio was not afraid to even put his principalship on the line in order to help his students.

A quite different example of innovation is offered by a partnership that Spezio created with a local college to develop a unique teacher preparation program for urban teachers. This initiative was motivated by Spezio's frustration with some of his current teachers as well as new hires. He felt that something had to be done to better prepare the new teacher work force to handle the challenges of the urban classroom. Spezio contacted the institution he had previously attended and proposed a new collaboration to enhance

their teacher preparation program by involving prospective teachers in longer and more intensive internships in his elementary school, starting with the very first day of the school year. This new program continued for several years. With this portion of his initiative a success, Spezio hired many graduates from this program; he knew that these specially trained teachers had received the kind of preparation needed for their own as well as the students' success.

Six years before retiring, Spezio secured the permission of the County Health Director to examine the health reports of the children in his Montessori school, as he suspected there could be a health reason behind the cognitive and behavioral problems that students were continuing to experience. As a result of this investigation, he discovered a very serious problem with lead poisoning; over 40% of the children at his school had started school with some brain damage caused by lead poisoning. This prompted city and county officials to join forces to start a fight against lead poisoning and to recognize the need to educate the community on the dangers of lead poisoning. Spezio played a key role in this community-wide initiative, speaking to the media and the public, urging politicians and health officials to establish educational awareness programs for parents and landlords. After his retirement, Spezio continued his mission to see the Primary Lead Prevention Poisoning Project become a national movement, and has blended this into a life-long commitment to “level the playing field” for urban children. Recently the Coalition to Prevent Lead Poisoning secured passage of a city ordinance, one of the first of its kind, to create primary prevention of childhood lead poisoning. With the help of a State senator, the city has been designated as a national model for this cause.

***Key entrepreneurial practices used at specific stages of the process of initiating an innovation***

As we reconstructed in detail how Thompson and Spezio approached the implementation of the initiatives described above, as well as a few other major innovations, we were able to identify a number of effective practices each of them used on a regular basis to facilitate specific key components of the entrepreneurial process – as reported below. To highlight the similarities and differences among the set of practices used by these two entrepreneurial educators, for each stage – i.e., coming up with ideas for innovations, evaluating whether the idea is worth pursuing, making detailed plans,

gathering the necessary resources, implementing and monitoring, and ensuring long-term sustainability – we have included a table reporting side-to-side the practices used by each subject at this stage, with common practices boldfaced.

**1. Coming up with ideas for innovations (see Figure 1)**

When looking for ideas for worthwhile innovations, the education entrepreneur and the entrepreneurial principal differed fundamentally in their goals, as the principal was driven by the imperative of finding new ways to meet his students’ needs (which are both dire and urgent in an urban situation), while the more traditional entrepreneur was mostly looking to remain at the cutting edge and beat the competition. However, there is some overlap in the strategies they used to come up with these ideas – as both valued and practiced listening to other people in their organization for ideas. Even more importantly, all the other four strategies employed by the entrepreneur at this stage of the process could be relevant and useful to the principal as well – as he, too, could benefit from reading, looking at the innovative practices of his staff as a source of ideas, being alert and open to recognize opportunities, and approaching problems as potential sources for opportunities.

**Figure 1: Practices for “coming up with ideas for innovations” identified**

<i>EDUCATION ENTREPRENEUR (Thompson)</i>	<i>ENTREPRENEURIAL PRINCIPAL (Spezio)</i>
<i>Looking for things that will help the company be the best at what they do and differentiate itself from the competition by:</i>	<i>Constantly looking for unmet needs of the “whole child” and alternative ways to meet those needs by:</i>
<ul style="list-style-type: none"> <li>• Looking at own practice and noticing unmet needs and new ways to meet those needs</li> </ul>	
	<ul style="list-style-type: none"> <li>○ Creating meaningful relationships with children, families, and the broader community so as to better understand their situation and needs.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Discussion with others as a key source of new ideas and opportunities</b></li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Engaging everyone in the organization to identify the most critical needs of children.</b></li> </ul>
<ul style="list-style-type: none"> <li>• Reading as a key source of ideas (while applying/combining what read in new ways)</li> </ul>	
<ul style="list-style-type: none"> <li>• Being alert and open to recognize opportunities when they present themselves</li> </ul>	
<ul style="list-style-type: none"> <li>• Recognizing opportunities within specific problems/obstacles one faces</li> </ul>	

**2. Evaluating whether the idea thus generated is worth pursuing (see Figure 2)**

Both the traditional entrepreneur and the principal shared that they always had more ideas than they could possibly follow given their limited time and resources. Therefore, they felt that deciding which innovations were really worth pursuing was both an important aspect of their practice and an important skill to develop. The strategies they used to go about it were also more similar than different.

For both subjects, the first and most important criteria when evaluating an idea or opportunity for innovation was to question whether or not, and to what extent, it would help them towards achieving their vision (although the questions they asked to determine that were significantly different, given their different goals and vision). They both also felt an urgency to make this evaluation quickly – so as to promptly respond to the dire needs of his urban students in the case of the principal, and not to miss the short window of opportunity usually associated with a business opportunity in the other case.

While we found explicit evidence for evaluating “missing the boat” versus “sinking the boat” risks only in the case of the traditional entrepreneur, there is reason to believe that the principal also used this kind of reasoning, even if more implicitly. He often mentioned that if he felt that an initiative had great promise to meet the needs of his students, he would take any risk to pursue it (and concretely demonstrated it in many occasions, including in the case of the Montessori school). Similarly, while only the entrepreneur explicitly mentioned evaluating costs versus benefits of each potential initiative, it is likely that the principal too would do that, even if perhaps more informally and implicitly.

The fact that in the business setting critical decisions about opportunities could and would be made essentially by the two partners, and then immediately acted on, instead, represents a very different reality than what school leaders can do in most situations.

**Figure 1: Practices for “evaluating opportunities” identified**

<i>EDUCATION ENTREPRENEUR (Thompson)</i>	<i>ENTREPRENEURIAL PRINCIPAL (Spezio)</i>
<ul style="list-style-type: none"> <li>○ <b>Each potential initiative is evaluated through the vision as a “filter”</b> by asking the question: “<i>Will this help us be the best at what we are doing? Will it help us differentiate from other companies?</i>”</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Each potential initiative is evaluated through the vision as a “filter”</b> by asking the question: “<i>is this best for the whole child?</i>”</li> </ul>
	<ul style="list-style-type: none"> <li>○ Encouraging members of the organization to use the same filter to evaluate their ideas.</li> </ul>
<ul style="list-style-type: none"> <li>○ Evaluating the benefits versus the costs of the proposed innovation</li> </ul>	
<ul style="list-style-type: none"> <li>● Evaluating both “missing the boat” and “sinking the boat” risks involved, and their balance</li> </ul>	
<ul style="list-style-type: none"> <li>○ <b>Evaluation and decision are made quickly</b> so as not to miss the window of opportunity</li> </ul>	<ul style="list-style-type: none"> <li>○ <b>Evaluation and decision are made quickly</b> because of a sense of urgency to promptly respond to the immediate needs of children.</li> </ul>
<ul style="list-style-type: none"> <li>● Decisions about whether an opportunity would be pursued or not were made by the two partners (although often with input from some of the employees) and then immediately acted upon.</li> </ul>	

### 3. *Making detailed plans for the innovation* (see Figure 3.1)

The literature on business entrepreneurship – and especially most textbooks (e.g., Timmons, 2004; Bygrave & Zacharakis, 2004) and courses on entrepreneurship – put a lot of emphasis on the importance of developing a sound and detailed business plan for a new venture. In contrast, it is interesting to note that neither of our subjects engaged in writing formal plans – unless obliged by external circumstances, usually related to seeking external funding. Furthermore, they both personally did not engage in the writing of those plans, but rather delegated that responsibility to other people in their organization or even sought outside experts to help them do it. It is important to note that this finding should not be interpreted to mean that neither subject valued or spent time developing detailed plans for the initiatives they had decided to pursue – as both of them indeed engaged in such planning. Rather, they carefully judged the need and value of writing down those plans formally, given the high amount of time this requires and the other demands on their time. It is also interesting to point out that both of them, while

recognizing the importance of paying attention to details, described themselves as “big picture people” and, thus, preferred when possible to delegate detailed tasks such as preparing written plans to others.

**Figure 3: Practices for “making detailed plans” identified**

<i>EDUCATION ENTREPRENEUR (Thompson)</i>	<i>ENTREPRENEURIAL PRINCIPAL (Spezio)</i>
○ <b>Formal written plans are created only when needed</b> (contracts, bidding etc.)	○ <b>Formal written plans are created only when needed</b> (for external funding, district approval, etc.)
○ <b>Getting support from other members of the organization to make a detailed plan when needed</b>	○ <b>Getting support from other members of the organization to make a detailed plan when needed</b>
○ <b>Seeking experts’ help to create formal detailed plans (such as grant proposals or business plans) if needed</b>	○ <b>Seeking experts’ help to create formal detailed plans (such as grant proposals or business plans) if needed</b>

**4a. Gathering the needed HUMAN resources to launch the innovation (see Figure 4)**

Securing the appropriate personnel to work on an initiative was recognized by both subjects as probably the most important factor for the success of an innovation they had decided to undertake. As both of them also were usually not in the position to oversee the day-to-day implementation of the initiatives they initiated, deciding who should work on an initiative – and especially who should lead and ultimately be responsible for its implementation – was particularly critical. As typical of entrepreneurs, both subjects were also not deterred by the fact that they may not always have the right people to work on an initiative on their staff. If that were to be the case, they both used as a possible strategy seeking new partnerships with organizations that had the talent they needed. In the case of the traditional entrepreneur, a few more options were available too, which may be more difficult (but not impossible) for public school leaders to employ: hiring free-lancers for the job, and under certain circumstances even new permanent staff.

At this “planning” stage of the process of implementing an innovation, often the principal also had the need to secure the support of administrators at the district level or even the Board of Education (as for example when he decided to build a Montessori pre-school and start the on-site clinic) – critical players that are sometimes referred to as

“champions.” His main strategy when this approval was needed was to provide these individuals with the most compelling data he had, as well as to harness all the human and social capital he had built over time, often through the success of previous initiatives he had initiated.

**Figure 4: Practices for “gathering the needed human resources” identified**

<i>EDUCATION ENTREPRENEUR (Thompson)</i>	<i>ENTREPRENEURIAL PRINCIPAL (Spezio)</i>
<p><i>Securing personnel to work on the initiative:</i></p> <ul style="list-style-type: none"> <li>• <b>Hand-pick staff to work on the initiative</b> based on skills needed for that particular initiative AND match with client’s personality and style (if a contract)</li> <li>• Assign a project manager that would oversee the implementation of an initiative and participate in early meetings to define the project</li> <li>• <b>Seek partnerships that can provide human resources not available internally</b></li> <li>• Hire free-lancers if there is staff able to perform the job but not available when needed</li> <li>• Hire new staff with the necessary background and skills to introduce the innovation ONLY if warranted to sustain future initiatives as well</li> </ul>	<p><i>Securing personnel to work on the initiative:</i></p> <ul style="list-style-type: none"> <li>○ <b>Hand-pick staff to work on the initiative.</b></li> <li>○ <b>Seek partnerships that can provide human resources not available internally</b></li> </ul>
	<p><i>Securing support for the initiative:</i></p> <ul style="list-style-type: none"> <li>○ Make use of previously built human and social capital to convince key people that it is worth to pursue specific innovations.</li> <li>○ Collecting and sharing essential data to support the needs of children and communicating those data effectively to those who need to give approval.</li> </ul>

**4b. Gathering the needed FINANCIAL resources to launch the innovation (see Figure 5)**

Not surprisingly, the principal and the business entrepreneur differed more significantly when it came to strategies and sources to fund specific initiatives. While both of them looked at their own internal funding as a potential source, they had different ways to go about it – as the principal had more restrictions about what funds that could legitimately be deployed to cover the expenses of the new initiative.

The principal also had no direct way to take on debts, or a new partner that would bring in more funds in the form of equity. However, the principal could and did look for external funding in the form of grants or gifts. Indeed, this principal was quite skilled at securing this kind of funding from individuals, corporations and organizations from the community. As listed in the table below, his main strategy to convince funders to support his initiative was to prepare a very compelling case for the proposed project, documenting its need with data, and to capitalize on the extensive human and social capital he had developed overtime. Having seen him “in action” on a few occasions, our interactions led us to believe that he used *stories* very effectively, and by doing so he was able to make his proposals very personal and concrete, and thus compelling, for the potential funder or donor.

**Figure 5: Practices for “gathering the needed financial resources” identified**

<i>EDUCATION ENTREPRENEUR (Thompson)</i>	<i>ENTREPRENEURIAL PRINCIPAL (Spezio)</i>
<i>Using internal funding by:</i> <ul style="list-style-type: none"> <li>○ Foregoing/reducing profits for some time</li> <li>○ Cutting other expenses</li> </ul>	<i>Using internal funding:</i> <ul style="list-style-type: none"> <li>○ Managing to find operating funds that could be deployed to support the initiative</li> </ul>
<i>External financing:</i> <ul style="list-style-type: none"> <li>○ Taking on debt</li> <li>○ Taking on a new partner who could bring additional equity to the company</li> </ul>	
	<i>Fund-raising (gifts/grants) by:</i> <ul style="list-style-type: none"> <li>○ Making use of previously built human and social capital to access gifts/grants.</li> <li>○ Collecting essential data to support the needs of children and communicating those data effectively to potential funders/donors.</li> <li>○ Communicating effectively how the initiative is going to be implemented, and which are going to be the results.</li> <li>○ Capitalizing on the success of previous initiatives to build trust and credibility with potential funders/donors.</li> </ul>

##### **5. Implementing and monitoring the innovation (see Figure 6)**

The two subjects also differed considerably with respect to their approach, practices and strategies when it came to the actual implementation of an initiative. These differences, however, may have been due more to their personality and management style than their role and context.

As mentioned earlier, the principal described himself as a “big picture” person, so he mostly delegated the implementation of an initiative after having secured the necessary support and resources – which then freed him to move on to the next initiative! However, he realized the importance of setting up support systems and reporting expectations to ensure that the implementation would be successful.

In contrast, the business entrepreneur was more of a “hands-on” person – even if, as the company grew, she needed and learned to delegate more. She was very aware that problems with the implementation phase can kill an initiative, and specifically mentioned the importance of paying careful attention not only to implementation issues but also to on-going monitoring; furthermore, she emphasized the need to establish clear and concrete goals that can be regularly monitored – a valuable suggestion for entrepreneurial school leaders as well!

**Figure 6: Practices for “implementing and monitoring” identified**

<i>EDUCATION ENTREPRENEUR (Thompson)</i>	<i>ENTREPRENEURIAL PRINCIPAL (Spezio)</i>
<ul style="list-style-type: none"> <li>• Setting clear and concrete annual goals, and monitoring that they are achieved</li> </ul>	
<ul style="list-style-type: none"> <li>• Doing what it takes to get the job done well</li> </ul>	
	<ul style="list-style-type: none"> <li>• Delegating responsibilities to team members in charge of the implementation, while also establishing support systems and reporting expectations</li> </ul>

**6. Ensuring long-term sustainability (if and when appropriate) (see Figure 7)**

Although this is not true for all initiatives, the value added by an innovation is usually greater the more it can be sustained over time and does not depend on specific people. How can entrepreneurs ensure that this happens, especially after they are no longer directly involved in an initiative?

Both subjects reported using two main strategies. First, they tried to create “systems” that codified, and possibly institutionalized, what was needed to carry on a specific initiative, so that continuing the initiative would be less dependent on specific people staying on the staff or being assigned to the project. Second, they made sure there was always a capable and committed leader responsible for that initiative, whenever they or the previous leader left for any reason.

**Figure 7: Practices for “ensuring long-term sustainability” identified**

<i>EDUCATION ENTREPRENEUR (Thompson)</i>	<i>ENTREPRENEURIAL PRINCIPAL (Spezio)</i>
<ul style="list-style-type: none"> <li>• <b>Create systems that can be reproduced and maintained by others</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Create systems that can be reproduced and maintained by others</b></li> </ul>
<ul style="list-style-type: none"> <li>• <b>Selecting a leader to continue the initiative after you are no more in charge of it</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Selecting a leader to continue the initiative after you are no more in charge of it</b></li> </ul>
	<ul style="list-style-type: none"> <li>○ Secure on-going resources for the initiatives.</li> </ul>
<ul style="list-style-type: none"> <li>• Monitor that the initiatives stays at the cutting edge (and innovate as needed or stop the initiative)</li> </ul>	

## Conclusions

In an unprecedented era of challenges faced by K-12 education, it is critical to provide school leaders with tools that can assist them to become more effective in initiating and successfully implementing worthwhile innovations to better serve their students and their broader community. This study suggests that entrepreneurship can offer valuable concepts and strategies to do so.

First of all, our case-studies identified some interesting commonalities between the “entrepreneur” and the transformational principle. For example, both subjects took leadership roles in their respective arenas, developed very good listening skills, tried to efficiently shorten the decision-making processes, recognized the importance of securing key players in carrying out new innovations, yet were not stopped by the lack of human resources at the planning stage, were great at networking and initiating partnerships, and developed “systems” to ensure the sustainability of their most important innovations.

Even more importantly, based on our study we believe that school leaders can benefit from becoming aware of the practices that successful entrepreneurs have used at various stages of the process of initiating an innovation – as the comparison of our two case-studies suggests that most of these practices may be relevant in the context of education as well. At the same time, some of the differences we identified also suggest that educators will not be able to simply “borrow” from the literature on entrepreneurship without first carefully determining whether a specific practice may be bound to aspects of

the business setting that do not translate in an educational setting, and especially a public school setting. For example, given the different constraints in their respective organizations, the two subjects differed in terms of approaching external funding and human resources, as Thompson could negotiate debt, take on new partners, and create new positions in the company, while Spezio had access to fund-raising and had to follow union rules in hiring personnel. Most importantly, school leaders should always evaluate the specific practices and strategies they are considering for adoption against their vision and goals, and make the necessary adaptations.

This, in turn, suggests the value of developing some strategies and vehicles for introducing entrepreneurial concepts and practices to school leaders, as part of their initial training, mentoring and/or in-service professional development. It will be equally important, however, to work with existing school leaders, school personnel, policy-makers, and the public to recognize the importance of innovation and what it takes to undertake it successfully, in order to create expectations and conditions that are conducive to innovation and entrepreneurial practices.

### References

- Baron, R., & Shane, S. (2005). *Entrepreneurship: A process perspective*. Mason, OH: Thomson South-Western.
- Boyette, I., & Finlay, D. (1993). The emergence of the educational entrepreneur. *Long Range Planning*, 26, 114-122.
- Brockhaus, R. (1982). The psychology of the entrepreneur. In C. Kent, D. Sexton & K. Vesper (Eds.), *Encyclopedia of Entrepreneurship* (pp. 39-71). Englewood Cliffs, NJ: Prentice Hall.
- Brown, R., & Cornwall, J. (2000). *The entrepreneurial educator*. Lanham, MD: Scarecrow Press.
- Bygrave, W., & Hofer, C. (1991). Theorizing about entrepreneurship. *Entrepreneurship Theory and Practice*, 16, 13-22.
- Bygrave, W. & Zacharakis, A. (2004). *The Portable MBA in Entrepreneurship* (3<sup>rd</sup> Edition). Mississauga, Ontario: John Wiley & Sons.
- Casson, M. (1982). *The entrepreneur: An economic theory*. Oxford: Martin Robertson.

- Eyal, O., & Kark, R. (2004). How do transformational leaders transform organizations? A study of the relationship between leadership and entrepreneurship. *Leadership and Policy in Schools*, 3, 211-235.
- Fisher, J. L. & Koch, J.V.(2004). *The entrepreneurial college president*. Westport, CN: Praeger.
- Green, W. S. (2005). Entrepreneurship, education and freedom: Reflections on the Kauffman Campuses Initiative. Paper presented to the Ewing Marion Kauffman Foundation.
- Hentschke, G. C. and Caldwell, B.J. (2005), Entrepreneurial Leadership, in B. Davies (Ed.), *The Essentials of School Leadership* (pp.145-159), Thousand Oaks, CA: SAGE.
- Hess, F. H. (Ed.) (2006). *Educational entrepreneurship: Realities, challenges, possibilities*. Cambridge, MA: Harvard Education Press
- Hill, P. T. (2003). Entrepreneurship in K-12 public education. *Social entrepreneurship*, 2:1, 65-77.
- Leisey, D. and Lavaroni, C. (2000). *The Educational Entrepreneur: Making a Difference*. San Rafael, CA: Edupreneur Press.
- Leithwood, K. (1992). The move toward transformational leadership. *Educational Leadership*, 49 (5), 8-12.
- Leithwood, K., & Jantzi, D. (2005).Transformational leadership. In B. Davies (Ed.), *The essentials of school leadership* (pp. 31-43), Thousands Oaks, CA: SAGE.
- Kirzner, I. (1979). *Perception, opportunity and profit: Studies in entrepreneurship*. Chicago, IL: University of Chicago Press.
- McClelland, D., & Winter, D. (1969). *Motivating Economic Achievement*. New York, NY: Free Press.
- Schumpeter, J. (1934). *The theory of economic development*. Cambridge, MA: Harvard University Press.
- Saboe, L., Kantor, J., & Walsh, J. (2002). Cultivating Entrepreneurship. *Educational Leadership*, 59, 80-82.
- Thornton, P. (1999). The sociology of entrepreneurship. *Annual Review of Sociology*, 25, 19-46.

Timmons, J. (2004). Opportunity recognition. In Bygrave, W. & Zacharakis, A. (Eds.), *The portable MBA in entrepreneurship* (pp. 29-70). New York, NY: John Wiley & Sons.

Vecchio, R. (2003). Entrepreneurship and leadership: Common trends and common threads. *Human Resource Management Review*, 13, 303-327.

Yin, R. (2003). *Case study research: Design and methods* (3<sup>rd</sup> edition). Thousand Oaks, CA: Sage Publications.

### Appendix. Coding Scheme Used for All Case-studies

1. Primary Subject Life & Professional History
2. Description of Initiative 1
  1. How Developed/Context
  2. Value Added
  3. Emergent Initiatives (that developed out of this)
  4. Success of the Initiative/Outcomes
  5. Sustainability
3. Description of Initiative 2
  1. How Developed/Context
  2. Value Added
  3. Emergent Initiatives (that developed out of this)
  4. Success of the Initiative/Outcomes
  5. Sustainability/Success
4. Description of Initiative 3
  1. How Developed/Context
  2. Value Added
  3. Emergent Initiatives (that developed out of this)
  4. Success of the Initiative/Outcomes
  5. Sustainability/Success
5. Description of Initiative 4
  1. How Developed/Context
  2. Value Added
  3. Emergent Initiatives (that developed out of this)
  4. Success of the Initiative/Outcomes
  5. Sustainability/Success
6. Primary Subject's Entrepreneurial Process
  1. Recognizing/Evaluating Opportunity
  2. Motivation/Personal Benefit
  3. Securing Resources
  4. Planning
  5. Implementation
  6. Challenges (at any point in the process)
7. Primary Subject's Characteristics and Practices
  1. Vision/Philosophy
  2. Marketing
  3. Finances
  4. Personnel/Team Building
  5. Risk Assessment
  6. Planning for/Dealing with Growth
  7. Decision-making
  8. Problem Solving
  9. Developing an Entrepreneurial Culture
  10. Building on Networks/Connections (General Networking)
  11. Communication
  12. Passion
  13. Persistency
8. Collaborators
9. Organizational Characteristics (of Primary Subject's Organizations)
  1. Facilitators
  2. Obstacles/hindrances
10. Other