Literature Review: Incubator Programs

Strategy 3: Objective 7

Virtual School Readiness Incubator Project

The Florida Institute of Education

at the University of North Florida

June 2007

This report is funded, in part, by the Office of Postsecondary Education, U.S. Department of Education as part of the Virtual School Readiness Incubator Project. The content of this report does not necessarily reflect the views or policies or imply endorsement by the U.S. Department of Education.

Background for the Review

Incubation is a support process that nurtures the development of beginning and emerging companies through a range of resources and services. The primary goal of a business incubator is to produce organizations that will leave the incubation program as a self-supporting organization during the start-up period when they are most vulnerable (Barrow, 2001, p. 14; Aernoudt, 2004; Hackett & Dilts, 2004). The primary reason for beginning and emerging organizations to join an incubator is to build successful enterprises and to connect and network within their community (Tötterman & Sten, 2005). Graduates of an incubator will potentially create jobs, revitalize neighborhoods, commercialize new technologies, and strengthen the local economy.

Incubation programs are distinguished by a commitment to incorporate industry best practices to small or emergent companies (Rice & Matthews, 1995; Barrow, 2001, pp. 5-6). Business incubators reduce the risk of small business failures and assist in the development and growth of existing companies (Allen & Rahman, 1985). Critical to the definition of an incubator is the technical assistance and the management consulting adapted to these organizations. Typically, incubators provide access to office space with flexible leases that offer basic business services and equipment. The incubator will have on hand technology support services and financial assistance necessary for company growth. In addition, a ready supply of clients is essential for long-term sustenance of the incubator project (Barrow, 2001,:Tötterman & Sten, 2005; Perry Interview, 4/11/07; Rossiter Interview, 3/22/07). Facilities built to nurture business survival and enhance growth prospects not only increase opportunities and prospects available to incubator clients, but increase the long-term sustainability and the respect of the community to the incubator.

The earliest incubation programs focused on a variety of technology and service firms. In fact, it is generally accepted that the earliest business incubator in the United States was established in 1959 at Batavia, New York (Hackett & Dilts, 2004). New incubator programs have targeted programs to support the needs of women and minorities, telecommunications, and education (Allen & Rahman, 1985). The incubation model has been adapted to meet a variety of needs, from promoting commercialization of university technologies to increasing employment in economically distressed communities to serving as an investment vehicle (NBIA, 2007).

The demand for early stage small businesses seeking to improve their opportunities must deliver results against the outcomes that the stakeholders in the community need and want. A broad range of supporting stakeholders in the community such as state and local governments, business and community based groups, and regional development organizations, look to business incubators as a method to curb risk not only to the companies that they serve, but also to the neighborhoods in which they are located. As a consequence, incubators have generated a high level of political and economic expectations in relation to their performance (Vedovello & Godinho, 2003). Therefore, incubator programs and their activities are integrated into the fabric of the community and its broader economic development goals and strategies (Perry Interview, 4/11/07).

Although some incubator models were designed in the late 1990s and early 2000 as a financial venture, incubators were not and should not be designed to make money (Barrow, 2001, Rothaermel & Thursby, 2005; Traynham Interview, 3/6/07). Many times, young companies enrolled in an incubator program may have had a solid business plan and/or exceptional business strategy to at least initiate the preliminary course of action by the proprietor. However, the entrepreneur may not have had the resources or the drive sufficient to

last the amount of time (and money) required to properly nurture the business in its developing stages (Barrow, 2001; Hacket & Dilts, 2004). The risk involved in moving these companies to thrive and become self-sufficient is many times far outweighed by the probability of their failing or taking longer than expected to become autonomous. A good incubator recognizes that along with the facilities, supplies, and instruction in best business practices they offer, a sense of community and belonging is critical to the clientele they serve. An incubator motivated by money may not always be the right choice for companies that could take longer to mature.

To lay the foundation for an effective incubation program, developers must invest time and money in a feasibility study (Logue, 2000). An effective study will help determine whether the proposed project has a sound financial base and strong community support, essential in the success of an incubator. Government subsidies for well-managed business incubation programs represent strong investments in local and regional economies. Research has shown that every dollar of estimated public investment provided to clients and graduates of the National Business Incubation Association (NBIA)—a private, nonprofit 501(c)(3) membership organization with a board of directors representing leading business incubators—generates approximately $30 in local tax revenue alone (NBIA, 2007). In 1996, NBIA's board of directors developed a set of industry guidelines to help incubator managers better serve their clients. Since that time, NBIA research has consistently shown that incubation programs that adhere to the principles and best practices of successful business incubation generally outperform those that do not.

Virtual Incubators

The term incubator is becoming more and more of an "umbrella word" covering a diverse initiative to facilitate new start-ups and their subsequent growth (Aernoudt, 2004; Bøllingtoft & Ulhøi, 2005). Initially in the 1980s, incubators referred to organization providing managed

workspaces within science parks and enterprise estates and centers (Folinas, Pastos, Manthou, & Vlachopoulou, 2006). However, in the past decade with the full exploitation of new economy practices and the rapid increases in technology— especially the Internet—the virtual incubation model has emerged.

Virtual incubators are typically hosted by a university or a research center and are characterized by the ability to operate both within and without a building (Scaramuzzi, 2002). When these models operate as "incubators without walls" they serve their clients as a virtual facility or resource within the Internet and provide services within an e- learning methodology (Hackett & Dilts, 2004; Folinas, Pastos, Manthou, & Vlachopoulou, 2006). It can be argued that lack of shared physical space of a traditional incubator would hinder the primary reason for clients to join an incubator—to network and build relationships. However, Alan Rossiter, CEO of North Florida Enterprise, emphasized that individuals motivated to participate in an incubator are doing so not for networking with other clients but for financial and knowledge reasons (2007). Therefore, with the ease and lower costs of current technological advancements, a virtual incubator model is advantageous in an assortment of industries.

Two principles characterize effective incubation, in a traditional or virtual sense. First, an incubator seeks to have a positive impact on its community's economic health by maximizing the success of emerging companies. Secondly, the incubator itself is a dynamic model of a sustainable, efficient business operation (Barrow, 2001). A virtual incubator model that uses the Internet for customized instruction, support, and services can be an effective method for its clients (Folinas, Pastos, Manthou, & Vlachopoulou, 2006). However, for this learning environment to be successful, incubator clientele must be computer literate and comfortable with communicating online. In addition, clients that are seeking opportunities to network with

financial institutions or with the community; a virtual incubator model is probably not the correct match for their needs. Virtual incubators are an excellent choice for existing small businesses, such as child care centers, which desire additional training and assistance in best practices for business and early child care.

Recent Reviews of Evidence

Current early child care programs are charged with helping to prepare all children to come to school ready to read and ready to learn. At present, "readiness gaps" persist between low-income and higher-income children entering kindergarten. As a result, "achievement gaps" exist and continue to widen as these children progress throughout their academic career (Florida Institute of Education, 2006). To ensure that all children are capable of being school ready, all children must begin their academic career with an equal chance to succeed.

Both experimental and quasi-experimental studies have recognized the value of early child care programs with an educational focus (Fashola, 1998). Research from rigorous studies has concluded that high-quality prekindergarten programs are a practical, cost-effective strategy for improving student achievement, especially for those children that are at-risk of academic failure (Florida Institute of Education, 2006). The skills and development of children are strongly influenced by their families and through their interactions among individuals outside their home before entering kindergarten. To ensure that all children are ready to start school, the quality of experiences provided by their families, early environments, schools, and communities must be of high-quality.

The large number of children involved in child care centers and family care homes has increased the awareness of the importance that these facilities have in affecting children's development and learning. Recognizing this connection to the future success of all children in school, the Early Learning Coalition of Duval (ELC) in collaboration with the

Mayor's early literacy initiative, developed a framework for a comprehensive quality support system for existing child care practitioners within the community. This framework provides child care practitioners with access to new research that can be put into practice in the classroom.

Objectives of This Review

The primary goal of the Virtual School Readiness Incubator Model (VSRIM) is to accelerate the formation, growth, and success rates of early child care and learning programs in our community. This review will help to shape current efforts in the design of capacity-building efforts and support for current early child care centers. This review will draw upon research and best practices from business and education to transform existing early childhood programs into consistently rated high-quality programs to improve all children's readiness for school. To accomplish this task, this review is committed to address the qualities that are derived from existing literature concerned with the best business practices of business incubator models and charter schools to improve young children's school readiness. This review will expand the knowledge base for resources and support for early child care center teachers and staff to create optimum conditions for the future academic success of their young students.

Critical to the implementation definition of an incubator is the technical assistance and the management consulting adapted to these organizations. Typically, incubators provide access to office space with flexible leases that offer basic business services and equipment. In addition, the incubator will have technology support services and financial assistance necessary for company growth. The earliest incubation programs focused on a variety of technology and service firms. However, modern incubators have targeted programs to support the needs of women and minorities, telecommunications, and education (NBIA, 2007). This incubation model has been adapted to meet a variety of needs, from promoting commercialization of university technologies to increasing employment in economically distressed communities to serving as an

investment vehicle (Barrow, 2001).

Development of the Virtual School Readiness Incubator Model (VSRIM) used current business incubators and charter school models to learn and apply best practices and lessons learned for success. Incubation is a support process that nurtures the development of beginning and emergent companies through a range of resources and services. The primary goal of business incubators is to produce organizations that will leave the incubation program as a self-supporting organization. The VSRIM collaborative will call upon four entities—the family, child care practitioners, formal schooling, and the community—to play critical roles in the well-being and future success of children.

Methodology

The VSRIM designed a capacity-building and support structure based upon research and best practices from business and education to identify knowledge, skills, strategies, and materials essential to high-performing learning communities. Through the VSRIM support, child care practitioners can improve student achievement,, increase meaningful family involvement, receive technical assistance, and build a shared vision of high-quality school readiness among organizations in their communities.

The agenda driving VSRIM will include the following five questions:

1. What are the key elements for high-quality readiness program and what do they look like in real-world settings that serve at-risk children?
2. What kind and what level of intensity of support is needed for child care center practitioners aspiring to transform current programs into high-quality, high- performing programs?
3. What research-based tools, strategies, and materials are needed to achieve this goal and

what needs to be done to increase access to needed tools, strategies, and support?

4. How can existing resources be leveraged and accessible systems of support be improved?
5. How will efforts be assessed and results used to improve both individual program performance and the performance of the readiness support system itself? (FIE, 2006)

Characteristics of the Population

For child care centers to become providers of consistently high-quality early care and learning, early child care practitioners need concrete examples from the real world. The Don Brewer Early Learning and Professional Development Center, located in a low- income neighborhood, will host the ELVIM. The Brewer Center strives to be a model for serving at-risk children and is aligned with VSRIM's mission to serve low-income families and to educate preschool-age children. Increased competency for the directors to sustain meaningful family involvement, create and uphold high quality interactions between children and parents

Types of Study

Three business incubators with diverse organizational models were investigated:

1. Enterprise North Florida – a high income, technologically-driven and specific business model located in one location in Jacksonville, Florida, that is privately owned.
2. University of Central Florida – a technologically-driven and specific business model with several locations located in the greater Orlando, Florida, area that is supported by the University of Central Florida.
3. Beaver Street Enterprises – a neighborhood-specific business model with one location situated in an economically distressed area in Jacksonville, Florida.

	North Florida Enterprise	UCF	Beaver Street
Mission	To accelerate the creation and growth of emerging high-potential companies in North Florida.	To facilitate smarter, faster startup and growth of emerging technology companies so those companies will become financially successful, high growth companies in the community.	To support and foster the entrepreneurial process, helping to increase survival rates for innovative startup companies in the downtown business sector.
Business model	Tax-exempt private corporation	University-driven community partnership	Developed and managed by FRESHMINISTRIES and Core City Business Incubators, Inc., a nonprofit group
Clients served	Large capital start-ups	Technology driven	Neighborhood specific
Recruitment of clients	Client-driven and referral	Client-driven and referral	Client-driven and referral
Current number of clients	38	40	19
Average length of client incubation	Projected 1 to 2 years (average stay can be shorter)	Projected 1 1/2 to 3 years (average stay is 3 years)	Projected 3 years (and up to 5 years) average stay 4 years
Prerequisites for acceptance	Solid business/innovative idea	Submit Application, Complete Excellence in Entrepreneurship, Present to UCFTI Selection Committee	Solid business plan, all tax and financial records, presentation to selection committee
Graduation requirements	Proven sustainability/longevity in the industry	Proven sustainability/longevity in the industry	Proven sustainability in the community
Number of Graduates	13	21	1
Major sources of funding	Angels, venture capitalists, banks, (Fuel for the Entrepreneurial Engine, The North Florida Venture Capital Network, Springboard Capital II, LLC, AmSouth Bank, The Clarkson Company, Coldwell Banker Commercial Nicholson- Williams Realty, Holland & Knight, CFO Services, Inc., Peak-10, SunTrust Bank, Florida East Coast Industries)	Grants, banks, (Ballast Point Ventures, Banyan Mezzanine, Black Business Investment Fund, Emergent Growth Fund, Hispanic Business Investment Fund, Florida Black Business Investment Board, Florida First Capital Finance Corporation, Florida Venture Forum, Inflexion Partners, Lovett Miller, Silicon Valley Bank, Springboard Capital)	Grants, banks,

Although the business incubators described above utilize different business models and serve different clients, each incubator has similar infrastructures to increase interest in private and political involvement and support, stimulate client activity, and establish standards that are flexible for incubator growth and development. Focusing on the process of incubation rather than on the incubator facility and its design will help draw attention to the underlying attributes of successful new venture development in an incubator environment (Hackett & Dilts, 2004).

The set of guiding principles derived from the research review on business model incubators is as follows:

- Develop a screening process.
- Provide a clear vision and expected outcomes for clients.
- Develop a plan for support and assistance that is aligned with the phases of growth and development of a new center.
- Provide consistent mentoring.
- Ensure diversity in committee membership.
- Focus on networking.
- Celebrate a center's completion of the incubator process through a recognition ceremony.

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