YOUTH ENTREPRENEURSHIP:
Theory, Practice and Field Development

A Background Paper
Prepared for the W. K. Kellogg Foundation
Youth and Education Unit

By

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SECTION I – EXECUTIVE SUMMARY

This background paper communicates the results from a comprehensive scan of youth entrepreneurship theory, practice and policy conducted by Integral Assets Consulting for the W.K. Kellogg Foundation.

The conclusions reported in the following analysis are informed by three principal trends:

- The ***failure of traditional educational experiences*** to connect youth to real-life experience and the boredom (as well as lack of engagement, energy and expectations) that accompanies such experiences.

- The ***changing nature of work*** as core elements of the industrial economy continue to erode and the foundations of the innovation economy (including instability, rapid change and cognitive complexity), increasingly encompass all sectors of the modern workforce.

- The ***potential for entrepreneurial attributes and skills to be enhanced*** through classroom learning and learning outside the traditional classroom in experiential learning environments

Our key findings are summarized below.

Summary of Strategic Hypotheses About the Youth Entrepreneurship Field

- ***Entrepreneurs are a vital component of our economy.*** Entrepreneurs are defined broadly as change agents that use innovation to exploit opportunity, evaluate risks and create a valuable service, product or system. Their efforts account for the majority of job growth in the U.S. economy. Entrepreneurship accounts for nearly one third of the difference in national economic growth between countries (The Global Entrepreneurship Monitor). According to Timmons, small entrepreneurs "are responsible for more than half of all innovations -- 67% of inventions and 95% of radical innovations since World War II" (1998, 11).

- ***The maturation of the innovation economy and the changing nature of work necessitate the presence of entrepreneurial skills and attributes in the workplace.*** Employers currently cite a lack of sufficient skilled labor as the single greatest challenge facing their business. The need for innovativeness and creativity, as well as the ability to transform ideas into reality, requires a new level of proficiency in entrepreneurial skills. Self-employment and entrepreneurship are increasing – in 1998, 14 million Americans were self-employed, 8.3 million were independent contractors, 2.3 million worked through temporary agencies and 74 million received IRS Form1099 (SBA).

- ***There is a crisis in K-12 education that impedes youth from gaining the skills necessary to survive in the innovation economy.*** The traditional school system is failing to meet the needs of youth in this segment, in several dimensions:

    - Overall, the system fails to engage vulnerable youth in learning experiences they find meaningful and challenging. Boredom is rampant in the system and a major cause of high dropout rates.
    - The system is not designed to develop knowledge, skills and attitudes that are important to entrepreneurial success. In even the best school districts, the penetration rate on entrepreneurial education rarely exceeds 2%.
    - Studies by the Gates Foundation and others show a decisive link between the decision to drop out and the lack of challenge and connection to real-life experience faced by youth in the public school system. 81% of survey respondents in the Gates Foundation study said that if schools provided opportunities for real-world learning (internships, service learning projects, and other opportunities), it would have improved the students' chances of graduating from high school.

- ***Youth exhibit a strong desire to become entrepreneurs.*** Between six and seven out of ten youth in extensive Gallup Polls indicated that they were interested in starting their own enterprise. This potential, however, is rarely actualized. The Global Entrepreneurship Monitor reports that entrepreneurial activity among 18 to 24 year olds accounts for only 10% of total entrepreneurial activity in the US.

- ***Increasing levels of minority and female entrepreneurship is important to the social and economic development of our society.*** The number of both women and minority-owned firms has continued to increase over the past decade, yet these firms significantly lag behind their white male counterparts in number and revenue.

- ***Although around 70% of youth say they are interested in starting a business, 85% of students said they had been taught "practically nothing about" or "very little about" business and how it works.*** Youth entrepreneurship programs have the demonstrated ability to capitalize on this potential. Findings from our literature scan and field visits support this assertion.

- ***Successful youth entrepreneurship programs approach learning in an interactive, experiential manner that connects real-life economic decisions to the institutional learning experience.*** These programs incorporate technology, mentoring, and planning and startup of simulated

and real businesses to produce tangible results. Youth graduating from these programs exhibit higher levels of achievement, are more prepared to take calculated risks and have increased economic opportunities.

- ***Entrepreneurship is a rewarding and desirable career.*** Blanchflower and Oswald state that the young self-employed in OECD countries reported markedly greater well being than wage employees. Job satisfaction, life-satisfaction and reported happiness levels are all higher than for wage workers with identical personal characteristics. “For whatever exact psychological reasons, self-employed young men and women are unusually satisfied with their lives” (Blachflower).

- ***Youth entrepreneurship programs can teach entrepreneurship and produce real progress towards social and economic development.*** The performance evidence is that properly designed youth entrepreneurship programs can improve youth educational achievement and practical skill development. The data on actual enterprise creation and asset/income development for young entrepreneurs is less conclusive.

- ***Real-life, experiential learning is crucial to the development of entrepreneurial attributes and skills.*** Entrepreneurship education cannot exist and succeed in a traditional K-12 environment and must be supported by real-life applications in order to be effective.

- ***The field of youth entrepreneurship is ripe for investment.*** Our research shows that many organizations have been working to develop the field and that, from their experiences, patterns of best practices continue to emerge. Currently at least 650 non-profit programs are operating to provide loans, training and/or technical assistance to disadvantaged entrepreneurs (Aspen Institute 2002). The following factors indicate that the field is ready for a more focused national philanthropic investment strategy:

    - There are emerging strands of a shared framework for thinking about youth entrepreneurship (although the frame is not yet fully coherent).
    - There is a core infrastructure of national NGOs focused on the issue.
    - There is a small network of philanthropic funders committed to long-term investment in the field.
    - There are early-stage examples of shared standards and practices (although many still consider their products “proprietary”).
    - Entrepreneurship is increasingly becoming a “standard” element of state government economic development strategies.

- There are some emerging examples of leading edge state youth entrepreneurship policies.
- There are many place-based "prototypes" for effective community-based programming.

- ***Some lessons about best practice are becoming clear.*** Practitioners are beginning to be able to articulate and demonstrate some of the practices that are most likely to lead to program success. Some that we observed in the field include the following:

  - Experiential learning. Experiential learning is core to developing entrepreneurial knowledge, skills and attitudes. While classroom learning can play a role in this work, the core experience needs to be built around authentic adult relationships and role models; hands-on experience; and exposure to real economic risks. Entrepreneurship development is not a "spectator sport."
  - High expectations. A culture of high expectations and belief in a young person's ability to succeed ("efficacy") are critical to success.
  - Community connections**.** Programs need to be deeply embedded in, and connected to, the communities in which they are operating.
  - Clarity about outcomes. It is critical to be very clear about the targeted outcomes (e.g. academic success vs. wealth creation) and to tailor programming to the targeted outcome.
  - Realism about youth enterprise development. It is important to be very modest about expectations for sustainable enterprise development in young adults. The percent of the youth population that is ready to conceive, create and operate a working business enterprise is very small.

- ***A number of critical challenges currently hinder the ability of youth entrepreneurship programming to have an impact at any level of scale on the lives of disadvantaged youth*.** Program designs need to be structured to address the following challenges:

  - A lack of disciplined frameworks to guide the field's development.
  - Difficulties of penetrating the public school as a delivery environment:
    - Resistance to experiential learning in schools.
    - Limited availability of teachers who are competent to teach entrepreneurship.
    - Lack of school connections to the community.
  - The lack of strategic system-wide models in communities.
  - Highly subsidized and expensive programming models and lack of access to sustainable funding.
  - The need to integrate and align youth entrepreneurship with other methods for youth capacity building.

- ***There are several potential areas for investments that would advance the youth entrepreneurship practice field.*** These include the following:

    - Development of more rigorous and integrated practice frameworks.
    - Development of national practice standards.
    - Research on outcomes.
    - Development of national-scale programmatic initiatives.
    - Testing and development of local prototype programs with scaling potential.
    - Testing of comprehensive community-based strategies.
    - Testing new strategies for youth enterprise development and wealth creation.
    - Development of a more comprehensive and integrated state and federal policy framework for youth entrepreneurship.

SECTION II – DEFINITIONS AND CONTEXT

It is important to have a precise definition of what is meant by "youth entrepreneurship" when framing practice in the field. There are many different aspects of entrepreneurship, and youth entrepreneurship is one subset of a much larger field of practice. The material in this section seeks to address the following questions:

- What is an entrepreneur?
- What is entrepreneurship?
- What is an entrepreneurial enterprise?
- What are some of the unfounded myths about entrepreneurs and entrepreneurial enterprises?
- What is youth entrepreneurship?
- What is entrepreneurship education?

Some of these definitions are summarized in the table below.

Term	Definitions
Entrepreneurs	*"… a person who sees an opportunity and acts to create an enterprise around that opportunity."* *"Essential agents of change who accelerate the generation, application and spread of innovative ideas."*
Entrepreneurial Enterprises	Enterprises that have explosive growth potential due to the uniqueness of their strategy, product or service.
Youth Entrepreneurship	Youth entrepreneurship involves the development of entrepreneurial attitudes, skills and opportunities for young people, from middle school through young adult hood (e.g., 25 yrs old).
Entrepreneurship Education	Entrepreneurship education involves the use of structured learning environments and support tools to help individuals develop entrepreneurial skills and become entrepreneurs.

What is an Entrepreneur? What is Entrepreneurship?

People have very different ideas when they think about an "entrepreneur." For most individuals, the term connotes both a way of thinking and acting, as well as the specific role of starting and running an enterprise.

Below are some of the more useful definitions of entrepreneurship we discovered in the literature:

- *"Innovation is the specific tool of entrepreneurs, the means by which they exploit change as an opportunity for a different business or a different*

service. It is capable of being presented as a discipline, capable of being learned, capable of being practiced…Entrepreneurship rests on a theory of economy and society. The theory sees changes as normal and indeed healthy. And it sees the major task in society – and especially in the economy – as doing something different rather than doing better what is already being done. This is basically what Say, two hundred years ago, meant when he coined the term entrepreneur. It was intended as a manifesto and as a declaration of dissent: the entrepreneur upsets and disorganizes. As Joseph Schumpeter formulated it, his task is 'creative destruction.'" (Drucker 1985 p. 20; 26)

- *"… a person who sees an opportunity and acts to create an enterprise around that opportunity."* (Jay Kayne, Miami University)

- *"Essential agents of change who accelerate the generation, application and spread of innovative ideas and in doing so … not only ensure efficient use of resources, but also expand the boundaries of economic activity."* (GEM 2000-6)

- *An entrepreneur is someone who can "locate new ideas and put them into effect… he cannot allow things to get into a rut and for him today's practice is never good enough for tomorrow."* (Baumol, 1968)

- *"Their self confidence and general optimism seems to translate into a view that the impossible just 'takes a little longer.'"* (Timmons 1989)

The most common elements in most definitions of entrepreneurship perceive entrepreneurs as:

- Change agents
- Exploiters of opportunity
- Accelerators of innovation
- Developers of enterprises

It is important to understand that entrepreneurship is a concept that goes well beyond creating a new enterprise. It is a way of thinking, acting and being:

- *"An "entrepreneurial perspective" can be developed in individuals. This perspective can be exhibited inside or outside an organization, in profit or not-for-profit enterprises, and in business or non-business activities for the purpose of bringing forth creative ideas. Thus, entrepreneurship is an integrated concept that permeates an individual's business in an innovative manner. It is this perspective that has revolutionized the way business is conducted at every level and in every country."* (Kuratko 2003, 2)

- *"Entrepreneurship should be defined in the broadest possible context as a process of creative change. It may result in the formation of new business, but then again it may not. The purpose of entrepreneurship education should be to foster creative activity and independent action wherever it is needed."* (Kent 1990, 6)

What Is An Entrepreneurial Enterprise?

Distinctions are often made between *entrepreneurial enterprises* and other forms of small businesses. Many thinkers in the field see entrepreneurial enterprises as a sub-set of the larger sector of small businesses. In this context, business enterprises can be divided into three categories:

- Entrepreneurial enterprises (what David Birch refers to as "gazelles" – see below). These are businesses with potential for high growth.
- Small businesses. These are enterprises, many of which are managed for income growth, not asset growth, that do not seek or have the potential for exponential growth. (Birch refers to these companies as "mice.") The traditional size limit for small businesses is 500 or fewer employees.
- Micro-enterprises. These are life-style oriented businesses that typically have five or fewer employees.

(These distinctions are not critical to youth entrepreneurs, other than for youth to understand their differences and the choices of risk and lifestyle that each type of enterprise is associated with.)

Entrepreneurial Enterprises (aka "Gazelles")

Entrepreneurial enterprises assemble resources in order to capitalize on opportunities and create innovative new products, services or strategies. Entrepreneurial enterprises differ from other small businesses in that they possess exponential growth potential due to the uniqueness of their proposed strategy, product or service. In contrast, small businesses or micro-enterprises are started to create income or family employment.

Despite their impressive growth performance, these companies face what Birch refers to as constant "terror, and there are very few people who can deal with terror on a continuous basis year in and year out." The capital needs of such companies are greater than small businesses and remain that way throughout the life of the enterprise. High growth rates over extended periods and the necessity of capturing fleeting windows of opportunity can stress both human and capital resources. Few companies are able to cope with the demands of such high-growth and 50% of such businesses slip out of the gazelle category each year.

Although only accounting for between 3% and 10% of US businesses, entrepreneurial growth companies play an influential role in the innovation economy. The National Commission on Entrepreneurship (NCOE) determined that the *Inc. 500* firms (the nation's 500 fastest growing companies) grow at an average rate of 1,312% over five years. New businesses that grow at least 20% annually for four straight years with revenues of at least $100,000 annually (David Birch's formal definition of a "gazelle"), account for nearly two-thirds of all net new jobs in the U.S. (NCOE)

Small Businesses (aka "Mice")

According to the U.S. Small Business Administration, small companies[1] created 76.5% of net new jobs from 1990 to 1995 and 75.8% from 1996 to 1997. Birch states, "The last time we looked--for the period 1994 to 1998--the largest firms lost two million jobs in aggregate. Over the same period small companies created ten million jobs." According to data from the SBA, small businesses with fewer than 500 employees are able to capture opportunities faster than large enterprises. They currently make up nearly 97% of all U.S. exporting firms and companies with fewer than 20 employees are the fastest growing both in number of exporters and in number of export dollars. Additionally, analysts note that "mice," while oriented towards income creation, still have the potential to become gazelles. 97% of gazelles go into their growth stage with less than 100 employees and, like Walmart, many remain mice for an extended period before reaching the high growth levels characteristic of gazelles.

Micro-enterprises (aka "Baby Mice")

Micro-enterprises are another form of what Birch calls mice and are usually defined as businesses with five or fewer employees that require less than $25,000 in start-up funds. These are also often referred to as "Mom and Pop" or "lifestyle" businesses. The most important difference between entrepreneurial enterprises and micro-enterprises is that the former is born in response to an economic *opportunity* while the latter is born out of *necessity* for income generation. Often microenterprise owners are unable to achieve full economic independence through the microenterprise. Instead, they operate their business as a means to increase their management skills and asset base, or they subsist by operating multiple micro-businesses.

The object of most microenterprise development programs is to create a viable employment option for the unemployed and underemployed through the development of business and entrepreneurial skills and the provision of access to often-restricted resources such as credit and business counseling. We believe that this strategy maintains the objective of the Foundation for this project and

[1] Definitions for small businesses vary across industry according to employee numbers and revenues, and can be found at http://www.sba.gov/size/indexfaqs.html.

therefore consider many aspects of microenterprise development compatible with entrepreneurship development.

Although not generally targeted towards youth populations, microenterprise development programs have made significant strides toward poverty alleviation in low-income communities. The Aspen Institute found that microentrepreneurs reduced their reliance on government assistance by 61% (1999). The reduction in benefits received averaged $1700 and more than half of the studies' participants were able to lift their families out of poverty with the money from their business. Additional studies by the Center for Social Development and others report that almost all business owners participating in microenterprise development programs increased their incomes after completing the programs.

Many microenterprise programs in the US resemble highly successful efforts to develop small businesses overseas. Domestic efforts to replicate international programs have proven to be successful as well yet face considerably higher barriers in developed economies due to increased regulation, competition and capital requirements.

The International Dimension of Micro-Enterprise

In 2000, the United Nations Millennium Declaration recognized that more people die each year from poverty than from any form of conflict, and thereafter identified overcoming poverty as the single greatest challenge to the new century. The World Bank estimates that as of 2004, 1.1 billion lived below the international poverty level of one dollar per day[2], accounting for approximately 27.9% of all people living in nations with low and middle-income economies. An additional 3 billion live on less than two dollars per day. Also during 2004, the Consultative Group for Advancement of the Poor (CGAP) estimated that around 500 million people worldwide desperately needed access to financial services. Microfinance and microenterprise development programs overseas seek to remedy the bleak circumstances facing nascent entrepreneurs in these areas of the world.

Often functioning in collaboration with widely acclaimed microcredit organizations such as the Grameen Bank or ACCION International, microenterprise development programs overseas have proven the ability of enterprise development to alleviate poverty. International microenterprise development focuses primarily on the problem of capital access and includes microenterprise development training as an add-on activity. The businesses that international microfinance and microenterprise help to start are mostly small and driven by the need for income generation.

Microcredit institutions report average repayment rates that generally exceed 95% and serve clientele bases that are nearly 100% female. Encouragingly, in

[2] Adjusted for purchasing power parity.

2001, CGAP observed 2,186 Microfinance Institutions (MFIs) reaching 54,904,102 poor and of those 59.4 million, 26.8 million are classified as the "poorest" living off less than $1 per day. CGAP also reported that more than 500 million of the world's economically active poor people run profitable micro or small enterprises (www.uncdf.org). Unitus (a microfinance investor) observes that as of 2005, MFIs now account for over $7 billion in outstanding loans.

According to estimates from the International Labor Organization (ILO), 300 million young people are unemployed or underemployed and 80% of these youth live in developing or transition economies. Although the ILO estimates that 20% of the young unemployed have the potential to become entrepreneurs, less than 5% actually do (Youth Business International). Some of these programs, such as the ILO's Youth Business International program, target youth specifically, yet most cater to adults and restrict participation to persons over 18 years of age.

Impact of Entrepreneurs on the Economy

Whether we are speaking about gazelles or mice, entrepreneurs influence our economy in a significant way. As economist Zoltan Acs reminds us "New jobs come from new establishments, whether they're independent firms or part of large multidivisional firms." These new establishments are the product of innovation, which starts with entrepreneurship.

The SBA Office of Advocacy released a report in April, 2005 which brings to light the contribution of entrepreneurship to our communities. It notes that the most entrepreneurial regions had better local economies from 1990 to 2001 compared to the least entrepreneurial. These areas exhibited:

- 125% higher employment growth,
- 58% higher wage growth and
- 109% higher productivity.

The areas were also associated with higher levels of technology development:

- 54% more R&D expenditures,
- 67% more patents per labor force participant,
- 63% higher percentage of high tech establishments and
- 42% higher portion of college educated population.

In summary, "Econometric models showed regional firm births to be positively correlated with innovation and regional growth (employment, wage and productivity). Economic models also showed regional innovation to be positively correlated with regional employment growth." (SBA 2005)

Common Myths about Entrepreneurship

There are several commonly held "myths" surrounding entrepreneurs and entrepreneurial enterprises. They are summarized in the table below:[3]

The Myth	The Reality
The Risk Taking Myth: *"Most successful entrepreneurs take wild, uncalculated risks in starting their companies."*	• "Successful innovators are conservative. They have to be. They are not 'risk-focused'; they are 'opportunity focused.'" (Drucker p. 140) • The highest levels of risk to the founders come much later in the life of the business – not at the startup. Others take on the majority of the risks at the beginning (i.e. family, customers, suppliers) • During later stages risks for the entrepreneur are much higher as she seeks to acquire increased investment and risks forfeiting the accomplishments of the enterprise • The ability to persuade others to take on risks is key to the success of a entrepreneurial enterprise
The High-Tech Invention Myth: "*Most successful entrepreneurs start their companies with a break-through invention – usually technological in nature."*	• Creating a distinct product or service is key yet rarely depends on high tech innovation (11) • 2 out of 3 companies listed in the *Inc. 500* magazine's list of the 500 fastest growing companies in the US are not technologically based (13) "You can't get a Starbuck's latté on the Internet" (Bhidé) • "Exceptional execution of an ordinary idea" was cited as the key to success for 9 out of 10 successful entrepreneurs (Bhidé) • Only 6 out of 100 successful entrepreneurs interviewed by Bhidé claimed to have had a unique idea (13) • Being first or second to dominate a market is often key, i.e. Starbuck's
The Expert Myth: *"Most successful entrepreneurs have strong track records and years of experience in their industries."*	• "The individuals that face high opportunity costs… usually do not start small, bootstrapped ventures," (Bhidé 14) • 40% of *Inc. 500* founders had no prior experience in the industry they were entering according to Bhidé (14)

The Venture Capital Myth: *"Most successful entrepreneurs start their companies with millions in venture capital to develop their idea, buy supplies, and hire employees."*	• In 1999 fewer than 4,000 of the roughly 700,000 new businesses created were venture capital funded – less than 1% (18)
	• Bhidé notes that 26% of successful businesses he studied started out with less than $5,000
	• 3 out of 4 entrepreneurs surveyed by Bhidé did not even attempt to secure venture capital
	• Examples of initial funding:
	  ○ Rolling Stone -$7,500
	  ○ Valdawn (watch company with $7 million in yearly revenue) - $1,000
	According to the Global Entrepreneurship Monitor Global Report in 2004:
	• Entrepreneurs themselves provide 65.8% of the start-up capital

[3] Most of these myths come from an analysis by the National Commission on Entrepreneurship.

	• Largely informal investors supply the remaining 34.2% • 33% of America's fastest growing companies raised start-up capital 'by tapping the assets of family and friends' • "99.9% of nascent entrepreneurs launch new ventures without formal venture capital or business angel investments" • Venture capital continues to move off shore or into more established businesses
The New Venture Myth: *"Entrepreneurship always entails the creation of a new enterprise."*	• Not all entrepreneurs create their own enterprises. • Many entrepreneurs use entrepreneurial attributes to create innovative solutions within existing organizations (intrapreneurship).

Who Becomes An Entrepreneur?

Although entrepreneurship spans cultures and age groups, as well as native and immigrant populations, certain sectors are more prone to entrepreneurship than others. These trends are exhibited through graphs in the following section and discussed in greater detail in the "Gender and Race" section later in this paper.

Table 1
Self-Employment Rates by Gender, Race, Immigration, and Education
Current Population Survey, Matched Annual Demographic Surveys (1998-2002)

Group	Self-employment ratio	N	Self-employment rate	N
Men	12.3%	69,230	14.2%	46,082
Women	6.6%	64,068	8.7%	40,907
White, non-Latino	10.7%	100,383	12.1%	67,448
Black	3.8%	9,216	5.0%	7,112
Latino	5.5%	8,001	7.2%	5,501
Native American	4.9%	1,207	[illegible]	967
Asian	8.1%	3,002	11.2%	3,148
Native-born	9.0%	91,480	11.0%	78,228
Immigrant	8.0%	11,408	11.6%	8,940
High school dropout	6.5%	10,235	10.5%	4,509
High school graduate	9.1%	33,680	11.4%	27,010
Some college	9.4%	29,721	11.3%	24,117
College	11.0%	30,651	12.4%	27,302

Notes: (1) The sample consists of individuals ages 20-65. (2) The self-employment ratio is the number of self-employed business owners divided by the population, and the self-employment rate is the number of self-employed business owners working 15 or more hours divided by all workers with 15 or more hours. (3) All estimates are calculated using sample weights provided by the CPS.

Source: Fairlie 2003

Below are two additional tables that provide added data on small business entrepreneurs currently operating in the US, as well as growth rates by type of owner.

	Self-employed owner (0 or 1 employees)	Small business manager (2 to 499 employees)
Age of household head		
Younger than 35	14.7%	15.1%
35–44	21.3%	33.7%
45–54	31.1%	27.7%
55–64	17.4%	15.2%
65–74	12.2%	6.9%
75 and older	3.2%	1.4%
Race of household head		
White	85.7%	91.7%
Nonwhite	14.3%	8.3%
Gender of household head		
Male	89.6%	94.2%
Education of household head		
Less than high school	7.9%	7.0%
High school diploma only	24.7%	21.7%
Some college	21.3%	23.3%
College degree or more	46.1%	48.0%
Income of household		
Less than 10,000	5.4%	2.1%
10,000–24,999	16.4%	8.8%
25,000–49,999	34.4%	24.6%
50,000–99,999	31.2%	36.6%
100,000 or more	12.5%	27.9%

Source: Haynes and Ou 2002. Table 5.

TABLE 6
Growth in Numbers of Minority-Owned Firms, 1982-1997[1]

	Number of Firms				Growth Rates (%)		
	1982	1987	1992	1997	1982-1987	1987-1992	1992-1997
All U.S. Firms	12,059,950	13,695,480	17,253,143	18,431,456	14	26	7
Nonminority Firms	11,234,999	12,419,170	15,103,959	15,645,358	11	22	4
All Minority Firms	824,951	1,343,910	2,149,184	2,786,098	55	68	30
Black-Owned	308,260	424,165	620,912	780,770	38	46	26
Hispanic-Owned	284,011	489,973	862,605	1 1,121,433	73	76	30
Am Native Owned	17,100	24,931	102,271	187,921	46	310	84
Asian-Owned	240,806	414,340	603,426	785,480	72	46	30

[1] Estimated undercounts have been included to illustrate trends believed reliable at the all firm level. Estimates are based on a large ample mailout designed to measure the undercoverage of Hispanic and Asian firms or firms not identified by race code or surname.
[2] Undercounts for Asians and Pacific Islanders, American Indians and Alaskan Natives are estimated based on total undercounts for the combined categories.
Source: U.S. Small Business Administration, Office of Advocacy, based on data from the U.S. Department of commerce, Bureau of the Census, Survey of Minority-Owned Business Enterprises, Company Statistics Series 1982, 1987, 1992, and 1997.

Source: Gwen Richtermeyer, 2002

As noted in these tables, self-employed households and business owners tend to be:

- Overwhelmingly white and male
- Highly educated
- Middle-aged

However, growth rates of minority enterprises are much higher than non-minority enterprises (partly reflecting, of course, the low base they are growing from).

Additional data from a study by Fairlie (2003) showed that only 6.5% of individuals who do not have a high school diploma are self-employed compared with 11% of college-educated individuals who own a business. Immigrants were also found to have a higher transition rate into self-employment from wage/salary employment.

What is Youth Entrepreneurship?

Youth entrepreneurship involves the development of entrepreneurial attitudes, skills and opportunities for young people, from middle school through young adult hood (e.g., 25 yrs old).

When the SBA conducted a survey of 5.6 million new business owners in 1996, 30% were under 31 years old and 40% of those respondents were 26 or under.

Additional recent studies indicate that youth account for only a small percentage of overall entrepreneurial activity. New business owners who are in their twenties or younger account for only 8.8% of the US's entrepreneur population according to a 1999 Bureau of Census Consumer Population Survey. The Global Entrepreneurship Monitor (GEM) observed similar results in its 2003 survey of entrepreneurship in the US noting that the level of entrepreneurial activity in the 18-24 year age bracket is similar to the level in the 45-54 year bracket with both segments accounting for about 10% of total activity. Recent surveys conducted by GEM, the Kauffman Foundation and others consistently note that the highest percentage of the population involved in starting a business falls in the 25-34 year age range when 11.3% of men and 7% of women are involved in business startup activities.

Youth entrepreneurs are distinct from adult entrepreneurs and must confront specific challenges to business startup. These obstacles include limited resources in the forms of capital, social and employment networks, role models and life and work experience, limited employment options and a lack of awareness of self-employment options. Despite the presence of these barriers, youth are considered to possess the energy, motivation, creativity, imagination and drive that universally define successful entrepreneurs. For this reason, Bennell (2000) and others suggest that the challenge for society is not to cultivate the aforementioned traits but rather to tap the inherent tendency of young people to challenge, to imagine and to create. Research validates the overwhelming existence of a demand among youth to engage in entrepreneurial activity neither out of the desire to earn more money nor because of laziness and a lack of determination but rather because young people are increasingly interested in securing their own future and being their own boss. In subsequent sections, we explore evidence that suggests both the presence of a robust potential to increase rates of entrepreneurship among youth as well as effective strategies for capitalizing on this potential.

What is Entrepreneurship Education?

Entrepreneurship education involves the use of structured learning environments and support tools to help individuals develop entrepreneurial skills and become entrepreneurs. While traditional business education focuses on managing existing corporate resources, entrepreneurship education focuses less on management techniques and more on innovation, creativity and risk assessment. A true entrepreneurial education cannot be delivered strictly through K-12 curricula or MBA style degree programs. The development of an entrepreneurial mindset requires experiential learning accompanied by the ambiguities and risk of real-world business startup and operation. The Consortium for Entrepreneurial Education defines it in the following way:

> *"Entrepreneurship education seeks to prepare people, especially, youth, to be responsible, enterprising individuals who become entrepreneurs or*

entrepreneurial thinkers and who contribute to economic development and sustainable communities."

All youth entrepreneurship programs have some elements of entrepreneurship education embedded in them; but not all youth entrepreneurship education focuses on the actual development of working enterprises.

A fundamental premise of entrepreneurship education is that entrepreneurial skills are capable of being taught, as opposed to being innate personality characteristics of a small sub-set of the population:

- *"The entrepreneurial mystique? It's not magic, it's not mysterious, and it has nothing to do with the genes. It's a discipline. And, like any discipline, it can be learned." (Drucker, 1985)*

- *While Vesper and Gorman note, "psychological attributes associated with entrepreneurship can be culturally and experientially acquired" (Rasheed 7), Kuratko declares that, "The question of whether entrepreneurship can be taught is* ***obsolete.****" (2003, 12)*

- *"Everyone who can face up to decision-making can learn to be an entrepreneur and to behave entrepreneurially. Entrepreneurship, then, is a behavior rather than personality trait. And its foundation lies in concept and theory rather than intuition." (Drucker, p. 26)*

Subsequent analytical studies presented below demonstrate the potential and repeated success of entrepreneurship education as a catalyst for behavioral change.

SECTION III –MARKET DRIVERS

There are several external market factors that create the rationale for increased investment in, and implementation of, youth entrepreneurship strategies. These include:

- The rapid emergence of the "innovation economy" as the core driver of global wealth creation.
- The changing nature of work and a redefinition of what it means to "have a job."
- The crisis in the K-12 system, and the failure of the system to adapt to the demands of the innovation economy.
- The emergence of a wide variety of new ways of learning.
- Documented demand among young people for entrepreneurial skills and opportunities.

Each of these drivers is explored in more detail below.

Factor #1 – The Emergence of the Innovation Economy

> *"Clearly, it is now possible for more people than ever to collaborate and compete in real time with more other people on more different kinds of work from more different corners of the planet and on a more equal footing than at any previous time in the history of the world—using computers, e-mail, networks, teleconferencing, and dynamic new software."*
>
> --Thomas Friedman, *The World is Flat* (2005, 8)

Previously driven by Religion and Imperialism and later the steam engine, railroad and telegraph, and later still by modern telecommunications and the Internet, globalization has created what Thomas Friedman describes as an increasingly "flatter" world. The interdependence, communication, and competition that have arisen in the wake of this global transformation fundamentally changes the way we think about our social, political and economic interactions. In today's economy, obstacles to the worldwide manufacture of high quality, low-cost products are receding and competition is escalating dramatically. Free trade, open markets and improved methods of transportation mean that goods now flow relatively unrestricted by both physical and protectionist barriers from anywhere on the globe to anywhere else on the globe. This simultaneously increases the efficacy of outsourcing and levels the international economic playing field. It is through this flattening process that we have traveled from industrialization and an economy that yields prosperity and

jobs as products of its focus on efficiency and quality to an economy that thrives on innovation.

> *"The prosperity and security of all Americans – now and in the foreseeable future – depend increasingly on our nation's enduring and evolving capacity to learn, inspire, create and innovate."*
>
> --Duane Ackerman, Chairman, Council on Competitiveness, Chairman and CEO, BellSouth Corporation

Innovation, which the National Innovation Institute (NII) defines as *"the intersection of invention and insight, leading to the creation of social and economic value,"* has continued to evolve at a rapid pace... Innovation has been a core value of American society and is the most potent tool we employ to solve technological, scientific, social, political and economic problems. Whether bringing us better products, improved services or new structures and methodologies, it is the lifeblood of our economic system and generates the productivity that economists estimate has accounted for half of US GDP growth over the past 50 years. (NII 2005)

No matter where it occurs, innovation today is seldom an isolated event. Able to affect change on a wider scale than ever before, innovation has become multidisciplinary and involves collaboration across traditional boundaries. New intersections between the service sector and manufacturing and the private and public sector, as well as customers that act as co-creators (such as was the case with eBay and microchip development), contribute to the evolution of innovation. Today, *"Innovation is best seen not as a linear or mechanistic process, but as an ecosystem, a multi-faceted and continual interaction among many aspects of our economy and society."* (NII 2005)

NII's report goes on to describe these "innovation ecosystems" as building on new relationships between supply and demand and policy and infrastructure. Their success depends on a high quality pool of talent, societal capacity to take risks and the continual creation of infrastructure that anticipates future innovation. Given the pivotal role played by these ecosystems in our economy, it has become vital for the success of our nation to cultivate these components in order to overcome the many obstacles facing our society, including budget and trade deficits and an aging Baby Boomer population. Through the successful nurturing of an innovation ecosystem, we may capitalize on the current and future potential of hydrogen technology, nanotechnology, homeland security and healthcare to produce both economic and social prosperity.

> *"The innovation economy is fundamentally different from the industrial or even the information economy. It requires a new vision, new approaches and a new action agenda. The United States must create the conditions that will stimulate individuals and enterprises to innovate and take the lead*

in the next generation of knowledge creation, technologies, business models and dynamic management systems. A new relationship among companies, government, educators and workers is needed to assure a 21st century innovation ecosystem that can successfully adapt and compete in a global economy."

--NII (2005)

America can no longer subsist by producing the same goods and services. Long-term investment in our economic future requires thinking "outside the box," advancing society through the creation of new industry and the exploitation of previously unforeseen opportunities. "Simply running in place will not be enough to sustain America's leadership in the 21st century," (NII 2005). Today competition in the flat world has reached an unprecedented level, which the following statistics from the NII illustrate.

- Foreign owned companies and foreign-born investors account for nearly half of all US patents.
- Sweden, Finland, Israel, Japan and South Korea each spend more on R&D as a share of GDP than the US
- In 2003 China overtook the US as the top recipient of Foreign Direct Investment
- Only six of the world's most competitive IT companies are based in the US; 14 are based in Asia
- Federal funding for R&D in the United States has declined since peaking in the mid-1960's to current all-time lows

As globalization and global competition intensify and the nature of innovation continues to evolve, the lives of American workers are affected on a profound level, especially in ways that increase the value of entrepreneurial attitudes and skills.

The Changing Nature of Work

"Welcome to Free Agent, U.S.A. Federal census takers can't tell you how many people actually live here. Government mapmakers have yet to give it an official location. But if you look for it… you can't miss it."

--Fast Company Magazine (December 1997, 131)

Work, and what it means to "have a job," is rapidly being redefined in today's economic environment. In the innovation economy, workers must accept corporate restructuring and downsizing as basic facts of the global marketplace. As a reaction to market instability and modern enterprise, new, horizontally fluid organizational designs permeate contemporary management structures, leaving traditional job positions behind.

Employees in the new economy are required to demonstrate higher degrees of interpersonal skill, teamwork ability and cognitive complexity than their predecessors. A recent study by Osterman showed that high performance workplaces, those with some combination of self-managed teams, problem solving groups, job rotation and total quality management increased from 25% in 1992 to 38% in 1997 (2000). The fact that the workforce has grown since 1980 from 50 million to 123 million workers, while the manufacturing industry has reported net job losses nearly every year since, indicates that the net job growth has been in the knowledge sector (Birch 1998). Indeed, as much as 85% of the value added of typical manufacturing products is embedded in knowledge and information, and not the physical manipulation of the product.

Companies across the board require their workers to have what analyst Rosabeth Kantor calls “kaleidoscope thinking” or the ability to see new angles and perspectives to improve existing practices and capitalize on new opportunities. Workers in all sectors are required to be mobile not only within, but also across, firms in what the National Academy of Science dubs evolution towards a “free agent nation.” In all segments of the job market, the demand for technological competence continues to grow. Amidst these transformations, the illusion of lifetime, worry free, blue-collar employment for non-skilled workers has all but entirely evaporated. Today, according to the US Bureau of Labor Statistics the average person in the US holds about nine jobs between the ages of 18 and 34. In sum, the aforementioned developments result in nothing short of a “fundamental redefinition of the employment relation.”

In 1998, 14 million Americans were self-employed, 8.3 million were independent contractors, 2.3 million working through temporary agencies and 74 million receiving IRS Form1099: “the pay stub of free agents.” (Fast Company Magazine, December 1997, 131) Cognetics (an organization founded by entrepreneur David Birch, now known as Arc Analytics) suggested a possible cause of this trend as research revealed that the size of “The Fortune 500 grew every year until 1980 and declined every year after," and also that the U.S. economy hasn’t added industrial jobs since 1953. The National Commission on Entrepreneurship also reported that

> *In 1960, it took twenty years to replace 35% of the companies on the list of Fortune 500 companies, i.e., there were fewer than 10 new faces on the Fortune 500 list each year. Now, 35% are replaced in three or four years, placing roughly 50 new companies on the list each year. Viewed another way, eight of America’s 25 biggest firms in 1998 did not exist or were very small in 1960.*

These statistics illuminate a changing workforce in which workers are “…questioning the wisdom of investing all their human capital in a single employer.” As they survey the volitile job market they note that “Not only is it

more interesting to have six clients instead of one boss; it also may be safer." (Fast Company Magazine)

As surveys reveal, most entrepreneurs start their own business out of a desire for independence and control and "gladly swap the false promise of security for the personal pledge of authenticity" (Fast Company Magazine). As noted by Walstad and Kourilsky, "The best security in the job market is knowing you can be your own boss if necessary." (1999, 24)

Studies suggest that entrepreneurs may be better off psychologically as well. Blanchflower and Oswald (2001) state that the young self-employed in OECD countries report markedly greater well being than wage employees. Job satisfaction, life-satisfaction and reported happiness levels are all higher than wage workers with identical personal characteristics. The researchers observe that "For whatever exact psychological reasons, self-employed young men and women are unusually satisfied with their lives."

The role of entrepreneurship in this new economic paradigm continues to attract growing attention. Entrepreneurial characteristics including the willingness to take calculated risks, the need for achievement and the ability to innovate and improve existing practice, are all essential attributes not only for new business owners but for the average modern worker as well. In the subsequent sections, we explore both the emerging consensus on new learning models that help to develop and enhance these skills and why the public education system that so effectively helped propel our nation through industrialization is failing to meet the needs of the innovation economy.

New Ways of Learning

> *"Schools don't teach the same way children learn…Children seem to learn best when they can explore the world and interact with expert adults."*
> --New York Times (January.26, 2004, Education Life Section, P. 26, "How We Learn")

Already, as much as 85% of the value added of typical manufacturing products is embedded in knowledge and information, and not the physical manipulation of the product. The key to surviving and growing in this new environment is the creation and exchange of knowledge--a process made possible by our capacity for learning.

Learning is the process of changing our "rules" for detecting, interpreting, predicting and acting on information. Learning happens when we have experiences that tell us that our current rules are inadequate for accomplishing whatever goals we might have.

The last several decades have seen a revolution in our understanding about human learning and how it can best be accelerated in institutions such as schools, colleges, universities and workplaces.

In the old view of learning, learners are passive “receivers of wisdom” who learn mostly by listening and repeating what the “teacher” has told them. Teaching is the simple process of transferring information from the teacher or a textbook to the student. Knowledge is broken down into small, separate pieces and “fed” to the student in a precise and linear order. The purpose of the learning is for the student to be able to get the “right” answer to questions asked by the teacher. Learning occurs entirely independent of the context in which it is to be used, and it is assumed that the learner will be able to transfer his or her knowledge to new situations.

Today’s schools are for the most part still based on this “machine and factory model” of learning. As practiced in the typical high school, community college, university and most corporate training centers, learning is something done by individuals in separation from a real environment. Research into the nature of learning, however, is increasingly revealing its fundamentally social nature. This approach to learning has been pioneered by the Institute for Research on Learning (IRL), an offshoot of the Xerox Corporation. IRL sees learning as something that happens through engagement with a community of individuals who are engaged in similar activities (what IRL calls a “community of practice.”) Knowledge is embedded in the way members in a community of practice carry out their work. Learning is therefore a process of gaining membership into a community of practice. IRL researchers point out that the classroom is the only place where knowledge is presented in the abstract, and people are expected to demonstrate knowledge through abstract performances. In all other life experiences, knowledge is linked to acting in real ways in the world. Tomorrow’s learning will occur in open, distributive environments controlled more by the learner than the teacher. The distinction between learning in schools, at work and in the community will diminish, as communities create new, open learning systems.

Some of the differences between traditional learning and new approaches to learning are summarized in the table below.

TRADITIONAL LEARNING	NEW LEARNING
Closed: Inputs are carefully controlled.	**Open:** We are provided a rich variety of inputs ("immersion").
Serial-Processed: All learners are expected to follow the same learning sequence; learners only learn one thing at a time.	**Parallel-Processed:** Different learners simultaneously following different learning paths; many types of learning happening at the same time for individual learners.
Designed: Both knowledge and the learning process are predetermined by others.	**Emergent:** Knowledge is created through the relationship between the knower and the known. The outcome cannot be known in advance.
Controlled: The "teacher" determines what, when and how we learn.	**Self-Organized:** We are active in the design of curriculum, activities and assessment; teacher is a facilitator and designer of learning.
Discrete, Separated: Disciplines are separate and independent; roles of teacher and student clearly differentiated.	**Messy, Webbed:** Disciplines are integrated; roles are flexible.
Static: Same material and method applied to all students.	**Adaptive:** Material and teaching methods varied based on our interest and learning styles.
Linear: Material is taught in predictable, controlled sequences, from simple "parts" to complex "wholes".	**Nonlinear:** We learn non-sequentially, with rapid and frequent iteration between parts and wholes.
Competing: We learn alone and compete with others for rewards.	**Co-Evolving:** We learn together; our "intelligence" is based on our learning community.

Integrating new knowledge about learning into our educational practices requires significant changes in how we teaching. Some of the implications include:

- Less lecture, more active learning;
- Greater variety in instructional media (voice, music, motion, visuals, etc.);
- Different preparation of teachers -- more emphasis on the learning process, as well as the material;
- Different forms of assessment;
- New classroom design; more flexible learning environments;
- More learning outside the classroom;
- More student control and choice in the learning process;
- Breaking down barriers between the disciplines; more inter-disciplinary work;
- More complex and rich interactions between educational institutions and the external environment.

Youth entrepreneurship programs incorporate these elements and make significant strides away from the traditional top-down method of "command economy, industrial teaching" towards a learning environment rich in inputs and experiential learning. The evidence available about the ability of our public school system to capitalize on new ways of learning methodologies and to help produce students that are able to function in the innovation economy is extremely discouraging, leading many researchers, instructors and business community leaders to declare a crisis in America's K-12 education system.

The Crisis in the K-12 System

Unfortunately, our public education system has been slow to adapt to the new knowledge we have about effective learning strategies:

> *"I often point out that if an American were put in a time capsule in 1895 and it was opened 100 years later, there would be few things in American life that person would recognize…The only American enterprise with which our latter-day Rip Van Winkle would be comfortable is our schools, since they are remarkably similar to the schools we had before the Spanish-American War."*
>
> --Louis V. Gerstner Jr. (Former Chairman and CEO of IBM and RJR Nabisco, 1994)

Universal access to high quality, public education has helped propel our nation through industrialization and into an economy based on knowledge and innovation. Throughout this progression, K-12 schools have assumed responsibility for supplying society with skilled and able workers that can utilize their talents to promote a vibrant capitalist market. Today, a growing body of evidence suggests that the traditional public education model is unsuited to meet the demands of the innovation economy.

Until several years ago, the Federal Government reported national graduation rates between 85% and 90% that were inflated by several factors. Many states allowed dropouts that said they would eventually get a GED to count as graduates and failed to incorporate dropout cases arising from pregnancy and military service in state averages. According to a 2005 report by the Education Trust, the Federal Government has often remained complacent when states report blatantly inflated graduation numbers and others fail to report dropout rates altogether.

Recent recalculations by the Gates Foundation and others state that dropout rates have held fairly constant at approximately 30% throughout the last two decades despite attempted reforms in public education. The situation is even more harrowing for disadvantaged populations. Youth from the lowest income

quarter are six times as likely to drop out as kids from the highest (National Center for Education Statistics). The Urban Institute estimated that the national graduation rate for whites in 2001 was 74.9% yet dropout rates for African Americans and Native Americans approached a whopping 50% (see table below). Several inner city districts such as Cleveland and Oakland failed to graduate nearly 70% of students in 2001.

On a global level, our schools are failing to remain competitive in the areas of math and science. In fact, statistics show progressively worse results as students move from elementary school into high school. The National Center for Education Statistics reports that in 4th grade, US students score above the international average in math and near first in science. By 8th grade, they score below the international average in math and only slightly above it in science. By 12th grade, US students are near the bottom of a 49-country survey in both math and science, outperforming only Cyprus and South Africa (quoted in the National Innovation Initiative Report 2005).

Exhibit 1
Graduation Rates for the
High School Class of 2001

	Public School Graduation Rate
National Graduation Rate	**68.0%**
National by Race/Ethnicity	
Native American	51.1%
Asian	76.8%
Hispanic	53.2%
Black	50.2%
White	74.9%
Selected Urban Districts	
New York City	38.2%
Los Angeles	46.4%
Chicago	48.8%
Houston	40.2%
Philadelphia	41.9%
Cleveland	30.0%
Oakland	30.4%

Source: Urban Institute.

Recognizing the magnitude of this crisis, the Gates Foundation conducted a study on dropouts in 25 separate rural and urban locations across the country and in 2006 released a report titled "The Silent Epidemic" summarizing the key findings. The study is unique in that it addresses the problem from the standpoint of the students in an effort to identify factors that lead youth to withdraw from the public education system. The following section provides a summary of the reports key findings.

> *"In 2003, 3.5 million youth ages 16 to 25 did not have a high school diploma and were not enrolled in school. There are nearly 2,000 high schools in the country with low graduation rates, concentrated in about 50 large cities, and in 15 primarily southern and southwestern states. In more than 20 of these cities, 75% or more of the students attend public high schools where graduating is less than a 60% proposition."*

The report goes on to profile the students that are dropping out.

- 88% had passing grades, with 62% having "C's and above";
- 58% dropped out with just two years or less to complete high school;
- 66% would have worked harder if expectations were higher;
- 70% were confident they could have graduated from high school
- 81% recognized that graduating from high school was vital to their success;
- 74% would have stayed in school if they had to do it over again;
- 51% accepted personal responsibility for not graduating and an additional 26% shared the responsibility between themselves and their school, leaving very few who blamed the schools alone.

When asked what the largest reason was for dropping out, students had a simple answer: "boredom."

> *"Boredom will always remain the greatest enemy of school disciplines. If we remember that children are bored, not only when they don't happen to be interested in the subject or when the teacher doesn't make it interesting, but also when certain working conditions are out of focus with their basic needs, then we can realize what a great contributor to discipline problems boredom really is. Research has shown that boredom is closely related to frustration and that the effect of too much frustration is invariably irritability, withdrawal, rebellious opposition or aggressive rejection of the whole show."* (Fritz Redl, When We Deal With Children)

Most youth recognize the importance of education. A poll released by MTV and the National Governors Association in the spring of 2005 found that 87% of all young people want to go on to college. The non-profit organization Public Agenda noted that two thirds of students said they could do better if they tried, yet they were unmotivated, bored and unchallenged by the current system.

The findings of the Gates Foundation study also indicate a strong desire for classes and programs that are more closely oriented towards the "real world" and that engage students in active, experiential learning. 81% of survey respondents said that if schools provided opportunities for real-world learning (internships, service learning projects, and other opportunities), it would have improved the students' chances of graduating from high school. In contrast, only 35% of

dropouts surveyed indicated that failing grades were a key reason for dropping out. Nearly 7 in 10 respondents (69%) said they were not motivated or inspired to work hard, 80% did one hour or less of homework each day in high school, two-thirds would have worked harder if more was demanded of them (higher academic standards and more studying and homework), and 70% were confident they could have graduated if they had tried. These results suggest that a wide scale reconfiguration of the public education system is crucial to preventing high school students from dropping out.

There are multiple negative consequences for those that choose to leave the education system. As the authors of "Dropout Nation" in *Time* (April 13, 2005) put it: "Dropping out of high school today is to your societal health what smoking is to your physical health." The US Census Bureau reports that high school dropouts earn only 43% of college educated workers (2004). 67% of prison inmates are dropouts and according to a Northwestern University study, nearly half of dropouts ages 16 to 24 are unemployed.

Entrepreneurship levels are significantly lower for dropouts as well. Only 1.6% of non-employed high school dropouts start a business the following year after leaving school compared to 4.1% of non-employed college educated individuals (Fairlie 2003). As reported in the Gates Foundation findings:

> *Dropouts are much more likely than their peers who graduate to be unemployed, living in poverty, receiving public assistance, in prison, on death row, unhealthy, divorced, and ultimately single parents with children who drop out from high school themselves. High school dropouts, on average, earn $9,200 less per year than high school graduates, and about $1 million less over a lifetime than college graduates. They are twice as likely as high school graduates to slip into poverty from one year to the next.*
>
> *…a dropout is more than eight times as likely to be in jail or prison as a person with at least a high school diploma.*

Other consequences await communities where the dropouts reside. A loss of skilled, productive workers affects local businesses and the economy at large. Social and health care costs place burdens on other community members and strain already dwindling social service budgets. Four out of ten dropouts received some kind of government support in 2001.

Within communities affected by dropout rates and the failure of K-12 education, business leaders are speaking out in protest of the broken system. A recent national survey of 314 business executives conducted by the Yankelovich Partners in Washington DC reveals the frustrated feelings of the business community towards public education:

- Seven in ten American business executives believe the nation's public education system is incapable of providing them with a sufficient pool of well-educated potential employees
- 50% said high school is the weakest part of the public education system
- 80% said local school systems should institute programs that reflect the employment needs of local businesses and they feel the focus of reform should not be limited to improving the quality of *academic* education
- 82% think more attention should be paid to *vocational* education and trade training
- "Without reform, they fear the forces of global economic competition and increased reliance on technology will only make matters worse."

In the face of these daunting problems, new ways of learning (as discussed above) are being explored as a means to combat boredom in schools and help provide business owners with workers that can contribute to an economy based on knowledge and innovation. These newly emerging structures fight the traditional classroom attitude where "Convergence and not divergence is disproportionately rewarded," (Kourilsky) and strive to eliminate the "command economy model of education."

By embracing practical and innovative intelligence, teachers are able to reach and develop youth that may fail to demonstrate the more time-honored analytical variety of intelligence. Youth entrepreneurship programs are one way in which kids are being engaged in active learning processes. The demand for such programs among youth has been clearly demonstrated in a number of polls.

The Demand by Youth for Entrepreneurship Opportunities

There is a significant amount of data showing strong demand among young people for entrepreneurial skill development and entrepreneurship opportunities.

- Survey evidence from 11 European countries (including Hungary and Italy) shows that the majority of young workers prefer self-employment (OECD 1998). Similar data reveals a strong preference for self-employment in youth groups throughout OECD nations.

- Blanchflower concludes that evidence from 15 OECD countries "shows that young people (aged under 30 years) find self-employment intrinsically attractive."

- A Consortium for Entrepreneurship Education poll of 3,076 students at 68 different schools found that the following percentages of students responded "YES" to the question: "Do you have an interest in starting a business?"
    - 8-12 years old: 42%
    - 13-16 years old: 44%

- 17 years and older: 47%

- A landmark Gallup poll in 1999 reported the following statistics:
  - 69% of high school students said that they wanted to start their own business; half of this group said that it is "likely" or "very likely" that they will act on this urge
  - 75% of black youth said that they wanted to start their own business
  - 73% of the students said that independence was their primary motivation for wanting to start a business (and not monetary benefits).
  - 68% of the students said that it was very important for successful entrepreneurs or business owners to give something, in addition to providing employment, back to the community
  - 80% of black students said that it was very important for successful entrepreneurs or business owners to give something, in addition to providing employment, back to the community

- Moreover, the survey indicated that youth are not getting the training they want:
  - 9 out of 10 students rate their entrepreneurial knowledge as poor or fair at most
  - When asked to answer questions demonstrating basic entrepreneurial knowledge, high school students on average were only able to answer 42% of the questions correctly
  - 85% of students said they had been taught "practically nothing about" or "very little about" business and how it works
  - Only 27% of students reported that they had taken a class in business or entrepreneurship
  - 84% of students said that it is "important" (36%) or "very important" (48%) that schools teach more about entrepreneurship and how to start a business
  - 67% of black youth said that it is "very important" that the nation's schools teach students about entrepreneurship and business

  (Supporting research: Gallup Organization, Inc. & National Center for Research in Economic Education. (1994-1999))

In contrast to the clear demand, evidence indicates that schools are significantly failing to meet business and student expectations in this area:

- Only 24% of 1,312 business leaders surveyed believed that high school youth had adequate preparation for entrance into the entrepreneurial economy, and only 46% believe that college graduates had sufficient entrepreneurial education (W&K 2000, 107)

- Kiesner notes that faculty often rate their curricula as more helpful than entrepreneurs do (Kent 1990, 7)

- Poorly structured traditional K-12 curricula provide inadequate economic and business instruction;
    - 5 of 10 youth, ages 14-19, gave themselves a “poor” or “very poor” rating on understanding the startup and management of a business (Gallup Poll)
    - “Most people enter workplaces after high school or college without even a rudimentary understanding of the business processes, entrepreneurial spirit or economic forces that shape their lives.” (Learning for the 21st Century Report 2004)
    - Failure to understand labor markets and the economy results in a failure to see education and the development of appropriate skills as desirable (Kent)

SECTION IV – REVIEW OF FIELD PRACTICE IN YOUTH ENTREPRENEURSHIP PROGRAMMING

"Our country's economic growth will hinge on our ability to create new jobs through entrepreneurship. Successful entrepreneurship, in turn, will require well trained, aspiring entrepreneurs willing to take the helm of venture creation. Effective initiatives in entrepreneurship education will be increasingly critical for expanding the flow of potential leaders from our school system with the passion and the multiple skills needed not only to give birth to the inherently risky, entrepreneurial enterprise but also to guide it successfully through the initial growth phase, which is subject to both extremely high expectation and chance of failure."
--Marilyn Kourilsky: (1995, p.8)

Youth entrepreneurship strategies have the potential to address many of the market context challenges discussed in the previous section. In specific, youth entrepreneurship strategies have demonstrated the capacity to make progress on three simultaneous fronts:

- ***Engagement and academic outcomes.*** Increasing levels of engagement and improving academic outcomes, therefore reducing dropout rates and post-secondary matriculation.

- ***Life and work skills.*** Helping youth develop entrepreneurial skills and attitudes that prepare them for employment in the "innovation economy," whether or not they run their own enterprise.

- ***Enterprise development.*** Helping young people design, develop, launch and grow viable businesses that can create income and assets for them.

In this segment, we summarize the elements of successful program designs from the literature and site visits that form a cohesive set of best practices.[4] This best practices outline is intended to apply broadly to youth entrepreneurship programs implemented through both traditional school systems and out-of-school programs administered by NGOs.

Review of Field Practice

We examined field practice through six key dimensions:

- The target population
- The needs and characteristics of the target population
- The offerings designed to address those needs
- The desired outcomes of the offerings

[4] See Attachment 1 for a list of the 27 programs we reviewed through site visits and/or field interviews.

- The nature of the organization delivering programs
- The relationship with public schools

Each of these dimensions of the field is described in some detail below.

Target Population

We found that:

- ***The majority of programs generally focus on middle and high school age populations.*** Programs operate across the educational spectrum from elementary school to university MBA programs. The critical mass of national practice however seems to concentrate on ages 13 – 17.

- ***9th graders are often regarded as the optimum program audience.*** There were three reasons for this focus most commonly mentioned by program designers:

    - 9th grade is a critical age to intervene in academic decline.
    - If you are going to be effective in reducing the drop-out rate, you need to get to kids before they turn 16 (which begins in 9th grade).
    - At this age, there are fewer schedule conflicts with other activities (i.e. employment, family responsibilities etc.) so kids are more likely to be able to engage with out-of-school programming.

- ***Participants generally self-select for participation.*** Youth typically opt into youth entrepreneurship programs rather than being targeted for participation. This may influence the success rates. Most programs are offered outside of the core educational curriculum of schools and are taught in after-school or in-school elective formats.

The Needs and Characteristics of the Target Population

- ***Programs target youth that are becoming disengaged from the traditional school environment.*** Steve Mariotti, the founder of National Foundation for Teaching Entrepreneurship (NFTE) says, "For youth, boredom in school is almost unbearable torture." Program designers are typically inspired by the belief that the traditional teaching and testing model is alienating an entire generation of at-risk youth. It is believed that these youth would respond very differently to "whole brain" learning strategies such as experiential and project-based learning.

- ***Most programs are designed to appeal to vulnerable youth.*** Most programs are designed on the premise that minorities and vulnerable youth are attracted to programs that have a link to real life and offer interaction with authentic, caring adults. Youth entrepreneurship

programming offers an alternative to sports as the typical path for developing skills from which youth can experience success in ways not experienced in the academic environment.

Neighborhood life for many vulnerable youth offers exposure to illegal entrepreneurial activity, which program designers cite as evidence of misguided capacity. Entrepreneurial programs offer an alternative path, helping to connect youth to profitable and legal forms of commerce, which in turn serves to motivate and reconnect youth toward their academic success.

Desired Outcomes

- ***There are three related, but very different kinds of outcomes targeted by programs.*** The three primary outcomes hoped for by the programs we talked to included:

    - Engagement and academic outcomes. Increasing levels of engagement and improving academic outcomes, therefore reducing dropout rates and post-secondary matriculation.

    - Life and work skills. Helping youth develop entrepreneurial skills and attitudes that prepare them for employment in the "innovation economy," whether or not they run their own enterprise.

    - Enterprise development. Helping young people design, develop, launch and grow viable businesses that can create income and assets for them.

- ***Outcomes are often not well articulated and differentiated.*** As is not uncommon in many fields of practice at their early stages of development, programs often do not clearly differentiate between these three different kinds of outcomes, which typically require very different kinds of programming strategies. Maturation of the field will require higher levels of differentiation, and more sophisticated alignment of different programming strategies to different outcome goals.

The Offerings Designed To Address Needs and Achieve Outcomes

There are three common offerings that typify practice. These can be stand-alone or can be combined with each other:

- Entrepreneurial curriculum integrated into academic classes or after school programming.
- Project based learning and skill development.
- Viable business plan development and business operations.

It should be noted that, while there is much overlap between these three kinds of offerings, they can each be aligned with the three outcomes describe above:

Targeted Outcome	Most Relevant Programming
Engagement and academic outcomes	Entrepreneurial curriculum
Life and work skills	Project-based learning and skill development
Enterprise development	Viable business plan design and business operations

Common elements in service delivery include:

- *Technical skill training*. Some examples from programs visited include: media production, web design, GIS mapping, art production skills in ceramics and glass blowing.
- *Life skill training*. Some examples: information gathering and research, financial literacy, writing and communication.
- *Academic tutoring*. Some programs offered access to tutors in core curriculum areas.
- *Enhance college bound outcomes*. Some programs build awareness of college entrance requirements, assist in the application and financial aid process, offer tours of colleges and build relationships with admission officers.
- *Employability skills through real job experience.* Features of this training tend to include work place appearance, on time arrival attitude and customer service training.
- *Business plan development and contests.* Business plans are the foundation for teaching entrepreneurship skills. Oral delivery and defense of business plans improve communication skills and confidence. The process of business plan development is viewed as a cross curriculum learning strategy that reinforces academic priorities.
- *Mentoring and networking.* Many programs link youth to adult role models and create opportunities for mentoring, job shadowing, networking and internships.
- *Curriculum developers and train the teacher models.* Programs deliver a broad range of curriculums that they have either developed or accessed. Scaling is accomplished through teacher training and classroom implementation.

The Nature Of The Organizations Delivering Programs

Youth entrepreneurship programs are sponsored by a diverse range of organizations. These fall into three main categories:

- ***Single purpose non-profits*.** Many programs visited are single mission nonprofits organized for the unique purpose of delivering on the vision of the founder. These include NFTE, BUILD, ECity, Consortium for Entrepreneurship Education, HopeWorks, Youth Radio and Little Black Pearl Art and Design Center.

- ***Program components of community development organizations*.** For example, the Four Bands Community Fund CDFI operates American Indian Business Leaders Youth / Made on the REZ program; The Enterprise Center Minority SBDC Community Development Corporation operates the YES program.

- ***National intermediaries*.** For example, ICIC operates the Growing Up CEO program and AEO, a national micro lending trade association, sponsors the Prudential Youth Entrepreneur Program.

The Relationship with Public Schools

The public education system is viewed by almost all program leaders as fundamentally flawed and overly regulated, using unimaginative tests and standards that do not engage or retain students. Their experience is that kids get lost in urban school systems and youth do not find relevance in the pursuit of an education. Program designs feature different strategies to cope with this dysfunction:

- NFTE, for example, creates curricula aligned with core subject areas to meet learning objectives in an experiential project based manner.
- Low performing students in 9th or 10th grade use the YES Program process to develop business plans to pitch funding proposals. Success can lead to seed financing and, more importantly, rewards follow through and commitment.
- BUILD, YES, Youth Radio and HopeWorks offer academic tutoring as part of program design. BUILD sets academic standards as a condition of continued program involvement. As a consequence, BUILD graduates are increasingly recognized by college admission officers and given preference for admissions review.

SECTION V – BEST PRACTICE EXAMPLES AND LESSONS LEARNED

In this Section, we describe some of what we believe are the "best practice lessons learned" that can inform the on-going development of the field.

1) ***When programs feature real-life role models and business leaders in program delivery, it inspires and grounds vulnerable youth in tangible examples that contribute to their motivation and program participation.***

Rappers tour schools for Youth Radio to recruit youth for media production training. Silicon Valley venture capitalists sit on panels that determine seed capital investments in youth enterprises applying to enter the BUILD incubator. Nationally known ceramic artists discuss the subject of marketing art on the Internet with Little Black Pearl Art and Design Center participants. These examples provide a powerful influence for youth. Experts bring hope and grounding and offer tangible advice in a relevant area of interest that youth can relate to.

Another consequence of outside expert engagement is that it builds social capital networks that can advantage youth and youth serving institutions. These relationships can also bridge the divide of conventional wisdom by breaking down stereotypes about what vulnerable youth are capable of doing. Finally, it builds networks that help programs connect to resources that in some cases become financially critical and supplement paid staff in expanding programs breadth and depth.

2) ***The best performing entrepreneurship programs create a culture of high expectations and belief in student's abilities to succeed. This positive pressure results in higher academic performance and better school outcomes.***

Program designers report that two elements interact to promote better academic outcomes. First, youth entrepreneurship challenges students to apply many academic disciplines in relevant ways to succeed. Participants must use math, writing, research and communication skills and draw on critical thinking, assessment and cognitive abilities. For many, youth entrepreneurship is the first relevant experience in applying multiple academic disciplines. Second, programs that set high expectations around relevant goals motivate vulnerable youth to excel. As success is experienced, youth better understand the correlation between real life goals and success in schools. *For most programs the outcome is not a youth enterprise but academic success and access to higher education*. Two concrete examples include:

- A Harvard Graduate School of Education Study found that NFTE students expand their future educational and occupational aspirations, take initiative within their present circumstances, and take on leadership roles

in their lives. The study found that interest in attending college increased 32% and occupational aspirations increased 44%.

- Admission to the BUILD program is based on commitment not academics, and the average participant enters the program with a 1.0 GPA. BUILD hooks youth on the feeling of success and participants become more motivated in their school environment. The program design includes mandatory tutoring and grade reviews. Over time, BUILD requires a 2.7 GPA for students to move to the second phase of the program. To date, students who complete the BUILD program enjoy a 100% college entrance success rate in an area where high school graduation rates average 30% annually.

3) *To reach scale in program delivery, youth entrepreneurship efforts find ways to integrate programming with schools*.

The over regulated nature of the public school system, coupled with dysfunctional bureaucracies that oversee many inner city school districts, present high barriers for youth entrepreneurship advocates. To break through these barriers, programs often begin as successful out-of-school programs that create awareness within their communities. Programs establish relationships with schoolteachers and administrators who become internal champions for building level and district participation. This is how BUILD initiated its connection to the East Palo Alto and Menlo Park Schools. Program results from these districts were used to introduce a pilot project in the Oakland Public Schools. The YES program and the Four Bands Community Fund / Made on the REZ are undertaking similar approaches to program scaling.

An alternative to persuading public schools to cooperate with youth entrepreneurship programs is to become a school that integrates youth entrepreneurship across the curriculum. EPrep will do this through opening a charter school, in August of 2006, with an aggressive college preparatory approach (11 month school year, 7AM – to 5PM school day for targeted low income minorities). Seniors are promised they will graduate with a business plan in one hand and an acceptance letter to a four-year college in the other.

4) *It is important to be modest and realistic about the opportunities for youth wealth creation and enterprise development*.

While there is a body of emerging evidence that entrepreneurship can be a very successful vehicle for engaged, experiential learning that increa***ses student*** success, the evidence regarding the creation of assets, income and business enterprises by youth is far more problematic. The vast majority of business formation is done by individuals over the age of 25. Most youth who are in school or at a school age will lack the will, resources, focus and discipline to run

businesses. It is likely that any effect from high quality, experience-based entrepreneurship education will show up only in later years.

There is, however, an emerging network of youth business incubators, as well as some intriguing opportunities to connect youth to wealth creation *in those sectors where they are major trendsetters and consumers*. Feedback from several of the programs that run youth business incubators provided these insights into this practice area:

- It is important to have a competitive source of start-up financing for the enterprises. Youth value this--it is one of the few places they can go for funding, and the competitive context provides valuable lessons about how to secure financing.
- There is no obvious correlation between the academic/career goals and performance of the youth and their success in enterprise development. Successful youth entrepreneurs cover the spectrum of college-bound and very low academic performers.
- Youth value the location in incubators and compete strongly for the right to be there.
- The incubators provide far more than just space and overhead – a referral network; information source; help with business decisions; etc.
- Incubator businesses are expected to "give back." The process creates high levels of pride in the youth, and is often the first experience youth have with making voluntary contributions.
- The first idea youth organize businesses around are often ultimately not that interesting or challenging. The point is the experience, not the business itself.

SECTION VI – EVIDENCE OF EFFECTIVENESS

There is a significant amount of data supporting the ability of youth entrepreneurship programs to produce positive social and economic development outcomes. In our analysis of program research, we divide the outcomes into three sets of positive results.

- ***Economic development and wealth creation***
- ***Increasing overall learning outcomes*** including social and personal development
- ***Development of an "entrepreneurial mindset" and skill set*** that can support success in the innovation

Economic development and wealth creation

A report for the UN prepared by Curtain in 2001 with supporting research from an International Labor Organization report by White and Kenyon noted that internationally, youth entrepreneurship programs in the 1990's had produced notable economic benefits. Regardless of program participant background, programs increased available job options and opportunities, which in some cases helped aid in the revitalization of local economies. Additional evidence of effectiveness in economic development outcomes include the following:

- Research by Klein, Alisultanov and Blair (2003) showed that individuals who completed entrepreneurship training increased employment/self-employment levels by 28% and increased household incomes by 85% within 2 years. Students involved in the Berger Entrepreneurship Program at the University of Arizona earned roughly 27% more than non-entrepreneurship graduates after graduation.

- In another study focused on an array of youth entrepreneurship programs, Bronte-Tinkew and Redd reported notable increases in employment and employment earnings and stated "clear evidence exists that programs are able to increase short-term and long-term employment and earnings for various disadvantaged subgroups."

Increasing overall learning outcomes

A New York Times article covering results from a Harvard Graduate School of Education study reported that students who engaged in NFTE's youth entrepreneurship program had a 32% higher interest in attending college than their peers and that students' interest in getting a job that required a higher level of education rose 44% after the program (NY Times 5/1/06). A DC Children and Youth Trust Corporation (DCCYIT) study[5] reported long-term results of increased

[5] This study included students from several vocational education programs in its results.

levels of academic achievement, educational attainment, positive interpersonal relationships, and civic engagement. The study also noted reductions in risky behaviors in the form of fewer arrests and lower rates of delinquency and crime among program participants. Overall, students demonstrated positive psychological levels of well being including low rates of depression and anxiety as well as high rates of optimism and self-esteem.

White and Kenyon (2001) saw improved peer relationships, expanded networks and an increase in positive role models as outcomes to youth entrepreneurship programs. In a 524-student sample from Newark, NJ public schools, results from post-entrepreneurship training tests reveal positive and significant ($\alpha \leq .05$) correlation between entrepreneurial training and higher scores associated with the need for achievement, personal control, self-esteem, and entrepreneurial attitudes (Rasheed 2001). “Worley (1995) found that adolescents who work in non-structured work environments have higher grades than those who did not work or worked in a structured work environment.” (James R. Lindner, Kathryn J. Cox Journal of Extension, October 1998 Volume 36 Number 5) Participants in the University of Arizona’s Berger entrepreneurship program were 25% more likely to be involved in new ventures and were 11% more likely to own their own businesses after graduation. Involvement in entrepreneurship programs also gave youth the opportunity to be involved with adult entrepreneurs. This access to positive role models contributed to higher levels of social development and maturity.

Development of an “entrepreneurial mindset” and skill set

Youth entrepreneurship programs were found to increase levels of the following skills associated with entrepreneurship (Un 2001 Report, White and Kenyon 2001, Rasheed 2001, Bronte-Tinkew and Redd, Walstad and Kourilsky 1999):

- Teamwork
- Leadership
- Money management
- Taking calculated risks
- Creativity
- Innovation
- Motivation
- Ability to recognize and assess opportunity
- Problem solving
- Technology skills
- Marshaling of resources

Rasheed notes that increased levels of innovation and creativity were noted only in the students involved in the hands-on creation of new ventures and was not associated with classroom activities and training (2001).

These encouraging statistics suggest that youth entrepreneurship programs often achieve the outcomes they are designed to produce. However, we believe that better measuring techniques and the development of performance metrics would greatly help track participants and produce more concrete data sets for further analysis.

SECTION VII – GENDER AND RACE FACTORS

Entrepreneurship offers both minority and female groups opportunities to overcome the discrimination and glass ceilings present in the traditional job market. Findings from our literature scan suggest that entrepreneurs emerging from a multitude of backgrounds face different challenges in pursuit of the American dream and entrepreneurial success.

Gender

Women-owned businesses, which "are as financially sound and creditworthy as the typical firm in the U.S. economy, and are more likely to remain in business than the average U.S. firm," (SCORE) clearly play a vital role in today's economy:

- There were 6.5 million women-owned businesses in 2002, up 20% from 1997. Their receipts totaled $950.6 billion, up 16% from 1997 (US Census Bureau)
- Women-owned businesses with no paid employees numbered 5.6 million, up 22% from 1997. Receipts totaled $137.4 billion, up 36% from 1997. (US Census Bureau)
- There were 917,946 women-owned businesses with paid employees in 2002, up 8% from 1997. Their receipts were $813 billion, an increase of 13%, with an average of $885,878 per firm. (US Census Bureau)
- Between 1997 and 2004, the number of women-owned companies grew by three times the rate of all privately held businesses with employees (Business Weekly May 1, 2006)

Other statistics:

- The Center for Women's Business Research estimates that females start approximately 55%, or 775,000, of new businesses each year.
- Another study by the Center for Women's Business Research in Washington found that the number of women-owned businesses with no employees grew 18% from 1997 to 2004, twice the rate for all businesses without employees; the revenue for such women-owned firms grew 66%, compared with 42% over all.
- According to the Small Business Administration, *women's start-ups outpace those headed by men in revenue growth by a margin of two to one*.
- Women now hold senior-management positions at 41% of venture-backed businesses, up from 21% in 1998, according to the research company VentureOne (www.inc.com)

Although these statistics are encouraging for women entrepreneurs, in 2002 women still owned only half as many businesses as their male counterparts (US

Bureau of Labor Statistics). Studies by the Kauffman Foundation and others also show that men are twice as likely to be starting new businesses as women are (2002). Despite the fact that women own 38% of US business, women-led companies receive less than 5% of the roughly $36 billion invested by venture capitalists (Inc. 500 Magazine September 2000).

While it is difficult to pinpoint the factors involved in these disparities, experts frequently cite social and cultural issues in addition to difficulties in accessing capital as the root causes. Nascent woman entrepreneurs are said to be "channeled" into historically "appropriate" professions and discouraged from breaking accepted social molds. When lacking access to a strong network of other female entrepreneurs, women are often unaware of the potential self-employment options available to them. Walstad and Kourilsky (1999) cite both a lack of awareness and lack of role models as the reasons why female youth are about 10% less likely to want to start their own business than are male youth (61% versus 70%).

Another cultural issue that affects women entrepreneurs is the balancing of family and work life. A study by the Women's Entrepreneurial Networking System Inc. stated that revenue growth for single women in Canada between 2001 and 2004 rose three times as much as for married women. Despite social and cultural factors with which women must contend in order to succeed in entrepreneurial endeavors, women entrepreneurs are working collectively to overcome barriers to success.

Most experts agree that entrepreneurship promotion programs have the potential to increase rates of women's entrepreneurship and are capable of empowering women both socially and economically. The emerging consensus on the best way to promote women's entrepreneurship revolves around a strategy of network building and providing access to startup resources. Schools and educational programs also have a valuable role to play by exposing young women to the possibility of starting their own business.

In addition to the government-based organizations mentioned in the Policy Scan that accompanies this document, numerous NGOs are operating to increase the number of women-owned enterprises and the rate of women's entrepreneurship. Seeking to address obstacles facing female business owners, organizations like Women Entrepreneurs in Science and Technology and the Forum for Women Entrepreneurs work to establish resource and support networks to connect women-owned startups and to aid in the development of entrepreneurial enterprises. The Women's Technology Cluster acts as an incubator for women-owned enterprise and connects entrepreneurs to angel investors, VCs, lawyers, accountants, and other professionals. Incubated companies pledge 2% equity to the cluster's development fund.

Minority Entrepreneurship

Minority entrepreneurship contributes not only to the social development of our society as a whole but also often benefits underprivileged communities by supplying services and products creating jobs. By forming successful enterprises in low-income, underprivileged areas, minority entrepreneurs aid in community revitalization and supply the population with goods and jobs that businesses outside the community fail to deliver. Some statistics from the SBA, US Census Bureau and Corporation for Enterprise Development (www.score.org) illustrate the contributions of different minority sectors to our economy:

- Self-employment as a share of the labor group is 3.8% for African Americans; 6.4% American Indian, Eskimo or Aleut; and 10.1% Asian or Pacific Islander.
- Of U.S. businesses, 5.8% are owned by Hispanic Americans, 4.4% by Asian Americans, 4.0% for African Americans and 0.9% by American Indians.
- Of minority-owned businesses, 39.5% are Hispanic-owned, 30.0% Asian-owned, 27.1% African American-owned and 6.5% American Indian-owned.
- Minority-owned firms had about $96 billion in payroll in 1997

In recent years, a marked surge in entrepreneurial activity among minority populations has been attributed to the development of a post-civil rights movement culture, general social advances for minority populations and minority procurement laws. According to US Census Bureau data, the number of US businesses increased by 10% between 1997 and 2002, while the number of black-owned businesses increased by 45%, Hispanic owned businesses increased by 31%, Asian-owned businesses increased by 24%, businesses owned by Hawaiians and Pacific Islanders increased as much as 67% and the number of Native American-owned business increased by 84%. Revenues for minority-owned businesses also grew rapidly from 1997-2002 with black-owned firms showing revenue gains of 25%, Hispanic-owned firms saw revenue grow 19%, while white-owned businesses saw increases of just 5%. Within the minority groups, the Native American-owned firms reveal phenomenal growth from 1987-1997, showing a rate of 310% growth from 1987-1992 and 84% growth from 1992-1997 (Minorities in Business 2001). As reported in a recent *Inc. 500* article, “Census Bureau Director Louis Kincannon called the statistics “encouraging,” adding that the increase in both number of firms and revenue demonstrates that “these firms are among the fastest-growing segments of our economy.””

Despite the recent success of minority entrepreneurship, minority-owned firms still account for only 18% of the country’s 23 million businesses (US Census Bureau). The US Department of Commerce reported in 1997 that black-owned firms have lower revenues and profits, hire fewer employees and are more likely to close than white-owned businesses. Wage discrepancies are also apparent as

black-owned businesses without employees earned on average $20,761 in 2002 while white-owned businesses without employees earned $44,426 on average. The 2006 US Census data revealed that 92% of businesses owned by African Americans had no employees compared with a national average of 75%. The SBA observed a tendency for minority-owned firms to be geographically concentrated. 47% of black-owned firms were in six states: New York, California, Texas, Florida, Georgia and Maryland, and 73% of Hispanic-owned businesses were in four states: New York, California, Texas and Florida (www.score.org).

Several factors that aid in entrepreneurship development are absent to some degree in minority communities and may help explain these results. Psychologically, minorities are disadvantaged given that many successful minority entrepreneurs—potential role models and mentors--took advantage of housing and employment opportunities outside low-opportunity communities in the 1960's and have moved to neighboring, primarily Caucasian, suburbs. (McNeil, Burgar, Carpenter) Minorities and especially youth minorities are lacking adequate entrepreneurial role models. A recent Gallup poll showed that 62% of white youth reported they knew someone that ran a small business compared with only 47% of black youth and 48% of Hispanic youth (1999). Black youth were also considerably less likely to cite a parent (13% versus 26%) as someone they knew who ran a small business. Recent findings reported by Lentz and Laband 1990, Fairlie 1999, Dunn and Holtz- Eakin 2000 and Rosen 2000, stated that the probability of business ownership is considerably higher among the children of business owners than among children of non-business owners. As cited in Walstad and Kourilsky's research (2000), although black youth are more interested in *starting* their own business, given the choice, a significantly lower percentage of blacks than whites preferred small business ownership to a management position in a large corporation (44% versus 61%). Another study by Fairlie found that the largest factor explaining disparities black and whites are differences in asset levels, which account for 15.5% of the gap in probability of entry into self-employment.

Minorities may also face higher barriers to accessing capital. In a study of variations between small business loan denial rates for minorities and whites, Cavalluzzo and Wolken (2002) found that credit history and credit scores of the business accounted for the majority of discrepancy. While banks often deny minority entrepreneurs loans based on existing physical and financial assets, ROSCAs and microlenders take into account the strong social capital that these ethnic groups often possess. In underprivileged communities, minority-owned entrepreneurships often mobilize resources along ethnic lines in what Valdez calls "reciprocity relationships," that help to strengthen social ties as well as the small business sector. These trends suggest that the strategies of the Grameen Bank and ACCION International may be appropriate for some minority startups. Although personal wealth and credit histories affect capital access for minorities, the authors also note, "information on personal wealth does little to rule out discrimination as a potential explanation for the large differences in denial rates

across demographic groups," (Valdez 2001, 21). Overall, the lack of community and family role models, discrimination, lower asset values and lower education levels all hinder the development of a strong minority entrepreneurship sector.

Levels of entrepreneurship and reasons for starting a business vary across ethnic groups. According to the Kauffman Index of Entrepreneurial Activity (2005), Latinos had the highest rate of participation at .41%. Non-Latino whites and Asians had a rate of .37%, while African Americans had the lowest rate at .29%. The report also noted that immigrants have substantially higher rates of participation; "0.46% compared to 0.35% for the U.S.-born." Robert Fairlie concluded that blacks have the lowest rates of entrepreneurship while whites, followed by Asians have the highest rates and ratios of self-employment.

> *White, non-Latinos and Asians have the highest self-employment rates and ratios. Among white, non-Latinos, 10.7% of the population ages 25-55 is self-employed and 12.8% of the workforce is self-employed. The Asian self-employment rate and ratio are slightly lower. Relative to these two groups, blacks, Native Americans and Latinos are much less likely to be self-employed. The likelihood of business ownership among Latinos is only slightly higher than 50% of that for white, non-Latinos. Native Americans have even lower levels of business ownership. Finally, of the five ethnic/racial groups identified in this analysis blacks have the lowest rates of business ownership. For example, the black self-employment ratio of 3.8% is roughly one-third the white self-employment ratio. Similarly low rates of black business ownership date back to at least 1910 (see Fairlie and Meyer 2000). Clearly, the three major disadvantaged minority groups in the United States -- blacks, Latinos and Native Americans -- are substantially underrepresented in business ownership…. 23.8% of Koreans are self-employed in the United States. (Fairlie 2003)*

Successful youth entrepreneurship programs should recognize and address differences in entrepreneurship traits for different ethnic groups in order to effectively promote youth entrepreneurship within these different communities.

SECTION VIII – CHALLENGES FACING THE FIELD

A number of critical challenges currently hinder the ability of youth entrepreneurship programming to have an impact at any level of scale on the lives of disadvantaged youth. These include:

- A lack of disciplined frameworks to guide the field.
- Difficulties of penetrating the public school as a delivery environment:
  - Resistance to experiential learning in schools.
  - Limited availability of teachers who are competent to teach entrepreneurship.
  - Lack of school connections to the community.
- The lack of strategic system-wide models in communities.
- Highly subsidized and expensive programming models and lack of access to sustainable funding.
- The need to integrate and align youth entrepreneurship with other methods for youth capacity building.

Each one of these barriers is addressed in more detail below.

There is an overall lack of a disciplined framework to guide the development of the youth entrepreneurship field.

The youth entrepreneurship field is still early in its developmental curve. As a result, the field is characterized by high levels of entrepreneurial practice and experimentation, divergent outcome goals, and a lack of the professional practice standards (such as shared intellectual frameworks; operational definitions; common methods and tools; disciplined data-driven research and development; formal training and credentialing systems) that characterize more mature fields of professional practice. This lack of a shared framework is reflected in many of the programming dimensions we explored earlier:

- ***Target population.*** The definition of the target population is often vague and broad, and specific and meaningful distinctions are often not made.

- ***Outcomes.*** There is a failure to differentiate among the very different kinds of outcomes that are being sought.

- ***Offerings.*** Program offerings are often more driven by the passion of the program entrepreneur than on any serious analysis of the needs of the target population. A great deal of more work is needed to better understand what kinds of intervention strategies are effective for achieving what outcomes with which client populations under what circumstances.

- ***Organizations.*** There is not yet a shared understanding of what kinds of organizational capacity are best suited to the development and delivery of

youth entrepreneurship programming. (As we note earlier, the use of the highly non-entrepreneurial school environment to "teach" entrepreneurship is questionable under many circumstances.)

- ***Community Context.*** There has not been nearly enough serious thinking about how to match entrepreneurship programs to the economic and cultural context of the community in which they are occurring. A youth entrepreneurship program in a community like Flint, Michigan that has been dominated for half a century by a single large corporation has to be thought of far differently from on in a place like Boston, which has a robust history of entrepreneurship and intellectual property commercialization.`

Some good progress is being made on many of these fronts. However, the field is far from "mature" and will require substantive investment in common intellectual architectures before that development can happen. The lack of a shared framework creates barriers to cooperation, collaboration and continuous improvement. Players in the field tend to compete with each other for resources and thought leadership rather than organizing collectively to advance the field as a whole.

Standards-based educational systems and academic outcomes based testing typically won't adopt experiential learning models.

- Federal standards in No Child Left Behind and state testing priorities relegate youth entrepreneurship to after school and elective courses. NFTE is tackling this head on by developing cross-referenced curriculum to key standards. NFTE's curriculum meets national social studies and mathematics learning standards, as well as language arts, math, science, technology, and social studies in several states throughout the country[6]. The Consortium for Entrepreneurship Education, working with entrepreneurs and practitioners nationally, has developed a set of National Content Standards to drive codification of entrepreneurial education at all levels[7]. The Consortium's vision is for the Content Standards to provide a framework for curriculum development, a guide for measuring knowledge

[6] Standards defined by:
The National Council for the Teaching of Mathematics (NCTM)
The National Council for Social Studies (NCSS)
The U.S. DOL's Secretary's Commission on Achieving Necessary Skills (SCANS)

[7] The Standards were developed in 3 major sections:
Entrepreneurial skills (traits and behaviors)
Ready skills (baseline of knowledge required to study entrepreneurship)
Business function skills (necessary for starting and running a business).

Limited adoption of the Standards has occurred in a few state departments of education and other organizations nationally. http://www.entre-ed.org/Standards_Toolkit/. None of the programs visited so far use this standard and NFTE has not yet drawn from National Content Standards.

and skill development and position the framework as a vehicle for application.

- Overall, schools themselves are not set up to facilitate the interactive, experiential education methods required to cultivate entrepreneurial skills and mindsets. As numerous studies show, class sizes remain too large to develop close student-teacher relationships. Additionally, in order to facilitate entrepreneurship education, schools must forge strong connections with local community and business leaders to immerse students in the experience of entrepreneurship. Our research indicates that these connections are lacking on a nearly universal level.

Traditional public school teachers are ill-equipped to teach entrepreneurial education.

- There are negative perceptions of teachers and their lack of experience with entrepreneurship. Some programs overcome this by using certified NFTE teachers[8]. Programs commonly reach out to business and private sector role models to act as mentors, resources and instructors.

- Research on teacher attitudes towards entrepreneurship indicates that teachers as a group are conservative and have an overall negative attitude towards entrepreneurship and are generally ill-equipped as a professional group to teach it:

    - Regarding the ability of teachers to develop entrepreneurial skills and mindsets in the public school system, additional data is available from the Gallup Polls funded by the Kauffman foundation from 1994 to 1999. In this research, Walstad and Kourilsky discovered that nearly six out of ten teachers would discourage youth from pursuing entrepreneurship, more than the percentage for the general public, youth and small business groups surveyed. The negative perspective of teachers towards entrepreneurship stands in stark contrast to the mere 3% of youth that would discourage others from entering a career in entrepreneurship. Nine out of ten small business owners surveyed reported being happy and satisfied with their choice to start their own enterprise.

    - Walstad and Kourilsky also reported that only two out of ten teachers believed that small businesses were better at paying workers for what they accomplished while a majority of the general public and youth believed that small businesses allocated pay better than large corporations. In this study, teachers were also the most skeptical about the quality of products produced by small

[8] NFTE is developing two levels of certification.

businesses compared with large companies. About half thought small businesses were worse at providing jobs overall than large corporations – a more negative perception than any other group surveyed. In fact, small businesses provide about half of the jobs in our economy.

- The study results also indicated that although most (8 out of 10) teachers believed entrepreneurial and small business education to be important or very important, they may not have the ability to teach their students the necessary skills. Almost five out of ten reported that their understanding of starting and managing a business was "poor" or "very poor"; only one out of six rated themselves as excellent of "good". This deficit results partially from the lack luster focus on entrepreneurship at the University level. The number of professional journals and departmental positions that focus on entrepreneurship continue to rise yet the number of educators graduating with knowledge of the entrepreneurial process remains glaringly low. In addition to the general lack of entrepreneurial education exhibited by teachers, most school counselors fail to even recognize entrepreneurship to be a viable career option.

- Our research into the personality types of K-12 teachers uncovered evidence suggesting that teachers may be fundamentally opposed to the educational reform suggested by entrepreneurship education advocates. Studies conducted by Lawrence (1979), Rojewski and Holder 1990), Stockburger (1991), Sears and Kennedy (1997) and Thornton, Peltier and Hill (2005) all found the predominant teacher personality type to be SFJ or Sensing-Feeling-Judgmental. SFJs are characterized as "concrete in their approach to tasks, do not appear interested in theory, trust their feelings, value harmony, make schedules and follow them, and thrive on order," (Sears and Kennedy). As Sears and Kennedy suggest, "Because SFJs respect order, the concrete, and the status quo, they will likely not be comfortable with the disorder ambiguity and confusion that inevitably accompanies change."

- As traditional teachers adapt entrepreneurship to their traditional environments, some curriculum has been criticized as being "directive" (teaching someone to be an entrepreneur) rather than developmental (shaping experiences and capacity for inquiry) to build entrepreneurship skills. In the educational field, this is the distinction between "mastery learning" (skill and drill to internalize knowledge previously codified by others) and "discovery learning" (experience-based knowledge creation by the learner). Powerful learning environments depend on a healthy mix and balance between these two types of learning. Schools are overwhelmingly biased towards mastery learning, whereas it can be

argued that the core skills of entrepreneurship are highly biased towards discovery learning. The following quote from David Birch is instructive:

> *"I do not think it (entrepreneurship) can be learned in the classroom. I would like to impose a rule that no one should teach in entrepreneurship if they have not done it themselves, that is, they have started and run their own company. The only faculty should be people that have successfully run their own company. Think about it. We find many forms of apprenticeships. Most professions have different versions of it. It is a well-defined way of mastering your profession. I do not see anything like this for entrepreneurs and can't see why not. Entrepreneurship is in the same category—except that it is harder." (*David Birch, ARC Analytics)

***Most youth entrepreneurship programs are treated as "add-ons" versus core elements of the curriculum*.**

- The elective nature of programming marginalizes the resources, the instructor quality, and accountability structures for achieving outcomes. NFTE addresses this issue head on through integrating core subject area content throughout its curriculum.

- Many existing entrepreneurship education programs within public schools treat entrepreneurship as an "add-on" course. As an elective, these courses are often taught by business management instructors and fail to connect the curricula to real-world learning. Entrepreneurship education must focus on the creation and identification of new opportunities and overcome the traditional mentality of "working with what's already there." Without a fundamental sea change in the way educators approach the learning process, entrepreneurship education succumbs to the same rudimental, disconnected instructional methods that researchers have identified as plaguing our school system on a general level.

***There are many experiments in youth entrepreneurship but few strategic system wide models*.**

- Many of the 26 programs researched are under-resourced experiments that reach small numbers of vulnerable youth. At the national level, only NFTE and a coalition of loosely affiliated local programs that target vulnerable inner city urban youth combine in a way to form a "community of practice" that shows strategic promise and capacity to scale. The Yes Program shows promise as a place-based systematic approach in Philadelphia.

***Revenue models require subsidy and are not self sufficient*.**

- All programs visited rely on multiple funding sources to survive. Programs traditionally rely on local and regional corporate funding, foundations, and governmental funding.

- Only E/Prep, through its charter school model has developed a reliable tuition reimbursement revenue model, but substantial subsidy is also required.

- Some programs see market opportunities for earned income. Two types of earned income have emerged:
  - Passive earnings. This typically involves the rental of facilities[9].
  - Direct earnings from the learning process involving products and services[10].

- None of the programs have yet tapped into reliable streams of public, private or non-profit funding sources – such as core school academic budgets.

***Self-selection and opt-in programs by-pass many vulnerable youth. Youth entrepreneurship needs to be one of a family of youth capacity building programs*.**

- The elective in-school and after-school nature of youth entrepreneurship programming provides options for vulnerable youth, but program capacity constraints and choice means many do not participate.

- If the broadest based goal of youth entrepreneurship training is building academic and social capacity for vulnerable youth to succeed in life, then this programming must be considered one of many methods to accomplish these goals (e.g. boys and girls clubs, sports, scouting, YMCA

[9] Little Black Pearl Art and Design (LBP) had earnings in 2005 of $87,000.00 from facility rentals for parties and functions. Youth Radio has generated a modest amount of rental income from studio space offered to ar***ea journalists and musicians.***

[10] LBP generated $27,000 in 2005 through commissions and retail sales of functional art and art objects created collaboratively by program youth and teachers. LBP is committed to expanding activities in student/teacher collaborative commissions, selling student work through retail gallery space and developing a signature line of LBP functional art that is jointly designed and produced by students and teachers. LBP believes the combination of these activities could generate 65% of total organizational revenues by 2008. However, LBP will require new capacity to execute. Youth Radio students offer sound engineering services during studio rental sessions, generating some earnings and useful job experience. Youth Radio's new facility will expand opportunities for rental studio income. During our site visit, Youth Radio expressed interest in exploring a separate earned income enterprise modeled after Seariders where a youth led media production service generates income.

and YWCA, youth groups, church programs, leadership programs, technical training opportunities).

SECTION IX – PRIORITIES FOR FIELD DEVELOPMENT

Based on this analysis of the youth entrepreneurship field, there are several priority areas for field development.

- ***Practice Frameworks.*** There is a need for development of more highly differentiated frameworks, hypotheses and insights regarding target populations; outcomes; program design; policy, and organizational capacity required.

- ***Continued Standards Development.*** Further investment is required in developing shared best practice standards and systems, such as the work being carried out by the Consortium for Entrepreneurship Education and NFTE.

- ***Outcomes Research.*** A longitudinal research program to track performance and differentiate performance by program design would help refine strategy and highlight the benefits of youth entrepreneurship.

- ***National Practice Models.*** Further investment is needed in national level systems for best practice, such as the National Foundation for Teaching Entrepreneurship and its network of affiliate programs. Initiatives of this scope have the potential to get overall higher levels of market penetration in schools and communities.

- ***Innovative Prototype Development.*** There are many early-stage experiments in programming. It is not clear which of these are potentially scalable and which are not. Further investment is required to "prove them out" and develop scalable operating systems and sustainable funding models.

- ***Comprehensive Community Based Strategies.*** One emerging hypothesis about the youth entrepreneurship field is that large-scale impact will come from comprehensive community-based strategies that take a full systems approach – integrating K-12 programming (elementary; middle and high school); out of school programming for in-school kids; out of school programming for out of school kids; 2 and 4 year education; enterprise development and incubation; enterprise finance; and intra-preneurship. This hypothesis has never been fully tested and doing so will require concentrated, long-term investments in specific communities.

- ***Testing New Strategies for Enterprise Development and Wealth Creation.*** At this time, there are a limited number of programs in the country that focus on the creation of viable business enterprises by young people (in contrast to using entrepreneurship strategies to enhance

school, academic and career outcomes). Additional experimentation and development is needed to:

  - Develop a deeper understanding about what kinds of program designs maximize the opportunities for commercial success of youth-based enterprises.
  - Create sector-based strategies that develop opportunities for young people to create wealth by contributing to business sectors that target young customers.
  - Develop novel ways to connect young entrepreneurs to sources of outside intellectual property commercialization (e.g. a youth inventors network).
  - Understand how to best connect micro-enterprise initiatives to youth populations.

- ***Youth Entrepreneurship Policy.*** Addition work is needed to develop a more comprehensive state and national policy agenda to support youth entrepreneurship. This would include:

  - Development of a comprehensive policy agenda that supports youth entrepreneurship, and advancement of that agenda at the state and national levels.
  - Integration of youth entrepreneurship strategies with state economic development strategies.
  - Development of a more rigorous framework and research base to support the ongoing development of the field.
  - Highlighting of best practice examples and networks across the country.

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Attachment 1 -- Youth Entrepreneurship Program Examples

As part of its research, Integral Assets reviewed a total of 27 programs nationally, and made site visits to 10 of them. (Asterisks indicate a site visit was made.)

1. Youth About Business (YAB) – Nashville, TN
2. Junior Achievement – Colorado Springs, CO
3. EnterprisePrep – Harvey Cedars, NJ
4. E City – Cleveland, OH*
5. NAACP Youth Entrepreneurial Institute – Baltimore, MD
6. John Pappajohn Entrepreneurial Center, University of Iowa – Iowa City, IA
7. The Academy of Business Leadership (ABL) – Rosemead, CA
8. BizWorld – San Francisco, CA
9. The Center for Teaching Entrepreneurship – Milwaukee, WI
10. Food From the 'Hood – Los Angeles, CA
11. Business United in Investing, Lending and Development (BUILD) – Menlo Park, CA*
12. Added Value, Red Hook – Southwest Brooklyn, NY
13. Prudential Youth Entrepreneur Program – AEO, Philadelphia & NJ
14. YES Program, The Enterprise Center – Philadelphia, PA*
15. Little Black Pearl Art and Design Center – Chicago, IL*
16. Youth Works, Micro Business Development – Denver, CO
17. 4H Nebraska, University of Nebraska – Lincoln, NB
18. Youth Radio – Berkley, CA*
19. Juma Ventures, San Francisco, CA
20. Jobs for a Future/Homeboys/Homegirls Industries – Los Angeles, CA
21. Youth Biz – Denver, CO
22. People's Grocery – West Oakland, CA
23. Made on the REZ Youth Program/Four Bands Community Fund, Eagle Butte, SD*
24. HopeWorks – Camden, NJ*
25. Growing Up CEO, Initiative for a Competitive Inner City – Boston, MA*
26. National Foundation for Teaching Enterpreneurship (NFTE) – NY, NY*
27. Consortium For Entrepreneurship Education (Columbus, OH)*

Attachment 2 – National NGOs Focused Relevant to Youth Entrepreneurship

Appalachian Regional Commission www.arc.gov Entrepreneurial development is one of dozens of strategies ARC uses to improve the economy of the region it serves.

Association for Enterprise Opportunity (AEO) www.microenterpriseworks.org-home of the Prudential PYEP program- operates with the following goals: to provide public policy advocacy, increase the awareness of the microenterprise strategy, and work to remove the barriers that impede low-income individuals from becoming self-employed and to provide training in microlending to member organizations.

The Center for Rural Entrepreneurship- www.ruraleship.org .is a national research and policy center. The rationale for the Center is rooted in a clear opportunity for building more prosperous, dynamic and sustainable economies in rural America through entrepreneurship development

Collegiate Entrepreneurs Organization – www.c-e-o.org - its mission "to inform, support and inspire college students to be entrepreneurial and seek opportunity through enterprise creation."

The Coleman Foundation –www.colemanfoundation.org - Programs focused on the creation of entrepreneurs and the development of entrepreneurship as an academic discipline have been supported by the foundation.

Consortium for Entrepreneurship Education www.entre-ed.org
An organization recognized as the national leader in advocating entrepreneurship education. The Consortium champions entrepreneurship education and provides advocacy, leadership, networking, technical assistance, and resources nationally across all levels and disciplines of education, promoting quality practices and programs. Developers of national standards in entrepreneurial education.

Corporation for Enterprise Development- www.cfed.org CfED is home of the REAL program and develops policies and practices that encourage entrepreneurship through microenterprise, youth enterprise, and small business development.

Ewing Marion Kauffman Foundation- www.researchkauffman.org - works with partners to encourage entrepreneurship across America and improve the education of children and youth. The Foundation focuses its operations and grantmaking on two areas: entrepreneurship and education.

Illinois Institute for Entrepreneurial Education www.iiee.org - advocates entrepreneurship throughout the State of Illinois.

The National Association for Community College Entrepreneurship (NACCE) **www.nacce.com** NACCE is dedicated to providing a cohesive system of entrepreneurship and incubation education utilizing community colleges as a coalescing force to accelerate the development of new venture creation in America.

The National Commission on Entrepreneurship www.ncoe.org was created to focus public policy on the role of entrepreneurship in the national economy and to articulate policies that will foster its continued growth.

The National Consortium of Entrepreneurship Centers (NCEC) www.nationalconsortium.org was founded in 1996 through the efforts of the University of Maryland and the Kauffman Foundation. The intent of the organization is to provide a coordinated vehicle through which participating members can collaborate and communicate on the specific issues and challenges confronting university-based entrepreneurship centers.

National Youth Employment Coalition www.nyec.org is a non-partisan network improving the effectiveness of organizations that seek to help youth become productive citizens.

United States Association for Small Business and Entrepreneurship (USASBE) www.usasbe.org USASBE's mission is to advance knowledge and foster business development through entrepreneurship education and research.