

## DOCUMENT RESUME

ED 441 151

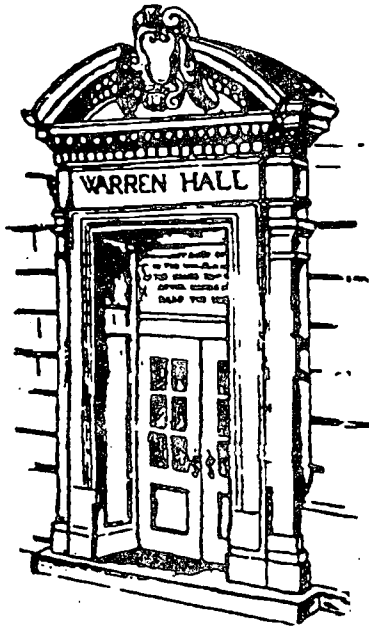
CE 080 172

AUTHOR Schlough, Charles; Streeter, Deborah H.  
TITLE Cornell University's Entrepreneurship Education & Outreach Program: Evaluation and Proposal. A White Paper.  
INSTITUTION Cornell Univ., Ithaca, NY. Dept. of Agricultural, Resource, and Managerial Economics.  
REPORT NO CU-WP-99-15  
PUB DATE 1999-07-00  
NOTE 27p.; Cover title varies from title page.  
AVAILABLE FROM Publications, Dept. of Agricultural, Resource, and Managerial Economics, Warren Hall, Cornell University, Ithaca, NY 14853-7801. Web site: <http://www.cals.cornell.edu/dept/arme>.  
PUB TYPE Reports - Evaluative (142)  
EDRS PRICE MF01/PC02 Plus Postage.  
DESCRIPTORS \*Agricultural Education; \*Business Education; College Programs; Delivery Systems; Educational Environment; Educational Improvement; Educational Needs; \*Entrepreneurship; Global Approach; Marketing; Models; \*Outreach Programs; Performance Factors; Philanthropic Foundations; Postsecondary Education; Program Development; Program Effectiveness; Program Evaluation; Program Improvement; Small Businesses; Statewide Planning; Success; Universities  
IDENTIFIERS Cornell University NY; Educational Marketing; \*New York; Premier FastTrac

## ABSTRACT

In 1997-1999, the Department of Agriculture, Resource, and Managerial Economics of Cornell University's College of Agriculture and Life Sciences conducted an entrepreneurship education and outreach program that was based on the Premier FastTrac Curriculum, which is a model delivery tool for entrepreneurship education. In 1997-1998, the program was actively promoted throughout New York. Of the approximately three dozen community entities that originally expressed interest in becoming licensed for FastTrac training, five obtained licenses and one conducted a pilot training course but never became organized enough to apply for a license. Together, the sites produced 58 program graduates in 1997-1998 (335 graduates had been projected). The program was evaluated in July 1998, and prospective candidates who had not actively pursued becoming affiliated with FastTrac training sites were interviewed by phone in December 1998. Data from the evaluation and the interviews, and a review of other studies and literature were used to develop a proposal for meeting the challenges uncovered during the evaluation and development of an effective small business education to serve New York's diverse communities. Appended is a case study of why the attempt to develop of an entrepreneurship program in Tompkins County, New York, failed. (MN)

WP 99-15  
July 1999



U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL HAS  
BEEN GRANTED BY

*C. Schlough*

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

1

# Working Paper

Department of Agricultural, Resource, and Managerial Economics  
Cornell University, Ithaca, New York 14853-7801 USA

## **CORNELL UNIVERSITY' S ENTREPRENEURSHIP EDUCATION & OUTREACH PROGRAM Evaluation and Proposal**

Charles Schlough  
Extension Support Specialist and  
New York State Coordinator, Entrepreneurship Training  
Network

Deborah H. Streeter, Ph.D.  
Bruce F. Failing, Sr. Professor of Personal Enterprise and Small  
Business Management

It is the Policy of Cornell University actively to support equality of educational and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age or handicap. The University is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.

CORNELL UNIVERSITY

**ENTREPRENEURSHIP EDUCATION & OUTREACH PROGRAM**

*Evaluation and Proposal*



A White Paper

Charles Schlough, NYS Coordinator, Entrepreneurship Training Network  
Deborah H Streeter, Bruce F. Failing, Sr. Professor of Personal Enterprise and  
Small Business Management

Entrepreneurship Education & Outreach  
Department of Agriculture, Resource, and Managerial Economics

July 1999

## ABSTRACT:

This paper is an evaluation of the two year experience of Cornell University's Entrepreneurship Education & Outreach (EEO) program and its efforts to disseminate and administer small business outreach training with the Premier FastTrac entrepreneurial curriculum. This paper describes EEO's origin, purpose, and mission, and an evaluation of knowledge gained from the fourteen month experience with the FastTrac entrepreneurship training program ending January 1999.

There have been difficulties for EEO to achieve original expectations that were formed in Summer of 1996. We learned that a critical component of a successful outreach program of this nature is to have supportive cooperation by local as well as state level stakeholders in economic and community development. Experience revealed significant obstacles and barriers to build and sustain these critical components in some communities.

A proposal to develop a statewide network of supportive partnerships is offered at the end of this paper.

Copies of this paper are available through the EEO office at 307 Warren Hall, Cornell University, Ithaca, NY 14853. Comments are invited. Please address them to Charles Schlough [cas30@cornell.edu](mailto:cas30@cornell.edu) , or 255-8047.

Charles Schlough  
June 1999

# ***ENTREPRENEURSHIP EDUCATION & OUTREACH PROGRAM Evaluation and Proposal***

A White Paper Draft for Discussion  
June 1999

---

## INTRODUCTION

- I. CORNELL UNIVERSITY'S ENTREPRENEURSHIP EDUCATION & OUTREACH PROGRAM:  
REVIEW and EVALUATION
  - A. EEO Mission
  - B. Origin, Activity, and Termination of FastTrac Affiliation
  - C. Affiliation with NxLevel Training Network
  - D. Knowledge Gained through the FastTrac Experience
  - E. Knowledge Gained from Other Sources
  
- II. THE ENTREPRENEURIAL TRAINING ENVIRONMENT
  - A. Motivation for Small Business Development
  - B. Pressure from Global Economic Evolution
  - C. Need for Small Business Training
  - D. Social Challenges Posed by the Need for Small Business Training
  
- III. THE SITE BASED ENTREPRENEURSHIP TRAINING MODEL
  - A. Essential Resources for a Successful NxLevel Site Based Program
  - B. Awareness of Diverse Needs and Readiness of Entrepreneurs
  - C. Course Delivery Variables
  - D. Varied Teaching Structures
  - E. Fundraising Challenges and Opportunities
  - F. Business Skills Training – A Piece of a Bigger Picture
  - G. Obstacles and Barriers to Effective Site Based Training
  
- IV. FUTURE DIRECTIONS
  - A. Revised Mission
  - B. Market Segments and Size – Where to Focus? Whom to Serve?
  - C. How Do We Reach Targeted Market Segments?
  - D. Cornell University's Land Grant Role in the EEO Mission
  - E. A Cornell Leadership Role in Community & Economic Development
  
- V. PROPOSAL:  
A Statewide Entrepreneurship Training Network

## APPENDIX

Case Study: Tompkins County, New York

**CORNELL UNIVERSITY'S**  
**ENTREPRENEURSHIP EDUCATION & OUTREACH PROGRAM**  
**Evaluation and Proposal**

White Paper  
July 1999

## INTRODUCTION

This paper is prepared as a discussion piece to evaluate recent experiences and consider appropriate direction for Cornell University's Entrepreneurship Education & Outreach (EEO) program. The home for EEO, an outreach component of the Entrepreneurship and Personal Enterprise Program, is the Department of Agricultural, Resource and Managerial Economics. This white paper describes EEO's origin, purpose, and mission, and an evaluation of knowledge gained from the fourteen month experience with the FastTrac entrepreneurship training program ending January 1999.

There have been difficulties achieving expectations of two years ago. It was assumed then that Cornell Cooperative Extension associations would have the resources to take on a lead role in assembling resources and coordinating FastTrac training in their communities, that enrollment for courses would approach maximum class size and fuel four classes a year per location, that entrepreneurs would see the value of paying several hundred dollars and committing three months of hard work to business planning, and that other economic development groups in local communities would readily cooperate to promote the program and help fund the costs.

We learned that none of these were viable assumptions and that a critical component of a successful outreach program of this nature is to have supportive cooperation by local as well as state level stakeholders. At the local level, there is a need for funding, for endorsement by lenders and by economic development and business organizations, for publicity and recruitment assistance, teaching facilities and equipment, quality instructors, and a coordinator. The ready availability of these resources was underestimated by EEO and we learned that their availability cannot be assured without deliberate, creative, and persistent efforts to build collaborative support from local, regional and state entities.

Our experience has revealed significant obstacles and barriers to build and sustain these critical components in some communities. It is clear from EEO's experience that it cannot achieve its mission without important partners at the community, State and Federal levels and to restructure strategies.

A proposal to develop a statewide network of supportive partnerships is offered at the end of this paper. Implementation of the Proposal has been unfolding. As of June 1, 1999, formal endorsement for ETN has come from the Department of Agriculture, Resource, and Managerial Economics, and the College of Agriculture & Life Sciences. Meetings with SBDC, Empire State Development, and USDA Rural Development are underway to establish state level partnerships. NYS regional presentations are being planned to present the ETN and NxLevel programs to community groups in three or four locations. The ETN website is under development and will be accessible through <http://www.epe.cornell.edu>.

# **I. CORNELL UNIVERSITY'S ENTREPRENEURSHIP EDUCATION & OUTREACH PROGRAM - REVIEW and EVALUATION**

## **A. EEO Mission**

“To provide business assistance and training opportunities and create a solid working network for entrepreneurs throughout the State of New York. Our programs will promote high quality education and training, emphasizing active learning, interactivity, and experiential learning. Distribution of the program will include on-campus teaching, site-based workshops, and distance learning (including both satellite-based and Web-based strategies).”

## **B. Origin, Activities, and Termination of FastTrac Affiliation**

When the EEO program was created in 1997, under the Department of Agriculture, Resource, and Managerial Economics in the College of Agriculture & Life Sciences, its site-based orientation was intended to bring improvement in the creation and sustainability of small business ventures through educational programs in New York State communities. EEO's first delivery tool for entrepreneurship education was the Premier FastTrac® curriculum, owned by the Ewing Marion Kauffman Foundation and distributed under its affiliate, Entrepreneurial Education Foundation (EEF).

### Promotion efforts of the New York State/FastTrac program.

- Six site presentations were made from Fall 1997 to June 1998.
- Letters and announcements were distributed to CCE offices.
- A statewide satellite video conference was broadcast in June 1998 from Cornell Campus. Panel presentations were given by FastTrac, Farming Alternatives Program at Cornell, Empire State Development, NYS Labor Dept., State SBDC office, and South Central NY RC&D.

An initial prospect list of some three dozen community entities produced four locations (Syracuse, Geneva, Lewis County, and Albany) where strong intentions were expressed to become licensed for FastTrac training.

### Accomplishments

Training sites were set up in Chenango County (through the RC&D office), Alliance for Manufacturing and Technology (AM&T - an MEP/NIST affiliate in Binghamton), and Cornell Office of Technology and Business Assistance (COTABA). Industrial Technology Assistance Corporation (ITAC), a manufacturing and technology group in New York City. Also, we inherited a not-for profit community development group (South Bronx Overall Development Corp.) that was previously licensed directly by FastTrac. A pilot training course was held at Tompkins County CCE, but never became organized to the point of applying for a license.



FastTrac Site Performance

	1997 - 1998		1999-2000
	<u>Proj. Grads</u>	<u>Actual Grads</u>	<u>Proj. Grads</u>
AM&T weak	n/a	n/a	tba
CHENANGO COUNTY good	40	7	60
COTABA dormant	40	0	60
ITAC good	80	30	100
SOBRO good	60	21	60
TOMPKINS COUNTY* absent	55		60
<b>Sub-totals (sites with agreements)</b>	<b>335</b>	<b>58</b>	<b>440</b>

\*(no signed Associate Agreement - Pilot course completed Nov '97)

A site proposal was received from Syracuse University and three other proposals were in draft stages by October 1998. At that point EEF underwent major restructuring, which shifted the cultural priorities from an education-based outcome to a commercially modeled publishing operation with a heavy emphasis on course book sales performance. EEO was given an ultimatum to sign a complex agreement that had been revised unilaterally by EEF. It contained onerous obligations and restrictions and EEF's intention to terminate the existing and still valid agreement with its licensees. On January 18, 1999, EEO informed EEF and Kauffman of our decision to not sign the new agreement due to their re-direction on a path that conflicted with our mission and community needs.

**C. Affiliation with NxLevel Training Network**

Research into other entrepreneurial training programs led us to an affiliation with NxLevel Training Network, which is based in Denver and funded by US West Foundation. NxLevel ([www.NxLevel.org](http://www.NxLevel.org)) is a strong and rapidly growing competitor to FastTrac and offers more diverse high-quality training products for startup and existing businesses. They have also developed courses in youth entrepreneurship, sustainable agriculture, tourism, and are writing one for micro-enterprises. Their administrative structure offers extensive local and state level flexibility with both operations and curricula. The agreement we have to market and deliver NxLevel training courses in New York State is identical to the other 23 state agreements and consisted of a handshake in the place of a rigid FastTrac contract. Nationally, NxLevel has graduated 12,000 participants in four years, and during 1999 an increase of 6,000 graduates is projected for the 30 affiliated states.

NxLevel's rapid growth is due to excellent educational materials, quality instructor training, flexibility of course delivery, and top-notch support. Substantial underwriting of some three million dollars for NxLevel development has come from US West Foundation. Training materials contain examples and case studies that are especially relevant for non urban and very small enterprises. There are excellent support resources available through their website, through national networking, and best practices sharing among state directors.

## **D. Knowledge Gained Through The FastTrac Experience**

### Strategic Planning and Evaluation - July, 1998

Professor Streeter and Charles Schlough conducted an evaluation of EEO efforts through July 1998 and noted key observations:

- FastTrac is part of a larger process to provide training and ongoing long term support
- Critical priorities are for high quality instruction, adequate funding, and effective coalitions
- Should emphasize successful business outcomes over numbers of graduates
- The mission statement needs to be adapted as the EEO program evolves
- Achieving critical mass of class size in low density markets is difficult
- The few FastTrac coalitions established by this office are struggling to stay together. Coalitions in formation face similar challenges to be viable
- Student interest varies by size of enterprise and attitudes toward learning

### Survey of FastTrac Training Prospects in New York State

In December 1998, phone interviews were conducted with prospects who have not actively pursued affiliation to become FastTrac training sites. The purpose was to learn their reasons for lack of further interest. Fifteen interviews produced some consistent themes.

- There is a perception of need for training, but no program funds to organize and operate
- The number of prospective entrepreneurs is limited by driving distance to training centers
- Some graduates seek external incentives, like access to credit or equity after completion
- Other training programs are in use or have been tried and discontinued
- The FastTrac program is too big a commitment for a single organization unless they are structured and experienced to run training programs
- Course commitments are too long (11 -15 weeks)
- Tuition is too high (~ \$200 to \$600+)
- Course sessions cover topics often not relevant to students with different levels of experience, type of enterprise, or stage of preparation

## **E. Knowledge Gained from Other Sources**

### Tompkins County Survey of Small Businesses

1998 - A survey<sup>1</sup> conducted in the Tompkins County area of 28 technology-based firms in the Spring of 1998 revealed an 84% interest in training to enhance understanding of business topics. Responses revealed principal interest in Marketing, Management, and Finance topics. Multiple (6 - 9 weeks) classroom sessions had least favor (14%). Preferred formats were shorter, such as 2 hours to a full day in classroom sessions (59%). Interactive and non-interactive internet series were little favored (19%), and 8% wanted an unspecified combination of formats. However, these findings of only 28 respondents in a

---

<sup>1</sup> Business Skills Training for Technology-Based Entrepreneurs - Assessment Survey, Cornell Office of Technology and Business Assistance, Spring, 1998

small geographic area of existing hi-technology enterprises do not support broader assumptions about attitudes toward training formats among other types of enterprises statewide. Nevertheless, an 84% interest in business training represents a strong market demand among small firms.

Cornell University - Entrepreneurship and Personal Enterprise Study

*1996 - "Creating a New Venture? Business Activities Essential for Entrepreneurship." S. S. Tyler*

This study presents a customer-focused needs assessment based on twenty-eight focus groups involving some 318 participants; business owners, professional, and community leaders. Its eleven recommendations addressed needs for improvement in the role of virtually anyone active or supportive with small business in New York State. Relevant points include:

- Business owners should invest in human capital assets and gain knowledge and skills
- Educational institutions, professional associations, and industry should partner in providing useful learning opportunities for business owners
- Educators, trainers, financial professionals, and economic development professionals should secure credentials and expertise in the issues identified in the study
- High quality products are needed for training
- Rural communities should be provided access via distance learning multimedia mechanisms
- Public policy makers should form active partnerships between government agencies, educational institutions, NFP's, and business and industry

ARME Report - Small Business Management Development Work Group

*1990 - "Report of the Small Business Management Development Work Group".* This report identifies similar needs of small businesses in rural communities for technical, financial, educational assistance, and access to funding. Agents felt that Extension's role should include a strong educational focus on pre start-up and start-up businesses. It further reported that many state programs in support of small businesses focus on the larger scale of small business (e.g.100+ employees), especially with financial support.

The survey reported these educational needs for small businesses:

- Planning assistance, referrals, resource materials for pre-start-up and start-up ventures
- Developing an emphasis on management skills with as much importance as technical know-how
- Improving ability and skill with planning, controlling, organizing, staffing, and directing
- Special emphasis on human resource management and marketing research and strategies
- Improving basic technical knowledge - financial analysis, taxes, estate planning, and labor regs
- Addressing the unique issues of family owned businesses

These three studies provide a body of evidence that supports existence of an unmet need, interest in the value of small business training, and comprehensive participation by the many community entities who have a stake or mission to promote and enhance small business growth and profitability.

Our experience suggests that capacity within and among local organizations is difficult to assemble to provide the level of support for a training program that depends upon a coalition of supportive local resources for multi-month site-based programs. Since the success of EEO's mission is closely linked to the capacity of local communities to provide essential resources, there remains a primary challenge to build community capacity or develop a simpler structure and format.

## **II. THE ENTREPRENEURIAL TRAINING ENVIRONMENT**

### **A. Motivation for Small Business Development**

In New York State, all net new jobs from 1992 to 1996 were created by small businesses<sup>2</sup>. Interest in entrepreneurship development has grown from awareness that successful small business start-ups and expansion are a durable source of economic growth. Small-scale businesses have the ability to respond to smaller markets and specialized opportunities and may thrive by attracting and retaining customer loyalties with more targeted and customized services. While employment downsizing has moved large numbers of hourly and mid-level workers off corporate payrolls, displaced workers often retrain for other jobs, seek self-employment in new fields of work, establish contract work assignments in their industry, or start up new businesses. These conditions create additional demand for business skills development since many of these individuals have little or no direct experience with the complex demands of creating or managing a business.

### **B. Pressure from global economic evolution**

Modern market-driven economics compels increasingly competitive business practices in an increasingly uncertain world. Competitive evolution has led to control of global markets by fewer and larger corporate entities. In this age of global market aggregation, traditional employment modes have diminished, corporate allegiance to any locale has practically disappeared, wealth has been siphoned from local economies, and individuals are responding to decentralized work structures and entrepreneurial options. Communities are feeling abandoned and looking homeward for solutions rather than outward for saviors. As economic globalization continues to pass over small scale economic activities and markets, consequences may favor local initiatives and participation.

### **C. The Need for Small Business Training**

The reasons for business failure are many. An entrepreneur's experiential limitations are often the primary reason. These include failure to adequately evaluate their personal expectations and capacities realistically, lack of personal qualifications to run a business, lack of experience in the chosen type of business, limited market knowledge, low priority for business planning, lack of adequate training, and unbalanced management skills.

Risks of small business failure are also high due to underestimated external factors like risks from unforeseen competitors, rigorous and short-term expectations of credit and equity suppliers, burdensome and confusing regulatory processes and policies, and tax policies that demand a large share of meager profits of start-ups.

---

<sup>2</sup> Office of Advocacy, U.S. Small Business Administration. Small Business State Profile 1998

Small businesses in a community are now faced with greater challenges for economic survival amidst tightening market conditions. Examples are: finding under-served markets; risks and complexity of developing new products or services; leftover market niches that are difficult to identify and expensive to serve; gaining access to distribution channels, and loss of successful niches to larger competitors.

Starting a small business is often considered an option for independent minded workers. But, the complexity of such an undertaking and the extent of external resources it requires involves many more commitments and risks within the economic social and political infrastructure than is generally realized.

#### **D. Social Challenges Posed by the Need for Small Business Training**

Small business failures have a rippling impact on communities and society in general. What does a community lose when a small business fails or is severely stressed? A short list of impacts includes: owner and family loss of capital, income, sometimes health and/or marriages; additional debt or even bankruptcy; employees lose incomes and may incur debt and other personal and family stresses; properties may become abandoned; lenders and investors lose capital; federal, state, and local governments lose public funds, sometimes loan guarantees must be paid out, unemployment benefit payouts rise; communities lose a piece of their local resources; and social capital is weakened.

The cost to support small business training to improve chances of survival and growth are small in comparison to the negative impacts that can be reduced by implementation of this and other kinds of support.

### **III. THE SITE BASED ENTREPRENEURSHIP TRAINING MODEL**

The FastTrac and NxLevel structures are built on 9 to 12 weeks of classroom sessions for 15 to 25 student learners. A certified instructor is supplemented by guest speakers, and optionally, business counselors. Course materials are well developed and provide structure and flexibility for both student and instructor. Supplemental materials and peer learning opportunities enrich the experience. The end product is a comprehensive business plan (or a feasibility study for those contemplating a start-up venture).

A business plan prepared in this environment involves more learning for the entrepreneur than those prepared by or with third parties such as SBDC's, accountants, and consultants. It requires the participant/owner to take full responsibility for each element, assumption, and projection. Such a business planning process brings together multiple perspectives and criticism that are not part of a solitary effort or one prepared on behalf of a business owner by a third party. FastTrac and NxLevel experience is that a business plan produced in these classes is more defensible than many business plans produced otherwise.

#### **A. Essential resources for a successful site based training program**

Effective delivery of entrepreneurship training courses is dependent upon assembling and coordinating sufficient resources and commitments such as:

- Teaching facilities and equipment
- Capable instructors selected and trained for the particular curriculum
- Guest speakers with relevant expertise or experience

- Fund raising, budgeting, accountability
- Promotion, marketing, and recruitment of learners
- Coordination of the above

Desirable, but not essential resources:

- Loan fund for start-ups
- Access to equity sources
- Ongoing counseling or mentoring

## **B. Awareness of Diverse Needs and Readiness of Entrepreneurs**

The EEO program began with a presumption that considerable entrepreneurial interest exists in communities. However, at any given time, there is a finite small percentage of adult population inclined to start or who presently operate a business. The potential population of learners is also limited by the level of readiness of an existing business owner for a business training course and by having time and money available, and awareness of value.

There is a widely held perception of demand for entrepreneurial business training that is not necessarily consistent with the actual needs expressed by small business operators. While some entrepreneurs may lack essential skills for business success, many have gained experience and knowledge through employment, prior training, exposure to family owned businesses, or self-education. For any set of small business owners, some are about to launch a venture, some are in the early months of operation, and some have experienced numerous business seasons and cycles. Their experiences vary, their challenges are both the same and different, and each one has personal issues that influence their capacity to direct and lead a business successfully.

If courses are given once or twice a year, the window of opportunity becomes quite narrow. Timely access to learning then becomes an issue for many prospective students. Limited geographic access to training sites is a considerable impediment to some rural entrepreneurs who prefer the least commitment of time and money to gain the knowledge they believe they need or may be required by some circumstance. These factors contribute to a concern that a minimum preferred class size may be very difficult to attain in low population areas.

## **C. Course Delivery Variables**

New York State's many rural counties present special challenges for recruitment for site based training due to low population density, driving times to reach more people, desirable class sizes of 12-25 students., and class duration of 3-4 hours. Other less intensive formats like workshops and 2-3 classes provide opportunities for less dependence upon coalitions, or for fewer coalition partners. Web-based courses or other self-paced courses provide further simplicity for delivery, but more intensive work by the course provider, and faculty partners.

The following table illustrates the relationship of several variable, delivery structures and course formats.

<b>COURSE FORMAT</b>	<b>Delivered by Coalition</b>	<b>Delivered by Training Organization</b>	<b>Not Site Based</b>
9-11 Session Classroom	Required	Optional	NA
4-5 Session Classroom	Required	Optional	NA
Weekend workshop	Optional	Optional	NA
Single day workshop	Optional	Optional	NA
Web-based Distance Ed. course	Optional	Optional	Direct from Campus
Home Study (paper or electronic)	Optional	Optional	Direct from Campus

#### **D. Varied Teaching Structures**

The FastTrac/NxLevel teaching structure of 9 to 11 weekly sessions requires a large commitment of local resources and a large commitment of time and money by learners. This is probably the most costly teaching structure per student among an array of existing ones. In recognition of varied needs, other structures should be considered that demand less commitments, such as; 3-5 weekly sessions, weekend or day-long workshops, electronic distance learning, and home study formats. Each has value for different learners and different training environments. But they all require some degree of interactive teaching/learning practices to meet the individual needs and readiness of learners. In the future, EEO will consider developing training formats with less demanding structures than FastTrac or NxLevel.

#### **E. Fundraising Challenges and Opportunities**

Fund-raising presents a considerable challenge to delivery of business training programs, but there are private and public sector resources to pursue. It is an appropriate role for the EEO program, with strategic assistance from higher levels of Cornell University, to garner support from these and other stakeholder entities who share in the outcomes of small business activity at several levels. Funds should come from federal, state, and local stakeholders and from course tuition. Appropriate sources of funding should consider:

- Empire State Development
- SBA - Direct loan programs
- USDA Rural Development
- Community Development Block Grants
- Municipal governments
- Foundation grants
- Banks (Community Reinvestment Act and business loan marketing budgets)
- Power, Fuel, Communication Utilities

#### **F. Business Skills Training - A Piece of a Bigger picture**

Training programs that teach entrepreneurial business skills are not sufficient alone to assure business sustainability and growth. A program of ongoing support is essential to

nurture healthy small business growth. Continuing small business support should include:

- Mentoring or counseling
- ongoing assessment and diagnosis
- needs analysis
- information and research support
- access to credit and equity

How are these needs to be met? Who is in a position to organize such support. Given the broad based importance of small business vitality for community and state level economies, where is the infrastructure to support these needs and where are the necessary commitments?

### **G. Obstacles and Barriers<sup>3</sup> to Effective Site Based Business Training**

#### **Local Collaboration**

If community economic improvement through small business growth is to become a reality in NYS, there must be commitments among economic development stakeholders that effectively address the barriers and obstacles that presently limit such achievement. Several barriers exist among relevant entities at the local level:

- Mission overlap
- Funding competition
- Need for public visibility and credit
- Past history of conflict
- Organizational inflexibility
- Need for effective models and training for collaboration

A partial list of typical stakeholders includes:

- chambers of commerce
- cooperative extension offices
- community colleges, technical schools, BOCES
- municipal economic development agencies
- not-for-profit economic development organizations
- business improvement districts
- industrial development authorities
- NIST/MEP programs
- trade groups
- Rural Development and related USDA agencies
- Resource Conservation & Development offices
- Regional Economic Development offices (NYS)
- Small Business Development Centers
- informal business networks

---

<sup>3</sup> Green, J. Building Partnerships for Local Agriculture Development, Farming Alternatives, Vol.7, No.1 Winter 1999



Most NYS communities are served by the following organizations that provide these types of support:

- Chambers of Commerce focus priorities on networking of businesses, topical workshops on timely issues, tourism development and promotion, and legislative advocacy. Not much is provided for small business start-up education or counseling. Such inquiries are referred to SCORE (see below).
- Small Business Development Centers (SBDC) (in NYS) usually provide free counseling and some training through short overviews or specific 1-3 hour workshops. The NYS SBDC system allows independent regional decisions as to whether training is part of their work plan. There is a lesser degree of commitment to small business training by SBDC's in NYS than in most states, especially where SBDC state directors have taken the lead role to promote and coordinate NxLevel statewide.
- Service Corps of Retired Executives (SCORE) consists of volunteer mentors usually offering specialized experience and knowledge. Mentoring skills and the quality and relevance of SCORE capacity varies greatly among communities and appears to be of limited value based on informal reports and discussions. Capacity and commitment of volunteer members varies widely throughout the US and NYS.
- Community Colleges have long provided continuing education on business subjects. Focus is greater with computer skills development, business plan writing, accounting and bookkeeping, business organization, communication skills, personnel management, and others. Instructor interest and availability often determine whether a course will be offered from term to term. Comprehensive planning is not offered.
- Industrial Development Authorities (IDA's) primarily serve manufacturing and technology firms, but have broader state charters that could serve micro-businesses with incubators, or revolving loan funds.
- Empire State Development has traditional economic development programs that can support small businesses, but generally favor large scale firms.
- Municipal economic development programs have varied commitments to small business support. They are relevant partners with a major stake, but capacity and commitments vary among communities.

Most economic development policies and practices focus on either large scale job growth initiatives or programs to employ welfare and other disadvantaged people. Based on SBA statistics for NYS, creation of most jobs does not appear to come from either of these areas even though traditional economic development attitudes continue to follow these strategies.

A strategy that could likely produce more new jobs would be through training and development for the broad market of entrepreneurs who form and manage firms of less than 20 employees. Cooperation and collaborative commitments among state and local levels of stakeholders with shared or related missions could provide measurable improvements in job development through small business growth. These stakeholders must recognize the important economic outcomes to be achieved from support of extended entrepreneurial support.

Can Cornell University, through the Extension System and its many relevant programs and departments, provide leadership and education that will support the community level need for collaborative improvements? What must be learned about incentives or requirements to bring local stakeholders into effective working relationships? EEO's current program

and mission for small business training depends on cooperation among those stakeholders.

#### **IV. FUTURE DIRECTION: Entrepreneurship Education & Outreach and Cornell University**

##### **A. Revised Mission –**

In recognition of EEO's experience its Mission Statement should be rewritten to reflect the desired outcome of community level programs.

"...to promote and support successful small businesses in New York State through leadership in entrepreneurship education and through provision of high quality training programs that teach research, evaluation, and planning of small business enterprises. Leadership will be provided through a statewide Entrepreneurship Training Network, and training will be delivered statewide through relevant learning formats for generic and specialized business needs of small enterprises."

##### **B. Market Segments and Size - Where to Focus? Whom To Serve?**

EEO's mission must further define the appropriate segments of the small business market for its education objectives. The small business definition of the SBA encompasses firms with less than 500 employees. Extensive support exists for the larger "small businesses" through Empire State Development, Regional Economic Development Centers, Industrial Development Authorities, NIST/MEP and their industrial and manufacturing associations, and municipal economic development agencies. Cornell's EEO mission and its extension programs address the very small scale of the SBA definition – a couple dozen employees or less.

Economic sectors overlooked by traditional economic development programs include most production agriculture and small scale food system businesses; independent retailers; micro enterprises such as home-based manufacturing, craft, and service enterprises; licensed professionals in all fields; independent consultants, and many other self-employed people.

The founders of EEO believe greater support for startups and nurturing of the small business enterprises can produce significant job growth with comparatively small funding commitments. If successful, startup and early stage ventures can become viable candidates for existing business development programs offered by traditional public and private sector economic development entities. It is a market that is continually overlooked by traditional economic development education and support programs.

The writers believe that a statewide program of comprehensive business planning courses can produce a positive impact on job creation through hundreds of very small enterprises. The cost of support for such training is less per new job than traditional job creation strategies and can produce significant numbers of new jobs with a better than average chance of retention and expansion.

### C. How Do we Reach Targeted Market Segments?

The "field of dreams approach - build it and hope they will come" has been used to date by most entrepreneurship training programs. It assumes that the value of training will be appreciated and subscribed to, but this approach does not provide enough incentives to overcome obstacles even for training-motivated entrepreneurs. Unfortunately, there is also considerable resistance by entrepreneurs to taking any educational courses.

A largely untapped ally to overcome this resistance lies with in the power of business lenders, venture funds, and loan guarantee agencies who can require entrepreneurial training as a condition of approvals and thereby augment recruitment of student participants. In several states and communities, this approach has produced nearly half of the registrations in site-based classes.

Marketing of NxLevel courses and the ETN will therefore take two directions. First; Promote and offer courses through statewide partners. Second; Urge lenders to require or at least recommend such courses as pre-conditions of credit extension.

### D. Cornell University's Land Grant Role in the EEO Mission

As a land grant educational institution, Cornell University has great potential to contribute to the economic well-being of New York State individuals and communities. There are several official statements within the Cornell community that reinforce a common intention for an outreach role in economic development. A quick review of these suggests consideration be given to formalize a comprehensive and structured commitment to economic development, especially through small business education. (Underlines are added to emphasize relevance to the EEO mission and to community economic development.)

*[excerpt from Cornell University's Mission Statement]* "As the land grant university of the State of New York, we apply the results of our endeavors in service to the community, the state, the nation and the world".

*[CCE Mission Statement]* MISSION: The Cornell Cooperative Extension educational system enables people to improve their lives and communities through partnerships that put experience and research knowledge to work.

*[CaRDI - untitled mission statement]* Cornell's Community and Rural Development Institute works to enhance life quality and social and personal well-being for the people of New York State. CaRDI links professionals and elected officials who share a concern for community development and policymaking, especially in rural communities. We bring together Cornell University departments and programs, local governments and community organizations to cultivate creative collaborations that bridge traditional institutional boundaries.

*[CCE Business and Economics Initiatives]* New York's economic vitality is dependent upon expansion of personal income and employment opportunities in its metropolitan, urban, and rural communities. Cornell Cooperative Extension programs focus on addressing contemporary issues related to the vitality of rural and urban communities, their

economies and people. Examples include programming to stimulate business growth and competitiveness through development of management skills and incorporation of appropriate new technologies.

*[Former Cornell President, Frank. H. T. Rhodes]...*, in testifying to Congress about the importance of the industrial extension service for manufacturers, presented the idea of a "teaching factory" where manufacturers can bring their problems to universities for assistance and to access resources and increase business literacy.<sup>4</sup> Extension of this idea beyond the manufacturing sector does not diminish its relevance.

There are also programs in ARME (Extension & Outreach) which address Community Economic Development: Business Retention and Expansion, Community Economic Renewal projects, and Cooperative Enterprise Program. These programs apply research to support the sustainability of businesses and communities.

*[Mission Statement of The Statewide Program Committee on Community and Economic Vitality] ...is to improve the economic vitality and well-being of individuals, families, and communities.*

#### **E. A Cornell Leadership Role in Community Economic Development**

Cornell Cooperative Extension has historically delivered technical assistance, education, facilitation, data, research - numerous extension activities to benefit individuals, families, and farm businesses. At the community level, CCE has been a collaborator with local institutions, agencies of government, and not-for-profit organizations. Some CCE associations, such as those in Cayuga and Oswego counties, have provided extensive commitments to programs that support small business formation and growth. But most county associations have insufficient resources available to support small business or community economic development. Shouldn't community economic development be an appropriate program area for the land grant extension mission in New York State?

For the EEO mission to be fulfilled, an effective partnership is needed among Cornell University, New York State and Federal agencies, and local communities of New York. Is it possible that Cornell University can bring about further leadership to effectively build and support community economic well-being? Which programs and resources of Cornell University are providing measurably effective improvements in community level economic well-being? Which ones can be organized, networked, or empowered to more effectively impact local economic vitality?

---

<sup>4</sup> [noted in Creating a New Venture? Business Activities Essential for Entrepreneurship, Entrepreneurship and Personal Enterprise Program. Cornell University, Ithaca, NY. April, 1996.]

## V. Proposal - A STATEWIDE ENTREPRENEURSHIP TRAINING NETWORK

The following Proposal has been developed in response to the challenges and opportunities discussed in this paper. Based on the experience of FastTrac affiliation and evaluation of EEO efforts to promote and implement it statewide, this proposal is created as a framework of a work plan to serve the EEO Mission. The proposal for the Entrepreneurship Training Network is intended to translate the many needs and obstacles into an effective small business education contribution by Cornell University to serve New York State communities.

### **Entrepreneurship Training Network (ETN)**

*Cornell University - Entrepreneurship Education*

*"Training for Sustainable Small Businesses"*

### **DRAFT PROPOSAL**

**Entrepreneurship Training Network (ETN)** is a proposed NYS coalition of economic development entities organized to provide business skills training at the community level for start up and existing businesses. A State Coalition of private/public partners will provide essential resources to supplement local coalitions that offer the training courses. Cornell University will provide Statewide coordination of the program and resources. Course materials will be provided by NxLevel Training Network.

**Goals** are (1) to achieve measurable increases in the number of small business formed, sustained and expanding in the areas served, and (2) achieve recognition among State economic development organizations that quality entrepreneurial education produces significant numbers of successful small businesses and job creation at a very low cost per new job.

### **NxLevel Courses**

Located at the University of Colorado, **NxLevel Training Network (NTN)**, (<http://www.nxlevel.org>) provides educational materials, instructor certification, and support to the **State Coordinator** and local coalitions. With training materials developed under a grant from US West Foundation at the University of Colorado, NTN has trained over 10,000 individuals from January 1996 to December 1998. In 1999 about 6000 participants are expected with approximately thirty states participating.

#### **Standard Courses**

NxLevel for **Business Start-ups** is a 10 session, 30-hour course designed for people thinking about starting a business. Participants develop a start-up business plan during the course to test the feasibility of their business concept.

NxLevel for **Entrepreneurs** is a 12-week session, 36-hour course designed for entrepreneurs who want to expand an existing business and need skills to make it grow. Participants develop a comprehensive business plan during the course to serve as the road map for future growth.

#### **Specialized Courses**

"TILLING THE SOIL OF OPPORTUNITIES": Sustainable Agriculture/Food System Ventures

"GET THE BUZZ ON BIZ": Youth

- In development:
- Micro-enterprise– due Jan 2000
  - Business for Artists (workshop)
  - Greening Your Business (workshop)

Additional training materials available (not courses):

- Tourism Business Entrepreneurial Handbook
- Small Business Guide to International Trade
- Establishing A Shared-Use Commercial Kitchen

### Costs/Fees

Affordable tuition levels range from \$175 to \$425 nationally. For tuition to be affordable, overall cost of course delivery is directly impacted by the levels of funding provided by sponsors at the state and local levels. Lowest overall costs are achieved with an ideal minimum enrollment of about twenty students. In some locations, training programs generate revenues to offset other operational overhead. Cornell University does not charge fees to local training courses for its role.

### State Coalition Partners

A crucial foundation for success of the ETN is a statewide network of private/public partners who provide various resources and support for community level training.

- **Funding** from State Coalition partners is needed to offset local costs and keep tuition affordable.
- A **recommendation** (sometimes requirements) by lenders for business training for their borrowers adds significantly to recruitment efforts.
- **Referrals and endorsement** of NxLevelL by respected public/private organizations is a valuable contribution.
- **Classrooms, equipment, and instructors** can be contributed by educational institutions.

### Potential State Coalition partners and contributions to be requested.

Chambers of Commerce	<i>recommendation, local promotion, endorsement, scholarships</i>
Community Colleges	<i>facilities, training</i>
Cornell Cooperative Extension System	<i>recommendation, local promotion, training</i>
Corporate Sponsorships:	
Fleet Bank, Marine Bank , etc.	<i>funding, scholarships, loan requirement</i>
Electric, gas, and telecommunications utilities	<i>funding, scholarships</i>
Empire State Development	<i>endorsement, recommendation</i>
Farm Service Administration (USDA)	<i>recommendation, loan requirement</i>
Newspapers	<i>publicity, scholarships</i>
NYS Department of Labor	<i>training funding</i>
NYS Bankers Association	<i>recommendations, endorsement</i>
Rural Development (USDA)	<i>recommendation, loan requirement, scholarships</i>
SBA	<i>funding, recommendations, loan requirement</i>
SBDC	<i>facilities, training, recommendations</i>

### Target Markets

ETN will market NxLevelL to small business sizes ranging from home based enterprises, through self-employment and professionals, to site based businesses in all economic sectors up to about 100 employees. The course in Sustainable Agriculture will be promoted through the Cornell Cooperative Extension system.

## **Local Coalitions**

A lead organization in an interested community will coordinate NxLevelL training classes with the support of a local or regional coalition to provide resources, utilize the State Coordinator's support, State Coalition resources where needed, and a local program manager. The local program manager will organize and coordinate instructors, recruitment of participants, funding, and facilities.

## **Desired Outcomes and Measurement**

### **Criteria for Success:**

- Graduates prepared to obtain funding, launch business ventures, and attain profits and growth.
- Graduates with sound business plans to grow and expand employment.
- Course participants who defer starting a business and avert likely failure.

### **Measurement of Success:**

- Number of small businesses started and thriving by graduates of NxLevelL courses.
- Number of jobs created by graduates of NxLevelL courses.
- Number of decisions of participants to not proceed with a business concept.
- Annual sustained enrollment levels in NxLevelL courses.

Beyond the scope of this proposal is the longer term intention of EEO to expand support of community economic vitality under the following guidelines:

- Offer a variety of programs and courses that meet the needs of different market segments and levels of entrepreneurship readiness.
- Use a combination of site based classroom and distance learning mechanisms, together or separately.
- Provide on-going support with:
  - consulting through advisory and peer groups
  - networking links, local and distant
  - direction and access to research resources
  - referrals to lenders and equity sources
  - access to credit and equity





**Small Business Development Center (SBDC)** *Endorsement, recruitment*  
[The Southern Tier office serves seven counties with very little training offered, except workshops on specialized topics. Their focus is on counseling and writing business plans for clients, at no charge. One-third of plans are rejected by lenders, according to its Director. Nationally, SBDC's frequently offer FastTrac and NxLevelL courses. But NYS Director of SBDC is not interested to discuss this training approach.]

**SBA** *Endorsement, recommendations to borrowers*  
[Potential role could be to recommend courses for applicants and borrowers.]

**Tompkins County Area Development (TCAD)** *Endorsement, recruitment*  
[A logical coalition member. But education is not part of their mission. Targeted constituents are primarily hi-tech and manufacturing firms.]

**Finger Lakes Entrepreneurs Forum (FLEC)** *Recruitment*  
[Informal network of area business owners, primarily in hi-tech and manufacturing. Limited interest in training courses. Yet consultants serving several of them report widespread need for comprehensive business planning.]

**Home-Based Micro Enterprise Network** *Recruitment*  
[Informal network also, but heavily home-based orientation. It was organized under the guidance of the Tompkins County CCE. Good candidates for training.]

**Rural Development (USDA)** *Funding, recruitment, endorsement*  
[There is a new USDA initiative to fund small business training. A good prospect for regional support.]

**City of Ithaca (Dir. of Economic Development)** *Funding, recruitment, endorsement*  
[Previously funded the CEO program through Community Development Block Grants. Currently no City participation in small business training. Referrals are made to the CEO program and to the community college.]

### **How FastTrac came to Tompkins County and Cornell**

In February of 1996 Phil Metzger, SoCNY RC&D/USDA - NRCS, attended training on the FastTrac program in Denver, CO under the auspices of USDA. Phil was asked to spread information on FastTrac throughout upstate NY and gauge interest for the program in the region.

- Fall 1996 - Rhoda Meador (Tompkins CCE) and Phil Metzger attend the Annual FastTrac Conference in Kansas City, KS, and give a series of five presentations on FastTrac to rural development professionals across Upstate NY.
- In April 1997, Rhoda Meador organized FastTrac instructor training in Tompkins County; 10 instructors from parts of the state were certified to teach FastTrac I & II.
- July 1997 Dr. Deborah Streeter, Associate Professor of Personal Enterprise in the Agriculture, Resources & Managerial Economics Department at Cornell University agrees to have Cornell act as Administrator for FastTrac in NY State, and Greg Sandor is appointed Statewide Coordinator.
- A FastTrac pilot course was held in Tompkins County in the fall of 1997 with 12 participants.

Leadership fell apart after Rhoda Meador left this position to work at Cornell University. Since no sponsors of the pilot course were local, organization and momentum faltered, and the Director of CCE Tompkins County was not able to obtain financial commitments to carry on the program.

### **Conclusion**

This Case Study exemplifies typical conditions in many counties of upstate New York where entrepreneurial training is desired, but not being delivered. The presence of so many entities, each with a stake in economic development through small businesses, is contrasted with the absence of coordination and collaboration among them to achieve their common goals.

**OTHER A.R.M.E. WORKING PAPERS**

<u>WP No</u>	<u>Title</u>	<u>Fee (if applicable)</u>	<u>Author(s)</u>
99-14	Why is Inequality Back on the Agenda?		Kanbur, R. and N. Lustig
99-13	World Oil: The Growing Case for International Policy		Chapman, D. and N. Khanna
99-12	The Timing Option in Futures Contracts and Price Behavior at Contract Maturity		Hranaiova, J. and W.G. Tomek
99-11	Measuring the Risks of New York Dairy Producers		Schmit, T.M., R.N. Boisvert and L.W. Tauer
99-10	Non-Market Valuation Techniques: The State of the Art		Rose, S.K.
99-09	The Economics of Oil Palm Production in Chiapas, Mexico		Wolff, C.
99-08	Productivity of Dairy Production in Individual States		Tauer, L.W. and N. Lordkipanidze
99-07	On Improving Econometric Analyses of Generic Advertising Impacts		Tomek, W.G. and H.M. Kaiser
99-06	A Framework for Thinking Through Reduced Aid Dependence in Africa		Kanbur, R.
99-05	International Public Goods and the Case for Foreign Aid		Jayaraman, R. and R. Kanbur
99-04	Income Distribution Implications of Globalization and Liberalization in Africa		Kanbur, R.
99-03	Valuing Electricity Assets in Deregulated Markets: A Real Options Model with Mean Reversion and Jumps		Ethier, R.G.
99-02	What Difference do Polarization Measures Make? An Application to China		Kanbur, R. and X.B. Zhang

To order single copies of ARME publications, write to: Publications, Department of Agricultural, Resource, and Managerial Economics, Warren Hall, Cornell University, Ithaca, NY 14853-7801. If a fee is indicated, please include a check or money order made payable to Cornell University for the amount of your purchase. Visit our Web site (<http://www.cals.cornell.edu/dept/armer/>) for a more complete list of recent bulletins.



U.S. Department of Education  
Office of Educational Research and Improvement (OERI)  
National Library of Education (NLE)  
Educational Resources Information Center (ERIC)



# REPRODUCTION RELEASE

(Specific Document)

## I. DOCUMENT IDENTIFICATION:

Title: <u>CORNELL UNIVERSITY'S ENTREPRENEURSHIP EDUCATION AND OUTREACH PROGRAM - EVALUATION AND PROPOSAL</u>	
Author(s): <u>CHARLES SCHLUGH AND DEBORAH STREETER</u>	
Corporate Source: <u>CORNELL UNIVERSITY WARREN HALL ITHACA, NY 14853-7801</u>	Publication Date: <u>JULY 1999</u>

## II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

The sample sticker shown below will be affixed to all Level 2A documents

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

\_\_\_\_\_

Sample

\_\_\_\_\_

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

\_\_\_\_\_

Sample

\_\_\_\_\_

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

\_\_\_\_\_

Sample

\_\_\_\_\_

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 1

Level 2A

Level 2B

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: <u>Charles Schlugh (clp)</u>	Printed Name/Position/Title: <u>CHARLES SCHLUGH</u>	
Organization/Address: <u>CORNELL UNIVERSITY WARREN HALL ITHACA, NY 14853-7801</u>	Telephone: <u>607-255-8047</u>	FAX: <u>607-255-9984</u>
	E-Mail Address: <u>CAS30@CORNELL.EDU</u>	Date:

Sign here, → please



### III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:	PUBLICATIONS OFFICE
Address:	WARREN HALL CORNELL UNIVERSITY ITHACA, NY 14853-7801
Price:	NA

### IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:	
Address:	

### V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:
---

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

**ERIC Processing and Reference Facility**  
4483-A Forbes Boulevard  
Lanham, Maryland 20706

Telephone: 301-552-4200

Toll Free: 800-799-3742

FAX: 301-552-4700

e-mail: [ericfac@inet.ed.gov](mailto:ericfac@inet.ed.gov)

WWW: <http://ericfac.piccard.csc.com>