The development of an evaluation process: Iowa Industrial New Jobs Training Programs (260E)

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The development of an evaluation process:
Iowa Industrial New Jobs Training Programs (260E)

by

Karen Fay Poole

A dissertation submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

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2002

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This is to certify that the doctoral dissertation of

Karen Fay Poole

has met the dissertation requirements of Iowa State University

Signature was redacted for privacy.

Major Professor

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For the Major Program
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ABSTRACT

In 2002, the State of Iowa is developing guidelines for implementation of the Accountability Government Action, House File 687. This legislation will require all state departments to develop planning and accountability strategies that will fit within the overall direction of state government. The pilot research was conducted utilizing one community college and a single participating company, through case study methodology, and developed an evaluation process and instruments to measure the effectiveness of economic development initiatives, specifically Iowa Industrial New Jobs Training Programs (260E). Three additional community colleges and participating 260E businesses volunteered to pilot the evaluation instruments and compiled results are included in the study and are referenced to initial research outcomes. Economic development programs assist in developing high-skilled workers to meet the demands of Iowa’s changing economy. The study focused on the following initiatives: (1) economic development (state-financed) programs, explored the operations of economic development programs; (2) Iowa Industrial New Jobs Training Programs (260E), presented the uniqueness of economic development programs monitored by the Iowa Department of Economic Development, financed and delivered by Iowa Community Colleges, and program enrollments reported to the Iowa Department of Education; (3) program training/evaluation/transfer of training, developed to evaluate training provided through economic development programs; and (4) community college customized/contract training, reviewed characteristics of business and industry training provided by community colleges. Results of the study, as perceived by the company
representative, will serve as a model for development of accountability strategies through program evaluation for Iowa New Jobs Training Programs (260E).
CHAPTER I. INTRODUCTION

The nation's economic future depends upon a highly skilled, productive workforce. To meet the challenge of increasing profitability in a global economy, American businesses look to develop an aggressive vision and expand beyond their current marketplace. Competition for federal, state, and private funding motivates companies to design growth strategies for expansion and possible physical relocation in search of a competitive market share and economic advantage. Community colleges are a local source for business assistance and an advocate for economic development initiatives, which are a mechanism to assist states and communities in attracting, expanding, and retaining business and industry.

The mission of community colleges has expanded beyond local community needs to incorporate a national agenda of economic development workforce training. Economic development initiatives include a variety of training programs, funding sources, identification of collaborations for training service providers and companies, and development of performance evaluation systems that will identify resources within community college service areas (Lynch, Palmer, & Grubb, 1991; Kantor, 1991; Shubird, 1990). A limited number of program evaluation models of state-financed, employer-focused, customized training programs underscore a necessity for accountability and measurable outcomes to assist in identifying the impact of these programs on communities, states, and policymakers.

The federal government funds numerous incentives to assist business and industry through economic development efforts. State-financed, employer-focused, contract training programs have been available since the 1960s to meet training and retraining needs of
business and industry. Private funding, in addition to federal and state resources, has supported efforts to ensure economic security for communities, businesses, and families.

Iowa is a national leader in providing economic development taxpayer-supported training programs. Economic development programs, identified by Iowa’s System of Community Colleges and the State Board of Education (2001), “…provide pivotal services to business and industry that enable them to respond quickly to the changing economy. These include customized training programs designed for them and assistance to local communities in their economic development activities” (p. 6).

Statement of the Problem

In 2002 the State of Iowa, Department of Management, is developing guidelines for implementation of the Accountable Government Action, House File 687. This legislation will require all state departments to develop planning and accountability strategies that fit within the overall direction of state government, as directed by the leadership agenda of the Governor.

This study provided a review, through case study methodology of the development of an evaluation process designed for Iowa Industrial New Jobs Training Programs (260E) state-financed, employer-focused, contract training programs. This two-part evaluation process will provide a method of identifying accountability measures for service providers of state-financed training program initiatives. As a point of clarity, effectiveness and accountability are interchangeable terms utilized throughout this study. Stakeholders within this system include the Iowa Department of Economic Development (IDED), Iowa
Department of Education (DE), State of Iowa Legislature, Iowa Community Colleges, participating companies, and citizens of Iowa.

An evaluation process would enable the legislature and stakeholders to assess the effectiveness of training provided through Iowa Industrial New Jobs Training Programs (260E) in raising the skills of Iowa's workers. These economic development programs are monitored by the Iowa Department of Economic Development and financed, developed, and delivered by Iowa's Community Colleges to eligible business and industry.

Documentation submitted to the Iowa Department of Economic Development (IDED) from Iowa Community Colleges for 260E programs includes the notices of preliminary agreement and final agreement (Appendix A). The preliminary agreement is notification to IDED that a community college is contemplating/discussing a 260E program with a company. The notice of final agreement reports to IDED that the community college is selling bonds to finance the 260E program, which may take up to ten years to conclude with repayment of the bonds. Existing Iowa Industrial New Jobs Training Programs (260E) have not incorporated a consistent evaluation process in reporting procedures.

In reviewing acknowledged evaluation models, Kirkpatrick (1998) developed four-levels of evaluation in an attempt to explain the term evaluation. The Kirkpatrick model serves as an example of a total evaluation process and includes:

1. ...measuring changes in behavior that occur as a result of training programs,
2. ...determining what final results occurred because of training programs,
3. ...comment sheets that participants complete at the end of a program, and
4. ...the learning that takes place in the classroom, as measured by increased knowledge, improved skills, and changes in attitude. (p.16)
Numerous modifications to the Kirkpatrick model incorporate learning as a means to identifying individual change and performance outcomes, which influence transfer behavior. Baldwin and Ford (1988), Holton III (1996), and Noe (1986) propose the addition of motivation to transfer, transfer conditions (environment), and transfer design (ability).

Motivation to transfer or motivational influences suggest that trainees associate a perceived relationship between training and enhanced job performance through identification of learning outcomes and positive job attitudes. Transfer conditions (environments) that are supportive of learning transfer to the job note that trainees are highly motivated to transfer learning to individual performance. Transfer design (ability) is difficult to measure and should be incorporated into the development and validation components of an evaluation model. This study reviewed evaluation models and focused on development of an evaluation process for training provided through state economic development initiatives and will assist decision-makers in the determination to continue, discontinue, and/or improve future training programs.

**Purpose of the Study**

The general purpose of this study was to develop an evaluation process, through case study methods and action research techniques, which examined the effectiveness or accountability of training provided through Iowa Industrial New Jobs Training Programs (260E). The results of this study served as a response to the Accountable Government Action, House File 687 legislation that will require all state departments develop planning and accountability strategies that fit within the overall direction of state government. Funds
provided to 260E-eligible companies expanding their workforce are utilized for job-training services and training to enhance employee skills.

Case study methodology, as presented by Yin (1994), is a distinctive structure of empirical inquiry that will identify specific research purposes.

Namely, this study was undertaken to:

1. Identify Iowa Department of Economic Development, Iowa Department of Education, Iowa Community Colleges, and participating case study company expectations for evaluating training provided through Iowa Industrial New Jobs Training Programs (260E).

2. Develop an evaluation process to assess the effectiveness of training provided through Iowa Industrial New Jobs Training Programs (260E) with input and direction from the Iowa Department of Economic Development, Iowa Department of Education, Iowa Community Colleges, and participating company.

3. Report case study results, as perceived by the Iowa Department of Economic Development, Iowa Department of Education, Iowa Community Colleges, and participating company, in an effort to provide an evaluation process model for economic development programs.

This case study assessed the effectiveness of training provided through economic development and community college initiatives. Qualitative analysis of existing theory, identified research, experiential knowledge, and case study methods based on the identified research problem from this study represents an inquiry to stakeholders' perceptions of effectiveness of training provided through Iowa Industrial New Jobs Training Programs (260E).
Action research methods structured this study with no identified distinction between the researcher and the researched. Stakeholders were consistent with Stringer's (1999) definition of participants that have equal standing in determining questions asked, information analyzed, and conclusions with direction of future activities to be determined through subsequent research. For purposes of clarification, the terms participants and stakeholders are interchangeable throughout this study.

**Objectives of the Study**

Objectives of this study were not limited to the development of an evaluation process for training provided by Iowa Industrial New Jobs Training Programs (260E) from case study results, but serve as a foundation for an evaluation process model that could be utilized statewide by the Iowa Department of Economic Development and Iowa's Community College system to assess the effectiveness of economic development funded training. The evaluation model process included two evaluation instruments (Appendix B).

The participating company completed the Company Program Evaluation Instrument (Part 1), which is the first component of the evaluation process and measured the company's perception of effectiveness of training provided through Iowa Industrial New Jobs Training Programs (260E). The company also rated the performance of economic development program components included in this evaluation instrument. The second section of the evaluation process is the Community College Program Summary Evaluation Instrument (Part 2) that was completed by the community college and provided a synopsis of the participating company's Iowa Industrial New Jobs Training Program (260E).
This study proposes that results of the evaluation process be summarized by the local community college and included with the notice of final agreement report for each Iowa Industrial New Jobs Training Program (260E) submitted to the Iowa Department of Economic Development. Iowa Community Colleges will utilize the data from this process to improve training and economic development programs in an effort to respond to emerging needs and problems of local businesses in a changing global economy.

Research Questions

The structure of state-financed, employer-focused, contract-training programs vary from state to state, which reinforces the importance of customizing an evaluation process for Iowa Industrial New Jobs Training Programs (260E). The design of the evaluation process lead to the development of research questions that advanced the purpose of this study.

The research questions in this qualitative study assessed stakeholder perceptions of effectiveness of training provided through economic development programs in the State of Iowa. The following research questions guided the pilot study, with attention to a systemic viewpoint:

1. Did training provided through Iowa Industrial New Jobs Training Programs (260E) raise workplace skills of the participating company’s employees?

2. How effective are Iowa’s Community Colleges in providing training through Iowa Industrial New Jobs Training Programs (260E)?

3. How effective are service providers-private vendors in providing training through Iowa Industrial New Jobs Training Programs (260E)?
4. What is the overall satisfaction level of companies participating in Iowa Industrial New Jobs Training Programs (260E)?

Assumptions for the Study

The following assumptions were formed for this study:

1. Personnel from the Iowa Department of Economic Development, Iowa Department of Education, Iowa Community Colleges, and participating company contributed to this study, which required completion of data collection evaluation instruments, cooperation in personal interviews, supplying the researcher with requested documentation, and assisting in development of a statewide evaluation process for training provided through Iowa Industrial New Jobs Training Programs (260E).

2. It is possible to identify training provided through Iowa Industrial New Jobs Training Programs (260E) at Iowa Community Colleges, as reported to the Iowa Department of Education.

3. Conclusions reached from this study may impact reporting of future Iowa Industrial New Jobs Training Programs (260E).

Definition of Terms

The following definitions clarify terms utilized in this study and are specific to economic development initiatives and Iowa Industrial New Jobs Training Programs (260E). Terms are referenced in the Code of Iowa, Iowa Administrative Code, and state resources.

Agreement: Documented between employer and a community college concerning a program/project.
Bonds: Certificate of debt payable by an entity and/or community college to an individual holder and customarily bearing a fixed rate of interest.

Business: Entity providing new jobs in an area or district served by a community college, which enters into an agreement (The term business and company are interchangeable in this study).


Community College: Institution, community college, established under Iowa Code, chapter 260C.

Employee: Individual employed at a company in a new job under an agreement.

Employer: Person/company providing new jobs in a community college area or district served by a community college and entering into an agreement.

New job: A job in a new or expanding industry not including jobs of recalled workers, replacement jobs, and/or other jobs that formerly existed in the industry in the State of Iowa.

New jobs credit: Credit as provided in Iowa Code, section 260E.5.

New jobs training program or program: Project or projects established to create jobs by providing education and training of workers at new jobs for new and/or expanding industry served by a community college area or district. As authorized by the State of Iowa, proceeds of certificates shall be used only to fund program services related to training programs, which are made necessary by the creation of new jobs.

Program services: Include, but are not limited to, the following:

1. Employee training for new job;

2. Adult Basic Education (ABE), basic skills, and job-related education;
3. Vocational and skill-assessment services and related testing support;

4. Training facilities, equipment, materials, and supplies;

5. On-the-job training;

6. Administrative expenses incurred for a training program;

7. Subcontracted services with institutions governed by the Board of Regents, private colleges, universities, other federal, state, and/or local agencies;

8. Contracted or professional services, as identified; and

9. Issuance of certificates related to the training program/project.

Project: A training agreement between a community college and employer to provide program training and services.

Delimitations of the Study

The framework developed for this study identified limitations, which may have affected research outcomes.

1. A case study of one company in the State of Iowa may limit overall perceptions of research validity.

2. Stakeholders (Iowa Department of Economic Development, Iowa Department of Education, State of Iowa Legislature, Iowa Community Colleges, participating company, and citizens of Iowa) are limited to the State of Iowa. Results of this study may not be applicable to economic development programs in other states.

3. Evaluation of training provided through Iowa Industrial New Jobs Training Programs (260E) could be biased by perceptions of stakeholders (Iowa Department of
Economic Development, Iowa Department of Education, Iowa Community Colleges, participating company, and citizens of Iowa).

4. The evaluation process is customized to Iowa Industrial New Jobs Training Programs (260E) and may not be applicable to other economic development programs.

5. The size (number of employees) and type (insurance, manufacturing, processing, etc.) of the participating company receiving training provided through Iowa Industrial New Jobs Training Programs (260E) was not considered.

6. This study did not examine any differences that could be evident between urban and rural communities participating in Iowa Industrial New Jobs Training Programs (260E).

7. Differences between size and internal structures of Iowa Community College districts that finance and deliver Iowa Industrial New Jobs Training Programs (260E) were not investigated.

8. This study did not examine perceptions of the effectiveness of training provided through economic development programs from Iowa Community College personnel beyond the identified economic development representative and may not reflect observations of other groups.

9. Personal biases, relationships, and experiences of the researcher may influence the account of this study.
Organization of the Dissertation

This dissertation contains five chapters, References, Acknowledgements, and Appendices. A unique collaborative effort between state governmental agencies and private business was realized through the development of this case study.

Chapter 1 contains an introduction to the subject of economic development programs at national, state, and local levels. This chapter identifies the statement of the problem, purpose of the study, objectives of the study, research questions, assumptions for the study, definitions of terms, delimitations of the study, and organization of the dissertation.

Chapter 2 provides a review of literature utilized by the researcher in preparation and application for the study. State of Iowa economic development programs and related state department functions served as a foundation for the development of the study.

Chapter 3 presents research methods, procedures, inclusion of human subjects approval, and processes applied by the researcher in the study. Theoretical framework and research design were explained and applied to case study analysis. Triangulation of data collection utilized in the study included sampling techniques, data analysis, narrative of selected interviews of one-on-one and groups, review of evaluation instruments, and description of stakeholders.

Chapter 4 reports findings of the study. An overview of the progression of the study, data, and narratives from stakeholders are included in this section. Detailed development of the evaluation process, evaluation instruments, and case study company perceptions of training provided through Iowa Industrial New Jobs Training Programs (260E) are presented.

Chapter 5 includes an overview of the study, responses to questions that guided the research, conclusions, implications, and recommendations. Future research suggestions are
also presented in Chapter V, with a goal of continuous improvement initiatives for Iowa Industrial New Jobs Training Programs (260E).

The final section of this dissertation includes Appendices, References, and Acknowledgements. Appendix C include the consent form, research questions/interview guide, evaluation instruments, notice of preliminary agreement, notice of final agreement, and Iowa Community College fiscal year 2000-2001 economic development enrollment data reported to the Iowa Department of Education.
CHAPTER 2. REVIEW OF LITERATURE

A literature review is the theoretical or conceptual writing "think" piece and links research to application. Merriam (1998) interpreted the literature review as a data-based research study, which has been collected and analyzed by the researcher. A viewpoint of multiple perspectives, through many lenses of stakeholders, provides an approach for examining the literature. Construction of a literature review includes: "...experiential knowledge, existing theory and research, pilot and exploratory research, and thought experiments" (Maxwell, 1996, p. 27).

Organization

Due to the exclusivity of economic development (state-financed) programs, in particular, training provided through Iowa Industrial New Jobs Training Programs (260E), the number of substantive studies revealed limited results. When specific descriptors such as community colleges, transfer of training, and customized/contract training were added to the search, the focus was narrowed to three general areas:

1. Economic Development (state-financed) Programs;
2. Program/Training Evaluation/Transfer of Training; and

These topic areas provided an evolving framework for conceptualizing the development of an evaluation process for training provided through Iowa Industrial New Jobs Training Programs (260E). This study examined the effectiveness of training provided through economic development initiatives and a commitment to accountability through the
Accountable Government Action, House File 687 for state-financed, employer-focused initiatives in raising the workplace skills of Iowa’s workforce.

An explanation of Iowa Industrial New Jobs Training Programs (260E), included in this chapter, presents a more in-depth explanation of the uniqueness of economic development programs. Incentive strategies, operation, financing, management, and structure of economic development programs vary in each of the 50 states that provide training and services across the United States.

**Economic Development (State-financed) Programs**

Originating more than 30 years ago, state-funded, employer-focused job training programs or economic development initiatives have evolved from “smokestack-chasing” (National Governor’s Association Center for Best Practices, 1999, p. viii) programs to an increasing focus on encouraging job expansion and upgrading skills among existing entities. Shrinking budgets and rising expectations emphasize the need to assess the impact of state-funded/public investments. Senator Edward M. Kennedy remarked, at the Innovations 2002 conference in Boston, “But as we know, community colleges can play an indispensable part in promoting economic development and attracting new businesses” (2002, March 18).

Use of incentives to attract business and industry to a state are directed through a centralized course of action. “Governors, mayors, legislators, and council members justify these public investments on the grounds that private-sector decisions to invest in a community result in jobs, income, and tax revenues that are essential to the economic and social well-being of a community or state” (Poole, Erickcek, Iannone, McCrea, & Salem, 1999, p. 1).
A comprehensive look at state-funded, employer-focused job training programs, based on a May 1998 survey, reported a variety of observations from state economic development activities and operations. Forty-seven states responded to this survey, and a summary of major findings of state programs identified eight areas of focus:

1. Training focus to existing workers and companies;
2. Benefits of training employees goes beyond value of current employer;
3. Funding strategies are unique to each state;
4. Direct training at larger manufacturing firms;
5. Costs vary in project/program and trainee;
6. Combined or multiform training programs a important priority;
7. Strong relationships are critical to state and federal financed programs; and
8. Strategic issues merit state policymaker’s attention (National Governor’s Association Center for Best Practices, 1999).

States develop processes and procedures for program development, management, finance, and evaluation in response to specific needs, unique political pressures, administrative structures, and economic environments.

"The economic development role of America’s community colleges may very well be the cornerstone of a renaissance in the education of the nation’s workforce" (Ryan, 1993, p. v). According to Pappas (1993), “...the concept of economic development appears almost universally in community college mission statements” (p. 1). Economic development programs and services vary from college to college and community to community, but partnerships at the state and local level provide an environment for creation of new jobs, improvement of existing jobs, and economic growth.
By assessing the culture of business and industry, adapting business practices, reinforcing commitment to accountability and customer service, community colleges are an economic development tool that can contribute by using legislative influence to lobby for state economic development support (Spence & Block, 1993). Educational institutions that provide economic development programs and services through business and industry partnerships go beyond workforce training to increase local community and state prospects for success.

Katsinas and Lacey (1989) asserted, “...there is growing recognition among policymakers in the public and private sectors that community colleges are well positioned to help the nation” (p. 13), and “…community colleges are a delivery system in place to serve local, state, and national needs” (p. 14). Economic development programs are distinctive to the local needs of business and industry, expertise of educational institutions, and specific state government requirements.

**Iowa Industrial New Jobs Training Programs (260E)**

Iowa invested in the state’s economic future through the Iowa Workforce Development fund and creation of the Iowa Department of Economic Development (IDED) in 1986. According to a 1999 presentation by the National Governors’ Association, “Iowa leads the nation in per-capita spending on employer-focused training programs” (p. 39). A variety of workforce development programs and services provide assistance in areas of finance, business, technical, and training opportunities to eligible businesses. Since 1983, all of Iowa’s 15 Community Colleges have partnered with the state to provide economic development programs for business and industry.
One of the major programs the Iowa Department of Economic Development monitors and Iowa Community Colleges finance/deliver is the Iowa Industrial New Jobs Training Program (260E), which is documented in the Iowa Administrative Code (2000) and the Code of Iowa (2001). The Iowa Department of Economic Development presents an explanation of the Iowa Industrial New Jobs Training Program (260E) as:

**Program services**
The Iowa Industrial New Jobs Training Program provides funds to train new employees of eligible Iowa businesses. Eligible businesses may be new to Iowa, expanding their Iowa work force, or relocating to the state. Employees qualifying for training services must be in newly created positions and pay Iowa withholding tax. Job training services are defined as any training needed to enhance the performance of a business’ new employees. Services include vocational and skill assessment testing, adult basic education, job-related training, cost of company, college, or contracted trainer or training services, training-related materials, equipment, software, and supplies, lease or rental of training facilities, training-related travel and meals, subcontracted services, contracted or professional services. Employee salary reimbursement during on-the-job training is also available.

**Program administration/operation**
The Iowa Industrial New Jobs Training Program is administered and operated by Iowa’s 15 community colleges. Each community college works with eligible businesses to assess training needs, determine funds availability, and provide training. The Iowa Department of Economic Development monitors the program.

**Business eligibility**
A business must meet the following criteria to be eligible for program services:

- A business must be engaged in interstate or intrastate commerce for the purpose of manufacturing, processing, assembling products, warehousing, wholesaling, or conducting research and development. A business that provides services must have customers outside of Iowa. Retail, health, and professional businesses (e.g., doctors, lawyers) are not eligible.
- A business cannot have closed or substantially reduced its employment base at any of its other business sites in Iowa in order to relocate substantially the same operation to another area of the state.
- A business cannot currently be involved in a strike, lockout, or other labor dispute at any of its business sites in Iowa.
• The employees who will receive training must occupy new job positions, which did not exist during the six months prior to the date the business and college agreed to pursue a training project.
• The employees who will receive training must be currently employed by the business and the business must pay Iowa withholding tax for them.
• The employees who will receive training cannot be replacement workers who were hired as a result of a strike, lockout, or other labor dispute.
• The business must be an equal opportunity employer, which complies with all local, state, and federal affirmative action requirements.

*Project funding*
Each community college sells bonds to fund Iowa Industrial New Jobs Training Program projects. The bonds are then repaid through the diversion of 1 \( \frac{1}{2} \) percent or 3 percent of Iowa withholding tax revenue generated by the business’ newly-hired employees and, in some instances, through the diversion of incremental property taxes generated as a result of a business’ new construction. A business’ profits are not used to repay the bonds. Because the bonds are repaid using tax revenues, the amount of training funds available to a business is determined by the business’ tax-generating capability or tax generated by the new positions (Iowa Department of Economic Development, 2002, pp. 1-2).

Iowa Industrial New Jobs Training Programs (260E) are a vital part of the State of Iowa and Iowa Department of Economic Development collection of economic incentive programs and services. Since 1992, Iowa Community Colleges have sold 260E bonds (certificates) funding a grand total of $313,143,900 and approximately 76,150 workers received training through 980 projects in Iowa, as presented by the Iowa Department of Economic Development for calendar year 2001.

In 1999, the State of Iowa adopted legislation, which created the Iowa Department of Economic Development, Workforce Development Accountability System, Iowa Administrative Code chapter 261-4.1 (2). The purpose of this legislation is to: “...report information concerning the use of any state or federal training or retraining funds, which are
a part of the workforce development system” (Iowa Administrative Code 2000, chapter 261-4.1(15), Ch. 4, p. 1).

An additional initiative of the Iowa Legislature charged the Iowa Workforce Development to establish the Iowa Customer Tracking System, Iowa Code chapter 84A.5(1), which utilizes data collected from Unemployment Insurance (UI) Employer Wage Records. Organizations participating in the Customer Tracking System include the State of Iowa Board of Regents, Department for the Blind, Department of Education, Department of Economic Development, Department of Human Services, Association of Independent Colleges and Universities, College Aid Commission, and Workforce Development.

The Iowa Customer Tracking System matches social security numbers of employees in state-financed economic development programs with Unemployment Insurance (UI) Employer Wage Records. Information obtainable from Unemployment Insurance (UI) Employer Wage Records includes employee wages; individual employee confirmation of employment, calculation of quarterly wages, and identification of the type of business and/or industry the person is employed. Unemployment Insurance Employer Wage Records do not provide employee occupational titles, hourly wage rates or hours worked in a specific quarter.

Input from Iowa Workforce Development Accountability System and Iowa Customer Tracking System will assist the Iowa Department of Economic Development in evaluating:

(a) The impact of services on wages earned by individuals.
(b) The effectiveness of training services providers in raising the skills of the Iowa workforce.
(c) The impact of placement and training services on Iowa’s families, communities, and economy. (Code of Iowa 2001, section 84A.5, Department of Workforce Development, p. 853)
The Iowa Department of Education, Division of Community Colleges and Workforce Preparation, Bureau of Community Colleges, is a partner in the Iowa Customer Tracking System and is the source of data reported by all Iowa Community Colleges. The Management Information System (MIS) collects data electronically from Iowa's Community Colleges. A summative report (Appendix D) developed from Iowa Industrial New Jobs Programs (260E) data was available for the first time in fiscal year 2000-2001 and results are included in this study (Iowa Department of Education, 2001). Programs can take up to ten years to complete and data included in this report is for a single fiscal year.

Data reported to the Iowa Department of Education were utilized to identify training provided by the community colleges through economic development training initiatives. The report contains community college credit and non-credit enrollment data and includes a variety of training provided through Iowa New Jobs Industrial Training Programs (260E). A majority of training delivered by community colleges, as reported by Doucette (1993), "...included job-specific technical training, computer-related training, supervision and management, and workplace literacy" (p. iii).

The Iowa Department of Education noted for fiscal year 2000-2001, Iowa Community Colleges reported Iowa Industrial New Jobs Training Program (260E) economic development enrollment data credit training in the areas of agriculture, basic skills, business management and administrative services, construction trades, engineering, health professions and related sciences, marketing education, mechanics and repairers, precision production trades, trade and industrial occupations, and transportation and materials moving workers. Non-credit enrollment data reveals that Iowa Community Colleges delivered precision production trades training.
Program Training/Evaluation/Transfer of Training

Evaluating economic development programs requires a complex, comprehensive process that considers program and/or training evaluation models to provide an option to facilitate measurement of efficiency and effectiveness. Impact of training on institutional productivity and improvement is difficult to measure. Evaluation, as acknowledged by Kirkpatrick (1998) and Phillips (1997), is a collective process utilized to determine worth, value, or meaning of something, or, in the case of the current study, the effectiveness of training provided through Iowa New Jobs Training Programs (260E).

For purpose of clarification, the definition utilized in this study for program evaluation is a general procedure of collecting and analyzing data with a purpose to determine if and to what level established objectives have been or are being attained (Boulmetis & Dutwin, 2000). Basarab and Root (1992) distinguished training evaluation as an investment rather than an expense, which provides a framework or benchmarks for measuring effectiveness of knowledge gained from training and improved job performance by participants.

Evaluation processes may be a combination of formative and summative methods, as interpreted by Bartik and Bingham (1995), and consist of:

1. Monitoring daily workplace tasks;
2. Assessing training program activities;
3. Detailing anticipated and/or documented outcomes;
4. Measuring training effectiveness;
5. Analyzing costs and benefits of training; and
6. Assessing impact of training, as related to an identified issue or stated objective.
Formative evaluation concentrates on process, which is reflected in monitoring daily workplace tasks and assessing training program activities. Summative evaluations report results or outcomes of training at the end of a program cycle and will assist interpreting results and policy decision-making. The current study focused on summative evaluation methods by reviewing results of training at the end of the economic development program.

Smith and Bradenburg (1991) defined summative evaluation as, "...the process of determining the value, effectiveness, or efficiency of an object to form a decision-making basis about that object" (p. 35). Cost/benefit analysis, an element of summative evaluation, incorporates analysis of economic cost factors and pricing benefits or perceived measurable impact of training, as detailed by Kearsley (1986), and Swanson and Gradous, (1988).

Smith and Marcinuck (1982) asserted that economically based evaluation is comprised of five basic components:

1. Curriculum/training development costs - related salaries, benefits, purchased vendor programs, and salary of staff support;
2. Distribution of staff expenses - salary benefits, license fees, materials, expenses of support staff;
3. Facility costs - leases, taxes, maintenance, depreciation, and participant expenses;
4. Administrative assistance costs – apportioned salaries for related staff, senior management, and operating costs of corporate services; and
5. Customer business costs - trainee salaries/benefits, tuition reimbursements, temporary employees, lost production, apportioned salary of supervisory time for enrolled employees.
Cost/benefit analysis, which is a component of economically based evaluation, is earnings divided by investment results in calculation of return on investment (ROI). A process for calculating cost/benefit analysis requires a deliberate plan of data collection methods (Phillips, 1997). Evaluation of training based on organizational goals and measurable objectives provides a link between learning, changing job behaviors, and transfer of training.

Results of evaluation may bring about change, as Burtless and Haveman (1984) addressed. "...if you advocate a particular policy reform or innovation, do not press to have it tested" (p. 128). One of the main purposes for utilizing qualitative evaluation of economic development programs is to communicate the perceptions of stakeholders.

Measuring success of economic development programs, as Alfred (1991) stated, depends on three categories of information:

1. Constituency needs and expectations from economic development;
2. Program design and outcomes; and
3. Constituency perceptions of program outcomes (p. 87-88).

These performance indicators are interdependent and results from the second and third categories will assist community colleges and economic development partners identify the needs and expectations of business and industry.

Successful planning is crucial to development of an evaluation program. As Maves (1998) stated, "The only effective way to ensure that an evaluation program will meet present and future needs is to plan and design it carefully" (pp. 18-19). Eight steps identified as a basis of evaluation for economic development programs include:
1. Secure institutional commitment – administration linkages with business and industry, state officials, and programs to adult learners;
2. Identify economic development goals and objective – framework to measure institutional performance of economic development programs;
3. Organize evaluation activities – anticipated outcomes;
4. Identify constituencies – partners and stakeholders;
5. Select outcome indicators – examine spectrum of activities and outcomes;
6. Assign data collection priorities – cost vs. need, information available, and priorities for collection of data;
7. Determine measurement methods and time frames – short-term outcomes vs. long-term outcomes; and

Community colleges can utilize evaluation results of economic development programs in decision-making procedures to improve instruction, classes/courses, delivery systems, internal processes and procedures, and marketing strategies. Business and industry representatives will focus on job skills that were obtained from the outcomes of training.

Kirkpatrick (1975) identified transfer as a post training outcome and an indicator of training effectiveness. Transfer of training concepts reflect benefit or impact of training as an effective and continuing application of knowledge and skills gained in training on and/or off the job (Broad & Newstrom, 1992). Training intervention requires an awareness of the complexity and interrelationships of all factors, processes, and levels within a system.
Kozlowski and Salas (1997) presented a multilevel systems approach to training implementation and transfer that contains components of the organization, team or unit, and the individual. Focus of the model identifies internal characteristics and their relevance to training. Integrative framework features include technostructural factors and enabling process factors, which are congruent between each level and to the next level.

The organization identifies technostructural factors as goals, strategy, resources, technology, structure and rewards. Enabling process factors at an organizational level include vision, rewards, leadership, organizational culture and climate. Team or unit level techno-structural factors include task interdependence, task technology, and task structure. Teamwork and leadership, consensual team climate, and team coordination are enabling process factors. The individual level imparts technostructural factors of technical skills and knowledge, enabling process factors of human process skills and human process knowledge to the multilevel model.

Advantages of a multilevel approach to training implementation and transfer include:

1. Forces consideration of issues that might be neglected with training targets and consideration of system linkages of factors to processes;
2. Issues of targeted individual-level skills and behavior identified and specified; and
3. Consideration of work environment factors and individual differences, as related to targeted behaviors.

Issues related to the multilevel system approach to training implementation and transfer includes the level, content, and congruence identified in the model. Cross-level relationships within the model have direct implications for development/design, delivery, and transfer of training in organizations (Kozlowski & Salas, 1997). Bartik and Bingham (1995) noted that
a majority of current economic development evaluations are process oriented and that an addition of outcome data that includes qualitative support may be valuable in determining program effectiveness.

Training and/or transfer of training literature suggest that B. F. Skinner's (1971) "operant behaviorism" is based on behavior or action of an individual or "operant" and results in consequences. The relevance of Skinner's expression "operant conditioning" displays a direct relationship between an individual's action and a reinforcement or reward/punishment. Arnold S. Tannenbaum (1996) stated, "...motivation, by definition, affects behavior and rewards/punishment are motives that help define what we might call a person's self-interest" (p. 32). Learning is encouraged through the consistent systematic application of Skinner's theory to training (Mayo & DuBois, 1987).

Social-learning or social cognitive theory extends Skinner's concepts of human behavior to a slightly different understanding by asserting that consequences of actions can be anticipated, which may have a direct effect on an individual's behavior. This interpretation differs from Skinner's theory in that there is no identified direct relationship between actions and reinforce or reward/punishment, but rather observational learning may influence future behaviors, as observed by Baldwin and Magjuka (1997), Bandura (1977), and Blanchard and Thacker (1999).

Cognitive models support transfer of training concepts by behavior influences of self-efficacy and training outcomes of learning or expectations of individuals (Bandura, 1986). Human behavior supplies the theoretical foundation of Skinner's and Bandura's paradigms of learning (Mayo & DuBois, 1987). Combining design methodology and application of learning theory, the procedure of an economic development evaluation process and
instruments are time consuming, but process and outcome evaluation models supply a wealth of data to substantiate and validate the use of federal, state, and local funds in supporting training provided through economic development (state-financed) programs.

Community College Customized/Contract Training

Two-year institutions, community colleges, junior colleges, and technical colleges are primary providers of customized/contract training programs. Private training providers are also utilized for training, but are typically contracted through representatives of economic development initiatives. Workplace transformation demands quality vocational/technical skills training and a variety of custom-designed or customized educational programs. Successful programs require up to date information to meet local economic needs as well as national and global trends, as proposed by Bragg and Jacobs (1991), Deegan (1988), and Shubird (1990).

Community colleges are coupled to the community and economic environments they serve and are positioned to encourage partnerships/collaboration with business and industry, government, and labor organizations. As Grubb (1989), Hines (1990), and Phelps, Bradenburg, and Jacobs (1990) documented, an ability to provide customized training programs to meet specific workplace needs and skill-based requirements, without jeopardizing quality and content, is a major strength of community colleges.

Community colleges are an initial point of contact for businesses looking for financial resources to expand within a community or to relocate to a different state. In an effort to determine the extent of customized workforce training partnerships between education and business and industry, the League for Innovation in the Community College conducted the
Survey of community college training programs for employees of business, industry, labor and government (Doucette, 1993). This survey was sent to chief executive officers of 1,042 two-year colleges in the United States, with a reported return rate of 73.2%. Results of the survey indicated that 96% of community college respondents provided workforce training. Local business and industry reported 71.5% of programs were specifically designed to meet their needs and 26.9% stated their training was customized for each company (pp. iii). The survey noted that small and medium-sized companies were more likely to partner with community colleges to provide customized training programs, which differ from results state in the May 1998 survey from the National Governor’s Center for Best Practices (1999), presented earlier in this study.

A Joint Study of the National Commission for Employment Policy and the National Governor’s Association, Evaluating state-financed, workplace-based retraining programs: A report on the feasibility of a business screening and performance outcome evaluation system, provides a model for development of an evaluation system of economic development programs. Twenty-four state case studies tested the feasibility of evaluation systems and “…it is likely that in the near future state agencies will be required to evaluate the effectiveness of their training investments in reducing unemployment and retaining jobs” (Creticos & Sheets, 1990, p. 2).

Another national study, Community college involvement in contract training and other economic development activities, conducted in 1989-1990, assessed contract training and other economic development services provided by technical institutes and community colleges. This study concluded a majority of community colleges offered at least one course as customized-contract training to employers (Lynch et al., 1991).
Benefits identified by business and industry utilizing community college contract training programs include:

- educational institutions increase enrollments, enhance services to their communities, and strengthen connections to employers; students receive training appropriate to their employment; firms benefit from higher productivity and economies of scale in training, and may receive training costs subsidizes; and communities benefit from economic development initiatives. (Lynch et al., 1991, p. 5)

Deegan and Drisko (1985) identified additional benefits of: “...increased revenues to colleges stabilized enrollment and decreased public funding; and provide ‘real world’ contact for community college faculty and prepare students for careers in business and industry” (p. 16).

Customized/contract training programs reinforce a universal principle that: “...companies want everything yesterday and assume that anything necessary to their operation will be available by tomorrow at the latest” (Kaplan, 1984, p. 86). There are possible drawbacks to contract training, including: “…access to employment opportunities for minorities, access to non-traditional occupations for women, substituting training that firms would otherwise provide themselves, and effects on local economic development” (Lynch et al., 1991, pp. 5-7).

Problems or serious drawbacks identified by business and industry utilizing community college customized/contract training programs include:

- shortage of qualified instructors; inadequate technical facilities for training; difficulties in scheduling contract courses for company employee shifts; low internal educational institutional support for contract training efforts; time required for educational institutions to develop contract training courses; and inefficient development of strategies for marketing contract-training programs. (Deegan & Drisko, 1985, p. 16)
Additional issues that were identified consist of:

...role of contract training in gaining employment access for minorities and non-traditional occupations for women; historical battle over vocational/career education-narrow and occupational specific; contract training substitutes training, which firms would provide themselves; and effect on local economic development—“smokestack chasing”. (Lynch et al., 1991, pp. 5-6)

Community colleges, as a primary provider of state-financed economic development training programs in the United States, connect with local neighborhoods and develop relationships with business and industry providing workplace-training initiatives. Customized training programs delivered by community colleges have expanded beyond traditional vocational education and job training assistance. Hirshberg (1991) recognized that the role of community colleges: “...includes activities as diverse as management and technical assistance for new and small businesses, tech-prep programs with high schools, cooperative education programs, partnerships with states in economic development activities, and contract or customized training for industries” (p. 1). Communities succeed and grow through collaborative efforts of citizens, education, business and industry, and government.

Summary

The review of literature for this study examined economic development (state-financed) programs, program/training evaluation/transfer of training, and community college customized/contract training fundamentals. Specialized economic development initiatives, including training programs and services, determine the structure and intent of an evaluation process. A goal of training should be transfer of learning and/or transfer of training for employees, which is crucial to the performance and success of business and industry for a more long-term payoff (Haskell, 1998).
Economic conditions, business environments, educational systems, and company and employee characteristics are related variables to be integrated in development of an evaluation system (Jacobs & Bragg, 1994). The outcomes or results of evaluating economic development training programs provide a baseline for continuous improvement initiatives for community colleges and participating companies.

The ability of community colleges to negotiate training and/or educational programs by providing alternative delivery systems, and developing learning environments for special company/employee populations is a key to the success of client-driven instruction (Bragg & Jacobs, 1991). Community colleges are extremely responsive to business and industry needs and are the appropriate institute to provide training for economic development programs, but, as McCabe (1997) stated, "...no program or service is ever complete without valid evaluation and dissemination of the results. The evaluation process will measure success in achieving the program’s objectives in meeting community needs" (p. 29). The development of an evaluation process that examines the effectiveness of training provided through Iowa Industrial New Jobs Training Programs (260E) will demonstrate an increased commitment of accountability for state-financed, employer-focused initiatives in raising the workplace skills of Iowa’s workforce.
CHAPTER 3. RESEARCH METHODS

This study was designed to develop an evaluation process for training provided through Iowa Industrial New Jobs Training Programs (260E) and to assess the effectiveness of programs funded by economic development initiatives. An overall qualitative approach or strategy is a combination for analysis of existing theory and research, experiential knowledge, and case study methods (Maxwell, 1996). Stake (1995) remarked that “…epistemology of qualitative researchers indicates the phenomenon of the researcher as an existential (nondeterminist) and constructivist” (p. 43).

Theoretical perspectives or frameworks structured this research through a combination of case study approach, systems theory perspective, constructivism paradigm, and action research methodology. Further explanation of the study and methodology employed are rationalized in this chapter.

Theoretical Perspectives

Case study approach

“Case study”, as described by Merriam (1998) and Creswell (1998), is an exploration of a pre-described or bounded system restricted by time, place, events, and/or processes. Miles and Huberman (1994) illustrated case study as a graphic representation of a circle with a heart in the center. The heart signifies a focal point and the circle represents boundary for the case study. Anything outside the circle is not included within the realm of possibilities for the researcher. Case study is a research strategy, which Yin (1994) put forth as, “…a way of investigating an empirical topic by following a set of prespecified procedures” (p. 15).
Procedures, methods of operation and/or systems require configuration or design that builds upon a foundation or set of benchmarks. An example of a development process is descriptive research, which, according to Long, Convey, and Chwalek (1986), and Merriam (1998), involved collecting data that will answer questions and communicate documented perceptions of stakeholders. Case study approach of an identified problem or issue will allow heuristic observational investigation by the researcher and participants/stakeholders.

This case study is an illustration of similar concepts documented by Merriam (1998), Miles and Huberman (1994), and Stake (1995), that identify qualitative research and case study methodology as a holistic description and analysis of grounded theory. Case study methodology engages a systematic process of gathering enough thick information, or accounts of situations to permit the researcher to effectively understand and analyze the importance of individuals, environments, or groups studied (Berg, 1998). Characteristics evolve from a case approach and the researcher fieldwork includes continuous assessment of initial parameters and focus on conceptual framework.

**Systems theory**

Multiple approaches define a system. It is interpreted as: "...a set of interrelated elements that requires inputs, transforms them, and discharges outputs to the external environment" (Daft & Steers, 1986, p. 7), "...complex grouping of human beings and machines for which there is an overall objective" (Checkland, 1972, p. 91), and "...characterized by inputs, transformational processes, outputs, and a feedback channel that translates the outputs into a signal to control the input of the process" (Jacobs, 1987, p. 2).
Planning, operating, and controlling a system depend upon the subsystems that are working together and coordinated into a whole. A modification in any part of the subsystem changes all other components of the system including the external and introspective framework of the whole (Swanson & Holton, 2001).

A major goal of system design, improvement, and innovation, according to Smith (1982), is the "...search for best overall structure, a progressive improvement of existing system and component parts, and the inductive and deductive heuristic forms of discovery" (p. 19). System design provides an operational process that is continuously improved internally and externally through deductive analysis.

Stufflebean (1983) developed the Context, Input, Process, and Product (CIPP) Evaluation Model that uses systems theory as a foundation for evaluation of customized/contract training programs delivered by educational institutions. Conceptual framework of a system developed from 'thinking' or epistemology from which it is created requires accountability and a decision-making process. The CIPP Model includes planning, structuring, implementing, and recycling as instruments for decision-making.

Feedback is utilized in continuous improvement processes and observes the four components of CIPP Model as subsystems. Each subsystem is a part of a complex total evaluation system that provides a structure for decision-making processes and includes:

1. Context evaluation assists in planning and recording objectives that are chosen in relationship to identified needs;
2. Input evaluation structures decisions and records design and data procedures;
3. Process evaluation supports the implementation of decisions and processes; and
4. Product evaluation reviews outcomes and procedures with results to continue, change, or discontinue programs.

An alternative model of evaluation, the Campbell and Panzano (1985) conceptual framework modified the CIPP Model components to include: context evaluation, educational experience or customized training evaluation, and outcomes evaluation as a benchmark. The researcher utilized systems theory in the current study to build a conceptual framework for developing an evaluation process for training provided through Iowa Industrial New Jobs Training Programs (260E). The system, in this set of circumstances, included input from the Iowa Department of Economic Development, Iowa Department of Education, Iowa Community Colleges, and participating company.

**Constructivism**

Fundamental principles guide the researcher in a constructivist paradigm. Assumptions cannot be proven or disproven, but represent fundamental positions that a researcher is willing to construct and guide procedures of a study (Guba & Lincoln, 1989). The constructivist, according to Denzin and Lincoln (1998), “…believes that to understand this world of meaning one must interpret it” (p. 222). Within a constructivist paradigm, stakeholders will attempt to interpret or make sense of an experience of a shared knowledge or experience (Guba & Lincoln, 1989). Socially constructed significance provides an understanding of investigation through development of consensus.

Participation through investigation employs concepts of Stringer (1999): “…practice scripts’ plans, procedures, and models to develop or reformulate policies and practices” (p. 211). Individual ethics and values of empowered participants drive constructivists
methodology to seek corrective action. Truth, in the realm of a constructivist, is a continual search of inquiry and does not require testing for validity and is not measurable in terms of quantitative analysis.

According to Guba and Lincoln (1989), "...constructivism or hermeneutic methodology involves continuing dialectic of iteration, analysis, critique, reiteration, and reanalysis" (pp. 84-90). Change or continuous improvement processes provide reconstruction methods of interpreting individual explanations for constructivists.

Examples of system paradigm models from business and industry include W. Edwards Deming's, Total Quality Management (TQM) philosophy and Malcolm Baldrige's, Continuous Quality Improvement (CQI) methods, which articulate a constructivism methodology through analysis of processes developed by a system. The structure of a continuous improvement model is a system that searches for best practice to solve problems through a progression cycle of planning, doing, checking, and acting. Systems necessitate evaluation throughout a cycle to ensure quality, consensus, and self-improvement.

Evaluation processes and methods allow constructivists to work toward compromise through assessment of multiple accounts or possibilities. Stringer (1999) described evaluation as, "...perceived outcomes as ends, which stakeholders accept instead of criteria that are measured against a fixed point or benchmark" (p. 132).

**Action research**

Community based-action presents a research routine developed from elements of "look, think, and act":

- **Look** – gathers data or relevant information by describing or constructing a situation;
• Think – analyzes, interprets and explains questions that are incorporated into the framework of the study; and

• Act – the plan, implementation, and evaluation of a study. (Stringer, 1999)

The complexity of an inquiry routine will depend on the depth and breadth of research. The result of work by Sagor (1992) characterizes action research as: “...the product of people who are searching to improve their own situation or environment and includes self-assessment by reporting results” (p. 7).

A constructivist’s investigation, as presented in this study, is created through joint construction. Guba and Lincoln (1989) suggested that: “...the development of focused observations and understandings are a ‘hermeneutic dialectic process’, which can formulate a construction of their situation that makes sense to them all and result in a higher-level synthesis” (p. 45). The interaction or connectivity of a constructivist’s paradigm utilizing action research techniques seeks to: “...change the social and personal dynamics of the research situation so that it is noncompetitive and nonexploitative and enhances the lives of all those who participate” (Stringer, 1999, p. 21).

Swanson and Holt (2001) identified action research as a cyclical process where data are collected after an action is completed and will be utilized to measure and determine the effects of the action on a system. This course of action may lead a system to design an evaluation process and/or instrument that will include a continuous improvement or feedback loop that will assist in the development of a new action.

Theoretical viewpoints presented through case study approach, systems theory perspectives, constructivism paradigm, and action research methodology contributed to the development of the current study by providing the researcher a conceptual framework to join
theory to application. The interconnection of theoretical viewpoints solidified the foundation of this study and contributed to research design, which advanced the development of an evaluation process: Iowa Industrial New Jobs Training Programs (260E).

**Research Design**

Case study qualitative research methods were employed to conduct research, interviews, and related analysis of the perceptions of major stakeholders including the Iowa Department of Economic Development, Iowa Department of Education, Iowa Community College economic developers, and participating company representatives. In addition, this study also includes data related to the perceptions of participants toward the utilization of a statewide evaluation process.

Coherent research design strategy and structure direct the study to investigate an empirical premise, which follows established procedures to assist the researcher in ensuring validity of the study. Yin (1994) identified five components of research design:

1. Research questions (how and why of study);
2. Study intention (identifying scope of study through research);
3. Unit of examination (what the case is, relevancy to the study);
4. Linking data to intentions, (data analysis, pattern-matching); and
5. Interpreting findings (relating data to objectives or intentions).

Research design models assist researchers in identification of what data are to be collected or researched in exploration of the study and will lead the researcher to deduct what should be done with the data after the collection process is completed. Design of a study that
follows Marshall and Rossman's (1995) model, attempts to identify at least three challenges synthesized to represent:

1. Develop a conceptual framework thorough, concise, methods;
2. Plan a manageable flexible systematic design; and
3. Integrate the framework and plan into a document that proposes a study.

Methodology provides further details of an organizational structure for research that attempts to solve a problem or issue by presenting numerous unique solutions for review and analysis. Enabled participants work to develop an action plan to solve the identified problem which, in the current study, assesses or evaluates the effectiveness or accountability of training provided through Iowa Industrial New Jobs Training Programs (260E).

The research design of this study integrated fourth generation evaluation process through case study methods. According to Lincoln and Guba (1989), the researcher organizes claims, concerns, and issues of stakeholders, and utilizes constructivism paradigm methodology by:

1. Identifying stakeholders, which may be at risk in evaluation;
2. Obtaining constructions from each participant;
3. Establishing a methodology which can be utilized and evaluated;
4. Negotiating consensus from numerous constructions;
5. Preparing an plan for negotiation when consensus is not achieved;
6. Gathering and supplying information for use in consensus actions;
7. Developing opportunity for participants to negotiate;
8. Building report(s) that will communicate participants perception of consensus and resolution; and
9. Continually review processes and results of any unresolved constructions.

The pilot case study of one community college and a single participating company will assess the relevance, initial achievement, and future applications of the evaluation process and evaluation instruments developed for this study. The research design for the evaluation process and instruments were refined through constructivist methods, which included input from stakeholders.

**Evaluation Instruments and Process Design**

The evaluation instruments (Appendix B) were designed to assess training provided through Iowa Industrial New Jobs Training Programs (260E). Merging action research methods and constructivist inquirer's paradigms, the researcher guided evolution of the process and instruments through integrated negotiation of understanding and consensus from stakeholders. Collective visions and versions involved adjustments to the design of the instruments, but resulted in transformations that dramatically altered the instruments (Stringer, 1999).

Evaluation models from state economic development programs in North Carolina, Kansas, and Wisconsin provided a variety of concepts utilized in the development of this study's process and instruments. The two-part evaluation instrument (Appendix B) process was developed to combine perceptions of the participating company and community college to assess the effectiveness of training provided through Iowa Industrial New Jobs Training Programs (260E).

Representatives from the Iowa Department of Economic Development, Iowa Department of Education, Iowa Community Colleges, and participating company negotiated
the design of the evaluation process and instruments through numerous one on one and group
face-to-face meetings. Evolution of the evaluation process included the following
components:

1. Statement of the problem

2. Stakeholder-negotiated evaluation elements
   b. The Company
      1) Perceived needs
      2) Connection to company goals and training objectives
      3) Understanding roles and responsibilities of funds
      4) Timeframes for completion of training and 260E program
      5) Expectations or anticipated outcomes
   c. The Iowa Community College economic developers and the Iowa Department of
      Economic Development
      1) Initial company contact/request
      2) Assistance in development of the training plan
      3) Community college training
      3) Private training vendors
      4) Program management
      5) Overall summary
      6) Company training plan
      7) Additional questions

3. Iowa Industrial New Jobs Training Program (260E) documentation components
   a. Notice of Preliminary Agreement
b. Notice of Final Agreement

4. Evaluation instruments
   a. Company Program Evaluation Instrument (Part 1)
   b. Community College Program Summary Instrument (Part 2)

5. Proposed Iowa Industrial New Jobs Training Program (260E) closeout documentation
   a. Notice of Preliminary Agreement
   b. Notice of Final Agreement
      1) Company Program Evaluation Instrument (Part 1)
      2) Community College Program Summary Instrument (Part 2)

The design and format of the evaluation instruments included fundamental training evaluation development structure, which limited the type and amount of data collected for the study. Connecting training objectives and outcomes to program evaluation demonstrated an opportunity for measurement of results to realize transfer of learning or transfer of training, which resulted in employee skill-based improvement. The structure of the evaluation instruments utilized in this study solicited both quantitative and qualitative responses in relation to assessing the effectiveness of training provided through Iowa Industrial New Jobs Training Programs (260E).

The Company Program Evaluation Instrument (Part 1) provided the participating company the opportunity to evaluate training provided through Iowa Industrial New Jobs Training Programs (260E). A five-point, Likert-type rating scale, having a range from 5=excellent, exceeded expectations to NA=not applicable, provided a method of rating levels of performance as perceived by the company's representative. The five-point scale was
selected to provide a basic, yet comprehensive, rating system. The instrument identified eight main areas of concentration to be evaluated:

1. Rate the performance of the community college’s response to initial company contact/request.

2. Rate the performance of the community college assistance in development of the training plan.

3. Rate the performance of service providers-community college.

4. Rate the performance of service providers-private training vendors.

5. Rate the performance of the community college-program management.

6. Rate company satisfaction of the program-overall summary.

7. Rate the performance of the program components-company training plan with training objectives listed.

8. Response to six questions related to additional training opportunities, identification of impact on the company of the Iowa Industrial New Jobs Training Program (260E), savings and benefits, estimated dollar value of impact, and provides an opportunity for additional comments from the company representative.

The Community College Program Summary Instrument (Part 2), completed by the community college economic developer, included the following:

1. Community college program summary documentation, with a synopsis of the company’s business and description of the Iowa Industrial New Jobs Training Program (260E); and

2. Additional summary information requests the number of new jobs projected to receive training and average hourly wage of new positions.
Data collected from the community college and participating company, through the proposed evaluation process, would assist the Iowa Department of Economic Development to assess the effectiveness of Iowa Industrial New Jobs Training Program (260E) in raising the skills of Iowa workers. Qualitative and quantitative data, available through the training evaluation process and the notice of final agreement documentation, provided by the community college would enable a statistical analysis of the Iowa Industrial New Jobs Training Programs (260E) and assist in the identification of trends at a statewide level.

Basarab and Root (1992) recommended inclusion of the following points to enhance the validity of the collected data:

1. Write questions to maximize validity of data gathered.
2. Design the instrument to ensure anonymity.
3. Notify participants/stakeholders of the research intentions.
5. Cement the purpose of evaluation before construction of instrument.
6. Question the reason of inquiry.
7. If closed questions are included, use reasonable alternatives.
8. Review the wording and appropriate terminology.
9. Include clues within structure of sentences to remind intent of evaluation.
10. Allow for additional comments.
11. Purposefully sequence questions by topic specific content.
12. Develop questions that will require participant/stakeholder to read before replying.
13. When applicable, use questions to sort or direct responses and allow for contingencies.
Human Subjects Approval

The design of the study's evaluation process and instruments directed the data gathering techniques and assisted the researcher in data analysis. Additional steps were taken to ensure confidentiality of the case study participating company and community college, as required by Iowa State University. Iowa State University's, Human Subjects Review Committee examined the research proposal for this study, which involved human subjects. The Institutional Review Board (IRB) approval date of August 23, 2001, documents adherence to university policy and Federal regulations (45 CFR 46).

The proposal outlined a framework for the study and addressed the degree of risk to subjects within the design of the proposed research. Documentation included the official review form, supporting attachments, a written statement to research subjects, consent form, and initial version of the program evaluation instrument that is designed to develop an evaluation process for Iowa Industrial New Jobs Training Programs (260E).

Site and Participant Selection

Maxwell (1996), and LeCompte and Preissle (1993) presented theoretical perspectives and research design that synchronize the rationale of site and participation selection through development of identifying a problem that is to be researched. Purposeful sampling or criterion-based selection would establish a predetermined a set of criteria, attributes or dimensions to be included in a study. A goal of deliberate sampling or selection of specific settings and participants provides the researcher exclusive parameters or units the study must contain.
Purposeful sampling, as presented by Maxwell (1996), requires knowledge of the research setting, definition in variation of participants, researcher relationship to participants, representation to the study, identification of heterogeneity of the population, deliberate study of related theory, establishment of particular comparisons or differences, data collection feasibility, validity issues, and ethical considerations of the study. Research settings for this study identified and limited research scope to one company and a single community college located in the State of Iowa.

Stringer (1999) offered an interpretation of action research initiatives that monitor and direct the process of inquiry by deliberately selecting participants/stakeholders who would concentrate the intent of the study, identify cases that add to the body of knowledge, and assist in developing the confidence or validity of the conclusions reached. This study was conducted with input that included representatives of the Iowa Department of Economic Development, the Iowa Department of Education, Iowa Community College economic developers, and the participating company.

Data Collection

Stringer (1999) recognized that, “…researchers or action research facilitators gain understanding through the contexts in which they work” (p. 68). A combination of tight and loose data collection methods (Miles & Huberman, 1994) evolved from research questions developed through constructivist methods for this study. Research designs and theoretical perspectives motivate data gathering approaches. A data collection matrix identified by Creswell (1998) and Stake (1995) incorporates a status board to specify the amount of information to be collected in relation to the tasks or objectives identified in the research.
Strategies for data gathering require that the researcher incorporate a purpose of the study, development of research questions, selection of participants/stakeholders, research data sources, identify the amount of time and expense involved, guidelines for field-observation, and analyze anticipated outcomes (Stake, 1992). Creswell (1998) identifies a variety of resources for information to be collected and included in qualitative research observations and field notes: interviews in-depth individual or systemic unstructured, semi-structured, open-ended, and focus groups; documents including journals, personal letters, and public documents; and audio-visual materials or physical evidence, videotape, photographs, sounds, electronic messages, and possessions or objects.

Sagor (1992), Stake (1995), and Marshall and Rossman (1995) identified additional data sources as photographs, charts and figures, written narratives, oral presentations, manuscripts, life histories, and questionnaires and surveys. The integration of data collection resources and methods requires analytical strategies, and refinement of the research design built into the research schedule to enable the study to evolve.

Maxwell (1996) underscored that triangulation of data collection methods will reduce risk from conclusions that may be reflected by one specific data-gathering technique and will assist the researcher to overcome biases. The nature of action research, case study methods, and constructivism paradigms requires participative construction of outcomes from human observation. One on one face-to-face interviews, group discussions, telephone or electronic technology provides meaningful access to participants for the researcher. Combinations of communication methods and data sources utilized in the evolution of this study were scheduled at the ease of participants/stakeholders and documented to enable management of the data gathered. Electronic correspondence and phone calls also offered an effortless
method of communication between stakeholders and the researcher, which allowed for flexibility and freedom of correspondence at one’s convenience.

**Data Management**

As mentioned in the data collection portion of this study, a matrix strategy with a status board was used to track the progress of information flow and analysis in accordance with the objectives of the study. Initial frameworks, as confirmed by Miles and Huberman (1994) “…will allow the researcher to be more receptive to local idiosyncrasies, lessen cross-case comparability issues, lower costs, and reduce information load” (p. 17).

As data were gathered, a coding system was used to prioritize the data and provide the researcher with a method of triangulating information. Coding links information from data collection to data management, data analysis, and connection to findings of the research. The use of information retrieval cards, a variation of index card data collection techniques, photocopied information, field notes, and computer-stored data provided a system for cross-analysis and sorting (Merriam, 1998). Stake (1995) suggested that researchers inventory records of investigation, classify or code raw data, and reinforce limitations of case study boundaries to audit data management.

Developing theory in qualitative case study analysis provides a process for data to move from a specific observable format to an abstract level by using concepts for purposes of analysis. Linking data to theoretical concepts through analytic strategies of pattern matching or explanation-building are basic criteria for interpreting findings (Yin, 1994). The researcher addressed the data analysis phase of this study by connecting patterns found in research, and identified evolving conclusions and interpretations from the case study.
Data Analysis

Analytic techniques identified by Creswell (1998), Yin (1994), Miles and Huberman (1994), and Merriam (1998) noted collectively that when the researcher selects a case study approach a detailed description of individual information will utilize within-case analysis or an embedded analysis followed by holistic analysis. Naturalistic case research advocates member checking as an approach where interviewed stakeholders review their material for accuracy and feedback, which reassures the researcher that an account is worthy of inclusion (Stake, 1995). When documented narratives were found to be objectionable, adjustments were made by the researcher to clarified interpretation and were resubmitted to the participants/stakeholders for endorsement. Qualitative interview techniques involve interpretation, summarization, and integration through analysis of narratives (Weiss, 1994).

Bracketing, as acknowledged by Miles and Huberman (1994), and Stringer (1999), refers to a process of analyzing information with intent to synthesize and identify key issues. Patterns will emerge throughout development of a study and tentative conclusions will provide construction for analysis of data. Connections between categories and themes will develop a strategy, which will serve as a tool for data reduction and data analysis (Maxwell, 1996).

Marshall and Rossman (1995) distinguished three process activities to analysis data including, “...data reduction, data display, and conclusion drawing/verification” (p. 127). The researcher utilizes each of these activities to draw conclusions, enhance triangulation methods, construct dependability, and create conformability in a study. Natural progression of research will shape and reshape the continuing study.
Validity

Validation is addressed as a component of design by the researcher through data gathering techniques, data management/recording efforts, and data storage (LeCompte & Preissle, 1993). Maxwell (1996) stated that validity testing can be completed through triangulation of data, alternative interpretations and explanations, “rich” data documentation, and feedback. Qualitative research is not replicable and criteria of goodness will differ since the researcher purposefully avoids controlling the research (Marshall & Rossman, 1995).

Under a constructivist paradigm, trust is normally built between individuals over a long period of time (Guba & Lincoln, 1989). The researcher for this study was afforded an analytical advantage based upon professional experience at an Iowa Community College and as a stakeholder of the system through the Iowa Department of Education.

The constructivist model guiding this research followed concepts presented by Denzin and Lincoln (1995), and Merriam (1998), and was oriented to the production of reconstructed understanding. The term internal validity was replaced with trustworthiness, and external validity with authenticity or reliability. Tests for trustworthiness and authenticity were constructed strategies for balancing bias in participant and researcher interpretation.

Stringer (1999) introduced interpretive assumptions, which are unique to inquiry of action research or community-based approaches:

- Studies usually limited in context —focused on an issue or problem,
- Researchers empower participants/stakeholders-active construction,
- Purpose of research to enlighten understanding of issue or problem-rich detail,
- Stakeholder accounts through negotiation-consensus and tangible outcomes,
• Perspectives of stakeholders are aligned with viewpoints identified in literature,
• Stakeholder experience and perspectives obtainable—policies and procedures for improvement of programs and services. (pp. 167-168)

As validity concerns are addressed through construction of research design, interpretation of the researcher's outcomes of credibility, transferability, and dependability and conformability components are recommended for inclusion in a study to establish trustworthiness (Stringer).

Peshkin (1993) affirmed, "...no research paradigm has a monopoly on quality. None can deliver promising outcomes with certainty" (p. 28). The progression of this study required refinement of research design, methods, interpretations, and transferability of the evaluation instruments to application in the field.

Role of the researcher

Action research approach describes the researcher as leader, facilitator, resource person, negotiator, and co-participant who provides direction to empowered participants through construction of the research design. The qualitative researcher employs multiple methodologies, unique perspectives, and selected paradigms to develop narrative accounts from research Stringer (1999).

Research design strategies motivate responsibility and accountability for the researcher as investigator, who gathers and analyzes data with an intention of constructing meaningful information (Merriam, 1998). The researcher must be aware of personal and participants biases that may harm the validity of research endeavors.

The researcher's role is to develop a systemic overview, which will establish the framework for the study (Miles & Huberman, 1994). The researcher, or interviewer in this
study, combined structured and unstructured interviewing processes by using both established and open-ended questions (Fontana & Frey, 1994).

A researcher's values and ethics drive the framework of a combined effort from naturalistic inquiry and constructivism paradigms. Collaborative construction reveals that the researcher shares empowerment and power with participants/stakeholders. The educational experience of research is for the good of all and connections between individual positions held by the researcher and participants will elevate all to a higher intellectual, moral, and ethical ground (Guba & Lincoln, 1989).

Summary

Theoretical perspectives were explained in this chapter, including case study approach, systems theory perception, constructivism paradigm, and action research methodology. The case study findings described in the next chapter are used to report the results of research methods. Summaries of interviews with stakeholders, advancement of the process, and progression of the development of instruments were utilized to evaluate training provided through the Iowa Industrial New Jobs Training Programs (260E).
CHAPTER 4. FINDINGS

An analysis of findings derived from the development and implementation of a case study evaluation process, which examined the effectiveness of training provided through Iowa Industrial New Jobs Training Programs (260E), is presented in this chapter. Stakeholders in this section of the study are the Iowa Department of Economic Development (IDED), Iowa Department of Education (DE), Iowa Community College economic developers, participating company, other identified resources.

Introduction

The researcher investigated the issue of accountability of Iowa Industrial New Jobs Training Programs (260E) and development of an evaluation process, which was the intent of the study. From September 2001 to May 2002, the researcher scheduled the following number of face-to-face meetings: seven-community college economic developers, thirteen-company representatives, and six-Iowa Department of Economic Development representatives. For purposes of clarification, coded narratives (Appendix E), including a page number, were documented by the researcher and are interchangeable throughout this study:

- Iowa Department of Economic Development (IDED) – ED
- Company representative – CP
- Community college economic developer – CL

Four meetings included the community college economic developer, company representative, and researcher, which provided unique opportunities to review the evaluation process and instruments at various stages of progression. The community college economic
developer assisted the researcher in focusing this study to develop an evaluation process for assessing the effectiveness of training provided through economic development programs, specifically Iowa Industrial New Jobs Training Programs (260E).

The developer’s expertise in Iowa Industrial New Jobs Training Programs (260E) provided depth and breadth of knowledge that is unmatched in the State of Iowa. Step-by-step procedures for “selling” economic development programs, from the perspective of the community college, assisted in the development of the evaluation process and instruments. Implementation of the Community College Program Summary Evaluation (Part 2) identified the need to customize the program summary to include specific information including the business of the company, number of employees-current and future, amount of training funds, and type of training completed. Additional summary information, included number of new jobs projected to receive training and the average hourly wage of new positions, which are benchmarks that will assist in assessing the accountability of the program.

The community college economic developer and company representative were essential in designing the structure of the process and language of evaluation instruments utilized in this study. The company representative specifically reviewed the wording of the Company Program Evaluation Instrument (Part 1), with a focus on comprehension and application by business and industry. The implementation of Part 1 enabled the company and researcher to recognize the relevance of each section of the instrument by evaluating the program.

Initial meetings with Iowa Department of Economic Development representatives acknowledged the need and importance of this study, which focused on assessing the effectiveness of training. Subsequent meetings incorporated IDED’s requests for additional
information related to Iowa Industrial New Jobs Training Programs (260E) incorporated into the Company Program Evaluation Instrument (Part 1) and program summary information presented in the Community College Program Summary Evaluation Instrument (Part 2).

During the nine-month time period, regularly scheduled monthly group meetings of Iowa Community College economic developers provided opportunity for open discussions and progress reports of the study. The group reviewed the evaluation process and instruments, with attention to individual community college requirements and policies. The community college economic developers acknowledged the need for accountability and program improvement, and were extremely supportive of the researcher throughout this endeavor. The Iowa Community Colleges and the Iowa Department of Economic Development will decide application of the evaluation process and instruments or a comparable system.

In addition, representatives from the Iowa Department of Education assessed the relevance of this study in relationship to the Management Information System (MIS) data reporting system and continuing efforts to demonstrate the role community colleges play in training Iowa's workforce. With accountability in mind, the one-on-one, face-to-face, and group interviews, including the company representative, college economic developers, and researcher, assisted in negotiations and final consensus that resulted in the evaluation process and instruments utilized in this case study. As the study progressed, evaluation instruments were implemented and results were assessed. The findings are presented in this section of the study.

This chapter is divided into three sections that provide a comprehensive explanation of findings of the study. The first section communicates descriptions and level of
involvement of the Iowa Department of Economic Development, the participating company, and the community college. Evolution and development of the evaluation process, including the Company Program Evaluation Instrument (Part 1) and Community College Program Summary Evaluation Instrument (Part 2), are included in the second section. The final section contains identification of conclusions, and patterns or themes that emerged from this study along with a summarization of the findings. Narratives from participant one-on-one interviews, electronic communications, phone conversations, and focus group meetings are interwoven throughout this chapter.

Application of a case study approach enabled the researcher and participants to utilize a constructivist paradigm to structure and guide procedures for this study. The participants were involved in the shared experience that resulted in consensus for development of an evaluation process for the good of the system.

The Company, Community College, and Iowa Department of Economic Development

Company

As one of the largest suppliers of industrial rubber products in the nation, the participating company employs approximately 100 workers in a non-union factory setting. The privately owned company was founded in 1974, and currently includes four branch locations in the United States, with sales worldwide. This company’s implementation of Iowa Industrial New Jobs Training Program (260E) began January 1, 1997. The community college sold bonds to fund the project in 1998, and training was completed July 7, 2001. Due to a downturn in the economy and lower product orders, the total amount funded through the
Iowa Industrial New Jobs Training Program (260E) was reduced from $99,212 to $82,600, which reflected a reduced number of new employees trained.

The company representative was a dynamic partner along with other stakeholders, in all phases of this study, and provided a connection for the application of the evaluation process and instruments to the field. The company representative had 22 years of experience in business and industry, including 4\(\frac{1}{2}\) years at the participating company as the Personnel Administrator. The knowledgebase and experience level of this individual afforded an in-depth analytical business approach to the development of the evaluation process, instruments, and implementation for this case study.

At the first meeting, the researcher sensed hesitance on behalf of the company representative, related to selection for participation. However, after a few minutes of conversation, an instant relationship was offered by the company representative and accepted by the researcher, with an impression of mutual respect and admiration for the individual and personal expertise. On-site interviews, one-on-one and/or with the community college economic developer were relaxed and energized with an enthusiasm of total cooperation to participate in the research study.

From the company's perspective, ...relationships are built at this company, employee turnover is low, and safety incentives are a priority (CP, p. 1). The company provides training during work hours, with additional educational opportunities available at the expense of the company after work hours. Cross training opportunities allow job sharing, build employee satisfaction, and result in a highly skilled workforce. We believe in personal wellness, physical wellness, and company wellness (CP, p. 1). The company practice of process review was identified by the researcher as a form of a community based-action
routine developed by Stringer (1999), and includes: Look – gathering data or relevant information related to the training program; Think – analyzing, interpreting, and explaining questions; and Act – planning, implementing, and evaluating training. The company representative a true believer in continuous improvement initiatives and views evaluation as a key component in attaining the link between training, transfer of training, and system excellence.

In this case study, the work environment of the company influenced transfer of training through methods, identified by Baldwin and Ford (1988), including "...managers' support, peer support, technology support, the climate for transfer, and the opportunity to use newly acquired capabilities on the job" (p. 111). The representative reinforced the company's support of individuals by encouraging learning opportunities for employees with direct assistance from managers to develop, design, and implement change through training. Employees are the key to company profitability and the company believes strongly in training, a positive work environment, and current job-related skills that will allow individuals to attain job satisfaction (CP, p. 2).

Training evaluation, at the company level, is developed through the personnel/human resources function. The company representative asserts, ...effectiveness of training programs begins with consensus of identifiable training objectives and measurable outcomes (CP, p. 3). Initial discussions between the community college economic developer and researcher identified the concept of the study, selected the participating company, and established the timeline for completion.

With Kirkpatrick's (1998) total evaluation approach model in mind, the researcher and company representative shared concepts related to evaluation in terms of measuring
changes in behavior, discussing final results that occur after training, reinforcing the need for participant comment sheets, and how the company evaluates learning or transfer of training. As the company representative noted, behavior is a human trait that is difficult to identify: final results are both measurable and immeasurable; comment sheets or "smile sheets" provide instant feedback to the company, trainer and employee; and transfer of learning can be determined by the bottom line—profit or loss of a company.

Examples of measuring changes in behavior, discussing final results, and identifying transfer of training included meeting and/or exceeding identified performance goals (skill-based improvement), productivity improvements implemented due to training, and employees received specific job skills that improved job performance. As the company representative stated, "training increased efficiency and product knowledge. Evaluation of an Iowa Industrial New Jobs Training Program (260E), as presented in this study, is a method of providing documentation for accountability of state-financed training program initiatives.

The opportunity to work with multiple stakeholders in developing a process that examines the effectiveness of training provided by economic development (state-financed) programs was viewed, by the company representative, as a continued commitment to provide support to the local community, area community college, and State of Iowa.

Community College

The college was established in 1966. It serves approximately 20% of the state's population, maintains six campuses, and is one of the largest 15 Iowa Community Colleges. According to the United States Department of Commerce, United States Census 2000 (2002),
the metropolitan area declared a population of over 198,600 people, and is nationally renowned as a provider of quality credit and non-credit educational opportunities including economic development training programs. The college is a publicly supported two-year institution accredited by the North Central Association of Colleges and Schools (NCA), and approved by the State of Iowa Department of Education and Iowa Board of Regents. College transfer curricula meet requirements of four-year colleges and universities. The United States Department of Education and Veterans Administration has also approved the career option and college transfer curricula programs.

According to data submitted by Iowa Community Colleges to the Iowa Department of Education in 2001, the participating college reported a fall credit student enrollment of 17.28% of the 68,790 credit students in the State of Iowa Community College. Credit programs include courses where students can achieve personal development, upgrade job related skills, and/or earn an associate degree, diploma or certificate.

Fiscal year-end data (July 1, 2000 – June 30, 2001) revealed a state total of 98,602 credit students enrolled at Iowa’s Community Colleges, with the participating college enrolling 17.35% of total credit students. Non-credit contact hour data for fiscal year 2001 reported 14.97% of the state total of 12,022,353.10 contact hours was generated by the participating community college. Non-credit offerings range from basic skills, personal enhancement, skill building for job preparation, and highly technical courses directly related to job skills.

The economic development agent from the community college has 18½ years of experience, with all but six months as a training consultant, and a master’s degree in Public Administration. This position may be referred to as the representative, agent, developer, and/or training consultant and are interchangeable throughout the study. This individual and community college
are respected statewide for professional integrity, expertise, intensity of mission, and viewed as a change agent for economic development initiatives in the State of Iowa. One on one interviews were short and to the point, with the purpose to share information, provide guidance, and assist the researcher in the goal of developing an evaluation process to measure effectiveness of training provided through Iowa Industrial New Jobs Training Programs.

(260E)

The evaluation process must allow each of the community colleges flexibility to utilize informal needs assessment methods, must be valuable to the company, assess the impact of training for the company—skill level increased, complete after the training is finished, provide feedback to the company, and meet state needs. (CL, p. 4)

Ghanatabadi and Saylor (1988) explained that the college economic developer or training consultant is responsible for all aspects of the training program including,

“...budgeting, complying with regulations of the college and the state, authorizing all payments, and maintaining ongoing frequent contact with the client” (p. 255). The evaluation process resulting from this study serves as a model for assessing results of economic development programs.

Iowa Department of Economic Development

The Iowa Department of Economic Development (IDED) was created on July 1, 1986, with intent to provide job creation, increased prosperity, and opportunities for the State of Iowa citizens through economic development initiatives. There are numerous programs and services that are directed and monitored through IDED, including the Iowa Industrial New Jobs Training Program (260E). The mission statement of the Iowa Department of Economic Development directs the department, “...to work with businesses and communities to continually improve the economic well-being and quality of life for all Iowans” (Iowa Department of Economic Development, 2001). Department representatives were extremely
cooperative throughout this study, and focused on accountability, process improvement, and attention to customer service.

Numerous face-to-face meetings involving the Iowa Department of Economic Development (IDED) representatives and the researcher provided a different perspective for the need for an evaluation process of 260E programs. Stakeholders are aware of the statewide Accountable Government Action, House File 687 legislation, which requires that state departments develop planning and accountability strategies that fit within the overall direction of state government.

Current documentation of Iowa Industrial New Jobs Training Programs (260E) to the Iowa Department of Economic Development is relatively minimal, with community colleges submitting the notice of preliminary agreement and notice of final agreement. Since the community colleges deliver and finance the programs, all related supporting documentation, except for the mentioned agreements, are located at the college.

A representative of IDED stated, ...we want to know if companies were satisfied with the training and services they are receiving through economic development programs (ED, p. 1). An evaluation process would support the state’s accountability initiatives by assessing company perceptions of effectiveness of training in raising the skills of Iowa workers.

**Evaluation Process and Instruments**

As the initial point of contact for this study, the community college representative shared information related to Iowa Industrial New Jobs Training Programs (260E) and volunteered to work with the researcher to explore establishment of an evaluation process that would function as an accountability measure for state-financed, employer-focused,
contract training programs. The college representative noted, ...since the process is a matter of interpretation, the evaluation instruments must be developed with clarity toward mission or outcomes to be accomplished (CL, p. 5).

Current documentation for 260E programs does not include a training evaluation process, which reinforced the researcher's interest in pursuing this study. The length of Iowa Industrial New Jobs Training Programs (260E) is ten years to allow for repayment of bonds through Iowa withholding tax revenue, with completion of training averaging three years. Development of the evaluation process required participation and input from the Iowa Department of Economic Development (IDED), Iowa Department of Education (DE), the company, and community college economic developers. Narratives from stakeholders were integrated throughout this chapter.

As a first step in concrete development of an evaluation process, the researcher collected a list of identified focus areas from the company, community college economic developers, and the Iowa Department of Economic Development. The "needs" of participants were compiled and operated as discussion points in an evolving process of consensus building. The company's perspective included identifying perceived needs before the program, connection to company goals and training objectives, understanding roles and responsibilities of funds, timeframes for completion of training and the 260E program, and expectations or anticipated outcomes.

The next step of consensus and negotiation of the evaluation process included recognition of common ground elements or areas of concentration that the Iowa Department of Economic Development, Iowa Department of Education, and community college economic developers could agree upon. There was hesitation on the part of the community
college economic developers to report information to IDED without purpose, but a cooperative relationship with the researcher guided the development of the evaluation process and instruments utilized in this study.

Development of the process began with identification of eight major areas of concentration that could be assessed from the company's perception of training and a community college program summary of Iowa Industrial New Jobs Training Programs (260E). Areas identified for collection and included on the Company Program Evaluation Instrument (Part 1):

1. Initial company contact/request;
2. Assistance in development of the training plan;
3. Community college training;
4. Private training vendors;
5. Program management;
6. Overall summary;
7. Company training plan; and
8. Additional questions.

Summary information recognized for collection through the Community College Program Summary Evaluation Instrument (Part 2) included:

1. Community college program summary; and
2. Additional summary information.

The partners recognized and agreed that state-financed, employer-focused, contract training economic development programs required a customized evaluation process.
The training process models reviewed for this study identified five phases or components including needs analysis, design, development, implementation, and evaluation (Blanchard & Thacker, 1999; Hawthorne, 1987; Mayo & DuBois, 1987; Phillips, 1991; Rogoff, 1987; Tracey, 1984). Customized training models differ from standard training models in that they include an analysis of the company, which is the foundation for developing program design. The Ghanatabadi and Saylor (1988) training procedure, specifically designed for customized training programs with new employees, was developed from six basic steps:

1. Analysis of the company;
2. Training needs assessment based on job and task analysis;
3. Identification of training outcomes;
4. Training program design, development, and delivery method;
5. Implementation; and
6. Evaluation of training. (p. 252)

An analysis of the company provides direction for evaluation of training intended for new employees. To understand the company’s internal structure, mission/goals, and production methodology is a connection to the development of a training plan with identifiable/measurable objectives or outcomes.

An evaluation process may reveal numerous benefits. Hawthorne’s (1987) interpretation includes:

1. Value of work-related training to participants – immediate benefits identified by employees, with an undetermined future value;
2. Attracting new employees – working at an employee friendly organization;
3. Satisfaction – work climate, learning job-related skills, and personal fulfillment;
4. Increased knowledge – skill-based instruction and transfer of training to job;
5. Productivity – increased job performance and company profitability; and

6. Reduced attrition – employee loyalty reduces turnover.

Again, the distinctiveness of Iowa Industrial New Jobs Training Programs (260E) provides rationale for customization of a two-part evaluation instrument process.

**Company Program Evaluation Instrument (Part 1)**

The analysis of data received from the Company Program Evaluation Instrument (Part 1) was organized to adhere to the framework of the instrument with tables representing responses from the company with comments noted. Evaluation models from North Carolina, Kansas, and Wisconsin served as models for development of the company program evaluation instrument in this study.

A performance indicator rating scale provided an opportunity for the company representative to apply a numerical ranking to the perception of satisfaction, from 5=Excellent, exceeding expectations to 1=Unacceptable, not satisfied, and NA=Not applicable, as the alternative that can be utilized when an item within the evaluation instrument does not apply to the program. The complete rating system is described as follows:

*The Performance Indicator Rating Scale*

- 5 = Excellent, exceeded expectations.
- 4 = Very good, highly satisfactory.
- 3 = Acceptable, need for improvement.
- 2 = Marginal, need significant improvement.
- 1 = Unacceptable, not satisfied.
- NA = Not applicable.

The Company Program Evaluation Instrument includes eight main areas of concentration, which are presented through the description, development, purpose, and
findings for each of the areas. The areas of concentration were identified through negotiations and consensus of the Iowa Department of Economic Development (IDED), Iowa Department of Education, and Iowa Community College economic developers. Description provides a definition of the area, development section presents the structure with input from stakeholders, purpose identifies the intention of the section, and findings is a summarization of participants’ responses.

1. Rate the performance of the community college's response to initial company contact/request

Description. Community colleges are a point of contact and the largest provider of training and economic development initiatives in Iowa. Faculty and staff provide expertise in a wide range of areas that are connected to local community growth, with shorter turnaround time to provide training than four-year institutions. Equipment and facility resources support training and are available for business development activities.

Training programs are tailored to meet the needs of each company and the funding mechanism of Iowa Industrial New Jobs Training Programs (260E) are utilized to reimburse eligible companies for training new employees and costs related to training, whether on-the-job training or subcontracted services. All of Iowa’s 15 Community Colleges have partnered with the state since 1983, to provide economic development programs for business and industry.

Development. The company representative and community college economic developer discussed impressions of their initial meeting with shared respect. Years of experience and a high level of trust are reflected in a comfortable professional relationship, as perceived by the researcher. The company representative viewed development of this
section of the evaluation process as a sales call contact by the community college agent, not only for economic development programs, but also for training assistance and a variety of community college services.

The researcher acknowledged the community college agent presented an organized system of documentation for company identification/accounts, personal priorities, internal institutional records, and state requirements. In a discussion with the researcher, the community college economic developer believed, *The form must be user friendly, easy to complete, and return of the instrument tied to the final agreement reported to the Iowa Department of Economic Development* (CL, p. 5). The company representative identified the initial contact phase as a "life saver" with assistance for economic development program and training needs.

**Purpose.** The primary contact, whether initiated by the company or college, is a point of sale or beginning of a partnership. Table 1 identifies the company's perception related to the initial company contact/request with the community college representative.

Table 1. Rate the performance of the community college’s response to initial company contact/request

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Responded to company request promptly.</td>
<td>x</td>
</tr>
<tr>
<td>b. Knowledgeable, organized, and prepared to assist company.</td>
<td>x</td>
</tr>
<tr>
<td>c. Clearly explained the process of the Iowa Industrial New Jobs Training Program. (Application/approval process, eligibility requirements, development of training plan, delivery of services/training, company repayment responsibility, and system of reimbursement)</td>
<td>x</td>
</tr>
</tbody>
</table>

Performance Indicator Rating Scale: 5 = Excellent, exceeded expectations; 4 = Very good, highly satisfactory; 3 = Acceptable, need for improvement; 2 = Marginal, need significant improvement; 1 = Unacceptable, not satisfied; NA = Not applicable.

Source: Iowa Community Colleges, Iowa Industrial New Jobs Training Program (260E), Company Program Evaluation Instrument (Part 1)
Findings. With a consistent performance indicator rating level four (4) Very good, highly satisfactory, Table 1 reflects the company’s perception of performance based on the community college’s response to the initial contact/request in promoting the Iowa Industrial New Jobs Training Program (260E). These findings reflect that the knowledge base, organizational presence, and overall preparedness of the community college economic developer at the initial meeting with company representatives provided a positive impression. Explanation of the Iowa Industrial New Jobs Training Program (260E) process was reported highly satisfactory, which included the application/approval process, eligibility requirements, development of training plan, delivery of services/training, company repayment responsibility, and system of reimbursement.

No written comments were documented, but discussions with the company representative confirmed, The college responded immediately, was extremely knowledgeable, completely prepared, and the presentation of information related to the Iowa Industrial New Jobs Training Program (260E) was comprehensive (CP, p. 1). The community college economic developer noted, Most companies have heard about economic development programs available in the state, but doing research about the company and knowing how I can assist them is the basis for a successful partnership (CL, p. 6).

The researcher applied Kirkpatrick’s four-level approach of evaluation to Table 1, to measure or interpret the findings:

- Reaction level – Company was highly satisfied, as a measure of customer satisfaction.
- Learning level – Community college could utilize results to execute continuous improvement processes.
• Behavior level – Community college could translate results into an improved behavior action or application for transfer of learning initiatives.

• Results level – Community college could examine results for organizational improvement and quality changes.

The data received from Table 1 could be utilized to determine process strength and weaknesses, gather data in marketing and delivering future programs, and develop a database that decision-makers can utilize.

2. Rate the performance of community college assistance in development of the training plan

Description. The training plan was developed through an analysis phase where the environment of the company was scanned in attempt to identify deficiencies in process or performance that could be assisted through training provided by the community college or private training vendors. As a blueprint, the training plan provides the framework or structure that directs the learning experience. The community college’s responsibility is to provide training when and where the company requests, with a plan for transfer of learning to be reinforced by the company, and implementation or timeframes developed with direction from the company.

Development. Three sources provided input in an analysis phase process, which, according to Blanchard and Thacker (1999), included: “…the organization as a whole, operational area where problems exist, and the people within the operational areas” (p. 22). The organization, with assistance from the community college, assessed problems or areas in need of improvement and makes a decision when training initiatives or non-training interventions are to be implemented.
The community college economic developer utilizes a training plan worksheet that documents identified needs and explanation/training objectives, anticipated outcomes, implementation plan with timelines for completion, budget categories of total costs, job skills-specific, training materials, and on-the-job training and additional services to be provided by the community college through the economic development program.

The training plan is directly connected to the company training objectives and results are documented by the community college. A needs assessment, whether formal or informal, was completed by the community college economic developer and utilized to develop the training plan. A key to success in delivering training is flexibility, responsiveness, and focusing on company needs and requests. Implementation of timeframes provided a schedule that directs the process and delivery of the Iowa Industrial New Jobs Training Program. (260E)

Purpose. Training objectives and design of the training plan are linked to company needs, identified performance measures, and company goals. The company representative and community college economic developer assessed company needs, requests, and goals connected to performance measures.

Findings. For this case study the company representative noted, The community college completed a company wide needs assessment in developing the training plan and job-specific assessments were accomplished in preparation for training” (CP, p. 4). A consistent performance indicator level five (5) Excellent, exceeded expectations, in Table 2 reflects the company’s perception of the performance of the community college’s response in providing assistance in development of the training plan. There were no written comments from the company representative, but in an interview stated, The college knew what they were doing in developing the training plan (CP, p. 2).
Table 2. Rate the performance of community college assistance in development of the training plan

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Contributed to the identification of training needs/needs assessments.</td>
<td>x</td>
</tr>
<tr>
<td>b. Flexible, responsive, and focused on company needs.</td>
<td>x</td>
</tr>
<tr>
<td>c. Training objectives/outcomes linked to company goals.</td>
<td>x</td>
</tr>
<tr>
<td>d. Designed training objectives to include performance measures.</td>
<td>x</td>
</tr>
<tr>
<td>e. Plan was developed to assist company to reinforce training.</td>
<td>x</td>
</tr>
<tr>
<td>f. Implementation/timeframes were clearly established.</td>
<td>x</td>
</tr>
</tbody>
</table>

Performance Indicator Rating Scale: 5 = Excellent, exceeded expectations; 4 = Very good, highly satisfactory; 3 = Acceptable, need for improvement; 2 = Marginal, need significant improvement; 1 = Unacceptable, not satisfied; NA = Not applicable.

Source: Iowa Community Colleges, Iowa Industrial New Jobs Training Program (260E), Company Program Evaluation Instrument (Part 1)

The needs assessment process drives the training and services the community college will provide through the 260E program (CL, p. 7). The researcher noted the community college was extremely responsive to the needs and demands of the participating company.

Kirkpatrick's four-level approach of evaluation, as applied by the researcher to Table 2, was used to measure or interpret the findings:

- Reaction level – Company ranking excellent, as a measure of customer satisfaction and expectations were exceeded.
- Learning level – Company and community college could utilize results to determine extent of measuring outcomes.
- Behavior level – Company and community college could translate results into improved behavior action on the job or application for transfer of learning initiatives.
- Results level – Company and community college could examine results for positive organizational improvement, performance measurements/outcomes, and quality changes.
The data received from Table 2 could be utilized to determine accomplishment of the program/training objectives, company identification for reinforced training, and development of a database that decision-makers can utilize.

3. Rate the performance of service providers—community college training

Description. Tables 3 and 4 were developed, with equal intent, to rate the performance of service providers—community college training and/or private training vendors. The competencies or performance indicators include curriculum, skill-based improvement, timing of scheduled trainings, quality of instructors/trainers, implementation of productivity improvement initiatives, and evaluation of training related to the job.

The design of Tables 3 and 4 enabled a comparison of college trainers and private training vendors on the same competencies or indicators. A results-based assessment of service providers presents a comprehensive measurement that is connected to the economic development program.

Table 3. Rate the performance of service providers—community college training (community college trainers and private training vendors)

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Company provided input for curriculum development.</td>
<td>x</td>
</tr>
<tr>
<td>b. Identified performance goals (Skill-based improvement).</td>
<td>x</td>
</tr>
<tr>
<td>c. Implementation/timeframes were clearly identified.</td>
<td>x</td>
</tr>
<tr>
<td>d. Training scheduled to meet company needs.</td>
<td>x</td>
</tr>
<tr>
<td>e. Quality of instructors/trainers.</td>
<td>x</td>
</tr>
<tr>
<td>f. Productivity improvements implemented due to training.</td>
<td>x</td>
</tr>
<tr>
<td>g. Training was evaluated to assess impact to the job.</td>
<td>x</td>
</tr>
</tbody>
</table>

Performance Indicator Rating Scale: 5 = Excellent, exceeded expectations; 4 = Very good, highly satisfactory; 3 = Acceptable, need for improvement; 2 = Marginal, need significant improvement; 1 = Unacceptable, not satisfied; NA = Not applicable.

Source: Iowa Community Colleges, Iowa Industrial New Jobs Training Program (260E), Company Program Evaluation Instrument (Part I)
Table 4.  Rate the performance of service providers – private training vendors

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Company provided input for curriculum development.</td>
<td>x</td>
</tr>
<tr>
<td>b. Identified performance goals (Skill-based improvement).</td>
<td>x</td>
</tr>
<tr>
<td>c. Implementation/timeframes were clearly identified.</td>
<td>x</td>
</tr>
<tr>
<td>d. Training scheduled to meet company needs.</td>
<td>x</td>
</tr>
<tr>
<td>e. Quality of instructors/trainers.</td>
<td>x</td>
</tr>
<tr>
<td>f. Productivity improvements implemented due to training.</td>
<td>x</td>
</tr>
<tr>
<td>g. Training was evaluated to assess impact to the job.</td>
<td>x</td>
</tr>
</tbody>
</table>

Performance Indicator Rating Scale: 5 = Excellent, exceeded expectations; 4 = Very good, highly satisfactory; 3 = Acceptable, need for improvement; 2 = Marginal, need significant improvement; 1 = Unacceptable, not satisfied; NA = Not applicable.

Source: Iowa Community Colleges, Iowa Industrial New Jobs Training Program (260E), Company Program Evaluation Instrument (Part 1)

**Development.** The community college economic developer remarked that the college utilizes smile sheets or comment documentation after each class/course that the college provides training, which Haskell (1998) defined as, “...subjective recordings of participants’ evaluation of the training program” (p. 9). These sheets attempt to seize participant’s perceptions immediately after the completion of training, which may result in how an employee felt more than measurable outcomes of training or subjective judgments.

Results of class/course evaluations are compiled and are shared with the company to discuss and interpret worker’s perceptions of content, transfer of training, and transfer of learning applications. The community college course evaluation instrument requests perceptions of students to rate areas of the quality of instructor, course content, and four questions related to the value of the course, suggestions for course improvement, possible use of course content, and future training interests identified by the student.

Carneval, Gainer, and Villet (1990) observed that most employer-based customized training provided by community colleges is geared toward technical and vocational fields.
Soft skills or supervisory and management development classes/courses also are requested by companies receiving economic development funds. The variety and combination of training topics varies, as do training programs.

*Purpose.* As training trends evolve and needs assessments are founded on skill-based improvement concepts, training service providers customize curriculum, training materials, and programs in areas beyond technical and vocational interests. Training provided by community college instructors/contractors was tailored to training objectives and skill-based improvement outcomes identified by the college economic developer and company representative.

*Findings.* The company representative reported an excellent, exceeded expectations performance, with an indicator rating of five, in the performance of service providers-community college, as noted in Table 3. This section of the company program evaluation instrument rates the perception of the performance community college trainers and/or faculty. The company representative explained, *…the quality of community college trainers has exceeded our expectations in every way* (CP, p. 5).

Connection of the training plan to delivery of training is evident in this section of the evaluation instrument. Great attention was paid to workplace assessment, design, delivery, and evaluation of classes/courses. As Kirkpatrick’s (1998) model noted, an evaluation will identify reaction, learning, behavior, and results through transfer of training or learning.

Community college faculty, staff, and contracted training providers represent the college and must meet high standards in delivering educational programs. The community college economic developer stated, *Faculty and trainers I contract with have years of experience and are experts in their field* (CL, p. 7).
The researcher applied Kirkpatrick’s four-level approach of evaluation to Table 3, to measure or interpret the findings:

- **Reaction level** – Company remarked excellent, with expectations exceeded.
- **Learning level** – Company and community college could utilize results to determine extent outcomes achieved identified objects and anticipated results.
- **Behavior level** – Company and community college could translate results into improved behavior action on impact to the job or application for transfer of learning initiatives.
- **Results level** – Company and community college could examine results for positive organizational enhancement, productivity improvements, skill-based development/outcomes, and quality changes.

Data received from Table 3 could be utilized to determine accomplishment of the skill-based improvement, quality of instructors/trainers, productivity improvements, transfer of learning-impact to the job, and develop a database that decision-makers can utilize.

4. *Rate the performance of service providers-private training vendors*

*Description.* Rating the performance of service providers – private training vendors provides a means of assessing non-community college employees or contractors that are supplying training to the participating company. The competencies or performance indicators are identical to Table 3. The community college may assist the company in identifying quality private training vendors when the level of expertise is not available through faculty or trainers employed by the college or as administrative assistance to the company.
Development. Development of sections in Tables 3 and 4 enables the company, community college, and Iowa Department of Economic Development to assess differences in the perception of trainers and training provided by the community college and private training vendors. Parallel design of these two sections was intentional and the product of the community college economic developer. Variations noted in future evaluation settings would enable a review of alternative delivery providers and serve as an assessment tool of private training vendors, which are not evaluated through the community college.

Purpose. Service providers—private training vendors also customize curriculum, training materials, and programs in areas beyond the technical and vocational interests of business and industry. Measuring the performance of private training vendors will provide evaluation of components/services of 260E programs that are not delivered by the community college.

Findings. Again, the company rated the performance of service providers—private training vendors utilizing the performance indicator rating of five, Excellent, exceeded expectations, as noted in Table 4. Private training vendors included companies with equipment and/or software that are utilized by the participating company. Many of the private training providers were identified by the community college and referred to the company to provide training. In a one-on-one interview, the company representative explained, *We are still in the process of evaluating transfer of training from the classes funded through our 260E program* (CP, p. 6).

Transfer of training or transfer of learning is a continuous process that is developed through additional training or reinforcement of skill-based improvement routines provided by the company. As Broad and Newstrom (1992) affirmed, “...transfer of training is the
effective and continuing application, by trainees to their jobs, of the knowledge and skills gained in training—both on and off the job” (p. 6).

Companies participating in 260E programs can contract with any service provider for training or services (CL, p. 8). Program services can be supplied by the community college, contracted or professional services and job training services are any training needed to enhance the performance of a company’s new employees.

Kirkpatrick’s four-level approach of evaluation was applied by the researcher to Table 4, to measure or interpret the findings:

- Reaction level – Company reaction rated excellent, with expectations exceeded.
- Learning level – Company and community college could utilize results to determine extent outcomes achieved identified objects and anticipated results.
- Behavior level – Company and community college could translate results into improved behavior action on impact to the job or application for transfer of learning initiatives.
- Results level – Company and community college could examine results for positive organizational enhancement, productivity improvements, skill-based development/outcomes, and quality changes.

Data received from Table 4 could be utilized to determine accomplishment of the skill-based improvement, quality of instructors/trainers, productivity improvements, transfer of learning-impact to the job, and develop database that decision-makers can utilize.
5. *Rate the performance of the community college-program management*

*Description.* Program management is the administration of finance and withholding repayment procedures, monitoring the progress of the program, fiscal administration of funds, identifying reporting requirements, and identification of additional services that provide assistance to the participating company. The community college economic developer assisted the company in understanding reporting requirements, financial and non-financial, and is the contact for any questions or problems that may occur throughout the 260E program.

State government accountability planning initiatives for Iowa Industrial New Jobs Training Programs (260E) would include the following stakeholders from this study: Iowa Department of Economic Development, Iowa Department of Revenue and Finance, Iowa Department of Education, and Iowa Community Colleges. Collaborative accountability planning for Iowa Industrial New Jobs Training Programs (260E) comprises an evaluation component to measure the effectiveness of this economic development program.

*Development.* This area of the evaluation instrument was structured to agree with financial reporting requirements and a method to assess performance of the community college's monitoring of training program services and funds. The Iowa Department of Economic Development (IDED) and Iowa Department of Education (DE) require reporting of social security numbers of trainees for use in conjunction with the Iowa Workforce Development Accountability System and Iowa Customer Tracking System in evaluating:

(a) The impact of services on wages earned by individuals;
(b) The effectiveness of training services providers in raising the skills of the Iowa workforce; and
A focus group of Iowa community college economic developers convinced the researcher to remove an item related to confidentiality assurance from the program management section of the initial evaluation instrument since local community college boards, which are open to the public, approve all 260E programs. The group discussion reinforced the fact that local governance and local boards provide guidance and direct decisions, related to each community college. Additional differences from college to college include job duties of community college economic developers, internal approval/documentation processes, and finalization procedures for 260E programs. Iowa Industrial New Jobs Training Program (260E) initiatives are statewide programs, but local community college boards are responsible for final decisions and any evaluation process must identify and comprehend this reality.

**Purpose.** Cost-effectiveness and cost-management is vital to program accountability. Program management includes fiscal administration of funds, reporting procedures, and monitoring program progress. Table 5 provides documentation of the tangible results that can be measured through evaluation.

**Findings.** The community college-program management had a performance indicator rating of 5, Excellent, exceeded expectations. Table 5 reflects perception of the company in rating the community college program management of the Iowa Industrial New Jobs Training Program (260E). The company representative was adamant stating, *The community college economic developer was a phone call away* (CP, p. 7). The high level of trust between the
### Table 5. Rate the performance of the community college – program management

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Finance and withholding diversion (Repayment) procedures explained.</td>
<td>x</td>
</tr>
<tr>
<td>b. Monitoring training program progress.</td>
<td>x</td>
</tr>
<tr>
<td>c. Questions and/or concerns were addressed in a timely and efficient manner.</td>
<td>x</td>
</tr>
<tr>
<td>d. Fiscal administration of funds (Training expense reimbursement, purchase of training and materials)</td>
<td>x</td>
</tr>
<tr>
<td>e. Explained official reporting procedures including requirements: Social security numbers of trainees, training enrollments, etc.</td>
<td>x</td>
</tr>
<tr>
<td>f. Identified services available through other agencies (Tax credits, job placement, workforce development, services, etc.)</td>
<td>x</td>
</tr>
</tbody>
</table>

Performance Indicator Rating Scale: 5 = Excellent, exceeded expectations; 4 = Very good, highly satisfactory; 3 = Acceptable, need for improvement; 2 = Marginal, need significant improvement; 1 = Unacceptable, not satisfied; NA = Not applicable.


Company representative and community college economic developer in this case study was obvious. Again, the company representative noted no comments.

During implementation stages of the 260E program, the community college economic developer was in frequent contact with the company and a partnership grew beyond the initial parameters, with the community college being the first point of contact to address the training needs of the participating company. Efficiency and effectiveness of the community college economic developer in all levels of program management is a priority to this individual, from the initial contact to the notice of final agreement form, and beyond.

In a discussion with the company representative and community college economic developer, the researcher questioned the NA, Not applicable rating, of identified services available through other agencies in this area of the evaluation instrument. The room became completely silent, the two looked at each other, and the community college economic developer said, *No, I guess I haven’t talked about that. Are you in need of any of the services*
The researcher applied Kirkpatrick's four-level approach of evaluation to Table 5, to measure or interpret the findings:

- Reaction level – Company observation excellent, with expectations exceeded, excluding identified services available through other agencies, which was not applicable.
- Learning level – Company and community college could utilize results to determine the extent outcomes were achieved and skills acquired through identified objects and anticipated results.
- Behavior level – Company and community college could translate results into improved behavior action.
- Results level – Company and community college could examine results for assessing organizational improvement, cost savings, and quality changes.

Data received from Table 5 could be utilized to determine accomplishment of prudent program management by understanding the role participants perform in the overall initiative, strengths and weaknesses of procedures, and development of a comprehensive database for decision-makers.

6. Rate company satisfaction of the program-overall summary

Description: An overall summary requested the company stop, think, and assess perceptions of their involvement in the Iowa Industrial New Jobs Training Program (260E), and the perceived value of the 260E program to the company’s mission. This enabled them
to assess the company’s satisfaction with training provided by the 260E program and other items identified on the evaluation instrument.

The comprehensive evaluation process developed from this study provides specific areas of focus and also assesses the perception of the participating company related to the satisfaction with the program, as a whole. As Phillips (1997) stated, “...what is needed from most evaluation processes is customer satisfaction” (p. 44).

Development. Table 6 represents a variety of topic areas listed under the umbrella of an overall summary. In the development phase of the instrument, the researcher requested items related to the effectiveness of training and overall satisfaction, which were included to meet requirements are issued and identified in the Code of Iowa. The community college economic developer requested a statement linked to meeting expectations for training and the company representative sought to include assessment of the community college contact.

Discussions linked to this section of the evaluation instrument followed action research methods of negotiation and consensus. Numerous dialogues with few disagreements established the importance of each of the items and developed configuration of this section. The research design assisted the researcher in triangulation of data collected through the evaluation process and findings of this study.

Purpose. Each item within this section requires that the company review their association with the program from initial contact to the completion of training funded by Iowa Industrial New Jobs Training Programs (260E).

Findings. Results based on the performance indicator rating scale were all five, Excellent, exceeded expectations, as noted in Table 6. The researcher invited the company
Table 6. Rate the performance of service providers – community college training (company satisfaction)

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Extent to which the program met company expectations for training employees.</td>
<td>x</td>
</tr>
<tr>
<td>b. Effectiveness of the training provided by the program in raising skill levels of employees.</td>
<td>x</td>
</tr>
<tr>
<td>c. Satisfaction with community college economic development contact/representatives.</td>
<td>x</td>
</tr>
<tr>
<td>d. Overall satisfaction of the Iowa Industrial New Jobs Training Program.</td>
<td>x</td>
</tr>
</tbody>
</table>

Performance Indicator Rating Scale: 5 = Excellent, exceeded expectations; 4 = Very good, highly satisfactory; 3 = Acceptable, need for improvement; 2 = Marginal, need significant improvement; 1 = Unacceptable, not satisfied; NA = Not applicable.


representative to present comments related to each of the items, Take a look at our training plan, training objectives, skill-based improvements identified by ours supervisors/managers. use of training funds, and this evaluation form as a whole. I wouldn't say something or mark this evaluation if I didn't mean it (CP, p. 9). The company representative did not discuss the rating of satisfaction with the economic development representative, but told the researcher, This person and college are good, with the knowledge level and experience excellent (CP, p. 10).

When the researcher reviewed the findings based on the performance indicator ratings of Table 2 (Development of the Training Plan, Table 5 (Program Management), and Table 7 (Company Training Plan), the scales ranged from 4 (Very good, highly satisfactory) to 5 (Excellent, exceeded expectations). The company representative was adamant regarding an overall satisfaction with the 260E program, as evident through the performance indicator rating scale from each of the sections on the company program evaluation instrument.

The community college economic developer reviewed the rankings and was satisfied with results documented in Table 6. The researcher sensed that a job well done is not enough
for the community college economic developer and that each 260E program provides an opportunity to improve the system and provide customer service for participating companies. In reviewing the overall program, the college developer stated, *In the eighteen years I’ve been involved with economic development programs one thing remains constant, all programs change from the preliminary agreement to the repayment of bonds, and flexibility allows the company and college to react to changes in environments including: products, customers, and markets* (CL, p. 9). Training provided through 260E programs may be delivered over a three-year period, which requires flexibility and accountability for all stakeholders.

Kirkpatrick’s four-level approach of evaluation was applied by the researcher to Table 6 to measure or interpret the findings:

- **Reaction level** – Company reaction was excellent with expectations exceeded.
- **Learning level** – Company and community college could utilize results to determine if objectives were achieved and anticipated results realized.
- **Behavior level** – Company and community college could translate results into improved behavior action.
- **Results level** – Company and community college could examine results for positive organizational enhancement, identified expectations recognized, raising skill levels of employees, and quality changes.

Data received from Table 6 could be utilized to determine accomplishment of meeting company expectations for training employees, productivity improvements-raising skill levels of employees, satisfaction with community college agent, overall satisfaction with the Iowa
Industrial New Jobs Training Program (260E), and develop a database that can be utilized by decision-makers.

7. **Rate the performance of the program components – company training plan**

   **Description.** The training objectives identified by the company representative and community college economic developer in a customized training plan are listed in this section of the evaluation instrument. In this case study, the community college economic developer documented a company-training plan with identified needs and explanation, anticipated project outcomes, and an implementation plan. The components identified are explained in this section of the Company Program Evaluation Instrument (Part 1).

   **Development.** The company representative and community college economic developer utilized training objectives rather than listing the types of training delivered for the program component – company training plan. Training objectives describe changes in behavior or performance, which could lead to anticipated outcomes. Results from the evaluation instrument identify the company’s perceptive of how training provided through the 260E program met identified objectives.

   The company training plan was based on company training objectives and identified by the following topic areas, which are included in Table 7:

   a) Job skills improved job performance;
   
   b) Workplace safer-job related injuries decreased;
   
   c) Application of Microsoft Office Software;
   
   d) Supervisor skills to-train new employees how to do the job;
   
   e) Training materials and equipment purchased; and
Table 7. Rate the performance of the program components – company training plan

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>(College to customize to individual company objectives of the training plan)</td>
<td></td>
</tr>
<tr>
<td>a. Employees receive specific job skills that improved job performance</td>
<td>x</td>
</tr>
<tr>
<td>b. The workplace became safer-job related injuries decreased.</td>
<td>x</td>
</tr>
<tr>
<td>c. Employees effectively use new Microsoft Office applications.</td>
<td>x</td>
</tr>
<tr>
<td>d. Supervisors learned skills to effectively train new employees how to do the job.</td>
<td>x</td>
</tr>
<tr>
<td>e. Explained official reporting procedures including requirements: social security numbers of trainees, training enrollments, etc.</td>
<td>x</td>
</tr>
<tr>
<td>f. The company will begin the ISO-9000 documentation and registration process</td>
<td>x</td>
</tr>
</tbody>
</table>

Performance Indicator Rating Scale: 5 = Excellent, exceeded expectations; 4 = Very good, highly satisfactory; 3 = Acceptable, need for improvement; 2 = Marginal, need significant improvement; 1 = Unacceptable, not satisfied; NA = Not applicable.

Source: Iowa Community Colleges, Iowa Industrial New Jobs Training Program (260E), Company Program Evaluation Instrument (Part I)

f) ISO-9000 documentation and registration process.

Successful businesses view their employees as the number one asset and training provides personal and professional enhancement opportunities that will benefit individuals and companies.

Purpose. Training objectives identified in the company training plan are based on company goals and provide a means of measuring improvement in this study. Company goals include, but are not limited to developing a safe work environment, improved employee job satisfaction, employee/company transfer of training, employee/company transfer of learning, increased productivity, return on investment, reduced material waste, reduced operating costs, and a rising profit margin.

Findings. The identified training objectives formed the basis of the findings as the company representative rated the performance of the program components–company training plan, as presented in Table 7. The training objectives ranked on the performance indicator
rating scale from 5, Excellent, exceeded expectations, to NA, not applicable, since the company stated that the training did not occur or was not relevant at the end of the 260E program.

New employee training funded through the 260E program included safety, Microsoft Office computer applications, blueprint reading and machine operation, supervisory skill development, and diversity instruction. Training materials and equipment purchased to enhance training rated the highest, which is an approved purchase with economic development funds.

Results from this section provide specific feedback to the identified training objectives, which are a reflection of the company’s commitment to meeting their organizational goals. The community college economic developer perceived this area of the evaluation instrument as check for value added service or, *What has this allowed you—the company—to do that you couldn’t have done* (CL, p. 10)?

The company representative noted that measuring training objectives, *...reflects a sustainable system/process improvement with impact on the company* (CP, p. 11). The training plan is a component of the system and the evaluation instrument is a tool that is utilized to obtain data from the training objectives.

Kirkpatrick’s four-level approach of evaluation was applied by the researcher to Table 7 to measure or interpret the findings:

- Reaction level – Company reaction ranged from five-Exceeded expectations to an NA or not applicable.
- Learning level – Company and community college could utilize results to determine extent outcomes achieved identified objects and anticipated results. When NA is
utilized, assess the company’s decision not to apply for ISO-9000 documentation and registration.

- Behavior level – Company and community college could translate results into improved behavior action or impact to the job or application for transfer of learning initiatives and company’s reinforcement of transfer of training.
- Results level – Company and community college could examine results for positive organizational enhancement, safety improvements, job skill-based development/outcomes, productivity/output changes, and quality changes.

Data received from Table 7 could be utilized to determine accomplishment of the skill-based improvement, productivity improvements, safer workplace initiatives, transfer of learning-impact to the job, enhancement of training presentations, and development of a database to be utilized by decision-makers.

8. **Company program evaluation instrument – questions**

*Description.* The last section of the Company Program Evaluation Instrument (Part 1) provides an alternative data collection method. Questions supply a qualitative foundation for the evaluation instrument, including narratives from the community college representative. This study is a qualitative research account of the development of an evaluation process for training provided through Iowa Industrial New Jobs Training Programs (260E).

The company representative, community college economic developer, and researcher agreed that open-ended questions would provide an opportunity for an evaluator to comment in their own words. The first section of this instrument should provide quantitative data for
analysis of program effectiveness and accountability, but this section allows for narrative expression.

Development. The company representative and community college economic developer reviewed the North Carolina Community College System's evaluation instrument and found narratives provided in the question section of an evaluation process useful in recording qualitative results. Iowa Department of Economic Development representatives viewed this section as an opportunity to quote specific narrative perceptions from companies involved in 260E economic development initiatives in their IDED year-end report.

As evident in the first section of this instrument, the company representative did not add comments to the numerically rated items, but provided responses on most of the open-ended questions. The design of the evaluation instrument included numerical and narrative evaluation methods within the instrument.

Purpose. Direct and open-ended questions enable the company representative to enhance documentation of perceptions beyond the quantitative rating system.

Findings. Narrative replies from the company representative are identified in Table 8. In this case study, the company representative utilized the question section for more in-depth comments and specific responses to illustrate impact of the Iowa Industrial New Jobs Training Program (260E) on the company. With a positive answer of "yes" on question 1, the company is open to additional training to be provided by the community college. The company representative was not comfortable replying to question 2, since the current economic development program involvement was the only experience. There were no
Table 8. Company program evaluation instrument – questions

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
</tr>
</thead>
</table>
| 1.  | Do you intend to use the community college for additional training?  
X Yes; ___ No. If no, please explain |
| 2.  | Suggestions for improving the Iowa Industrial New Jobs Training Program? |
| 3.  | What was the overall impact of the Iowa Industrial New Jobs Training Program on your Company (Efficiency, Operations, productivity, and profitability)?  
*Extensive personal computer training increased efficiency & productivity. Knowledge of blue print reading lowered the risk of ordering incorrect dies & lessened the possibility of producing a wrong part. Supervisory skills were enhanced through team building & role playing exercises provided through various supervisory seminars.* |
| 4.  | Savings and/or benefits from employees trained through the Iowa New Jobs Training Program (Reduced operating costs, increased production, reduced material waste, etc.)  
*Unable to quantify.* |
| 5.  | Estimated dollar value of impact from Iowa Industrial New Jobs Training Program.  
*Unable to quantify.*  
(Note: Measuring outcomes and tracking performance improvement indicators can provide information, which will assist your company in maximizing the skills of employees) |
| 6.  | Additional Comments, Suggestions:  
*I was extremely impressed with the "college economic developer", our training consultant. She was knowledgeable, friendly & more than willing to go the extra mile. She was very perceptive concerning our needs. There were times when she knew what I needed before I did. It was a pleasure working with her and "the college" is fortunate to have her as an employee.*  
May your company's name be used in future marketing for the Iowa Industrial New Jobs Training Program?  
X Yes; ___ No |

Source: Iowa Community Colleges, Iowa Industrial New Jobs Training Program (260E), Company Program Evaluation Instrument (Part I)

written suggestions for question 2 that are intended for improving Iowa Industrial New Jobs Training Programs (260E). The community college economic developer, cooperating with this study, identified the need for documentation to reflect training effectiveness and accountability for economic development programs.
Written comments to question 3, the overall impact of the 260E program, were descriptive and precise, noting increased efficiency and productivity, lowered risk of ordering incorrect parts, and enhanced supervisory skills. Question 4 and 5 were unable to quantify and the company representative mentioned in an interview, Through assistance of our comptroller, these items are difficult to calculate and at this time there is no practical way to assess a dollar amount. Let's let future generations tackle this question (CP, p. 12).

Additional comments, suggestions provided room for the company representative to share observations or concerns related to training and/or services provided through 260E program funds. In replying to the last question, the company provided approval to utilize the company’s name in future marketing campaigns for Iowa Industrial New Jobs Training Programs (260E).

Kirkpatrick’s four-level approach of evaluation was applied by the researcher to Table 8 to measure or interpret the findings:

- Reaction level – Company reaction provided narratives to evaluate the effectiveness of different aspects of the 260E program.
- Learning level – Company and community college could utilize results to determine if objectives were achieved and anticipated results realized.
- Behavior level – Company and community college could translate results into improved behavior action.
- Results level – Company and community college could examine results for positive organizational enhancement, identified expectations recognized, and quality changes.

Data received from Table 8 could be utilized to determine additional training opportunities provided by the community college, suggestions for improving the program, overall impact
of the program on their company-productivity improvements-raising skill levels of employees, savings or benefits from employees trained through the program, estimated dollar value of impact of the program, additional comments, utilizing the company’s name in future marketing initiatives, and developing a database that can be utilized by decision-makers.

**Community College Program Summary Evaluation Instrument (Part 2)**

The purpose of the information received from the Community College Program Summary Evaluation Instrument (Part 2) is to assist the Iowa Department of Economic Development (IDED) and other stakeholders in reviewing the effectiveness of Iowa Industrial New Jobs Training Program (260E) through a two-part procedure. The first segment is the Community College Program Summary, which describes the 260E program financed and delivered of the participating company. The second section, or additional summary information, presents information requested by the Iowa Department of Economic Development.

1. **Community College Program Summary**

   Evaluation models from North Carolina, Kansas, and Wisconsin served as examples for development of the College Program Summary Evaluation Instrument (Part 2) of the Iowa Industrial New Jobs Training Program (260E) evaluation process. A project/program executive summary sheet documents a process in which community colleges report 260E-training activities to the state at closeout of an economic development program.

   **Description.** The Community College Program Evaluation Instrument (Part 2) is a summary report of the 260E program composed by the community college economic developer. Information collected from this section of the evaluation process not only
presents facts and figures related to the 260E program, but also provides a narrative that can be utilized in the year-end IDED report.

**Development.** The community college economic developer reviewed evaluation instrument examples from North Carolina, Kansas, and Wisconsin and suggested incorporating the summary-reporting concept into the Community College Program Summary Evaluation Instrument (Part 2). Then a focus group of Iowa Community College economic developers, representatives from the Iowa Department of Economic Development, and the Iowa Department of Education voiced support of the summary report as a component of the Iowa Industrial New Jobs Training Program (260E) evaluation process.

Consensus of the stakeholders provided the researcher a vital data connection of program evaluation by the company to program summary documented by the community college economic developer. Perspectives from both sides of Iowa Industrial New Jobs Training Programs (260E), the company and the college provide an information loop to implement continuous improvement initiatives, with quantitative and qualitative data available for evaluating the effectiveness of 260E programs.

**Purpose.** The summary presented in Table 9 provides a short, concise abstract that includes company name, product produced, number of employees, number of new positions, amount funded to the 260E program, and types of training delivered.

**Findings.** The company representative reviewed an early copy of the Community College Program Summary Evaluation Instrument (Part 2) and commented, *It looks good, and with the Company Program Evaluation Instrument (Part 1) you've covered evaluation of 260E programs* (CP, p. 13). The community college economic developer was instrumental
Table 9. Community college program summary

(Customized executive summary of the completed program)

The company is one of the largest suppliers of industrial rubber products in the U.S. The company had 65 employees at the start of the project and planned to add 40 new positions.

Markets and processes changed forcing the company to reduce the number of new positions to 19. The 260E-training fund was reduced to $82,600 from $99,212 to reflect this reduction. Training for the company's new employees focused on safety, PC application training, Blueprint reading and machine operation, supervisory skill development, and diversity training.

Source: Iowa Community Colleges, Iowa Industrial New Jobs Training Program (260E), Community College Program Summary Evaluation Instrument (Part 2)

in the development and implementation of this section of the evaluation process. The Iowa Department of Economic Development representative was excited to see “real life” narratives. Qualitative perspective of economic development programs will provide a “personal” touch to an otherwise quantitative annual year-end report issued by IDED.

Kirkpatrick’s four-level approach of evaluation was applied by the researcher to Table 9 to measure or interpret the findings:

• Reaction level – Community college developed an executive summary of the completed training program.

• Learning level – Community college could utilize results to determine extent training achieved, funding provided, and anticipated results reached.

• Behavior level – Community college could translate results into changed/improved behavior and self-assessment.

• Results level – Community college could examine results for positive organizational improvement, process development, and quality changes.
Data received from Table 9 could be utilized to determine program accomplishment, assessment of program effectiveness/accountability, and development of database that can be utilized by decision-makers.

2. Additional summary information

When information from the notice of preliminary agreement, notice of final agreement, and data collected from the community college program summary evaluation instrument are combined, a more complete representation of the effectiveness of training provided through Iowa Industrial New Jobs Training Programs (260E) could be presented through comprehensive year-end reports issued by the Iowa Department of Economic Development.

**Description.** The community college economic developer and Iowa Department of Economic Development (IDED) representative assessed information to be included in this section of the Community College Program Summary Instrument (Part 2). The intent of the information provided in this area is to report specific information related to an individual 260E program. This section of the evaluation instrument is open to continued development, with input from the Iowa Department of Economic Development, Iowa Department of Education, and Iowa Community College economic developers, which would provide opportunity for expansion and customization of the instrument.

**Development.** In a focus group meeting with Iowa Department of Economic Development representatives, Iowa Department of Education researcher, and Iowa Community College economic developers agreed to include the projected number of new jobs to receive training and the average hourly wage of new positions. Additional
information, to be identified and developed by Iowa Community College economic
developers and the Iowa Department of Economic Development (IDED), could be attached
to a closeout or final report submitted to IDED at the end of 260E programs, if adopted for
implementation.

Purpose. Provides a quick review of additional summary information to be reported
by Iowa Community Colleges to the Iowa Department of Economic Development. The
researcher proposed expansion of this section of the instrument, to include program closeout
information at the end Industrial New Jobs Training Programs (260E).

Findings. As noted in the Community College Program Summary area of this
instrument (Table 10), the estimated number of new jobs projected verses actual number
trained may differ due to hiring projections, market fluctuations, and process changes. The
average hourly wage of new positions is reported and could also be included in year-end
reports to the Iowa Department of Economic Development (IDED).

The researcher applied Kirkpatrick's four-level approach of evaluation to Table 10 to
measure or interpret the findings:

- Reaction level – Community college provided information, with redesign suggested.
- Learning level – Community college could utilize results to determine the extent to
  which facts were acquired and anticipated results reported.

Table 10. Additional summary information

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Number of new jobs projected to receive training (e.g.)</td>
<td>40</td>
</tr>
<tr>
<td>2.</td>
<td>Average hourly wage of new positions (e.g.)</td>
<td>$11.50</td>
</tr>
</tbody>
</table>

Source: Iowa Community Colleges, Iowa Industrial New Jobs Training Program (260E), Community College Program Summary Evaluation Instrument (Part 2)
- Behavior level – Community college could translate results into improved behavior action through learned knowledge.
- Results level – Community college could examine results for assessing organizational improvement, and quality modifications.

Data received from Table 10 could be utilized to determine accomplishment of program effectiveness by understanding the overall initiative and development of a comprehensive database for decision-makers.

If the evaluation process and instruments developed in this study were adopted for Iowa Industrial New Jobs Training Programs (260E), additional negotiation and consensus between Iowa Community College economic developers and the Iowa Department of Economic Development would be required to complete this area of the Community College Summary Evaluation Instrument (Part 2). A review of the notice of preliminary agreement, notice of final agreement, and proposed program closeout data would customize the process by combining information and data sources. Program closeout data would include information related to finalization of Iowa Industrial New Jobs Training Programs (260E), to be negotiated by the Iowa Department of Economic Development and Iowa Community College economic developers.

Both Iowa Community College economic developers and Iowa Department of Economic Development representatives have expressed interest in implementing the evaluation process and instruments developed for this study. Including program closeout data to the Additional Summary Information section of the Community College Program Summary Evaluation Instrument (Part 2) would assist stakeholders in evaluating the effectiveness of Iowa New Jobs Training Programs (260E). Development of electronic
forms, which could be accessed and completed on-line through the Iowa Department of Economic Development website would be an issue to be negotiated. In addition, consensus by both parties on the evaluation process, procedures, instruments, and timelines would be necessary.

**Summary**

This case study provided examination of the development of an evaluation process for Iowa Industrial New Jobs Training Programs (260E) and implementation a case study setting. The performance indicator rating scale, included in the Company Program Evaluation Instrument (Part 1), provided a means of ranking perceptions of the participating company and an opportunity of numerical or quantitative analysis of results.

The community college’s performance in specific areas: initial contact/request, assistance in development of the training plan, training service provider, program management, satisfaction of the program, training plan were rated by the participating company. Results ranged from 5, Excellent, exceeded expectations, to 4, Very good, highly satisfactory, and NA, not applicable to the program evaluation. Private training vendors were also evaluated in this study; a parallel design provided comparison to community college training providers (Tables 3 and 4), with the results of 5, Excellent, exceeded expectations. The company’s overall satisfaction with a summary of the Iowa Industrial New Jobs Training Programs (260E) were documented in findings exhibited in Table 6, which had a performance indicator rating of 5, Excellent, exceeded expectations.

After reviewing each section of the Company Program Evaluation Instrument (Part 1), the researcher agreed with documented perceptions of the company representative. After
completion of the Company Program Evaluation Instrument (Part 1), interviews with the company representative, and personal assessment by the researcher, the identifiable results of the community college’s performance in providing Iowa Industrial New Jobs Training Programs (260E) included:

- **Performance of the Community College’s Initial Company Contact/Request (Table 1).** Average rating of 4 – Very good, highly satisfactory.

- **Performance of Community College Assistance in Development of the Training Plan (Table 2).** Average rating of 5 – Excellent, exceeded expectations.

- **Performance of Service Providers-Community College Training (Table 3).** Average rating of 5 – Excellent, exceeded expectations.

- **Performance of Service Providers-Private Training Providers (Table 4).** Average rating of 5 – Excellent, exceeded expectations.

- **Performance of the Community College-Program Management (Table 5).** Average rating of 5 – Excellent, exceeded expectations. Identified services available through other agencies rated NA, Not applicable.

- **Company Satisfaction of the Program-Overall (Table 6).** Average rating of 5 – Excellent, exceeded expectations.

- **Performance of the Program Components-Company Training Plan (Table 7).** Average rating above 4 – Very good, highly satisfactory. The company will begin the ISO-9000 documentation and registration process rated NA, Not applicable.

- **Company Program Evaluation Program Instrument – Questions (Table 8).** Responses were specific to questions related to the company’s perception of Iowa Industrial New Jobs Training Programs (260E).
The second component of the evaluation process, Community College Program Summary Evaluation Instrument (Part 2), presented the Community College Program Summary, of the 260E program and documented impact on the participating company.

- Community College Program Summary (Table 9). Executive summary of the completed program including company name, product produced, number of employees, number of new positions, amount funded to the 260E program, and types of training delivered.

- Additional Summary Information (Table 10). The estimated number of new jobs projected to receive training and the average hourly wage of new positions under the program.

The researcher applied Kirkpatrick’s four-level approach of evaluation for development of an evaluation process, Company Program Evaluation Instrument (Part 1), and the Community College Program Summary Evaluation Instrument (Part 2) of Iowa Industrial New Jobs Training Programs (260E) to measure or interpret findings:

- Reaction level – Stakeholders provided qualitative and quantitative information, with redesign suggested if the evaluation process and instruments are implemented for 260E programs.

- Learning level – Stakeholders could utilize results to determine the extent to which facts were acquired and anticipated results reported.

- Behavior level – Stakeholders could translate results into improved behavior action through learned knowledge.

- Results level – Stakeholders could examine results for assessing organizational improvement, and quality modifications.
• Data received from the Company Program Evaluation Instrument (Part 1) and the Community College Program Summary Evaluation Instrument (Part 2) could be utilized to determine accomplishment of effectiveness Iowa Industrial New Jobs Training Programs (260E) by understanding the overall initiative and development of a comprehensive database for decision-makers.

"Communicating results is as important as achieving results," stated Phillips (1997, p. 337). The role of the researcher in action research is leader, facilitator, resource person, negotiator, and co-participant to provide direction to empowered participants.

As the researcher assessed the findings of this study, the systemic overview process presented a progression of the development and implementation of the study through analysis of data and narratives expressed by stakeholders. A detailed development of the evaluation process, evaluation instruments, and case study company perceptions of training provided through Iowa Industrial New Jobs Training Programs (260E) were presented in this study.

The researcher also applied Kirkpatrick's evaluation model:

1. ...measuring changes in behavior that occur as a result of training programs,
2. ...determining what final results occurred because of training programs,
3. ...comment sheets that participants complete at the end of a program, and
4. ...the learning that takes place in the classroom, as measured by increased knowledge, improved skills, and changes in attitude. (p. 16)

This study reviewed evaluation models and focused on development of an evaluation process including accountability strategies for training provided through state economic development initiatives and will assist decision-makers in the determination to continue, discontinue, and/or improve future training programs.
CHAPTER 5. CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

This chapter contains a brief overview of the study, answers the research questions/interview guide structuring the investigation, draws conclusions, and presents implications and recommendations related to economic development programs, in particular Iowa New Jobs Training Programs (260E). Community colleges are extremely responsive to business and industry needs with proven ability to provide customized training programs by meeting specific workplace needs and skill-based requirements, without jeopardizing quality and content (Grubb, 1989; Hines, 1990; Phelps, Bradenburg, & Jacobs, 1990).

Overview of the Study

This qualitative study was designed to develop an evaluation process for Iowa Industrial New Jobs Training Programs (260E) and provide accountability measures for state-financed economic development initiatives. The evaluation process could assist stakeholders preparing for the Accountable Government Action, House File 687, which requires all state departments to develop planning and accountability strategies that fit within the overall direction of state government.

Within an estimated timeframe of three years, state departments monitoring and delivering Iowa Industrial New Jobs Training Programs (260E) will be required to exhibit accountability strategies. Current documentation, notice of preliminary agreement and notice of final agreement, with addition of the proposed evaluation process, should provide stakeholders an accountability system for 260E programs. The stakeholders identified included the Iowa Department of Economic Development, Iowa Department of Education, Iowa Department of Revenue and Finance, and Iowa Community Colleges.
Case study methodology (Yin, 1994) was undertaken to identify perceptions, develop an evaluation process, and report results of an assessment of training provided through Iowa Industrial New Jobs Training Programs (260E). Systems theory (Smith, 1982) was utilized to identify the best overall structure for improving an existing operational process. Constructivist paradigms (Guba & Lincoln, 1989) and action research methods (Stringer, 1999) identified stakeholders as participants with equal standing attempting to interpret a shared experience or knowledge developing conclusions with direction of future activities to be determined through subsequent research.

The research design for this study utilized a purposeful sampling approach (Maxwell, 1966) to select a single company and one community college coupled in partnership of an Iowa Industrial New Jobs Training Program (260E). A combination of tight and loose data collection methods (Miles & Huberman, 1994) evolved from the development of research questions. Triangulation of data collection methods and a cross-analysis system (Merriam, 1998) identified qualitative research observations and field notes, one-on-one interviews, focus group meetings, identified documentation, and electronic messages. Research for the study began in fall 2000, with Iowa Community College data collection, analysis, and identification of findings related to the study concluding in spring 2002.

A main goal for this study was to develop and present accountability measures to improve economic development initiatives through development and implementation of a case study evaluation process for Iowa Industrial New Jobs Training Programs (260E). The purpose of evaluation “...is to collect data that will serve as a valid basis for improving the training or development system and maintaining quality control over its components” (Tracey, 1984, p. 441).
Theoretical Perspectives

The theoretical perspectives that guided this study included case study approach, systems theory perception, constructivism paradigm, and action research methodology. Use of case study methodology enabled the researcher and participants/stakeholders to actively engage in heuristic observational investigation. The process of gathering rich, thick information and accounts of situations permitted the researcher to effectively understand and analyze information with a focus on conceptual framework.

Systems theory provided a set of interrelated inputs, processes, and outputs that were transformed through planning, operating, and controlling. The systemic initiative provided an operational process that can be improved continuously beyond this pilot study, internally and externally through deductive analysis.

The constructivism paradigm in this study represented fundamental positions for continual search based on inquiry. The researcher and stakeholders worked toward compromise through assessment of multiple accounts or possibilities. Interpretation and shared knowledge or experiences were applied to develop consensus.

The results of action research methodology utilized in this study provided a product or outcome that was developed by stakeholders who were searching to improve their own situation. Joint construction resulted in a higher-level of synthesis for systemic change.

Use of a combination of the theoretical perspectives enabled successful application within the parameters established for this study. The interconnection of theoretical viewpoints solidified the foundation of this study and advanced accountability initiatives through the development of evaluation process for Iowa Industrial New Jobs Training Programs (260E).
Findings Based on the Research Questions

Four research questions and an interview guide provided structure for evolution of the study and direction for interviews. A summary of findings is included in this section of the study. The interview guide followed the framework of the program evaluation instruments, while explaining the process and purpose of the study. Narrative replies from the company, community college economic developer, and identified stakeholders are presented.

Research Question 1. Did training provided through Iowa Industrial New Jobs Training Programs (260E) raise workplace skills of the participating company’s employees?

The company representative responded through the Company Program Evaluation Instrument (Part 1) to the main areas of concentration, as shown in Tables 6 (b), 7 (a), 7 (c), 7 (d), and 8 (3). Table 6 (b) Effectiveness of the training provided by the program in raising skill levels of employees, received a performance indicator rating 5, Excellent, exceeded expectations. Table 7 (a) Employees received specific job skills that improved job performance, (c) Employees effectively use new Microsoft Office applications, and (d) Supervisors learned skills to effectively train new employees how to do the job, were all rated 4, Very good, highly satisfactory. Table 8 (3) Overall impact of the Iowa Industrial New Jobs Training Program (260E) on the participating company, presented that training increased efficiency and productivity, with a lowered risk of incorrect ordering of parts. Interviews with the participating company’s representative were a positive experience, with comments including, The training provided through this program has lead to increased efficiency and productivity of our employees, with supervisors developing their skills (CP, 15).
The "participants' perspective" (Maxwell, 1996) or company representative's account of the experience demonstrates reality through a personal interpretation. The quantitative or numerical scores attached to the Company Program Evaluation Instrument (Part 1) enable the researcher or reader to understand the perspective or perception of the participant.

The design of the evaluation instrument was a collective process intended to determine worth, value or meaning (Kirkpatrick, 1998; Phillips, 1997), which provided a summative report (Bartik & Bingham, 1995) of results, or outcomes, at the end of training and should assist policy and decision-making procedures for future programs. The multilevel systems approach applied in this case study to training implementation and transfer of training (Kozlowski & Salas, 1997) included the participating company and community college.

Since data collection priorities are identified through an evaluation process, the case study allows one to draw a baseline or benchmark for use of evaluation instruments in the future (Alfred, 1991). If the evaluation process and instruments are adopted for use by stakeholders, report formats and dissemination strategies would be developed through future negotiations and consensus with the Iowa Department of Economic Development, Iowa Department of Education, and Iowa Community College economic developers.

The researcher would assist in implementation of the evaluation process and suggests that reports should follow the framework of the Company Program Evaluation Instrument (Part 1) and the Community College Program Summary Evaluation Instrument (Part 2), with adjustments to include data pertinent to Iowa Department of Economic Development closeout reports for Iowa Industrial New Jobs Training Programs (260E). Data from the evaluation process should be included in reports issued by the participating community
Research Question 2. How effective are Iowa's Community Colleges in providing training through Iowa Industrial New Jobs Training Programs (260E)?

The Company Program Evaluation Instrument (Part 1) documented responses from the company representative the Service Providers-Community College Training (Table 3 (a-g). Curriculum development, performance goals, implementation/timeframes, training schedules, quality of instructors/trainers, productivity improvements, and training impact to the job rated 5, Excellent, exceeded expectations. The role of community colleges (Hirshberg, 1991) in contract or customized training initiatives goes beyond the delivery of training to providing collaborative efforts among education, business and industry, and government.

The outcomes, or results, of evaluating economic development training programs provide a baseline for continuous improvement initiatives for community colleges and participating companies. In agreement with Creticos and Sheets (1990), this study observed the attainment of skill-training objectives to evaluate the effectiveness of training investments, at both the state and company level.

The design of the evaluation process and instruments was developed through consensus of Iowa Department of Economic Development, Iowa Department of Education, and Iowa Community Colleges. These stakeholders are partners in delivering, reporting, and monitoring Iowa Industrial New Jobs Training Programs (260E).
Research Question 3. How effective are service providers-private vendors in providing training through Iowa Industrial New Jobs Training Programs (260E)?

A rating of 5, Excellent, exceeded expectations, was awarded by the company representative for training provided through service providers-Private Training Vendors (Table 4). The competencies or performance indicators are identical for private training vendors and community college trainers on the Company Program Evaluation Instrument (Part I). The design was intentional to enable a comparison of community college trainers vs. private training vendors, and to provide for evaluation of private training vendor programs that are not contracted through the community colleges. Community colleges utilize “smile sheets” after each class/course that it provides, and the results are reported to the trainers and company representatives. The company representative noted, The community college assisted in identifying trainers outside their area of expertise (CP, p. 3).

System linkages of factors to processes forces evaluators to consider numerous issues related to a multilevel model that might be neglected with specific training targets (Kozlowski & Salas, 1997). The intentional design allows for a review of alternative delivery private training vendor providers in Iowa Industrial New Jobs Training Programs (260E). In the current study, cross-level relationships of service providers directly affected the development/design and delivery of training.

Companies participating in 260E programs can contract with any service provider for training or services (CL, p. 8). As a component of customer service, community colleges assist participating companies in securing the best trainer for the job, whether he or she is a private training vendor, faculty member or a contract consultant. Community colleges are the point of contact for training and economic development initiatives in the State of Iowa.
Research Question 4. What is the overall satisfaction level of companies participating in Iowa Industrial New Jobs Training Programs (260E)?

In response to the overall satisfaction with 260E economic development initiatives, as presented on the Company Program Evaluation Instrument (Part 1), the company representative rated all of the items 5, Excellent, exceeded expectations (Table 6 (a-d). Topic areas include the extent to which the program met company expectations for training employees, effectiveness of the training provided by the program in raising skill levels of employees, satisfaction with community college economic development contact/representative, and overall satisfaction of the Iowa Industrial New Jobs Training Program (260E).

Development of the evaluation process and instruments for this study was an example of action research, constructivism with a systems design focus. The researcher’s evaluation process followed the Kirkpatrick (1998) evaluation model identified earlier in this study including reaction, learning, behavior, and results relating to organizational improvement.

Conclusions

As presented in Chapter 3, the research design of this study integrated a 4th-generation evaluation process through case study methods. The researcher utilized Lincoln and Guba’s (1989) framework by organizing claims, concerns, and issues of stakeholders and applying constructivism paradigm methodology through:

1. Identifying stakeholders, which may be at risk in evaluation;
2. Obtaining constructions from each participant;
3. Establishing a methodology which can be utilized and evaluated;
4. Negotiating consensus from numerous constructions;
5. Preparing an plan for negotiation when consensus is not achieved;
6. Gathering and supplying information for use in consensus actions;
7. Developing opportunity for participants to negotiate;
8. Building report(s) that will communicate participants perception of consensus and resolution; and
9. Continually review processes and results of any unresolved constructions.

Lincoln and Guba's (1989) theory was utilized to carry out the purpose of this study by providing the participants with a framework for designing the evaluation process and instruments. Through this pilot study of one community college and a single participating company, the researcher assessed the relevance, initial achievement, and future applications of the evaluation process and evaluation instruments developed for this study. The research design for the evaluation process and instruments was refined through constructivist methods, which included input from and consensus of stakeholders.

Measuring the success of economic development programs depends on the needs and expectations of constituents, program design and outcomes, and the perceptions of program outcomes by constituents (Alfred, 1991). The community college developer stated, *This evaluation is separate from the notice of final agreement to the Iowa Department of Economic Development, this is evaluation of training* (CL, p. 3).

Jacobs and Bragg (1994) noted that economic conditions, business environments, educational systems, and company and employee characteristics are related variables to be integrated in development of an evaluation system. A goal of training should be the transfer of learning and/or transfer of training for employees, which are crucial to the performance and success of business and industry for a greater long-term payoff (Haskell, 1998). The
evaluation instruments developed for this study incorporated the subject matter of transfer of learning and/or transfer of training of employees.

Bartik and Bingham (1995) stipulated that economic development programs can be evaluated with a combination of quantitative and qualitative results, but these evaluations are far rare since there may be “too much political risk and/or cost in economic development evaluations” (p. 46). Once decision-makers/policymakers review a good evaluation process, the next step is to “improve the program’s performance and political viability” (p. 47). The appropriate and effective design of process/instruments is the key to moving beyond good to great evaluations that will improve the system.

Deegan and Drisko (1985) presented difficulties identified by business and industry utilizing community colleges for customized/contract training programs related to qualified instructors, technical facilities, scheduling training around company shifts, low educational institutional support, development time for courses, and marketing strategies of contract training programs. Addressing concerns at the initial company contact point and training plan design will lessen the possibility of problems in program delivery and evaluation phases. The college representative confirmed, …the evaluation process will link the training plan directly to training objectives and company goals (CL, p. 12).

The researcher also applied Kirkpatrick’s (1998) evaluation model throughout the study, which included:

1. …measuring changes in behavior that occur as a result of training programs,
2. …determining what final results occurred because of training programs,
3. …comment sheets that participants complete at the end of a program, and
4. …the learning that takes place in the classroom, as measured by increased knowledge, improved skills, and changes in attitude. (p. 16)
The development of an evaluation process and assessment of the effectiveness of training provided through Iowa Industrial New Jobs Training Programs (260E) demonstrates an increased commitment of accountability for state-financed, employer-focused initiatives in raising workplace skills of Iowa's workforce. An Iowa Department of Education representative declared:

*Information reported to the Iowa Department of Economic Development and Iowa Department of Education can be utilized to evaluate the impact of training on employees and participating companies. The Iowa Customer Tracking System, Unemployment Insurance (UI) Employer Wage Records will review wages, confirm employment, calculate quarterly wages, and identify the type of business the person is employed. Accountability is the key* (DE, p. 3).

Reviewing and integrating research literature with the findings from this case study revealed an emerging theme of effectiveness or accountability. The design of the training plan and evaluation process enabled the identification of specific objectives, goals or outcomes to be achieved through training programs. The performance measures or accountability indicators provide information or data on the effectiveness of training in meeting specific performance standards. As political and budgetary pressures require a higher level of accountability from economic development programs, it is the responsibility of the Iowa Department of Economic Development, Iowa Department of Education, and Iowa Community Colleges to provide guidance and leadership.

The literature review and research methods presented in this study provided an abstract framework for development of the evaluation process and instruments utilized in assessing the effectiveness of training provided through Iowa Industrial New Jobs Training Programs (260E). The focus was on three general areas:

1. Economic Development (state-financed) Programs
2. Program/Training Evaluation/Transfer of Training

3. Community College Customized/Contract Training

As this case study was being completed, the Accountable Government Action, House File 687 legislation will require all state departments to develop planning and accountability strategies that fit within the overall direction of state government, and is gaining momentum. The Iowa Department of Economic Development, Iowa Department of Education, and Iowa Community Colleges will direct the implementation of an evaluation process and instruments for Iowa Industrial New Jobs Training Programs (260E).

Implications

The research, interviews, and findings of this case study revealed that an evaluation process developed and specifically designed for Iowa Industrial New Jobs Training Programs (260E) would provide baseline qualitative and quantitative data. Realization of a statewide evaluation process could provide a gateway to accountability measures for 260E economic development programs. “Accountability indicators are often classified as context, input, process, or output” (Far West Lab, 1988, p. 4). Within a system design, these indicators could be related to the environment, individuals and resources, operational functions, or goal-related accomplishments.

An evaluation of the Iowa Industrial New Jobs Training Programs (260E) could also reveal political risks. Accountability standards for state-financed, employer-focused, customized training programs may present negative consequences. “Hard quantitative evidence on the effectiveness of a particular approach to economic development will have benefits to all state and local areas, not just to the state or local area that has the program and
is funding the evaluation” (Bartik & Bingham, 1995, p. 35). The utilization of economic
devolution program/course data reported to the Iowa Department of Education should
assist stakeholders in identifying the types of training that are provided by community
colleges.

As Creticos (1990) posited:

...critics of these programs argue that there is no clear policy rationale and
intervention model that explain how these programs will retain jobs and
minimize unemployment. They argue that there is no formal evaluation
system for assessing whether retraining is effective in reaching these
objectives. In addition, they argue that training funds are given to companies
that would have retrained their employees without government assistance.
(p. i)

An economic development documentation system and evaluation process would retain jobs
and minimize unemployment, assess effectiveness of training, and provide investment
analysis of state-financed programs.

The Iowa Department of Economic Development, Iowa Department of Education,
and Iowa Community Colleges are in a unique position to implement evaluation procedures
and processes that could affect economic development programs in the State of Iowa. The
compiled findings of the Company Program Evaluation Instrument (Part 1) and the
Community College Program Summary Instrument (Part 2) presented in this study
(Appendix F) correlate to the pilot case study evaluation model results and support the
implementation of the process and instruments developed for this study. The findings,
conclusions, and implications of this study provide a basis for the recommendations
presented in this chapter.
**Recommendations**

"If a program is not evaluated, one can always claim success" (Bartik & Bingham, 1995, p. 36). This study presents a process and instruments that could be utilized for statewide evaluation of Iowa Industrial New Jobs Training Programs (260E). It also provides the basis for additional research related to economic development initiatives and more specifically 260E programs. Specific recommendations include the following:

1. Establish an expanded program monitoring documentation process for the Iowa Department of Economic Development through utilization of an evaluation process and instruments. (The results should assist decision makers in improving 260E programs and provide documented accountability measures).


3. Develop and implement a community impact assessment or economic impact evaluation model to be utilized by the Iowa Department of Economic Development. (Impact assessment information at community and statewide levels should be beneficial in marketing economic initiatives).

4. Review the cost-benefit/return on investment (ROI)/fiscal analysis of Iowa Industrial New Jobs Training Programs (260E) to Iowa's economy. (This should be a viable response to the Accountable Government Action, House File 687).

5. Develop joint annual reporting procedures for Iowa Industrial New Jobs Training Programs (260E) community college delivered training data submitted to the Iowa
Department of Education in the Iowa Department of Economic Development. (This should reduce duplication of efforts and develop a streamlined reporting system of 260E programs).

6. Identify linkages of 260E programs to Adult Basic Education (ABE) Programs, Welfare to Work, and issues beyond training that impact the workers of Iowa. (The results should provide an information piece for marketing Iowa Community Colleges and other state entities).

7. Establish a statewide evaluation and reporting process, similar to concepts presented in this study, for 260E programs monitored by the Iowa Department of Economic Development. (This should represent a workable response, through collaborative efforts, to the Accountable Government Action, House File 687).

This study revealed several opportunities for additional research in the area of collaborative community college and economic development initiatives and programs.

1. Conduct a multi-case study on institutional commitment to economic development initiatives by Iowa Community Colleges.

2. Conduct a multi-case study utilizing quantitative analysis of economic development programs – Iowa Department of Economic Development.

3. Study the impact of economic development initiatives on the State of Iowa economy – Iowa Department of Economic Development.

4. Develop and implement a community impact assessment or economic impact evaluation model – Iowa Department of Economic Development.

The nation’s economic future depends upon a highly skilled, productive workforce, and economic development initiatives provide a mechanism to assist states and communities
in attracting, expanding and retaining business and industry. It is the responsibility of service
providers to develop and implement accountability strategies to assess the impact of state-
funded/public investments.

The problem statement of this study identified a need for evaluating the effectiveness
of training provided through Iowa Industrial New Jobs Training Programs (260E) and
introduced the State of Iowa, Department of Management, Accountable Government Action,
House File 687. This legislation will require all state departments to develop planning and
accountability strategies that fit within the overall direction of state government. The
outcomes of this study, along with compiled findings (Appendix F), provided an evaluation
process and instruments that should enable an assessment of the effectiveness of training
provided through the Iowa Industrial New Jobs Training Program (260E).

This study contributes to accountability measures/strategies, through case study
methodology, by developing an evaluation process: Iowa Industrial New Jobs Training
Programs (260E) state-financed, employer-focused, contract training programs. The
evaluation process provides a method of identifying accountability measures for service
providers of state-financed training program initiatives. The Company Program Evaluation
Instrument (Part 1) and Community College Program Summary Evaluation Instrument (Part
2) present opportunity for assessment of effectiveness of Iowa Industrial New Jobs Training
Programs (260E).

The study’s evaluation process, in conjunction with the Iowa Department of
Economic Development’s Iowa Industrial New Jobs Training Programs (260E) notice of
preliminary agreement and notice of final agreement documentation provides a
comprehensive evaluation system including performance measures to assess the effectiveness
of 260E programs. As the initial study is completed, it becomes the responsibility of the Iowa Department of Economic Development, Iowa Department of Education, and Iowa Community Colleges to direct the statewide implementation of an evaluation process and instruments for Iowa Industrial New Jobs Training Programs (260E).

At the conclusion of this pilot case study and the review of the results of the compiled evaluation instruments (Appendix F), the researcher reinforces the need to address numerous issues/topics that may influence the success of an evaluation process for Iowa Industrial New Jobs Training Programs (260E). The researcher proposes that stakeholders review the following issues/topics prior to implementation of an evaluation process:

1. **Systemic review:** Correlate the development of an evaluation process for Iowa Industrial New Jobs Training Programs (260E) to the planning and strategies developed for the Accountable Government Action, House File 687. Review the relevance and application of existing accountability measures/performance indicators at the Iowa Department of Economic Development, Iowa Department of Education, and Iowa Community Colleges to the evaluation process for Iowa Industrial New Jobs Training Programs (260E).

2. **Transfer of training:** Community college and private training vendors (service providers) develop procedures to assist participating companies in identifying the benefits or impact of training funded through economic development initiatives in raising workplace skills. Include a component/question/statement related to transfer of training in the Company Program Evaluation Instrument (Part 1), which would indicate an increased commitment by training providers to participating company and economic development programs.
3. **Return on investment:** Connected to the accountability issue presented earlier, but specific to fiscal use of any state or federal training or retraining funds, expand economically based cost/benefit analysis measurements, return on investment (ROI) calculations or uniform procedures/processes to assess the economic/fiscal effectiveness of Iowa Industrial New Jobs Training Programs (260E) at the local and state level.

4. **Seamless reporting system:** Community colleges use a collaborative process to report current economic development program/project information, proposed summative evaluation results to the Iowa Department of Economic Development, and year-end enrollment data to the Iowa Department of Education. The results of a collaborative effort would provide a database of in-depth information related to economic development programs that could be accessed by the legislature, potential business and industry clients, and citizens of Iowa.

Iowa Industrial New Jobs Training Programs (260E) are an integral component of economic development initiatives monitored by the Iowa Department of Economic Development and financed, developed, and delivered by Iowa's Community Colleges. As a national leader in providing economic development taxpayer-supported training programs, Iowa must also lead the nation in developing, implementing, and evaluating training provided through economic development programs.
# APPENDIX A. NOTICES OF PRELIMINARY AND FINAL AGREEMENT

## Notice of Preliminary Agreement

**IOWA INDUSTRIAL NEW JOBS TRAINING PROGRAMS (260E)**  
**IOWA DEPARTMENT OF ECONOMIC DEVELOPMENT**

<table>
<thead>
<tr>
<th>Signature of preparer and date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COLLEGE ACRONYM</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSINESS</td>
</tr>
<tr>
<td>PROJECT # (1,2,3,4)</td>
</tr>
<tr>
<td>SIC CODE (4 digit)</td>
</tr>
<tr>
<td>FED ID NUMBER</td>
</tr>
<tr>
<td>SITE ADDRESS LINE 1</td>
</tr>
<tr>
<td>SITE ADDRESS LINE 2</td>
</tr>
<tr>
<td>TOWN</td>
</tr>
<tr>
<td>COUNTY</td>
</tr>
<tr>
<td>ZIP CODE</td>
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<tr>
<td>MULTIPLE SITE (y/n)</td>
</tr>
<tr>
<td>EFFECTIVE PRELIM DATE</td>
</tr>
<tr>
<td>DED PRELIM NOTICE (ded use)</td>
</tr>
<tr>
<td>NEW/ EXPANDING BUSINESS (n/e)</td>
</tr>
<tr>
<td>BASE EMPLOYMENT</td>
</tr>
</tbody>
</table>
Notice of Final Agreement

IOWA INDUSTRIAL NEW JOBS TRAINING PROGRAMS (260E)
IOWA DEPARTMENT OF ECONOMIC DEVELOPMENT

<table>
<thead>
<tr>
<th>Signature of preparer and date</th>
</tr>
</thead>
</table>

| IDED CODE:       |
|                 |
| COLLEGE ACRONYM |
| BUSINESS        |
| PROJECT #(1,2,3,4) |
| SIC CODE (4 digit) |
| FED ID NUMBER   |
| SITE ADDRESS LINE 1 |
| SITE ADDRESS LINE 2 |
| TOWN            |
| COUNTY          |
| ZIP CODE        |
| MULTIPLE SITE (y/n) |
| EFFECTIVE PRELIM DATE |
| DED PRELIM NOTICE (ded use) |
| EFFECTIVE FINAL DATE |
| DED FINAL NOTICE (ded use) |
| NEW/ EXPANDING BUSINESS (n/e) |
| BASE EMPLOYMENT |
| PLANNED # OF NEW JOBS |
| MULTIPLE ISSUANCE (y/n) |
| OJT COSTS       |
| TRAINING COSTS  |
| COLLEGE ADMIN FEES |
| LEGAL FEES      |
| UNDERWRITER FEES |
| STATE 1% FEE    |
| RESERVES        |
| OTHER FEES      |
| CERTIFICATE AMOUNT |
| INTEREST RATE   |
# APPENDIX B. INITIAL EVALUATION INSTRUMENTS  
(PART 1 & PART 2)

**IOWA INDUSTRIAL NEW JOBS TRAINING PROGRAMS (260E)**  
**COMPANY PROGRAM EVALUATION INSTRUMENT (PART 1)**

<table>
<thead>
<tr>
<th>Company</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company Address</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Community College</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Project Identification Number</th>
<th>Training Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Iowa Code section 84A.5 Department of Workforce Development and Iowa Administrative Code, chapter 251-4.1(2) Workforce Development Accountability System, requires assessment of economic development programs funded by Iowa Community Colleges and monitored through the Iowa Department of Economic Development and the Iowa Department of Education. The evaluation process will assess training provided by the program and assist in determining the effectiveness of service providers in raising the skills of the Iowa workforce.

Iowa Community Colleges are committed to provide top quality training programs and business assistance services to meet the needs of Iowa companies. Economic development programs assist in developing high-skilled workers to meet the demands of Iowa's changing economy. Company responses are confidential and will be summarized for program evaluation and improvement.

Please rate each item based on the performance indicator rating scale. Place an “X” in the blank that expresses your assessment of each item and add comments in the space provided. You may need to contact additional internal sources to complete this evaluation.

**Performance Indicator Rating Scale:**

5 = Excellent, exceeded expectations.  
4 = Very good, highly satisfactory.  
3 = Acceptable, need for improvement.  
2 = Marginal, need significant improvement.  
1 = Unacceptable, not satisfied.  
NA = Not applicable.

<table>
<thead>
<tr>
<th>1. Rate the Performance of the Community College's Response to Initial Company Contact/Request</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Responded to company request promptly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Knowledgeable, organized, and prepared to assist company.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Clearly explained the process of Iowa Industrial New Jobs Training Programs. (Application/approval process, eligibility requirements, development of training plan, delivery of services/training, company repayment responsibility, and system of reimbursement).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments:
COMPANY PROGRAM EVALUATION INSTRUMENT (PART 1)

Performance Indicator Rating Scale:

5 = Excellent, exceeded expectations.
4 = Very Good, highly satisfactory.
3 = Acceptable, need for improvement.
2 = Marginal, need substantial improvement.
1 = Unacceptable, not satisfied.
NA = Not Applicable.

2. Rate the Performance of Community College Assistance in Development of the Training Plan

<table>
<thead>
<tr>
<th>Rating</th>
<th>a. Contributed to the identification of training needs/needs assessments.</th>
<th>b. Flexible, responsive, and focused on company needs.</th>
<th>c. Training objectives/outcomes linked to company goals.</th>
<th>d. Designed training objectives to include performance measures.</th>
<th>e. Plan was developed to assist company to reinforce training.</th>
<th>f. Implementation/timeframes were clearly established.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td></td>
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<td>4</td>
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<td>NA</td>
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</tr>
</tbody>
</table>

Comments: __________________________________________________________________________________________

3. Rate the Performance of Service Providers-Community College Training

<table>
<thead>
<tr>
<th>Rating</th>
<th>a. Company provided input for curriculum development.</th>
<th>b. Identified performance goals (Skill-based improvement).</th>
<th>c. Implementation/timeframes were clearly identified.</th>
<th>d. Training scheduled to meet company needs.</th>
<th>e. Quality of instructors/trainers.</th>
<th>f. Productivity improvements implemented due to training.</th>
<th>g. Training was evaluated to assess impact to the job.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
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</tbody>
</table>

Comments: __________________________________________________________________________________________

4. Rate the Performance of Service Providers-Private Training Vendors

<table>
<thead>
<tr>
<th>Rating</th>
<th>a. Company provided input for curriculum development.</th>
<th>b. Identified performance goals (Skill-based improvement).</th>
<th>c. Implementation/timeframes were clearly identified.</th>
<th>d. Training scheduled to meet company needs.</th>
<th>e. Quality of instructors/trainers.</th>
<th>f. Productivity improvements implemented due to training.</th>
<th>g. Training was evaluated to assess impact to the job.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
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</tr>
</tbody>
</table>

Comments: __________________________________________________________________________________________
COMPANY PROGRAM EVALUATION INSTRUMENT (PART 1)
(PAGE 3)

Performance Indicator Rating Scale:
5 = Excellent, exceeded expectations.
4 = Very Good, highly satisfactory.
3 = Acceptable, need for improvement.
2 = Marginal, need substantial improvement.
1 = Unacceptable, not satisfied.
NA = Not Applicable.

<table>
<thead>
<tr>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>NA</td>
</tr>
</tbody>
</table>

5. Rate the Performance of the Community College-Program Management

| a. Finance and withholding diversion (Repayment) procedures explained. |
| b. Monitoring training program progress. |
| c. Questions and/or concerns were addressed in a timely and efficient manner. |
| d. Fiscal administration of funds (Training expense reimbursement, purchase of training and materials). |
| e. Explained official reporting procedures including requirements: Social security numbers of trainees, training enrollments, etc. |
| f. Identified services available through other agencies (Tax credits, job placement, workforce development services, etc.). |

Comments: ____________________________________________________________
_____________________________________________________________________

6. Rate Company Satisfaction of the Program-Overall Summary

| a. Extent to which the program met company expectations for training employees. |
| b. Effectiveness of the training provided by the program in raising skill levels of employees. |
| c. Satisfaction with community college economic development contact/representative. |
| d. Overall satisfaction of the Iowa Industrial New Jobs Training Program. |

Comments: ____________________________________________________________
_____________________________________________________________________


COMPANY PROGRAM EVALUATION INSTRUMENT (PART 1)
(Page 4)

Performance Indicator Rating Scale:

5 = Excellent, exceeded expectations.
4 = Very Good, highly satisfactory.
3 = Acceptable, need for improvement.
2 = Marginal, need substantial improvement.
1 = Unacceptable, not satisfied.
NA = Not Applicable.

<table>
<thead>
<tr>
<th>Rating Scale</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>NA</th>
</tr>
</thead>
</table>

7. Rate the Performance of the Program Components-Company Training Plan

(College to customize to individual company objectives of the training plan)

Comments:

Please respond to the following questions:

1. Do you intend to use the community college for additional training?
   
   _____ Yes _____ No. If no, please explain

2. Suggestions for improving the Iowa Industrial New Jobs Training Program?

3. What was the overall impact of the Iowa Industrial New Jobs Training Program on your Company (Efficiency, Operations, productivity, and profitability)?
COMPANY PROGRAM EVALUATION INSTRUMENT (PART 1)

4. Savings and/or benefits from employees trained through the Iowa New Jobs Training Program (Reduced operating costs, increased production, reduced material waste, etc.)

5. Estimated dollar value of impact from Iowa Industrial New Jobs Training Program

(Note: Measuring outcomes and tracking performance improvement indicators can provide information, which will assist your company in maximizing the skills of employees)

6. Additional Comments, Suggestions:

Company Representative (Printed) Representative Signature

Date

May your company's name be used in future marketing for the Iowa Industrial New Jobs Training Program?

_____ Yes _____ No.

THANK YOU FOR COMPLETING THE IOWA INDUSTRIAL NEW JOBS TRAINING PROGRAM (260E) EVALUATION
COMMUNITY COLLEGE PROGRAM SUMMARY EVALUATION INSTRUMENT (PART 2)

Company_____________________________ Date__________
Company Address____________________________________________________
Project Identification Number_____________ Training Completion Date__________
Community College______________________________
Community College Representative____________________________

Community College Program Summary
(Customized executive summary of the completed program)

Additional Summary Information
1. Ex: Number of new jobs to receive training
2. Ex: Average hourly wage of new positions $ 

Attach additional information, as needed
APPENDIX C. RESEARCH QUESTIONS, INTERVIEW GUIDE, AND CONSENT FORM TO PARTICIPATE

Research Questions / Interview Guide

Structure and direction for interviews include:

Research Questions

1. Did training provided through Iowa Industrial New Jobs Training Programs (260E) raise workplace skills of the participating company's employees?
2. How effective are Iowa's Community Colleges in providing training through Iowa Industrial New Jobs Training Programs (260E)?
3. How effective are service providers-private vendors in providing training through Iowa Industrial New Jobs Training Programs (260E)?
4. What is the overall satisfaction level of companies participating in Iowa Industrial New Jobs Training Programs (260E)?

Interview Guide

The researcher will explain the process and purpose of this study. Consent forms will be utilized, as needed, and stakeholders can withdraw at any time or decline to participate in this study. Unstructured interviewing techniques will follow research questions, but the process will adhere to the program evaluation form topics. The topic areas are:

1. Initial company contact/request,
2. Training plan development,
3. Service providers - community college,
4. Service providers - private training vendor,
5. Program management,
6. Overall satisfaction,
7. Program components – training plan to identified training objectives,
8. Open-ended questions on the evaluation, and
9. Overall perceptions of the value of the evaluation instrument.

The interview process will direct the researcher to utilize field notes, audiotapes telephone, and electronic mail to interview participants, which will develop rich-detailed holistic descriptions for the study. Member checking and feedback techniques will reinforce the importance of ensuring the validity of narratives from participants.
Consent to Participate

“The development of an evaluation process: Iowa Industrial New Jobs Training Programs (260E)”

Karen F. Poole  
September 2001-December 2002  
Iowa State University

You are invited to participate in a qualitative research study undertaken to explore the perceptions of effectiveness of economic development programs in the State of Iowa. Data collection for this Ph.D. thesis study will take place during the years 2001 and 2002.

You may be asked to participate in individual or small, focus-group interviews, scheduled at your convenience. Interviews will be documented using audiotape and researcher notes and will last approximately 30-50 minutes. I will also preserve scripts of various on-line/phone conversations conducted during the time period on the subject of your perceptions related to your expertise.

Your participation is confidential and this confidentiality will be maintained through: data and notes remaining accessible only to the researcher, removal of personally identifiable information from notes and transcripts, and use of personal and organizational pseudonyms in written reports and oral presentations of this research.

There are no foreseeable risks or discomforts to you as a participant in this research. Your participation is voluntary and you may withdraw at any time or decline to participate in certain portions of this study.

If at any time you have questions about this research or your participation, please contact me:

Karen F. Poole  
Iowa Department of Education  
Grimes State Office Building  
Des Moines, IA  50319-0146  
karen.poole@ed.state.ia.us  
(515) 281-3671

I consent to participate in this research study named and described above.

Signature: ___________________________ Date: ________________________

Researcher Signature: ___________________________ Date: ________________________

(Design, Dr. Barb Blakely Duffelmeyer-ISU)
APPENDIX D. SUMMATIVE REPORT ON ECONOMIC DEVELOPMENT

CONDITION OF IOWA COMMUNITY COLLEGES
IOWA DEPARTMENT OF EDUCATION
IOWA COMMUNITY COLLEGES
FISCAL YEAR 2000-2001

The researcher of this study wrote this section of the Condition of Iowa Community Colleges Report. Training and retraining programs delivered by Iowa Community Colleges, monitored by the Iowa Department of Economic Development, and reported on the Management Information System (MIS) for Fiscal Year 2000-2001, are separated into four areas. The areas include Iowa Industrial New Jobs Training Programs (260E), Iowa Jobs Training Programs (260F), Accelerated Career Education - ACE (260G), and Apprenticeship. Community college reports are based on fiscal year, while economic development program timeframes may be up to 10 years.

This appendix presents the Iowa Industrial New Jobs Training Program (260E) data. Three community colleges did not report 260E hours for Fiscal Year 2000-2001 (July 2000-June 2001) on the MIS. The number of students is unduplicated. Definitions for programs are from the Iowa Department of Economic Development (IDED).

Iowa Industrial New Jobs Training Programs (260E)

Iowa Industrial New Jobs Training Programs (260E) assist businesses that are creating new positions or new jobs in the State of Iowa. The community college district in which the new or expanding business is located issues training certificates (bonds) to pay for the training costs. Flexible funding may be utilized to meet a variety of training and employee development needs.

TABLE 36 - 260E Training Provided by Iowa Community Colleges
Fiscal Year 2000-2001

<table>
<thead>
<tr>
<th>Non-Credit Programs</th>
<th>Unduplicated Students</th>
<th>Contact Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture Education</td>
<td>2</td>
<td>13.50</td>
</tr>
<tr>
<td>Agricultural Sciences</td>
<td>1</td>
<td>21.30</td>
</tr>
<tr>
<td>Basic Skills</td>
<td>35</td>
<td>1,190.40</td>
</tr>
<tr>
<td>Business Management and Administrative Services</td>
<td>3,096</td>
<td>91,333.60</td>
</tr>
<tr>
<td>Construction Trades</td>
<td>68</td>
<td>2,024.00</td>
</tr>
<tr>
<td>Engineering</td>
<td>30</td>
<td>1,576.80</td>
</tr>
<tr>
<td>Engineering-Related Technologies</td>
<td>2,723</td>
<td>197,324.20</td>
</tr>
<tr>
<td>Health Professions and Related Sciences</td>
<td>82</td>
<td>932.80</td>
</tr>
<tr>
<td>Health-Related Knowledge and Skills</td>
<td>31</td>
<td>37.20</td>
</tr>
<tr>
<td>Marketing Education</td>
<td>75</td>
<td>586.40</td>
</tr>
<tr>
<td>Mechanics and Repairers</td>
<td>387</td>
<td>9,564.80</td>
</tr>
<tr>
<td>Precision Production Trades</td>
<td>696</td>
<td>33,248.60</td>
</tr>
<tr>
<td>Trade and Industrial Occupations</td>
<td>291</td>
<td>16,626.60</td>
</tr>
<tr>
<td>Transportation and Materials Moving Workers</td>
<td>97</td>
<td>2,440.40</td>
</tr>
<tr>
<td><strong>260E Non-Credit Total</strong></td>
<td><strong>7,614</strong></td>
<td><strong>356,920.60</strong></td>
</tr>
</tbody>
</table>
TABLE 36 - 260E Training Provided by Iowa Community Colleges
Fiscal Year 2000-2001, Continued

<table>
<thead>
<tr>
<th>Credit Programs</th>
<th>Unduplicated Students</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precision Production Trades</td>
<td>23</td>
<td>69.00</td>
</tr>
<tr>
<td><strong>260E Credit Total</strong></td>
<td><strong>23</strong></td>
<td><strong>69.00</strong></td>
</tr>
</tbody>
</table>

Source: Iowa Department of Education, Bureau of Community Colleges, Management Information System (MIS).

Iowa Jobs Training Programs (260F)

**Fiscal Year 2000-2001**

**260F**

- 222,000.75 Contact Hours
- 54.00 Credit Hours

Iowa Jobs Training Programs (260F) foster growth and competitiveness of Iowa's business and industry by building workforce skills and expertise. Customized training programs are developed for current employees.

TABLE 37 - 260F Training Provided by Iowa Community Colleges
Fiscal Year 2000-2001

<table>
<thead>
<tr>
<th>Non-Credit Programs</th>
<th>Unduplicated Students</th>
<th>Contact Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture Education</td>
<td>425</td>
<td>8,031.60</td>
</tr>
<tr>
<td>Basic Skills</td>
<td>28</td>
<td>642.00</td>
</tr>
<tr>
<td>Business Management and Administrative Services</td>
<td>6,306</td>
<td>85,996.51</td>
</tr>
<tr>
<td>Communications</td>
<td>57</td>
<td>205.20</td>
</tr>
<tr>
<td>Computer and Information Sciences</td>
<td>22</td>
<td>4,346.40</td>
</tr>
<tr>
<td>Construction Trades</td>
<td>522</td>
<td>39,300.00</td>
</tr>
<tr>
<td>Engineering-Related Technologies</td>
<td>2,192</td>
<td>36,489.30</td>
</tr>
<tr>
<td>Health Professions and Related Sciences</td>
<td>139</td>
<td>1,460.80</td>
</tr>
<tr>
<td>High School/Secondary Diplomas &amp; Certificates</td>
<td>19</td>
<td>1,386.00</td>
</tr>
<tr>
<td>Marketing Education</td>
<td>94</td>
<td>682.00</td>
</tr>
<tr>
<td>Mechanics and Repairers</td>
<td>526</td>
<td>11,876.10</td>
</tr>
<tr>
<td>Precision Production Trades</td>
<td>610</td>
<td>28,934.14</td>
</tr>
<tr>
<td>Protective Services</td>
<td>185</td>
<td>1,076.40</td>
</tr>
<tr>
<td>Trade and Industrial Occupations</td>
<td>23</td>
<td>806.40</td>
</tr>
<tr>
<td>Transportation and Materials Moving Workers</td>
<td>86</td>
<td>767.90</td>
</tr>
<tr>
<td><strong>260F Non-Credit Total</strong></td>
<td><strong>11,234</strong></td>
<td><strong>222,000.75</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credit Programs</th>
<th>Unduplicated Students</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Management and Administrative Services</td>
<td>13</td>
<td>13.00</td>
</tr>
<tr>
<td>Science Technologies</td>
<td>41</td>
<td>41.00</td>
</tr>
<tr>
<td><strong>260F Credit Total</strong></td>
<td><strong>54</strong></td>
<td><strong>54.00</strong></td>
</tr>
</tbody>
</table>

Source: Iowa Department of Education, Bureau of Community Colleges, Management Information System (MIS).
Accelerated Career Education (ACE 260G)

Accelerated Career Education (ACE 260G) supports the development or expansion of educational programs that address critical workforce needs. The legislation contained three components: infrastructure, program job credits, and student aid.

TABLE 38 - 260G Training Provided by Iowa Community Colleges
Fiscal Year 2000-2001

<table>
<thead>
<tr>
<th>Non-Credit Programs</th>
<th>Unduplicated Students</th>
<th>Contact Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Management and Administrative Services</td>
<td>80</td>
<td>1,968.00</td>
</tr>
<tr>
<td>Mechanics and Repairers</td>
<td>4</td>
<td>2,304.00</td>
</tr>
<tr>
<td>260G Non-Credit Total</td>
<td>84</td>
<td>4,272.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credit Programs</th>
<th>Unduplicated Students</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture Education</td>
<td>5</td>
<td>120.50</td>
</tr>
<tr>
<td>Business Management and Administrative Sciences</td>
<td>483</td>
<td>7,746.00</td>
</tr>
<tr>
<td>Construction Trades</td>
<td>20</td>
<td>472.50</td>
</tr>
<tr>
<td>Engineering-Related Technologies</td>
<td>35</td>
<td>588.00</td>
</tr>
<tr>
<td>Health Professions and Related Sciences</td>
<td>112</td>
<td>1,414.00</td>
</tr>
<tr>
<td>Mechanics and Repairers</td>
<td>300</td>
<td>5,336.50</td>
</tr>
<tr>
<td>Precision Production Trades</td>
<td>50</td>
<td>1,446.00</td>
</tr>
<tr>
<td>260G Credit Total</td>
<td>1,005</td>
<td>17,123.50</td>
</tr>
</tbody>
</table>

Source: Iowa Department of Education, Bureau of Community Colleges, Management Information System (MIS).
Apprenticeship programs utilize the most up-to-date technologies that are available in the workplace. The Bureau of Apprenticeship and Training must approve all apprenticeship projects funded through the Iowa Department of Economic Development.

### TABLE 39 - Apprenticeship Training Funded by 260E and 260F and Provided by Iowa Community Colleges
Fiscal Year 2000-2001

<table>
<thead>
<tr>
<th>Non-Credit Programs</th>
<th>Unduplicated Students</th>
<th>Contact Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Apprenticeship 260E Funds</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrician</td>
<td>32</td>
<td>1,596.00</td>
</tr>
<tr>
<td>Machine Tool Operations/Machine Shop</td>
<td>35</td>
<td>2,563.00</td>
</tr>
<tr>
<td></td>
<td><strong>260E Apprenticeship Non-Credit Total</strong></td>
<td><strong>4,159.00</strong></td>
</tr>
<tr>
<td><strong>Apprenticeship 260F Funds</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associated Builders &amp; Contractors</td>
<td>72</td>
<td>10,980.00</td>
</tr>
<tr>
<td>Business Administration &amp; Management, Other</td>
<td>1</td>
<td>2.00</td>
</tr>
<tr>
<td>Carpenter</td>
<td>23</td>
<td>3,210.00</td>
</tr>
<tr>
<td>Electrician</td>
<td>5</td>
<td>720.00</td>
</tr>
<tr>
<td>Industrial Equipment Maintenance and Repair</td>
<td>38</td>
<td>4,100.00</td>
</tr>
<tr>
<td>Machine Tool Operations/Machine Shop</td>
<td>5</td>
<td>614.50</td>
</tr>
<tr>
<td>Tool and Die Making</td>
<td>18</td>
<td>3,110.40</td>
</tr>
<tr>
<td></td>
<td><strong>260F Apprenticeship Non-Credit Total</strong></td>
<td><strong>22,736.90</strong></td>
</tr>
<tr>
<td><strong>260E/260F Apprenticeship Non-Credit Total</strong></td>
<td><strong>229</strong></td>
<td><strong>26,895.90</strong></td>
</tr>
</tbody>
</table>

Source: Iowa Department of Education, Bureau of Community Colleges, Management Information System (MIS).
APPENDIX E. NARRATIVES

For purpose of clarification, coded narratives, including a page number were documented by the researcher and are interchangeable through the study. The quotes included in this appendix are integrated in Chapter IV Findings.

Iowa Department of Economic Development (IDED) – ED

- "We want to know if companies were satisfied with the training and services they are receiving through economic development programs" (ED, p.1).

Company representative – CP

- "Relationships are built at this company, employee turnover is low, and safety incentives are a priority" (CP, p. 1).
- "Cross training opportunities allow job sharing, build employee satisfaction, and result in a highly skilled workforce. We believe in personal wellness, physical wellness, and company wellness" (CP, p. 1).
- "Employees are the key to company profitability and the company believes strongly in training, a positive work environment, and current job-related skills that will allow individuals to attain job satisfaction" (CP, p. 2).
- "Effectiveness of training programs begins with consensus of identifiable training objectives and measurable outcomes" (CP, p. 3).
- "The college responded immediately, was extremely knowledgeable, completely prepared, and the presentation of information related to the Iowa Industrial New Jobs Training Program (260E) was comprehensive" (CP, p. 1).
- "The community college completed a company wide needs assessment in developing the training plan and job-specific assessments were accomplished in preparation for training" (CP, p. 4).
- "The college knew what they were doing in developing the training plan" (CP, p. 2).
- "The quality of community college trainers has exceeded our expectations in every way" (CP, p. 5).
- "This person and college are good, with the knowledge level and experience excellent" (CP, p. 10).
- "We are still in the process of evaluating transfer of training from the classes funded through our 260E program" (CP, p. 6).
- "The community college economic developer was a phone call away" (CP, p. 7).
- "No, I guess I haven’t talked about that. Are you in need of any of the services" (CL, p. 9)?
• "I'll let you know" (CP, p. 8).
• "I wouldn't say something or mark this evaluation if I didn't mean it" (CP, p. 9).
• Let's let future generations tackle this question" (CP, p. 12).
• "It looks good, and with the Company Program Evaluation Instrument (Part 1) you've covered evaluation of 260E programs" (CP, p. 13).

Community college economic developer – CL

• "The evaluation process must allow each of the community colleges flexibility to utilize informal needs assessment methods, must be valuable to the company, assess the impact of training for the company-skill level increased, complete after the training is finished, provide feedback to the company, and meet state needs" (CL, p. 4).
• "Since the process is a matter of interpretation, the evaluation instruments must be developed with clarity toward mission or outcomes to be accomplished" (CL, p. 5).
• "The form must be user friendly, easy to complete, and return of the instrument tied to the final agreement reported to the Iowa Department of Economic Development" (CL, p. 5).
• "Most companies have heard about economic development programs available in the state, but doing research about the company and knowing how I can assist them is the basis for a successful partnership" (CL, p. 6).
• "The needs assessment process drives the training and services the community college will provide through the 260E program" (CL, p. 7).
• "Faculty and trainers I contract with have years of experience and are experts in their field" (CL, p. 7).
• "Reflects a sustainable system/process improvement with impact on the company" (CP, p. 11).
• "Companies participating in 260E programs can contract with any service provider for training or services" (CL, p. 8).
• "In the eighteen years I've been involved with economic development programs one thing remains constant, all programs change from the preliminary agreement to the repayment of bonds, and flexibility allows the company and college to react to changes in environments including: products, customers, and markets" (CL, p. 9).
• "What has this allowed you-the company-to do that you couldn’t have done" (CL, p. 10)?
APPENDIX F. COMPILERED EVALUATION INSTRUMENTS
WITH IMPLICATIONS

Iowa Community Colleges provide leadership in assessing the effectiveness of training provided through collaborative economic development initiatives and accountability strategies for assessing training in raising the skills of Iowa workers. In Spring 2002, Iowa Community College economic developers volunteered to participate in implementation of the pilot evaluation process and instruments developed through this study. Three (3) additional community colleges and three (3) Iowa Industrial New Jobs Training Program (260E) participating companies responded to the Iowa Industrial New Jobs Training Program (260E) evaluation instruments (Appendix B), which will provide collaboration for the evaluation process developed by this study.

Compiled Company Program Evaluation Instrument (Part 1)

Compiled findings of the collective Company Program Evaluation Instrument (Part 1) are presented in this section of the study, with findings correlated to the pilot case study results. The evaluation instrument and performance indicator rating scale duplicated the pilot case study evaluation model.

Compiled Findings. Table 11 results from the three (3) companies are within range of the pilot case study, which reported a consistent performance indicator rating level four (4) Very good, highly satisfactory. The compiled results ranked no lower than a level four related to the performance of the community college’s response to initial company contact/request and corroborate with the pilot case study evaluation model (Table 1).
1. Rate the Performance of the Community College's Response to Initial Company Contact/Request

Table 11. Rate the Performance of the Community College's Response to Initial Company Contact/Request

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Responded to company request promptly.</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Knowledgeable, organized, and prepared to assist company.</td>
<td></td>
<td></td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Clearly explained the process of the Iowa Industrial New Jobs Training Program. (Application/approval process, eligibility requirements, development of training plan, delivery of services/training, company repayment responsibility, and system of reimbursement).</td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Performance Indicator Rating Scale
5 = Excellent, exceeded expectations.
4 = Very good, highly satisfactory.
3 = Acceptable, need for improvement.
2 = Marginal, need significant improvement.
1 = Unacceptable, not satisfied.
NA = Not applicable.


Compiled Findings. The compiled results fluctuate between a performance indicator level five (5) Excellent, exceeded expectations to a level four (4) Very good, highly satisfactory. Table 12 responses support the pilot case study evaluation model (Table 2), as perceived by participating 260E companies.

Compiled Findings. Table 13 results are within range of the pilot case study responses, with performance indicator ratings of five (5) Excellent, exceeded expectations to a level four (4) Very good, highly satisfactory. The combined company perceptions confirm the pilot case study evaluation model (Table 3).
2. Rate the Performance of Community College Assistance in Development of the Training Plan

Table 12. Rate the Performance of Community College Assistance in Development of the Training Plan

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Contributed to the identification of training needs/needs assessments.</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Flexible, responsive, and focused on company needs.</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Training objectives/outcomes linked to company goals.</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Designed training objectives to include performance measures.</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Plan was developed to assist company to reinforce training.</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Implementation/timeframes were clearly established.</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Performance Indicator Rating Scale
5 = Excellent, exceeded expectations.
4 = Very good, highly satisfactory.
3 = Acceptable, need for improvement.
2 = Marginal, need significant improvement.
1 = Unacceptable, not satisfied.
NA = Not applicable.


3. Rate the Performance of Service Providers-Community College Training

Table 13. Rate the Performance of Service Providers-Community College Training

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Company provided input for curriculum development.</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Identified performance goals (Skill-based improvement).</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Implementation/timeframes were clearly identified.</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Training scheduled to meet company needs.</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Quality of instructors/trainers.</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Productivity improvements implemented due to training.</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Training was evaluated to assess impact to the job.</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Performance Indicator Rating Scale
5 = Excellent, exceeded expectations.
4 = Very good, highly satisfactory.
3 = Acceptable, need for improvement.
2 = Marginal, need significant improvement.
1 = Unacceptable, not satisfied.
NA = Not applicable.

Compiled Findings. Compiled results are ranked closer to a performance indicator rating four (4) Very good, highly satisfactory with NA or Not applicable responses noted by the participating companies. Overall reactions from Table 14 are supportive of the pilot case study evaluation model (Table 4).

Compiled Findings. Table 15 results are comparable to the pilot case study evaluation model (Table 5), but are not consistently ranked five (5) Excellent, exceeded expectations. Responses range from a five (5) Excellent, exceeded expectations to a three (3) Acceptable, need for improvement. NA, Not applicable notation was not included in this area of the compiled evaluation instrument.

Compiled Findings. The compiled results in Table 16 range from five (5) Excellent, exceeded expectations to four (4) Very Good, highly satisfactory. The pilot case study evaluation model consistently rated a level five (5). Results are comparable to the pilot case study evaluation model (Table 6).

Compiled Findings. Table 17 responses are not comparable to the pilot case study evaluation model (Table 7) results, since all colleges did not apply similar customization techniques for assessing company objectives of the training plan. Colleges utilized a combination of training subjects/topics and identifiable/measurable objectives or outcomes in this section of the evaluation instrument.
4. Rate the Performance of Service Providers-Private Training Vendors

**Table 14. Rate the Performance of Service Providers-Private Training Vendors**

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Company provided input for curriculum development.</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>b. Identified performance goals (Skill-based improvement).</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>c. Implementation/timeframes were clearly identified.</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>d. Training scheduled to meet company needs.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>e. Quality of instructors/trainers.</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>f. Productivity improvements implemented due to training.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>g. Training was evaluated to assess impact to the job.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

The Performance Indicator Rating Scale

5 = Excellent, exceeded expectations.
4 = Very good, highly satisfactory.
3 = Acceptable, need for improvement.
2 = Marginal, need significant improvement.
1 = Unacceptable, not satisfied.
NA = Not applicable.

Source: Iowa Community Colleges. Iowa Industrial New Jobs Training Program (260E), Compiled Company Program Evaluation Instrument (Part 1)

5. Rate the Performance of the Community College-Program Management

**Table 15. Rate the Performance of the Community College-Program Management**

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Finance and withholding diversion (Repayment) procedures explained.</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>b. Monitoring training program progress.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>c. Questions and/or concerns were addressed in a timely and efficient manner.</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>d. Fiscal administration of funds (Training expense reimbursement, purchase of training and materials).</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>e. Explained official reporting procedures including requirements: Social security numbers of trainees, training enrollments, etc.</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>f. Identified services available through other agencies (Tax credits, job placement, workforce development services, etc.).</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

The Performance Indicator Rating Scale

5 = Excellent, exceeded expectations.
4 = Very good, highly satisfactory.
3 = Acceptable, need for improvement.
2 = Marginal, need significant improvement.
1 = Unacceptable, not satisfied.
NA = Not applicable.

Source: Iowa Community Colleges. Iowa Industrial New Jobs Training Program (260E), Compiled Company Program Evaluation Instrument (Part 1)
6. Rate Company Satisfaction of the Program-Overall Summary

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Extent to which the program met company expectations for training employees.</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Effectiveness of the training provided by the program in raising skill levels of employees.</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Satisfaction with community college economic development contact/representative.</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Overall satisfaction of the Iowa Industrial New Jobs Training Program.</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Performance Indicator Rating Scale
5 = Excellent, exceeded expectations.
4 = Very good, highly satisfactory.
3 = Acceptable, need for improvement.
2 = Marginal, need significant improvement.
1 = Unacceptable, not satisfied.
NA = Not applicable.

7. Rate the Performance of the Program Components-Company Training Plan

| Table 17. Rate the Performance of the Program Components-Company Training Plan |
|----------------------------------|-------------------------------|
| (College to customize to individual company objectives of the training plan) |   |   |   |   | NA |
| Executive Planning               |   |   |   |   |   |
| Team Training                    |   |   |   |   |   |
| Executive Follow Up              |   |   |   |   |   |
| Team Training – Next Follow Up   |   |   |   |   |   |
| Introduction to Computers        |   |   |   |   |   |
| Quality Assurance                |   |   |   |   |   |
| Ergonomics/Carpal Tunal          |   |   |   |   |   |
| Tool & Die                       |   |   |   |   |   |
| Employees receive specific job skills that improved job performance |   |   |   |   |   |
| Employees effectively use Manufacturing Skills to be successful on their job |   |   |   |   |   |
| The workplace became safer-job related injuries decreased |   |   |   |   | x |
| Employees effectively use new CNC Lathe applications |   |   |   |   | x |
| Supervisors learned skills to effectively train new employees how to do the job and leadership skills |   |   |   |   | x |
| Training materials and equipment were purchased that enhance the presentation of training and operations |   |   |   |   | x |
| Employees effectively use new computer applications |   |   |   |   | x |

The Performance Indicator Rating Scale

5 = Excellent, exceeded expectations.
4 = Very good, highly satisfactory.
3 = Acceptable, need for improvement.
2 = Marginal, need significant improvement.
1 = Unacceptable, not satisfied.
NA = Not applicable.

Source: Iowa Community Colleges, Iowa Industrial New Jobs Training Program (260E), Compiled Company Program Evaluation Instrument (Part I)

Compiled Findings. Narratives from Table 18 provide perceptions of participating companies, as documented in the pilot case study evaluation model (Table 8). Results are not comparable, but rather provide additional qualitative accounts from individual companies.

Table 18. Company Program Evaluation Instrument – Questions

1. Do you intend to use the community college for additional training?
   **“3” Yes _____ No. If no, please explain**

2. Suggestions for improving the Iowa Industrial New Jobs Training Program?
   **“None”**

3. What was the overall impact of the Iowa Industrial New Jobs Training Program on your Company (Efficiency, Operations, productivity, and profitability)?
   **“All training was helpful. It improved quality, supervisor performance, and employee skills levels. Help establish the groundwork for start-up, self-directed teams, and culture. Fast start-up. Profitable in first year. Rapid growth. Keep it up, helps when we go to our corporate office and can show the dedication the state is willing to add jobs. Thank you! Added to our bottom line of $1 million.”**

4. Savings and/or benefits from employees trained through the Iowa New Jobs Training Program (Reduced operating costs, increased production, reduced material waste, etc.)
   **“Refer to number 3**
   **No supervision. Focus on productivity. Reduction of scrap. Operators better educated to handle task, increased productivity”**

5. Estimated dollar value of impact from Iowa Industrial New Jobs Training Program
   **$**
   **“It is difficult to apply a dollar amount to the type of training our company has participated in. $100,000. $1-5 million”**

   (Note: Measuring outcomes and tracking performance improvement indicators can provide information, which will assist your company in maximizing the skills of employees)

6. Additional Comments, Suggestions:

May your company’s name be used in future marketing for the Iowa Industrial New Jobs Training Program?
   **“2” Yes ___ 1 No.**

   **“I would like you to be able to use, but it is our corporate policy to not be identified”**

Source: Iowa Community Colleges, Iowa Industrial New Jobs Training Program (260E), Compiled Company Program Evaluation Instrument (Part I)
Compiled Community College Program Summary Evaluation Instrument (Part 2)

Compiled findings of the collective Community College Program Evaluation Instruments (Part 2) are presented in this section of the study, with findings correlated to the pilot case study evaluation model results. The evaluation instrument and performance indicator rating scale duplicated the initial case study evaluation model.

1. Community College Program Summary

<table>
<thead>
<tr>
<th>Table 19. Community College Program Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Customized executive summary of the completed program)</td>
</tr>
</tbody>
</table>

"Company was a start-up ice cream cone bakery in 2000. The newly constructed plant focused on production of sugar cones, to fulfill firm supply agreements for major ice cream novelty customers. There is currently one other company serving the ice cream novelty business in the United States. The company created 21 new full-time positions at the time they entered into a 260E agreement with the college. Training focused new employees on a Team Concept of management and running the business. Additionally, employees were given training on the state-of-the art cone baking machines from Walters of Germany and safety and industrial maintenance. The Iowa New Jobs Training Program Funds provided $110,000 for the project. The company has doubled the plant capacity since 2000 and has created an additional 22 full-time positions."

"The company produces belt conveyors, bucket elevators, automatic bag palletizers, value and open mouth bag filling equipment, conveyor pulleys, and in industrial rollers. Company employs over 391 people in Iowa and entered into a 260E agreement with the college in 1998 to add 391 jobs. Training focused on providing new employees with manufacturing skills, leadership, safety, CNC lathe and mill, computer, training room equipment and rental, business application software. Iowa Industrial New Jobs Training Program Funds provided $2.565 million for the project with $1,638,265 in actual training cost."

"Company makes stampings and large & small welded assemblies for automobiles customers include General Motors, Ford, Chrysler, Nissan, Subaru, BMW, and Isuzu. The company employs over 350 people in Iowa and entered into a 260E agreement with the college in 1995 to add 50 jobs. Training focused on providing new employees with AutoCAD, safety, blueprint reading, quality assurance, measurements, and SPC. Iowa Industrial New Jobs Training Program Funds provided $96,810.00 for the project."

Source: Iowa Community Colleges, Iowa Industrial New Jobs Training Program (260E). Compiled Community College Program Summary Evaluation Instrument (Part 2)
Compiled Findings. The community college economic developers compose the 260E program company summary. Information collected from this section of the evaluation process presents facts and figures related to the company specific program. The format is comparable to the pilot case study evaluation model (Table 9), but the information will be customized to each company.

Compiled Findings. Responses are comparable to the pilot case study evaluation model (Table 10), but specific to the individual company 260E program. This section of the Community College Program Summary Evaluation Instrument (Part 2) would provide opportunity for expansion and customization.

2. Additional Summary Information

<table>
<thead>
<tr>
<th>Table 20. Additional Summary Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ex: Number of new jobs projected to receive training.</td>
</tr>
</tbody>
</table>

Source: Iowa Community Colleges. Iowa Industrial New Jobs Training Program (260E), Compiled Community College Program Summary Evaluation Instrument (Part 2)
REFERENCES


State of Iowa. (2000). *Iowa Administrative Code, 261*. (Chapter 4, p.1)


ACKNOWLEDGEMENTS

There’s a saying, “The Truly Educated Never Graduate,” and I believe this to be true, but a post-graduate degree does present an event called graduation—Thank you so much! This goal and the accomplishment there after are dedicated to my family. To my Mother, Father, Husband—Matthew, Children—Christopher, Andrea, Grandsons—Walker and Samuel, and my best friend—Patrice. Without the support, understanding, encouragement, tolerance, and love of these individuals I could not have completed this objective.

The professors, coursework, studying, research, writing, and rewriting has been a personal journey of dedication. I thank my committee: Drs. Thomas Chacko, Sharon Drake, Larry Ebbers, Daniel Robinson, and John Schuh, and especially Judy Weiland, the departmental graduate records staff member. This dissertation research would not have been possible without the support, cooperation, and expertise of the Iowa Department of Economic Development, Iowa Department of Education, participating company representative, and Iowa Community College developers.

Another saying that’s undeniable is, “The only good dissertation is a done dissertation”. May I say it’s true! I look forward to new challenges in the future. Thank you all!