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IMPLEMENTER PERCEPTIONS OF WASHINGTON STATE'S
INTEGRATED BASIC EDUCATION AND SKILLS
TRAINING (I-BEST) PROGRAM

by

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May 2010

~~Approved~~ by:

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ABSTRACT

IMPLEMENTER PERCEPTIONS OF WASHINGTON STATE'S INTEGRATED BASIC EDUCATION AND SKILLS TRAINING (I-BEST) PROGRAM

Robert W. Fox
Old Dominion University, 2010
Director: Dr. Mitchell R. Williams

Basic skills instruction has had poor success in equipping adults with the training needed in today's global economy. The educational leaders in Washington State realized the necessity of rapidly equipping adults with career skills and developed the Integrated Basic Education and Skills Training (I-BEST) program to meet workforce needs. In 2004, Washington State piloted the I-BEST program in ten institutions, but it has since expanded to all 34 of the State's community colleges. I-BEST is an instructional method which provides basic skills support to ABE and ESL students while they receive career training. I-BEST uniquely pairs a basic skills instructor with a vocational instructor in the classroom at the same time. Previous research has looked at the positive impact the program has had on the retention and academic success of students. Unfortunately, the pivotal role instructors and administrators play in the program's success has been largely ignored. This study explored the perceptions of the instructors, program managers, and the managers' immediate supervisors regarding the I-BEST program.

The Administrators and Instructors I-BEST Perception Survey (AIIPS) was developed and tested to explore the perceptions of the program's implementers. A panel of experts familiar with the program helped to establish the content validity of the instrument. A pilot group of I-BEST implementers helped to establish the reliability of the instrument. All

of the current I-BEST implementers were contacted via electronic mail and sent a link to the instrument on SurveyMonkey. The data collection took place at the end of the fall 2009 academic term.

The study explored whether there were differences in the perceptions of the instructors, program managers, and the managers' immediate supervisors. The group differences were compared using *t* tests. Statistically significant differences were observed in areas such as the adequacy of instructor release time, adequacy of student support services, and using employment outcomes to modify instruction. Recommendations to decision-makers include limiting the number of data collection items being tracked, and increasing the number of minority instructors involved in the I-BEST program. Implications of the findings may assist the State Board and community college presidents in enhancing the program.

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CHAPTER 1

INTRODUCTION

The ability of the United States to compete globally is being eroded by the significant number of Americans who lack the basic skills necessary for today's knowledge economy (Conference Board, 2006). The Department of Education estimates approximately 30 million Americans (i.e., 14% of the population) possess literacy skills functioning below the basic literacy level; despite years of effort this figure has not improved since 1992 (White & Dillow, 2005). An advanced industrialized nation like the United States cannot continue to successfully compete in the global marketplace of the 21st century when so many of its citizens are unable to read and comprehend anything but the simplest materials.

While it appears the educational skills in America are declining, those in other industrialized countries continue to progress (Friedman, 2005). A survey conducted by the Organization for Economic Co-operation and Development (OCED) found the literacy and numeracy skills of the United States ranked fifth out of the six countries compared in the study (ProLiteracy Worldwide, 2006). The OCED survey confirms the findings identified previously by Comings, Reder, and Sum (2001) which found approximately 42% of all working age adults lack the requisite skills to succeed in the modern workforce. American businesses are fully aware of worker skill deficiencies because they feel the effects firsthand (National Association of Manufacturers, 2005). The impact is felt in lost productivity, hence in profit to business, which in turn means less tax revenue for public services the nation requires.

However, the costs to the nation extend well beyond the financial sector. Skills deficiencies play a role in the increase in the number of individuals requiring public assistance, participating in civic activities, and taxing an overburdened health care system (Levin, 2005). In addition, there is the personal cost in terms of an individual's self-worth and his or her ability to contribute to the lives of others (Seppanen, 1991). Whether the costs are personal or national, educational underachievement is a challenge that has been ignored far too long.

The challenge is how to address the problem in an era when tax dollars for educational programs are growing increasingly scarce. All levels of higher education have experienced financial pressures as the government limits funding while concurrently demanding heightened accountability (Gladieux, King, & Corrigan, 2005). In the case of adult basic education it has been especially difficult to argue for increased funding based on prevailing performance measures because the past success rates have been so poor. The students who do persist for one year of study typically show only marginal gains (e.g., improvement from a fifth-grade to a sixth-grade level) which have minimal real-life returns (Grubb, Badway, & Bell, 2003).

Prior research (Prince & Jenkins, 2005; Tyler, 2001) found only between 30 - 35% of ABE/GED students continue on to any postsecondary education and only a very small number earn an associate's degree or certificate. Other research (Amstutz & Sheard, 2000) has found the drop-out rate in adult basic programs to be as high as 80%. The dismal success rates impede the efforts of supporters of basic skills education and buttress the position of its detractors. Fortunately, the supporters of basic skills education have shown a

tireless commitment to press lawmakers into funding adult basic education so the talents of millions of Americans can be tapped for the advancement of the entire nation.

Background of the Study

The first federal funding of adult basic education occurred under Title IIB of the Economic Opportunity Act (EOA) of 1964. The goal of the legislation was to address educational inequalities which effectively barred individuals from employment (West, 2005). However, it was not until 1966 with the passage of the Adult Education Act that Adult Basic Education (ABE) became a distinctive program (Parker, 1990). In the late 1990s the Adult Education Act was replaced with the Workforce Investment Act (1998). The passage of this legislation moved ABE under the Adult Education and Family Literacy Act (Title II of WIA). In shifting adult basic education under WIA, the federal government pointedly implied ABE was now to be viewed conceptually as workforce development (Minnesota Workforce Education, n.d.). WIA further underscored the shift to workforce development by mandating the reporting of program outcomes, including participant entry into unsubsidized employment, and employment retention rates six months after entry (Bingman, Ebert, & Bell, 2000; Workforce Investment Act, 1998).

The Economic Opportunity Act and the Workforce Investment Act show how federal legislation can be responsive to citizens' needs and promote the general economy. The passage in 1964 of EOA sought to expand the training and employment opportunities for the millions of Americans still living in poverty. Perhaps President Lyndon B. Johnson was anticipating critics of his efforts when he said to a group of delegates at the White House Conference on Education in 1965, "Education will not cure all the problems of society, but without it no cure for any problem is possible" (Woolley & Peters, n.d.). While

EOA did not eradicate poverty as its supporters hoped, nevertheless it began the process of meeting skills deficiencies through adult basic education.

The process which began with EOA became more integrated under WIA with basic skills training focused on meeting employment objectives. The passage of the Workforce Investment Act responded not only to the workforce needs of millions of Americans but also to pressures for greater accountability from a concerned electorate. In adopting WIA, governmental officials took an important step toward moving greater numbers of low-skilled adults into the workforce. Yet, more work needs to be done. Millions of Americans still need skills training to move into well paying employment opportunities, and this task needs to be accomplished quickly to avoid a potential national crisis.

The nation is growing older, and millions of citizens from the baby boomer generation are moving into retirement. The number of people aged 65 and older is projected to more than double from 35 million in 2000 to 71 million in 2030. While the number of retirees is increasing, the expansion of the American workforce is decreasing (Karoly & Panis, 2004). The consequences of this decline are serious because a robust expansion of the workforce is needed to pay into the tax system which supports the health and social services system. The financial impact on the nation could be catastrophic given that health care costs are three to five times greater for those over 65 years compared to those who are under 65 years old (Goulding, Rogers, & Smith 2003). Karoly and Panis (2004) suggest one possible solution is the recruitment of people who have been largely ignored (e.g., disabled citizens). Other citizens who could help meet the nation's workforce needs include immigrants and persons who are deficient in basic skills. In recent years

several states have implemented programs targeting citizens from these populations in an effort to fuel expansion of the workforce so the nation remains economically vibrant.

Washington State

The need to address this issue is especially important to Washington state because the number of adults aged 65 or older will increase from its current level of 662,000 to approximately 1.66 million in 2030. This represents a change from 11.2% to 19.7% of the population (Office of Financial Management, 2008). The aging population will put greater demands on the state, but the beginning effects already are being seen. A recent report suggests Washington state's health index has worsened over the past year, which represents a continuation of a trend in three of the last four years (Washington State Economic and Revenue Forecast Council, 2007). The burden for providing health and support services for Washington's aging population will have to be shouldered by a shrinking workforce. The Office of Financial Management (2008) reports in 2000 there were 4.6 workers for every person over the age of 65 years old but by 2030 this ratio will drop to 2.5 workers. The increased demand for health and social services coupled with fewer workers will require a highly skilled and well paid workforce in order to avoid significant cutbacks and hardship to some of the state's most vulnerable citizens.

, The challenge for Washington state is to educate low-skilled adults so they can fill the growing employment gaps. This undertaking is in many ways daunting. The best available figures estimate approximately 15% of the adult population is capable of reading at only the lowest literacy skill level (Washington State Institute for Public Policy, 2008). Despite the difficult challenge, steps must be taken soon because Washington cannot fill the need based solely on its young high school graduates. The state director of adult basic

education, Israel Mendoza, commented at a symposium addressing the issue of college transitions, "...the working-age, low-skilled adult population in our state is the same size as all the high school graduating classes from the year 2000 through 2011" (U.S. Department of Education, 2007, p. 10). Mr. Mendoza went on to say that by 2030 approximately 20% of Washington state's working-age adults will be in this age group. Successfully raising adults' basic skill levels would increase their likelihood of attaining a better paying job, thus improving their standard of living while simultaneously increasing the state's revenue to pay for needed social services.

To meet this challenge Washington has adopted the Integrated Basic Education and Skills Training (I-BEST) program. I-BEST is an instructional design which concurrently teaches basic and vocational skills through the pairing of an ABE (i.e., Adult Basic Education) or ESL (i.e., English as a Second Language) instructor with a vocational instructor (Prince & Bloomer, 2005). Since I-BEST is a new program, there has been relatively little research conducted on the program. There appears to have been only one empirical study of the program since it was brought to scale, but its findings and other reports on I-BEST have been very positive (Bloomer, 2008; Cooper, 2007; Jenkins, Zeidenberg, & Kienzl, 2009; Washington State Board for Community and Technical Colleges [WSBCTC], 2008). The successful findings are not surprising because Washington state has a distinguished history of innovative programs for adult basic education students.

For example, the 1990s witnessed the Workplace Improvement of Necessary Skills (WINS) program and WorkFirst. Out of these efforts evolved the realization, "Only when basic skills instruction is coupled with occupational skills training does it generally have a

positive impact on employment and earnings" (Washington State Workforce Training and Education Coordinating Board [WTECB], 2002, p. 57). The WTECB conducted a study in 1997 which noted basic skills students who were enrolled for work related reasons did post earning increases over the next 3.5 years following the program, but the benefits did not exceed the costs to the taxpayers. The WTECB report (2002) concluded unless basic skills education is paired with career training, then meaningful financial gains cannot accrue to the participants and the public. Drawing from these prior lessons, the I-BEST program teaches basic skills simultaneously with training in high demand career fields. However, because the program is structured to have two instructors in the classroom at the same time, the State Board will eventually have to confront not only the issue of whether the program is effective, but also whether it produces positive results without adding burdensome costs to the state's taxpayers. A future study is intended to examine the cost effectiveness of the program (Jenkins, Zeidenberg, & Kienzl, 2009), but in the meantime the pivotal role the instructors and administrators play in the process has been largely overlooked. The current study corrects this oversight.

Purpose Statement

The purpose of this study is as follows: (a) to explore the differences in the perceptions of administrators and instructors regarding the I-BEST program, (b) to explore whether instructors and administrators in rural and non-rural institutions differ in their perceptions of the I-BEST program, and (c) to identify factors contributing to the success or failure of the I-BEST program.

Research Questions

The following research questions guided this study:

- 1) Is there a statistically significant difference in the perceptions of I-BEST instructors compared to the perceptions of administrators regarding the I-BEST program?
- 2) Is there a statistically significant difference in the perceptions of I-BEST program managers compared to the perceptions of their immediate supervisors regarding the I-BEST program?
- 3) Is there a statistically significant difference in the perceptions of instructors at rural community colleges compared to the perceptions of instructors at non-rural community colleges regarding the I-BEST program?
- 4) Is there a statistically significant difference in the perceptions of program managers at rural community colleges compared to the perceptions of program managers at non-rural community colleges regarding the I-BEST program?
- 5) Is there a statistically significant difference in the perceptions of administrators at rural community colleges compared to the perceptions of administrators at non-rural community colleges regarding the I-BEST program?

Significance of the Study

I-BEST has been recently mentioned by President Obama as an example of innovation worthy of support (White House Office of the Press Secretary, 2009). I-BEST combines Adult Basic Education (ABE) or English as a Second Language (ESL) with training in a particular market-driven vocational skill. The program started with 10 campuses during the 2004 - 2005 academic year but has since expanded to all 34 colleges offering certificates in areas ranging from appliance repair to welding. The pilot study for

the program found the I-BEST students had a 44% completion rate in the skills training compared to a 3% completion rate for the control group (Prince & Bloomer, 2005). The first participants in the program were ESL students, and therefore the initial findings were based on the pairings of ESL and vocational instructors. Since the pilot study the program has expanded to include both ABE and ESL students. Implementers' perceptions of I-BEST program merits investigation because there may be differences as a function of the student population being served.

One of the most extensive studies to date was the pilot study performed by the WSBCCTC (Prince & Bloomer, 2005) which launched the program. The WSBCCTC has presented more recent findings on the program which also show impressive results. The studies present findings from 24 colleges during the 2006-2007 academic year or descriptions of the experiences of specific colleges (Cooper, 2007; Jenkins, Zeidenberg, & Kienzl, 2009; Mendoza, 2008; WSBCCTC, 2008). The focus of these studies has been on student retention and success. One recent study has looked at the I-BEST administrators' experience (Bragg et al., 2007). However, this research only reported on the experience of one community college located in the Seattle metropolitan area. Bragg et al. (2007) interviewed officials as part of a larger national study and concluded that student support services and the leveraging of external partnerships were both critical for success. There appears to be a lack of research on the perceptions of I-BEST implementers statewide. The current study is significant because it fills a void in the research regarding the perceptions of instructors and administrators of the I-BEST program across the State.

Instructors and program managers are in a position to see beyond FTEs and perceive issues which may be obscured to higher-level administrators. By looking at the

differences in perceptions it may be possible to identify areas of concern so ameliorative measures (e.g., additional resources or professional development) can be adopted.

Furthermore, comparing the perceptions across levels of urbanicity can provide insights into how adaptable I-BEST is to varying local circumstances. Some institutions may need additional support because of their low population levels or dependency on a single major employer. If I-BEST is to be a model for Adult Basic Education and ESL programs across the nation as its proponents hope, then the opinions and experiences of those involved in the program need to be explored.

The current study is also significant because it can help provide feedback to the State Board on its performance initiative (WSBCTC, 2007). The instructors and administrators will be the professionals responsible for collecting program results at each of their colleges. Washington state has moved from performance reporting to performance funding (Burke & Minassians, 2002; Dougherty & Natow, 2009), and the results of the I-BEST program will have a direct financial impact on each college. Therefore, feedback from the institutions on benchmarks may help to avoid potential financial sanctions and adverse effects to student recruitment, and help to establish evidentiary data for long-term program results (Condelli, 2007; Mazzeo, Rab, & Alssid, 2003).

Ultimately, the college presidents will play a pivotal role in the success or failure of I-BEST at their respective institutions. Leaders must be willing to provide the administrative backing the fledgling program needs to survive. In their analysis of the success of the career pathways programs, Bragg et al. (2007) identified strong administrative leadership and the provision of support services as essential elements to a successful program. Presidents will need to be willing to provide the assistance instructors

and lower-level administrators need to be successful. The task will not be easy because the life circumstances of many of the I-BEST students put them at risk to fail, necessitating a strong institutional commitment to the provision of resources.

Part of strong administrative leadership will involve communicating to the State Board the needs of the program managers and instructors for adequate resources and further professional development opportunities. In a similar fashion, leaders will need to convey policy decisions to their institutions and insure their implementation. This study will provide feedback to college presidents on how instructors and administrators perceive I-BEST is currently performing at their schools. Presidents can use the findings to identify areas where deficiencies exist and take corrective measures to insure continual improvement in both the program and the institution. If I-BEST is to achieve its goals of equipping adults with the skills to help transform the state's economy, then it is imperative presidents be appraised of the current condition of the program.

Overview of the Methodology

This quantitative methods study uses a survey design to answer the research questions on the I-BEST program. The survey design is employed because it is well suited to discovering the prevalence of an attitude or opinion (Creswell, 2003). Furthermore, surveys provide an efficient and economical way to collect data, avoiding the travel time and expense of visiting each of the community colleges across the state. A cross-sectional survey using a Likert-type scale provides an ideal way to rate the intensity level of an attitude relating to the program (Kumar, 2005). The responses from the instructors and administrators can be used by decision-makers to assess the current state of the program.

Also, the exploration of responses across the state permits comparing to see if the perceptions of the rural colleges mirror those of their more urban counterparts.

The data collection method involves administering a survey to I-BEST instructors, I-BEST program managers, and administrators who directly oversee the program managers (e.g., deans). Prior research has stated the need to collect survey data to help demonstrate the impact of integrated programs (Mazzeo, Rab, & Alssid, 2003). I-BEST is operational at all of Washington's 34 community colleges. Administrators and instructors involved with the program at all the participating colleges will be surveyed. The community colleges are distributed across the state, providing a broad image of the diverse experiences of I-BEST instructors and administrators.

An electronic survey was conducted because it provided an efficient means of reaching large numbers of participants and avoided the expense of postage. A cover email provided a brief request to participate in the survey, and included a statement about the importance of participating because of how the findings could improve the program for future users. The notification letter provided a web-link which directed the participants to the survey. Reminder emails were sent to the participants after the first and second weeks of data collection. Each reminder email thanked those people who had participated and encouraged those who had not taken the survey to please do so.

Data analysis of the survey responses consisted of both inferential and descriptive statistics. The descriptive statistics helped provide a clearer picture of the professionals who currently implement the I-BEST program. Inferential statistics were used to answer all five of the research questions. Specifically, t -tests were used to analyze the responses and determine whether there were statistically significant differences between the groups. The

use of a *t* test is appropriate because there are grouping variables which divide the participants into groups (e.g., administrators and instructors), and test variables (i.e., survey responses) which distinguish individuals along a quantitative dimension (Green & Salkind, 2005).

Delimitations and Limitations

The scope of the study was limited to Washington state. I-BEST is a new program and thus far has not been adopted by any other community college system outside Washington. Also, the study explored the program using quantitative methods in order to provide a broad perspective of implementers' experiences. One limitation of the study is that the participants answered the survey items honestly and thoughtfully. There is no way to determine if someone answered the survey based on their own perceptions of the program, or if they responded in a manner to please someone else (e.g., their supervisor or the researcher). Furthermore, there is the possibility the person who responded to the survey was someone other than the administrator or instructor to whom the questions were directed.

Definition of Terms

The definitions of significant terms which are used throughout this research have been listed below:

Administrator - Any person employed by the community college district that performs administrative duties at least 50% of the time as his/her assignments, and who may have the authority to hire, discipline, or dismiss other college employees (Seattle Community Colleges, n.d.). The current study limits community college administrators to

the I-BEST program manager and his/her immediate supervisor which could be at the dean or vice-president level of authority.

Adult Basic Education - A program for adults who function below the ninth- grade level in reading, writing, mathematics, or various life skills (e.g., technology, communication) which adversely impacts their employability, parenting, or civic responsibilities (WSBCTC, n.d.).

Collaborative instruction - The simultaneous pairing of teachers from different disciplines in the classroom so the length of training is shortened and relevancy of the material is made explicit.

Generation 1.5 students - Non-native English speaking adult students who have graduated-from U.S. high schools and possess advanced language proficiency but still require additional instruction, especially in their writing (Crandall & Shepard, 2004).

High demand job - Career with a shortage of skilled qualified workers as identified by local workforce development councils (Washington State Employment Security Department, n.d.).

I-BEST - An instructional method which concurrently teaches basic and vocational skills through the pairing of an ABE or ESL instructor with a vocational instructor (Prince & Bloomer, 2005).

Living wage - The level of income needed for a family or individual to meet all of their basic needs without public assistance plus have funds to meet (at least partially) an emergency situation or future expenditure. The current living wage for a household in Washington with a single full-time working adult and two children is \$25.18/hour (Chinitz, Osorio, Reese, & Smith, 2007).

Rural Community College - A public two-year community college located in an area with a total population of less than 500,000 people based on the 2000 census (Hardy, 2005; Carnegie Foundation for the Advancement of Teaching, 2009).

Transformative learning - A profound shift in a person's cognitive foundation so mental structures are less rigid. A person who has experienced transformative learning is emotionally capable of change and demonstrates openness and reflection (Kilgore & Bloom, 2002; Mezirow, 2003).

Washington State Board of Community and Technical Colleges (WSBCTC) - The state agency charged with providing leadership and coordination of the Washington's 34 community and technical colleges (WSBCTC, n.d.).

Conclusion

The challenges Washington state will face over the next several years will require greater numbers of adults to have the skills demanded in a knowledge economy. The jobs requiring little or no education have largely disappeared from the state's economy, requiring people to further their education in order to secure employment at a living wage. Washington state officials recognize the need to train students who have skill deficiencies so they can fill the talent vacuum left by retiring baby boomers. Drawing on lessons learned from successful programs in the past, the State Board has developed the I-BEST program which integrates basic skills and career training. The adoption of an integrated approach recognizes the greater likelihood of success because basic skills are tied directly to an application which has meaning in the lives of the students.

Preliminary findings from the WSBCTC demonstrate the effectiveness of the program in helping students achieve academic success in I-BEST. For most participants

attaining success in college seemed impossible because of their past failures in the educational system and the difficulties they contend with in their daily lives. Yet despite seemingly insurmountable odds, most students appear to thrive and experience a sense of self-worth and optimism they never possessed prior to becoming involved with I-BEST. While initial investigations conducted by the State Board and others have looked at student achievement in the program, there do not appear to be any statewide studies which have looked at the perceptions of the instructors and administrators who are in charge of implementing the program. The current study sought to fill this important gap in the

CHAPTER 2

REVIEW OF THE LITERATURE

The low success rates of adult basic education and ESL programs have led to a greater emphasis of tying basic skills instruction to real world knowledge. The contextual information imparted in I-BEST addresses past failures by focusing the course content on vocational skills of significance to the students. There are other programs linking career training programs with ABE students, but the distinguishing feature of I-BEST is the simultaneous pairing of two instructors in the classroom. Although co-teaching is not new in higher education, it is not widely practiced, and the WSBCTC expects the pairings to stimulate learning on both the part of the students and the instructors (Cooper, 2007). The unusual instructional model is designed to keep students motivated by learning high-demand skills while providing the basic skills support they need to carry them through to certificate completion. The preliminary results from the work by the WSBCTC suggest the program is helping ABE and ESL students have a successful academic experience. However, since the program is relatively new, there have been no statewide studies which look beyond the students' experience to see if I-BEST's innovative approach is forever changing the approach to adult basic education.

Basic Skills Instruction

One of the reasons cited for the poor performance in adult basic education programs has been a reliance on skills and drills methods rather than those tied to student interests and real-world contexts (Levin & Calcagno, 2008). Context allows learners to link the relevance of the skills to their actual setting (Mazzeo, Rab, & Alssid, 2003). Instructors who use contextualization facilitate students' ability to tie new information to the pre-

existing fabric of an existing knowledge base. When students are able to link new information to their pre-existing knowledge there is an increased likelihood of understanding the instructor's lessons. However, it is unusual to find instructors incorporating learners' prior experiences into either their materials or instruction (Sparks, 2002). For example, one survey of national literacy programs reported the vast majority, 73%, used non-contextualized materials in their courses (Purcell-Gates, Degener, & Jacobson, 1998). The course materials are only one factor impeding student success. Other factors contributing to the poor performance of ABE programs include inadequate amounts of effective classroom time and the skill of the instructors.

Increasing the number of hours and intensity of instruction (i.e., classroom hours per week) have been found to be effective in improving student performance. However, most ABE students drop out early in the program. The typical ABE student receives only 61 hours of instruction (O'Donnell, 2006). Of course, there are many students who fall well below the average. One study found nearly 20% of the students dropped out after only approximately 25 hours. Unfortunately, meaningful gains cannot be achieved at these levels because most adults need at least 100 hours of instruction to show one grade level increase on standardized reading tests. Additional hours appear to have a salutary effect because when students attend between approximately 150 to 175 hours, the majority (i.e., 75%) of them will post gains of at least one grade level (Comings & Cuban, 2007; Comings, Sum, & Uvin, 2000).

Although the findings of Comings and Cuban (2007) and Comings, Sum, and Uvin (2000) suggest that improved performance is best achieved by insuring high attendance rates or lengthening the number of classroom hours, some research shows these factors to

bear little relation to ABE students' success (Fitzgerald & Young, 1997; Venezky, Bristow, & Sabatini, 1994). One possible explanation to reconcile these findings is the quality of the program. When researchers compared two programs, one in an urban location and one a rural location, they found the programs to be more similar than different regarding participants' behaviors. In both programs teachers and students spent approximately 41% (i.e., 25 min/hr) of their time involved in activities not related to teaching or learning (Mellard, Scanlon, Kissam, & Woods, 2005).

More recent research (Patterson & Mellard, 2007) observed positive student outcomes when classroom hours were increased in high quality programs. These findings beg the question as to what is meant by quality. Student attendance is certainly one barometer of quality. Students are likely to show increased hours of attendance in classes which meet their needs and less likely to attend courses which do not (Comings, Sum, & Uvin, 2000). Although quality may have different meanings depending upon the philosophical orientation or approach, at a minimum it should include student engagement in activities to learn basic skills quickly and efficiently (Beder, 2007). One critical factor in insuring engagement and positive outcomes is using effective instructors (Hamilton, 2002; Twombly & Townsend, 2008). Other factors identified with quality and student success include using full-time faculty, providing strong institutional support, and offering professional development opportunities (Fitzgerald & Young, 1997; Stein, 2007).

The majority of instructors in ABE are part-time faculty who rarely receive the pre-service training needed to teach adults (Smith & Hofer, 2003). The community colleges are prone to hire part-time faculty despite their professional gaps because it is one way to reduce institutional expenses (Banachowski, 1996; Sandford & McCaslin, 2004). The

colleges may also pare down costs by limiting training once an instructor is hired. Studies have found the professional development which could be useful in enhancing effectiveness is less likely to be provided to part-time faculty members (Mazzeo, Rab, & Alssid, 2003; Outcalt, 2000). Smith and Hofer (2003) suggested wage considerations and a perceived lack of institutional support help to explain why there is a high turnover of faculty in ABE programs. The lure for other opportunities is so great that half of all part-time instructors have been teaching adult basic education for less than three years.

The ABE instructors are not alone in their frustrations with the community colleges. Technical instructors cite lack of administrative support and the lack of job security as reasons why they opt to leave the teaching profession (Ruhland, 2001). Due to their professional qualifications, these faculty members can easily return to the private sector if they feel their grievances are being ignored by the institution. Since the career instructors' skills are critical to the success of vocational programs, it behooves college leaders to insure they are provided training and support in order to retain quality faculty. I-BEST relies on technical and ABE instructors so their job satisfaction is vital to the program's long-term success.

I-BEST eschews the failed skills and drills approaches of the past by incorporating the concepts of contextualization into its training of ABE and ESL students. Linking meaningful real-world careers with basic skills appears to sustain students' interest so they persist significantly longer in training thus increasing the likelihood of completing a vocational certificate (Prince & Bloomer, 2005). However, the ultimate success of I-BEST will hinge on the use of quality instructors and the support of administrators. The degree to which institutions provide resources and professional development may dictate if the

instructors are satisfied and remain with the program. Instructor dissatisfaction could spill over into the classroom and effect student performance. Most of the students in the program have had poor experiences with the educational system, and prior research with other ABE students (King & Wright, 2003) has found instructors' nurturing and encouragement contribute significantly to their success.

There is a paucity of research on the perceptions of the people at the community colleges who implement the I-BEST program. The instructors and administrators are in an ideal position to identify which factors contribute to the success of I-BEST. Yet, these groups may perceive differences in the implementation process which could impact the future of the program. For example, administrators are under pressure to reduce costs because of current financial conditions. Administrators may opt to reduce program costs by relying on adjunct instructors or reducing professional development offerings. Cost-cutting measures, such as reliance on adjuncts, could have the unintended consequences of destroying the program by driving away the very people needed to make it succeed. The current research asks administrators and instructors their perceptions about I-BEST to see if it is not only meeting the needs of students but whether it is generating team-building or divisiveness at their institutions.

English as a Second Language Students

Significant numbers of immigrants continue to come to America in search of a better life. During the 1990s international migration accounted for approximately 31% of the nation's population growth. This percentage is expected to swell past 50% in the period between 2000 and 2015. One important segment of this immigrant influx is the Hispanic population which is estimated to account for 20% of the nation's total population by the

year 2030. One estimate from 2004 showed that approximately 57% of adult Hispanics are foreign born. Unfortunately, over half of these immigrants lack a high school diploma, and the vast majority (i.e., 80%) report having difficulty speaking English (Kirsch, Braun, Yamamoto, & Sum, 2007). The changes nationally are mirrored in Washington state. Hispanics are the fastest growing ethnic group in the state, and their numbers are projected to increase by 150% by the year 2030 (Washington State Office of Financial Management, 2006).

Public institutions, especially community colleges, play an important role in providing English language skills which help the integration process of immigrants into American society (Szelenyi & Chang, 2002). The enrollment numbers attest to the significant role the community colleges play in the integration process; approximately every one in four community college students is an immigrant (Crandall & Shepard, 2004). Much of this growth is from the Hispanic population, and these changes are especially apparent in Washington state. The number of Hispanic students in Washington state's community colleges has seen steady growth over the past few years. For example, Hispanic student enrollment increased by 7.5% from 2004 to 2005, 8.7% from 2005 to 2006, and 4.8% from 2006 to 2007. While the increased enrollments are an encouraging sign they belie the facts. Hispanic students are disproportionately represented in basic skills classes relative to their numbers in the general population (WSBCTC, 2009). Furthermore, the WSBCTC (2009) reports Hispanic students lag behind whites and most other students of color in showing gains in basic skills courses or in transitioning from basic skills to college level courses. Since Hispanics and other immigrant groups play such a significant role in

the future economic growth of Washington state, and the nation as a whole, it is imperative community colleges find ways to help them be academically successful.

ESL students pose a tremendous challenge to their instructors because of the extreme range in their capabilities (Gray, Rolph, & Melamid, 1996). An ESL classroom can have students who have completed graduate-level work alongside Generation 1.5 students, and students who may only have arrived in the country with less than an eighth-grade education. Unfortunately, the same instructional approach which plagues many ABE classrooms also appears in ESL classrooms. Skills and drills instruction is a common practice and contributes to the high drop-out rate among ESL students (Curry, 2004). Another factor in the lack of student success is the reliance on adjunct faculty who may be inadequately trained to teach the courses (Curry, 2001), or who lack the time to properly advise their students (Curry, 2004).

An additional hurdle is a reliance on college placement tests. The tests pose a unique problem for some ESL students. Generation 1.5 students possess situational English fluency, but lack the grammatical skills needed to successfully meet the writing demands of most college-level courses. Placement tests ostensibly should be used to determine whether a student should be in a regular English class or an ESL class. However, some colleges do not use the tests for that purpose. Instead students are channeled into an ESL class and the only issue is which skill level they should be placed (Bunch & Panayotova, 2008). The result of this practice, as Bunch and Panayotova (2008) observe, is students find themselves protracting the time it takes to reach their educational goals. The time students could be spent on improving their English skills in college credit courses and moving toward a meaningful career is instead being spent in ESL classes. Furthermore, the longer students

spend acquiring the skills needed to succeed in college, the less likely they are to continue with their education (Adelman, 2005; Prince & Bloomer, 2005).

ESL is one of the community education programs which community colleges provide to fulfill the mission of reaching out and serving the un-served (Gleazer, 1980). Any measures increasing the likelihood of ESL student success would assist administrators in meeting the community colleges' commitment to the community. Yet, there are limits to how far some college leaders may be willing to go to serve this segment of the public. Prior research has found many administrators conclude immigrant students perform better than other students and do not need any special support services beyond ESL (Gray, Rolph, & Melamid, 1996; Szelenyi & Chang, 2002). Gray, Rolph, and Melamid (1996) reported when administrators did perceive a need it was felt to overlap with the non-immigrant student population and already handled under existing resources or programs. While not every ESL student requires additional support, counseling and other services have been found to be effective and contribute to student retention (Ignash, 1995). Given the contraction of government funding, administrators are faced with the difficult decision of expanding ESL classes and support services targeted to immigrants at the expense of other student populations on campus. The decision to provide assistance to the ESL population may simply become a matter of demographics and the perceived need in each college's service area.

The pilot program for I-BEST was launched with ESL students. The results found I-BEST students were 15 times more likely to complete workforce training than non-I-BEST students (Prince & Bloomer, 2005). The labor force needs of Washington coupled with the growth of the state's Hispanic population illustrate the need for I-BEST to

maintain its early success. The pathway forward will require feedback from administrators and instructors on how the shorter I-BEST training curriculum and targeted student support services impact the students. The current research sought to expand the work of Bragg et al. (2007) which focused on the experiences of one urban college by examining the perceptions of administrators and instructors for all of the community colleges in Washington.

Washington State

Washington state is one of a number of states (e.g., Arkansas, Kentucky, Massachusetts, Michigan, Ohio, Oregon, and Tennessee) which have embraced the career pathways approach to tackling the problem of equipping low-skilled adults to meet society's employment needs. The career pathways model recognizes that many students need to have a support structure in place in order for them to be successful in higher education. Jenkins defines career pathways as,

A series of connected educational and training programs and support services that enable individuals to secure employment within a specific industry or occupational sector, and to advance over time to successively higher levels of education and employment in that sector. Each step on a career pathway is designed explicitly to prepare the participant for the next level of employment and education. (2006, p. 6)

The community colleges play a critical role in providing students with the skill sets necessary to improve their standard of living by meeting the workforce needs of local employers. The adoption of the career pathways approach for the community colleges in Washington state evolved from earlier programs targeting skills development and employment.

The late 1990s saw two examples of programs where basic skills instruction was combined with vocational training to help Washington residents. The Workplace Improvement of Necessary Skills (WINS) program assessed specific employment environments and then delivered work-related skills training with the goal of having people more fully participate in their working environments. Findings demonstrated the employees were able to expand upon their training largely because basic skills instruction was tied to their workplace competencies (Dwyer, 1998). A second example is WorkFirst which was signed into law in 1997. This legislation is Washington's welfare-to-work strategy designed to provide skills training for disadvantaged adults leading to career advancement and earning increases. The philosophy of developing human capital is in contrast to many welfare programs which force participants to take the first available job without regard to potential opportunities or advancement (WSBCTC, 1999; Smith, Wittner, Spence, & Van Kleunen, 2002).

The developers of WorkFirst created several programs to help move people off of assistance and into living-wage employment. One of these programs, Customized Job Skills Training (CJST) developed some ideas which foreshadowed the I-BEST program. For example, CJST provides students with short term instruction (i.e., 8 to 22 weeks), integrated with basic skills and targeted to a specific industry. The results have been quite positive. The program has resulted in increased employment rates and higher median hourly wages for the participants compared to those who received literacy training alone (WSBCTC, 2005). The lessons from earlier programs have paved the way for I-BEST and a new approach to educating Washington's citizens.

The major difference between prior programs and I-BEST is the simultaneous pairing of vocational and adult basic education or ESL instructors in the classroom. I-BEST appears to be an answer for those wanting rapid placement of students into the workforce and those who desire to increase human capital. O'Shea and King (2001) observed there was some tension in Washington when WIA went into effect because of its focus on finding employment quickly and the state's human capital development philosophy. I-BEST seemingly evolved from the dialectical tension between the demands of WIA and the desires of enhancing human capital. The program meets the demands of advocates who want to rapidly get people into the workforce but at the same time I-BEST imparts marketable vocational skills to build students' talent base for potential long-term financial growth.

The I-BEST program is based on the career pathways approach of providing training upon which students can build at a later date. Students can earn certificates after brief intervals of instruction and then enter the workforce or continue in school for more advanced training. The intent of the program is not only for students to earn a vocational certificate, but also to complete at least one year of college-level coursework because this is the "tipping point" for earning significant wages with long-term career opportunities (Prince & Jenkins, 2005). While the intent may be laudable, it may not be practical for some I-BEST students whose goal is to get into the workforce as quickly as possible. The WSBCTC's intent also could frustrate employers who urgently need positions filled and cannot wait until students have completed one year's worth of classes. The tension between WSBCTC desires and community needs could be especially strong in areas with a scarcity of adequately trained workers (e.g., rural communities). The current study explored the

perceptions of administrators and instructors to see how they handled different stakeholder goals at their institutions.

Simultaneous Teaching

One of the unique features of the I-BEST program is basic skills and vocational instructors are teaching concurrently in the same classroom. The pairing of two teachers in a classroom is not new. Others have reported (Thousand, Villa, & Nevin, 2006) co-teaching to be effective with diverse student populations ranging from pre-school through high school. In higher education, collaborative teaching has been frequently observed in teacher education programs or in courses with complementary disciplines (Bakken, Clark, & Thompson, 1998; Hohenbrink, Johnston, & Westhoven, 1997; Kluth & Straut, 2003; Shapiro & Dempsey, 2008), but the pairing of instructors from such disparate fields (i.e., ABE/ESL and vocational education) is rarely seen in higher education.

The ease of blending of ABE/ESL material and vocational training may be smoother for some faculty members than others. For example, most of the previous experiences with pairings in higher education were drawn from similar or complementary disciplines. I-BEST faculty members may express easier transitions when ABE/ESL instructors are paired with instructors in career courses which make greater traditional academic demands on the students (e.g., health care and medical office training). There may be more conflict evident in faculty members from the building trades or manufacturing industry merely because instructors in these fields may place a greater emphasis on occupational task competency rather than the academic content of the basic skills instructors (Somers et al, 1998).

There may also be points of contention over income. Unlike ABE or ESL instructors whose primary source of income is teaching in academe, vocational instructors tend to make considerably more income from non-academic work and view teaching as supplementary income (Levin, Kater, & Wagoner, 2006). In addition, Levin, Kater, and Wagoner (2006) keenly observe the skill-sets which vocational instructors bring to their institutions are unique, and therefore highly valued by both the college and private industry. The current economic conditions may require the colleges to make staff cuts, and it has been noted these conditions adversely impact the levels of collegiality among faculty members in low-status departments such as ABE and ESL (Battell, Gesser, Rose, Sawyer, & Twiss, 2004; Gray, Rolph, & Melamid, 1996). These income considerations may hinder classroom collaborations from enduring beyond a semester or two which defeats the power lasting pairings can muster.

Successful collaborative instruction takes time to mature. Smith (1998) draws a distinction between co-teaching which is collaborative and co-teaching which is contrived. Collaboration is an evolutionary process characterized by voluntary participation based on mutual trust and openness. On the other hand contrived co-teaching is administratively mandated and limits participants' choices. Little (1990) noted in schools where collaborative efforts are not firmly established there can be problems of fragility and competitiveness. The commitment to collaborate is dampened when a teacher feels he or she could do a better job on their own. One way to increase participation in collaborative efforts, however, is to structure the curriculum where each instructor needs to rely on the other's expertise. I-BEST is an example of a situation where this principle of mutual reliance is being put into practice.

Other observed problems with simultaneous instruction rest with the levels of communication and organization in the collaboration (Bakken, Clark, & Letterman, 1998; Dugan & Letterman, 2008; Shapiro & Dempsey, 2008). Successful outcomes will require the instructors to be able to communicate both with each other and the students. In research by Dugan and Letterman (2008), students were dissatisfied with co-taught courses when either the instructor-student or instructor-instructor communication chain was broken. Part of the student dissatisfaction emanated over concerns on whether course grading would be uniform across both instructors. In addition to the students' concerns over consistency there may be faculty tensions over the value of particular assessment measures.

The WSBCTC requires students to take standardized tests which basic skills instructors use to structure their lessons. Test scores can be used to monitor student progress. However, research has observed technical instructors rarely use the results of these measures in making instructional decisions (Belcher, McCaslin, & Bradrick, 1998). A vocational instructor may feel a performance test is a superior tool to determine student outcomes but this could impede a basic skills instructor's goal of improving scores on standardized tests such as CAS AS. Moreover, although performance measures may give a more accurate picture of learning this position may find itself at odds with a program trying to satisfy governmental agencies reliant on standardized test scores (Condelli, 2007).

The success of I-BEST may depend on how well the paired-instructors are able to effectively collaborate. According to Smith (1998), collaboration is observed when instructors mutually reflect, evaluate, and refine their teaching practices. In her study of long-term collaborators, Creamer (2004) observed the most innovative teams consisted of equal status pairings who were not afraid to disagree and used discourse in reaching accord.

When differences of opinions occurred, open discussion of the issues proved to be beneficial both to the instructors themselves and to their students (Hohenbrink, Johnston, & Westhoven, 1997; Kluth & Straut, 2003). I-BEST instructors are still in the early stages of collaborations, and differences of opinions will naturally occur. These differences can provide opportunities to question accepted instructional practices providing the chance to reflect and grow professionally (Smith, 1998). One measure of success of the collaborative efforts of the instructors in the I-BEST program will be the degree to which they express their differences in front of the students and model productive resolutions.

The WSBCCTC is aware of the potential for conflict and has mandated both instructors for each I-BEST class be present in the classroom at least 50% of the time (Cooper, 2007). When instructors are allowed to express their viewpoints as the course develops there is less likelihood of misunderstanding. The challenge for the instructors will be to find the time to sit down together outside of the classroom to create a truly collaborative course. Unless adequate release time is provided to the faculty members to compensate them for the extra time required, forming a successful collaboration will be difficult (Prentice, 2001). The demands on additional time commitments should be expected (Prince & Bloomer, 2005). Bragg and her colleagues (2007) reported I-BEST instructors found it necessary to come in early or stay after hours to solve classroom issues. Faculty requests for additional release time or resources may go unheeded because of the additional costs associated with the program (i.e., two instructors in the class) and the deteriorating condition of the state's economy.

Unfortunately, students will suffer if the program is not able to retain effective pairings because they could benefit from the dynamism of instructors who trust each other

enough to work through their differences of opinion. Something less than this adaptive instructional method may not justify the cost. In fact, when typical students were surveyed about the co-teaching strategy, they felt it was no more effective than courses taught by a sole instructor (Dugan & Letterman, 2008). If the I-BEST program is to promote learning in its students and faculty, there will need to be sufficient resources to allow instructors to serve as transforming models for their students. The current research looked at instructors' perceptions to see if concurrent instructional methods enhanced I-BEST student performance. Furthermore, this study explored whether the instructors' perceptions of I-BEST's instructional challenges (e.g., extra preparation time) were similar or different from the perceptions of college administrators.

Transformative Experience

The IBEST program hopes to change the lives of adult basic education and ESL students by equipping them with marketable skills. This educational process can be viewed from a transformative learning perspective which explains how individuals make meaning out of their experiences. The transformative process is not merely an acquisition of knowledge, it is a profound shift in the cognitive foundation regarding how persons make decisions and act (Kilgore & Bloom, 2002). Mezirow (2003) defined transformative learning as the restructuring of fixed mental patterns "to make them more inclusive, discriminating, open, reflective, and emotionally able to change" (p. 58). Others have noted it becomes evident a transformation has taken place when a person begins acting or thinking in a new way (Merriam, 2004; Neese, 2003; Taylor, 2008; Wilhelmson, 2006).

There is evidence which shows students experience transformational learning in the classroom. Two conditions of transformational learning are critical reflection on one's

experience and reflective discourse (Merriam, 2004). The prospect of I-BEST students showing evidence of transformational learning is clearly possible because researchers have observed transformations in both ESL and ABE students. Transformational learning has been observed to occur in ESL students to a greater degree than typical adult higher education students (King, 2000). King and Wright (2003) reported transformational learning in the ABE students based on their increased levels of both classroom socialization and self-confidence. Terry (2006), in her study of adults in a literacy program, also reported evidence of transformative thinking based not only on the self-reports from students, but also from interviews with the faculty, parents, and the students' significant others. The development of these socialization skills cannot be overstated because they have direct implications on the students' future employment opportunities. Research has shown ABE students' tend to be apprehensive over their communication skills but lessening these fears enhances their chances for future employment and promotion (Conner & Williams, 1987).

Students' ability to successfully experience transformational learning may rest at least partially on the skill of the instructor. Mezirow (2003) asserts educators can assist in the transformation process by creating conditions that foster reflective and critical thinking in the student. In fact, most students who reportedly experienced transformational learning identified the instructor as the catalyst of their change (King & Wright, 2003). Instructors can facilitate transformation by first recognizing a student's willingness to change. The growth process cannot be rushed but there are instructional strategies which can help. For example, adopting exercises which promote reflective dialogue or reflective journaling, engaging students in critical questioning, and conducting activities which build upon the nascent transformations are all instructional techniques instructors should consider using.

The creation of a transformative classroom environment is not easy (Taylor, 2008). Faculty members may encounter resistance to any shift away from the traditional lecture approach because of familiarity even if the students had an unpleasant experience with it (Belzer, 2004; Inderbitzin & Storrs, 2008).

Even in favorable environments transformative learning does not appear to occur in all circumstances. Merriam (2004) suggested not every adult has attained the level of cognitive maturity necessary for critical reflection. Also, Kilgore and Bloom (2002) found people who were undergoing a crisis or were mandated to be in the class did not experience transformational learning. This finding has a direct bearing on I-BEST students because many of them are dealing with crisis situations in their personal lives.

There may also be circumstances where a significant transformation is undesirable. For example, Boyle (1999) observed employers approved of the positive attitudinal shifts resulting from classroom instruction, but some expressed concern over employees' new confidence in voicing their opinions. There is also the concern of crushing students' hopes due to the lack of a well paying job after completing the training. Hull, Jury, and Zacher (2007) reported the response of one student who found out there were no jobs after she endured several months of difficult training, "Teach yourself to read so you can understand why you're not employed!" (p. 309). If I-BEST is to be a program which transforms lives, it must not only teach skills but also be attuned to the local labor market so graduates attain living-wage jobs after earning their vocational certifications.

Students are not the only persons who may experience a transformation as a result of the program. The faculty at most institutions is accustomed to teaching in isolation and the experience of being paired with another instructor may initiate a condition of change.

Transformation can be facilitated by professional workshops but especially by the provision of time to focus on the curriculum and teaching (Major & Palmer, 2006). For faculty members transformational learning may be evidenced by what Major and Palmer (2006) referred to as "pedagogical content knowledge." The term captures the idea of content knowledge expertise coupled with the ability of how to present the information. Instructor transformations can be observed in their reflections about teaching and the propensity to discuss teaching with colleagues. The transformation learning process can be rewarding but it is difficult, time consuming, and may meet with bureaucratic resistance (Inderbitzin & Storrs, 2008; Taylor, 2008).

Others have observed transformational learning in ABE and ESL populations in typical programs (King, 2000; King & Wright, 2003; Terry, 2006). The current study sought to expand on prior research by uncovering whether transformational learning was evident with students in I-BEST. The perceptions of instructors have been explored to see if students demonstrate changes indicative of transformational learning (e.g., classroom socialization and self-confidence). However, a program as unique as I-BEST is likely to spread its transformative influence beyond the classroom therefore, this study also asked administrators if the program promoted learning throughout their institutions.

Institutional Learning

A learning organization has integrated the ability to continuously adapt to internal or external challenges with the capacity to overcome barriers which inhibit collective learning (Marsick & Watkins, 2003). Learning institutions monitor environmental stimuli and react to changing market demands. Marsick and Watkins (2003) note an organization's culture filters stimuli and helps direct leaders in the decision making process. Furthermore,

the researchers observe that two results of learning institutions are improved financial well-being and increased intellectual capital. Clearly, the implications for the success of any program, such as I-BEST, are a need to have strong upper-level leadership as well as a dedicated staff of instructors and managers who quickly adjust to changing circumstances.

Overcoming bureaucratic inertia will be essential if I-BEST is to have sustained success over the next several years. The WSBCTC will need to allow colleges to adjust as the market changes. For example, one innovative college in Arizona now promises curricula approval within two days, not the usual three to six months, in order to meet the training needs of area employers (Stanley, 2008). I-BEST is geared to match educational services to local employer needs thus requiring institutions maintain a great deal of program flexibility. Furthermore, it will require the community colleges to be far more proactive developing post-training employment opportunities with local industry, something which the colleges have historically done rather poorly (Deil-Amen & Rosenbaum, 2004). Another indicator of a successful program will be how well I-BEST meets the employment needs of each community college's service area.

Market dynamics will compel colleges to have greater flexibility in the development of high demand jobs and the elimination of unwanted courses (Jacobs, 2001; Maguire, Freely, Clymer, & Conway, 2009). The ability for institutions of higher education to be adaptive and avoid a "make-do" mindset will require them to view themselves as enterprises responsible for their own destinies which may feel a little foreign to most colleges (Crow, 2007). The willingness to change may be an indicator of which community colleges will have long-term success with the I-BEST program. In fact, if I-BEST is implemented as envisioned, the program should foster change in the community college

system. One aspect of institutional change will be the tension produced by supporters of a vertical orientation (i.e., academic transfer) and those who have a horizontal orientation (i.e., market responsiveness). In many community colleges the shift is to a horizontal approach to the curriculum (Teitel, 1991). Adaptive colleges will be able to reconcile these two orientations to their unique locations, students, markets, and histories.

Part of the institutional learning process will be how to reconcile a paradox which I-BEST seems to present. Market conditions require the I-BEST courses to meet needed demands and shift as conditions warrant. The colleges can do this, but the result may be a steady turnover of vocational instructors as employer demands shift from one needed skill to another. The change of faculty could destroy the instructional relationships built-up in the collaborative process. The constant re-pairings with different instructors lends itself to a curriculum of trial-and-error class procedures rather than experience tested lessons. Ineffective instructors set the stage for poor student performance or student withdrawal.

On the other hand if an institution decides to invest in the value of co-teaching and uses seasoned instructors year after year, it leaves itself exposed to irrelevancy because of market changes. One possible solution to the problem is to provide courses of a more generalized nature. Since much of the vocational content knowledge is transitory in nature, providing students with a broader base of skills may be more appropriate because of location or mobility considerations (Eaton, 1994; Jacobs, 2001). Another possibility is to invest more resources in professional development because this aids in the integration of part-time faculty in the college community (Sandford & McCaslin, 2004). The investment in professional development has program implications because improving instructor performance can enhance student outcomes.

Another aspect of institutional learning is whether the program will be implemented as intended by its designers or adapted by the users in the field. There is tension between these positions with fidelity representing the extent to which a program is adopted according to the developer's original blueprint. Maintaining fidelity during the implementation process has been found to contribute to a positive program. However, program users do not always closely adhere to the original design and adapt it according to their own unique circumstances (Emshoff et al, 2003). Adaptations do carry risks because they may dilute the effectiveness of a proven method to the point of failure. Sometimes modifications may occur too early in the process rather than patiently allowing the collective effectiveness of a program to become evident and address issues of concern. The process of problem solving also becomes more difficult when adaptations have been performed (Szulanski & Winter, 2002). The designers of I-BEST have structured the program to give the colleges flexibility in its implementation. Some have suggested (Shen, Yang, Cao, & Warfield, 2008) it is appropriate to design programs so adaptation is a built-in component allowing for variations in locales, populations, and changing circumstances. In the context of a program like I-BEST, adaptation seems defensible given the different regions and economic needs across the State.

The current research sought to expand the findings of Bragg et al. (2007) by exploring the perceptions of administrators across the State regarding I-BEST. Since one sign of a learning institution is financial well-being the study wanted to know if administrators perceived an increased entrepreneurial or market driven atmosphere at their institutions. The nature of the program requires a tenacious monitoring of the local labor force and the ability to adapt to market conditions. Moreover, strategic leadership for

learning (i.e., modeling and supporting learning) is an important dimension for institutional learning (Marsick & Watkins, 2003). This study sought to uncover whether administrators noticed any differences in their institutions after the implementation of I-BEST. Since administrators are in the position of making needed adaptations and reading the pulse of the entire institution, their input is critical to discover the factors contributing to a successful program.

Rural Issues

Some of the presidents in the Washington state community college system face greater challenges than others because of the location of the communities they serve. While non-rural community colleges are the beneficiaries' of sizable state support due to their enrollment numbers, rural colleges are typically obligated to meet the needs of their service areas with far fewer resources (Hardy & Katsinas, 2007). Urban and suburban schools also enjoy the luxury of being able to leverage resources among themselves to achieve together what they would be unable to accomplish on their own (Pennington & Williams, 2002). The geographic distances and lack of institutional density make clustering efforts less likely in rural communities putting them at a relative disadvantage compared to their more urban counterparts (Green & Galetto, 2005). Yet, rural campuses are expected to be both comprehensive in scope and provide specialized programs like I-BEST.

The most recent estimates indicate approximately 922 rural community colleges comprise approximately 59% of the public community and technical colleges in the nation (Hardy & Katsinas, 2007). The sheer number of these colleges makes it imperative their experiences be reported. Frequently, the experiences of rural areas are viewed somewhat pejoratively, and the primary characterization conveyed in the media is a set of depressing

descriptors such as low, slow, and high - low population levels, low educational levels, slow job creation, high unemployment, and high rates of illiteracy (Gillett-Karam, 1995). The degree to which a program, such as I-BEST, can be successful is a measure to how well rural community colleges can fulfill their role as the economic engine of their communities (Cavan, 1995). This will not be an easy task because as Gillet-Karam (1995) observed, although production costs may be cheaper in rural areas employers, are reluctant to relocate their operations into these regions because of the low education levels. I-BEST may help to break this pattern as program graduates attract area employers seeking to tap into a newly formed talent pool.

To infuse graduates into the local labor force, rural colleges need to have quality instructors. However, a recent survey of rural college leaders found recruiting and retaining qualified personnel was a significant problem (Pennington, Williams, & Karvonen, 2006). A study comparing the hiring practices of faculty noted community colleges tended to be more likely to hire regional applicants as opposed to candidates from another part of the country. The location of the schools could influence the quality and number of potential faculty applicants because of the proximity to labor pools. Rural schools have a smaller pool to draw candidates from as compared to non-rural institutions. A potential source of conflict could present itself if regional institutions are vying for the same instructors (Twombly, 2005).

Instructor retention is also a concern because of the remoteness of some institutions. Instructors seeking employment at a rural community college that have never lived or taught in a rural area may be viewed with some skepticism by the soliciting institution. In the screening of potential job applicants, rural community college leaders ranked the 'fit' of

an instructor (i.e., regional familiarity) higher than non-rural college leaders. The issue of retaining qualified personnel is significant because faculty turnover results in increased costs and a disruption in service. Furthermore, resources and professional demands are additional factors in attracting and retaining qualified personnel. Rural institutions may have fewer financial resources available to off-set travel expenses of potential faculty applicants making them less attractive than larger colleges (Twombly, 2005). In addition, because the faculty sizes in rural schools are much smaller than at the urban and suburban institutions, instructors are required to do a broader range of job responsibilities in order to fulfill the mission of the college (Wolfe & Strange, 2003).

Approximately 47% of community colleges in Washington state serve rural communities (Carnegie Foundation for the Advancement of Teaching, 2009). The current research sought to uncover if rural institutions perceived similar or different challenges as compared to their non-rural counterparts. For example, the collaborative structure of I-BEST makes additional time demands on instructors. The smaller rural college staffs may perceive this as more burdensome than non-rural instructors because of the other responsibilities they are asked to perform. In addition, the current study can shed light on whether there are any perceived differences in recruiting and retaining qualified faculty between rural and non-rural institutions. Since there is a limited talent pool for vocational instructors there could be disruptions to specific I-BEST programs if qualified personnel are unavailable. Finally, it is critical to ask administrators if the program has forced them to change their policies toward community employers. If I-BEST is to serve as a potential economic engine for rural communities, then there could be perceived differences between

rural and non-rural community college administrators on the program's importance and overall impact.

Perceptions

Exploring personnel perceptions can be useful in increasing institutional performance by spotlighting areas which are a source of concern. The practice of obtaining feedback from various stakeholders is common practice at many institutions. For example, community colleges conduct student evaluations of instructor performance on a routine basis and these can be useful in deciding whether to retain or release adjunct faculty (Campbell & Bozeman, 2008). Instructor perceptions can be used to assist in targeting student services so precious resources are not wasted. For example, Song (2006) used the perceptions of ESL instructors to help identify employment and family responsibilities as the most common factors in contributing to student failure. Administrators equipped with this information can provide interventions to assist students in addressing various life issues which could prevent them from reaching their academic goals.

An additional advantage of comparing group perceptions is it provides a window into how uniformly or differently an issue is viewed by stakeholders. For example, although evaluations are routinely collected on campuses, Campbell and Bozeman (2008) noted administrators and instructors differed on the influence evaluations had on classroom instruction. Monitoring group differences on particular issues can provide upper-level administrators with feedback on how cohesively the institution is functioning. Some of the differences between groups reside with the roles and responsibilities people fill at their institutions. In research looking at the roles of various levels of managers within organizations it has been reported low-level managers tend to be the ones who maintain

contacts with outsiders, handle personal conflicts, and correct material shortage problems (Paolillo, 1981). Paolillo (1981) also noted that unlike low-level managers, mid-level managers tended to play more of a motivating and guiding role to their subordinates. The current research sought to determine if the role differentiation of the program managers and their immediate supervisors produced significant differences in their perceptions of the I-BEST program.

Conclusion

I-BEST presents ABE and ESL students in Washington state with the opportunity to acquire career skills in high demand employment fields. Adult educators in Washington have designed the program to be flexible so students can quickly earn vocational certificates and enter the job market. I-BEST uses the context of a particular career to maintain student interest so they desire to persist in the program thus avoiding the tremendous attrition rates common to most ABE/ESL programs. I-BEST stands upon the shoulders of prior state adult education programs but also makes an important extension. The pairing of an ABE or ESL instructor and a vocational instructor is unique to the program giving students job skills plus the basic skills needed to transform their lives. However, I-BEST's transformative process is envisioned to go beyond the lives of students to include their instructors and the entire college. The evidence of transformations should be seen in the performance of students, faculty, and the institutions. If transformations are evident, then students should complete certificates and attain employment, faculty should be reflecting upon instructional strategies, and the institutions should be nimbly adjusting to local market conditions.

I-BEST has several challenges which limit its potential for dramatically altering the face of adult basic education. The life situations of many of the students put success in jeopardy unless adequate support systems are in place (e.g., counseling services). The students who have persevered despite their hardships do so with the promise of meaningful employment. Yet, will the community colleges be more aggressive in finding graduates employment in their career fields as some have suggested (Deil-Amen & Rosenbaum, 2004)? Unless a more assertive institutional approach is taken in placing students into the workforce, I-BEST will have a difficult task convincing prospective students of the program's benefits.

The risks to the program are not isolated to the students. The tenuous employment situation faced by many I-BEST instructors due to their adjunct status is another potential pitfall. The additional cost of having two instructors in the classroom may force administrators to recruit inexperienced educators to help defray expenses. However, in order for the program to boast of quality graduates it will likely need to have experienced high-quality instructors. Finally, the institutions will be required to make changes which will not be easy. The colleges will need to be more proactive in finding employment for their graduates. Also, a willingness to swiftly alter course offerings must become a normative response to changing market forces. These challenges are not insurmountable, but they will require a steadfast commitment to the program from not only the WSBCTC but every upper level administrator and program manager in the community college system.

CHAPTER 3

METHODOLOGY

The purpose of this study was to explore the perceptions of instructors and administrators regarding the I-BEST program. Further, the study looked at the perceived factors contributing to the program's success or failure. Additionally, the study explored whether there were differences in participants' perceptions based on the location of their institutions in rural or non-rural communities. The focus of this chapter is to provide a detailed description of the research methods and procedures used to achieve the purpose of the study. The following research questions guided the study:

- 1) Is there a statistically significant difference in the perceptions of I-BEST instructors compared to the perceptions of administrators regarding the I-BEST program?
- 2) Is there a statistically significant difference in the perceptions of I-BEST program managers compared to the perceptions of their immediate supervisors regarding the I-BEST program?
- 3) Is there a statistically significant difference in the perceptions of instructors at rural community colleges compared to the perceptions of instructors at non-rural community colleges regarding the I-BEST program?
- 4) Is there a statistically significant difference in the perceptions of program managers at rural community colleges compared to the perceptions of program managers at non-rural community colleges regarding the I-BEST program?

5) Is there a statistically significant difference in the perceptions of administrators at rural community colleges compared to the perceptions of administrators at non-rural community colleges regarding the I-BEST program?

Research Design

A cross-sectional electronic survey instrument was developed, tested, and used to explore the perceptions of instructors and administrators. A cross-sectional study is an appropriate design, in conjunction with a Likert-type scale survey instrument, for assessing participants' attitudes or perceptions about phenomenon (Kumar, 2005). An electronic data collection method was used because it is the most appropriate method to answer the research questions. Online methods offer the advantages of greater flexibility of administration, rapid data collection, data management, and respondent confidentiality (Van Horn, Green, & Martinussen, 2009). The utilization of an electronic survey is the most appropriate method because it offers the ability to adjust to situational or personnel changes which may occur (e.g., class cancellations) and provides rapid distribution to the targeted population. The demanding schedules of college personnel, especially administrators, required a survey method which gave them a great deal of flexibility so their participation in the study would pose negligible intrusion into their professional responsibilities.

Setting

The study explored the I-BEST experience at the community colleges in Washington state. At the time of the study, the program had not been implemented anywhere else in the nation. There are 34 institutions in the Washington community college system serving over a quarter of a million students (WSBCTC, 2008). Public colleges span

the state from the Pacific Ocean in the west, the Canadian border to the north, Idaho to the east, and Oregon to the south. Twenty-five of the 34 community colleges are located near the Interstate-5 corridor which runs from Oregon to Canada in western Washington. There are 16 rural serving colleges and 18 non-rural serving community colleges in Washington state as defined by the Carnegie Foundation classification (Carnegie Foundation for the Advancement of Teaching, 2009). As referenced in Chapter One, this study defines a rural community college as a public two-year institution located in an area with a total population of less than 500,000 people based on the 2000 national census (Hardy, 2005; Carnegie Foundation for the Advancement of Teaching, 2009).

Variables

A variable is a characteristic or attribute which can be measured and differs along a continuum of scores into two or more categories (Creswell, 2003). According to Creswell (2003), an independent variable is believed to influence an outcome and the outcome or result is called the dependent variable. In this study each research question explored whether a specific characteristic of the participants (i.e., independent variable) influences their perceptions of the program (i.e., dependent variable). Each research question explored slightly different facets of the participants' perceptions based on their role in implementing I-BEST or the location of their college. For example, the first research question used group affiliation (i.e., administrators or instructors) as the independent variable. The dependent variable was the perceptions each group had regarding the program. The exploration of implementers' perceptions was important because they are in a unique position to identify the strengths and deficiencies of the fledgling program.

The second research question used level of hierarchy within the institution as the independent variable. Specifically, the second research question looked at the differences between I-BEST program managers and their immediate supervisors in mid-level administrative positions. The final three research questions used the location of the community college as the independent variable. Participants were grouped as being affiliated with either a rural or non-rural community college. The third research question asked whether there were differences between instructors in rural and non-rural community colleges. Research question four explored whether there were differences in the program managers in rural colleges compared to non-rural community colleges. The final research question asked whether there were differences between the administrators at rural community colleges compared to administrators in non-rural institutions. In addition to the independent variables associated with each question there were several other variables, including demographic variables, which applied across all of the questions. The additional variables in this study include the following: age, gender, ethnicity, years of teaching experience, and the length of time teaching in an I-BEST class.

Subjects

Participants were selected from each of the 34 community colleges in Washington state. Two administrators from each community college were surveyed. The administrators included the I-BEST program manager, and the individual who supervised the program manager in a mid-level administrative position (e.g., dean or associate dean). In the institutional administrative hierarchy, the lower and mid-level management positions were deemed to have the greatest familiarity with the daily workings of the program and its institutional impact. In addition to the administrators, all the current I-BEST instructors

were surveyed. Participants included those who teach in basic skills programs (i.e., ABE and ESL) and vocational-career skills programs. Only current instructors were surveyed in this study. The decision to exclude former I-BEST instructors was made to avoid collecting data which may not be representative of I-BEST's present condition.

Therefore, the defined population for this research included the current I-BEST instructors, the I-BEST program managers, and the managers' immediate supervisors. The study used census sampling (Lodico, Spaulding, & Voegtle, 2006) because it was both feasible and appropriate given the small number of I-BEST instructors and administrators. The instructors included ABE, ESL, and vocational faculty. I-BEST instructors comprised the largest response group in this study. Since the community colleges rely heavily on part-time faculty members, the majority of instructors surveyed in this study were adjunct faculty.

The administrators included the managers who are responsible for the day-to-day operations of the program and the manager's immediate supervisor. Two current administrators from each of the 34 institutions were surveyed. The contact information for the participants was obtained from the staff directory Web page for each college and from the I-BEST program managers. The implementers at each institution were contacted by the researcher or by one of the administrators (i.e, program manager or manager's supervisor). All of the participants in this research were self-selected.

To increase the response rate, all respondents became eligible to win one of three \$50 gift certificates. The gift certificates were awarded one per week for each of the three weeks of data collection. Giving participants incentives has been found to be innocuous and appropriate for most populations (Van Horn, Green, & Martinussen, 2009). Increasing

the response rate to capture all or almost all of the population helps insure the obtained sample is representative (Cook, Heath, & Thompson, 2000). Since there is a small population of I-BEST participants, it was important to take measures to maximize the response rate. In addition to the gift certificate incentives, whenever possible all the communications with the implementers were personalized. In their meta-analysis of electronic surveys Cook, Heath, and Thompson (2000) found pre-contact, the number of contacts, and personalized contacts to be factors which increased the response rate.

Instrumentation

Since I-BEST is an emerging program, a new survey instrument was developed, the Administrators and Instructors I-BEST Perception Survey (AIIPS). The initial survey instrument items were developed through a review of the professional literature and interaction with those considered to be experts on the I-BEST program. The literature suggests institutional support and professional development are important but their importance may be perceived differently by instructors and administrators (Bragg et al., 2007; Campbell & Bozeman, 2008; Sandford & McCaslin, 2004). The provision of support and training have been found to be essential ingredients for student success and instructor retention, thus how participants perceive these items could impact the long-term viability of the program.

It is critical for senior college administrators and WSBCTC officials to be aware of implementers' perceptions. The ability to quickly identify potential problems could prevent fissures from forming in the I-BEST structure. Furthermore, the survey explored how participants from rural and non-rural areas view I-BEST. Rural institutions have some unique challenges and frequently lack the resources of non-rural institutions (Hardy &

Katsinas, 2007). The exploration of the rural colleges' perceptions can help inform decision-makers so resources are allocated fairly across all the state's community colleges. The AIIPS instrument was designed specifically to examine these issues because of the role they play in shaping I-BEST. After creating the survey, it along with all of the references and procedures were submitted and approved by the University's Human Subjects Institutional Review Board. Since a new instrument had to be created, the necessary steps were taken to insure its validity and reliability.

Validity

Validity is the degree to which a testing or measurement instrument measures what it is supposed to measure (Kumar, 2005). For the AIIPS, content validity was established through a review process conducted by a Panel of Experts on the I-BEST program. The experts included Ms. Tina Bloomer, Dr. Davis Jenkins, Ms. Tina Prentiss, Dr. Thomas Keegan, and Dr. Debra Bragg.

- Ms. Bloomer is a policy associate at the Washington State Board of Community and Technical Colleges who has lectured and authored several articles on I-BEST.
- Dr. Jenkins is a Senior Research Associate at the Community College Research Center and has authored several articles on I-BEST including the pilot research which launched the program.
- Ms. Prentiss is a full-time ABE instructor and has helped with I-BEST activities at Olympic College in Bremerton, Washington.
- Dr. Keegan is the president of Peninsula College in Port Angeles, Washington and oversees an I-BEST program which has repeatedly posted strong enrollment figures.

- Dr. Bragg is the Director of the Office of Community College Research and Leadership at the University of Illinois at Urbana-Champaign and expert on career pathways programs.

Members of the expert panel were contacted to request their assistance in reviewing the AIIPS instrument (see Appendix A). A follow-up email was sent three days later to anyone who had not responded to the initial request (see Appendix B). The email explained the survey had been designed to measure the perceptions of I-BEST implementers and their feedback of the instrument would be appreciated. After receiving an affirmative response, the panel member received another email along with an attachment containing the survey as a Word document (see Appendix C).

The content experts were asked if the statements appropriately addressed each research question. The panel members then assessed whether an item appeared adequate and made recommendations for improvement. The experts next rated each item using the following scale: 1 = omit, 2 = satisfactory, or 3 = retain. Finally, the members suggested a statement if a topic related to the I-BEST program had been omitted from the AIIPS instrument. The document and comments were returned electronically to the researcher within two weeks. Once all of the panelists had returned the survey, the researcher revised the instrument based on their feedback. In situations where only one panelist felt the item needed revising but the others did not, the item was left intact, and no revisions were made to it. If at least two of the experts suggested an item should be omitted, then the item was removed or revised. The experts' recommendations resulted in omitting four items from the survey. In addition, 17 other items were reworded or revised resulting in a total of 28 items on the instrument.

Reliability

Reliability refers to the ability of an instrument to yield consistent and stable results over time. One of the typical ways to establish reliability is the test/re-test procedure (Kumar, 2005). In this study reliability was established by administering the instrument twice to a group of five implementers composed of three instructors, the program manager, and the manager's immediate supervisor from Olympic College in Bremerton, Washington. The five people selected for the pilot study were ineligible to participate in the main study. The pilot group was excluded from the principal portion of the study because their familiarity with the testing instrument could confound the findings. The pilot group was selected because of both convenience and the fact the manager's supervisor was familiar with some of the researcher's work at the college. The researcher spoke to the administrator explaining purpose of the survey and the need for assistance in piloting the study. The administrator contacted the other four I-BEST implementers and encouraged their participation in the research.

The program manager's supervisor provided the contact information for each member of the pilot group. Email notifications were sent to the pilot group participants one week before the beginning of the pilot test (see Appendix D). The notification introduced the researcher and the purpose of the survey (i.e., assessing the reliability of the survey instrument). Group members were informed the survey would be available in one week and at that time they would be sent the access information to SurveyMonkey. In addition, participants were informed they would be retaking the same test exactly 14 days later. The pilot group members were also informed the test and retest would be available on SurveyMonkey for only one day. The notification explained the strict adherence to the time

constraints was necessary in order to minimize any circumstances which could adversely affect the accuracy of the instrument.

The researcher sent an email the following week to each member of the pilot group along with a link to SurveyMonkey (see Appendix E). The email thanked the participants for their help and reminded them the test would only be available for one day. The email also called the members' attention to four additional questions at the end of the survey asking their opinions about the instrument. The four questions were as follows:

1. Were the survey instructions clear?
2. Was the wording of any item unclear or ambiguous?
3. Was the wording of any item offensive to you or potentially offensive to anyone?
4. How long did it take you to complete the instrument?

The responses to the four questions were used to further refine the instrument. At the conclusion of the first survey, a period of 14 days passed prior to sending out the re-test notification along with the link to SurveyMonkey (see Appendix F). As in the case with the initial administration of the instrument, the survey was available to the pilot group for one day. The scores of the test-retest were analyzed by a statistical software program (i.e., SPSS) to determine a Pearson product-moment correlation reliability coefficient for the AIIPS. The Pearson r for the AIIPS was .76. After determining the reliability of the instrument, a notification email was sent out to each of the college presidents and the I-BEST implementers in the Washington state community college system informing them about the study (see Appendixes G and H).

The final instrument (see Appendix I) was posted on SurveyMonkey along with a cover email (see Appendix J). The cover email identified the researcher and the purpose of

the study, as well as the significance of the research and the importance of participation. The cover email addressed all the items required on an informed consent form except it did not have a signature line. Respondents were informed the submission of the survey acknowledged their willingness to participate in the research.

The first section of the survey asked for basic background information including demographic information (i.e., gender, age, ethnicity, etc.), length of service at their institution, length of time with I-BEST, and the participant's role with I-BEST (e.g., program coordinator, ABE/ESL instructor, etc.). Participants were also asked to indicate if they worked at rural or non-rural institutions. A list of all the community colleges was provided segregating the institutions into two groups (i.e., A or B) using the classification system utilized by the Carnegie Foundation for the Advancement of Teaching. The AIIPS instrument used a 5-point Likert-type scale to measure responses to the series of statements about I-BEST. Participants were asked to make a selection along a scale with the following five choices: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. The use of a continuous scale provided internal data suitable for performing parametric statistical analysis.

Data Collection

After establishing the validity and reliability of AIIPS, the final version of the instrument was made available to the I-BEST implementers on SurveyMonkey. All of the identified I-BEST participants (i.e., instructors and administrators) were sent a pre-survey electronic mail notification one week before the beginning of the survey. The pre-survey emails were sent out the Wednesday before the Thanksgiving break of the 2009 - 2010 academic year so respondents new to I-BEST would have at least nearly a full-term's

experience with the program. The notification introduced the researcher and provided his contact information in the event of further questions. The participants were informed the research focused on their perceptions of I-BEST because it appeared this topic had not been previously explored but was nevertheless critical to its success. Also, the recipients were encouraged to complete the survey in order to provide a more complete picture of I-BEST. In addition, everyone was informed the researcher would provide the results of the study if they wished to read them. Finally, the notification announced the date when they could access the survey.

One week later the researcher sent a cover email to the survey announcing the commencement of the study and providing the link to the instrument on SurveyMonkey. The email also included the survey's availability dates. Participants were informed on approximately how long it would take to complete the survey. The email also announced eligibility to win one of three \$50 gift cards for taking the time to complete the survey. Participants were informed the SurveyMonkey feature tracking their email addresses had been turned-off so their responses would remain anonymous. However, to enter the drawing for a gift card, they would need to click on the URL link after submitting the survey. The link would take them to a different site where their contact information would be requested for the gift certificate. The two sites were totally separate, so the researcher would be unable to trace the survey responses to a specific individual.

The data collection phase ran for three weeks. One winning gift card was awarded for each week of the collection period. The name of college where the winner worked was announced in reminder emails. The names of the winning participants were announced if they granted prior permission. At the end of the first week, emails were sent to everyone

announcing the winner of the first drawing and thanking those who had participated (see Appendix K). The participants who failed to win during the first week were told their names were entered in the drawing for the second gift certificate. The people who had not completed the survey were encouraged to please do so. A final email was sent out after the second week announcing the second winner (see Appendix L). The email also informed those who had not participated they had one more chance to win. No other reminder notices were sent out because of wishing to avoid adversely impacting the response rate by saturating the respondents with requests to participate (Cook, Heath, & Thompson, 2000). The access to SurveyMonkey was terminated at the end of the three weeks. At the end of the data collection period, all of the data were downloaded into SPSS 15.0 for analysis.

Anonymity

Responses were anonymous to allow individuals to freely express their perceptions. The testing instrument did not ask for any self-identifying information (i.e., their name or the name of the institution where they worked) so the responses could not be traced back to a specific individual. Anonymity also was assured by reporting the findings in the aggregate to avoid any possibility of identifying any particular individual or institution. The results were stored in a secure location throughout the entire study. No one other than the researcher had access to the survey results.

Data Analysis

The data provided descriptive statistics for each of the five research questions. In addition, the continuous dependent variables made it possible to conduct independent sample *t* tests to compare the different groups. The *t* tests provided inferential statistical information making it possible to see if differences existed between the groups identified in

the research questions (e.g., instructors and administrators). Prior to data analysis, the data were checked to verify the assumptions of normality were satisfied. The significance level in this study was set at .05. The selection of *t* tests for the data analysis were appropriate for this research because it is used to determine if there are significant differences between the quantitative dependent mean scores of two groups. For example, Research Question 1 explored the differences between I-BEST instructors and administrators. Research Question 2 examined the group differences between I-BEST program managers and their immediate supervisors. The final three research questions explored group differences between instructors, program managers, and the managers' supervisors based on whether they worked at a rural or non-rural serving community college.

Conclusion

Chapter 3 presents the methodology used both to achieve the purpose of this study and to answer the research questions. This research study explored the I-BEST program in the community colleges located in Washington state looking at the population of I-BEST instructors, I-BEST program managers, and the managers' immediate supervisors. A researcher developed Administrators and Instructors I-BEST Perception Survey (AIIPS) assessed the perceptions of the participants. The survey findings are presented in Chapter 4.

CHAPTER 4

RESULTS

This chapter provides the demographical information of the participants and the statistical findings of the study. The purpose of this study is (a) to explore the differences in the perceptions of administrators and instructors regarding the I-BEST program, (b) to explore whether instructors and administrators in rural and non-rural institutions differ in their perceptions of the I-BEST program, and (c) to identify factors contributing to the success or failure of the I-BEST program.

To facilitate accomplishing the purpose, the following five research questions guided the study:

- 1) Is there a statistically significant difference in the perceptions of I-BEST instructors compared to the perceptions of administrators regarding the I-BEST program?
- 2) Is there a statistically significant difference in the perceptions of I-BEST program managers compared to the perceptions of their immediate supervisors regarding the I-BEST program?
- 3) Is there a statistically significant difference in the perceptions of instructors at rural community colleges compared to the perceptions of instructors at non-rural community colleges regarding the I-BEST program?
- 4) Is there a statistically significant difference in the perceptions of program managers at rural community colleges compared to the perceptions of program managers at non-rural community colleges regarding the I-BEST program?

5) Is there a statistically significant difference in the perceptions of administrators at rural community colleges compared to the perceptions of administrators at non-rural community colleges regarding the I-BEST program?

The researcher constructed a survey instrument to answer the questions in this study. The AIIPS instrument consisted of 38 demographic and program specific items. Electronic notifications regarding the survey were sent out to all the I-BEST implementers during the late fall 2009 academic term. Implementers from all of the 34 community colleges in Washington State were invited to participate in the study. Participation in the survey was voluntary and completely anonymous. Three \$50 gift certificates were awarded as an inducement for participation. Data collection took place during a three week period in December of 2009, and 162 responses were received on the SurveyMonkey website.

Prior to presenting the findings for each of the five research questions, descriptive statistics are presented on the respondents who provided data for this study. Four of the submissions were returned largely incomplete (i.e., surveys submitted with blanks on more than three items). In two of these cases, approximately 61% of the survey had been completed, and in the third case approximately 82%. In each of these cases imputed mean values were entered in the remaining blank items (Tabachnick & Fidell, 2007). One response was deleted because only the demographic items were completed. The elimination of the one mostly blank submission yielded 161 surveys for analysis. The 161 participants represent a response rate of 58.3%.

Participant Demographics

The majority of the participants in this study were female. Table 1 shows almost 75% (i.e., 74.5%) of respondents were female. The ethnic makeup of the respondents

included Whites, African-Americans, Asian-Americans, and individuals who identified their ethnicity as Other. The ethnic composition of the participants is shown in Table 2.

Table 1

Gender Composition of the I-BEST Participants

Gender	<i>N</i>	Percentage
Females	120	74.5
Males	41	25.5

Table 2

I-BEST Participant Ethnicity

Ethnicity	<i>N</i>	Percentage
White	138	85.7
African American	3	1.9
Asian	7	4.3
Hispanic	-	-
Other	12	7.5

Note. One case did not identify his/her ethnicity and was excluded from this table.

The research examined the perceptions of three groups of I-BEST professionals: instructors, program managers, and the managers' immediate supervisors. Most of the responses were from instructors, who accounted for 67.7% of the total number of submissions. The participation levels of these groups are displayed in Table 3.

Table 3

Frequencies of Instructors, Program Managers, and the Managers' Supervisors

I-BEST Role	<i>N</i>	Percentage
Instructors	107	67.7
Program Managers	28	17.7
Managers' Supervisors	23	14.6

The participants who identified instruction as their primary role with the I-BEST program were predominantly involved in career/vocational training (i.e., 55.2%). The respondents were largely seasoned instructors with 49.1% of them reporting over 8 years of college teaching experience. The distribution of teaching roles and college instructional experience are displayed in Tables 4 and 5.

Table 4

Instructors' Teaching Role

Subject Matter	<i>N</i>	Percentage
Adult Basic Education	20	19.0
English as a Second Language	27	25.7
Career/Vocational	58	55.2

Note. Two cases did not identify their roles and were excluded from this table. Percentage total does not sum to 100% because of rounding.

Table 5

Instructors' Teaching Experience

Total Years	<i>N</i>	Percentage
<1	6	5.7
1-3	22	20.8
4-7	26	24.5
8+	52	49.1

Note. One case did not identify their level of experience and was excluded from this table. Percentage total does not sum to 100% because of rounding.

Instructors reported varying levels of experience within the I-BEST program. Respondents who had 7 or more quarters of experience in I-BEST comprised 33.0% of the total. The next largest group, 26.2% of the total, reported 1 -2 academic quarters of

teaching experience in the program. The distribution of the participants' teaching experience with I-BEST is displayed in Table 6.

Table 6

Instructors' Experience in I-BEST

Total Academic Quarters	<i>N</i>	Percentage
1-2	27	26.2
3-4	24	23.3
5-6	18	17.5
7+	34	33.0

Note. Four cases did not identify their level of experience and were excluded from this table.

This study also examined the administrative elements of the I-BEST program in Washington State. The program managers and the program managers' supervisors are responsible for the administrative duties of I-BEST. As indicated in Tables 7 and 8, the administrative respondents were primarily experienced administrators with 53.1% reporting 8 or more years of experience, and 65.3% reporting 7 or more quarters administering the I-BEST program.

Table 7

Levels of Managers' and their Supervisors' Administrative Experience

Total Years	<i>N</i>	Percentage
<1	1	2.0
1-3	13	26.5
4-7	9	18.4
8+	26	53.1

Note. Five cases did not identify their level of experience and were excluded from this table.

Table 8

Levels of Managers' and their Supervisors' Administrative Experience in I-BEST

Total Quarters	<i>N</i>	Percentage
1-2	4	8.2
3-4	4	8.2
5-6	9	18.4
7+	32	65.3

Note. Five cases did not identify their level of experience and were excluded from this table. Percentage total does not sum to 100% because of rounding.

Research Question One

The first research question asks whether there are statistically significant differences between the perceptions of I-BEST instructors and administrators. Instructors

comprised the majority of the respondents, accounting for 67.7% of the total. Table 9 reports the number of the instructors and the administrators.

An independent-samples *t* test was used to determine if there were any significant differences in the perceptions of I-BEST instructors and administrators (i.e., managers and their immediate supervisors). The results of the survey found six items where there were statistically significant differences between the two groups. The alpha level was set at .05. The first item of difference addressed the issue of performance tests rather than standardized tests to determine the program's effectiveness. The instructors ($M = 3.79, SD = 0.89$) were more likely than the administrators ($M = 3.47, SD = 0.99$) to view performance tests as a better barometer of I-BEST's effectiveness than standardized tests, $t(156) = 2.00, p < .05$. A second difference between the groups involved the perception of ESL students needing additional support services beyond those currently provided. The administrators ($M = 2.11, SD = 1.01$) were more likely than the instructors ($M = 2.62, SD = 1.01$) to perceive ESL students as needing additional support, $t(156) = 2.98, p < .01$.

Another statistically significant difference between instructors and administrators concerned the issue of data collection. Administrators ($M = 3.62, SD = 1.19$) were more likely than instructors ($M = 3.13, SD = 1.04$) to report data collection as difficult because of their other demands $t(156) = 2.5, p = .01$. Instructors and administrators also significantly differed in their perceptions on the adequacy of support services to I-BEST students. The administrators ($M = 2.34, SD = 0.97$) were more inclined than the instructors ($M = 2.94, SD = 0.95$) to view the current levels of support as inadequate, $t(156) = 3.66, p < .01$.

The final two statistically significant differences between the groups concerned the perceptions of whether the State Board approved new programs in an appropriate time-

frame, and whether student employment outcomes were used to modify course instruction. I-BEST administrators ($M = 3.73$, $SD = 0.85$) were more likely to regard the pace of approval as appropriate than were the instructors ($M = 3.08$, $SD = 0.68$), $t(82.11) = 4.82$, $p < .01$. Finally, instructors ($M = 3.23$, $SD = 0.95$) were more likely than administrators ($M = 2.88$, $SD = 1.14$) to agree student employment outcomes were routinely used to modify instruction, $t(156) = 2.03$, $p = .04$. The findings for all of the survey items are shown in Table 10.

Table 9

Frequencies of the I-BEST Instructors and Administrators

I-BEST Role	<i>N</i>	Percentage
Instructors	107	67.7
Administrators	51	32.3

Note. Three cases with imputed values were excluded from this table.

Table 10

Means, standard deviations, and levels of significance for Research Question One

Variables	Instructors		Administrators		<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Release Time	2.79	1.11	3.06	1.10	.16
Equal Time	3.12	1.16	3.37	1.11	.20
Testing	3.79	0.89	3.47	0.99	.05*

Table 10 Continued

Variables	Instructors		Administrators		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Adequate Resources	3.55	1.12	3.24	1.19	.11
Feel Supported	3.79	1.00	3.80	0.92	.94
ESL Students	2.62	1.01	2.11	1.01	.00**
Cut Back	2.57	0.73	2.42	1.08	.39
College Mission	3.08	1.10	2.76	1.31	.14
Instructor Supply	3.40	0.92	3.35	1.15	.77
Transportation	3.00	0.90	3.22	0.94	.17
Program Funding	2.91	0.96	2.80	1.25	.61
Retain Instructors	2.85	0.92	2.68	1.14	.37
Local Needs	3.85	0.79	3.80	0.94	.75
Hiring Strategies	3.09	1.00	3.02	1.01	.67
Optimism	4.37	0.65	4.44	0.70	.55
Little Interest	2.11	1.02	2.06	0.95	.75
Career Context	4.02	0.91	4.04	0.94	.90
Verbally Discuss	4.11	0.74	4.08	0.77	.79
Marketing	3.62	0.89	3.60	1.13	.90
Campus-wide	3.37	0.88	3.56	1.19	.33
Personal Contact	2.54	1.01	2.52	1.08	.92
Collect Data	3.13	1.04	3.62	1.19	.01**

Table MI Continued

Variables	Instructors		Administrators		<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Effective Practices	3.07	0.95	2.84	1.16	.22
Support Services	2.94	0.95	2.34	0.97	.00**
Eliminate Programs	2.88	0.64	2.82	0.91	.68
Board Approval	3.08	0.68	3.73	0.85	.00**
Employer Demands	3.28	0.69	3.12	1.16	.39
Student Outcomes	3.23	0.95	2.88	1.14	.04*

Note. * $p < .05$. ** $p < .01$.

Research Question Two

The second research question asks whether there are statistically significant differences between the perceptions of the program managers and their immediate supervisors. Program managers comprised slightly over half (i.e., 51.9%) of the respondents responsible for administrative responsibilities. Table 11 reports the number of the managers and their supervisors.

Significant differences in the perceptions of I-BEST managers and their immediate supervisors were explored by performing an independent-samples *t* test. The results of the survey found three items where there were statistically significant differences between the two groups. The alpha level was set at .05. The first item of difference addressed the issue of instructor release time. The supervisors ($M = 3.43$, $SD = 1.12$) were more likely than the managers ($M = 2.75$, $SD = 1.00$) to agree a sufficient amount of release time was being

offered to I-BEST instructors, $t(49) = 2.31, p = .03$. A second significant difference between the groups involved the difficulty of data collection. The program managers ($M = 3.93, SD = 1.12$) were more likely than their supervisors ($M = 3.25, SD = 1.20$) to view data collection difficult because of their other duties, $t(49) = 2.07, p = .04$. Lastly, program managers ($M = 2.50, SD = 1.11$) were less likely than their supervisors ($M = 3.35, SD = 1.03$) to use student employment outcomes to modify instruction, $t(49) = 2.83, p = .01$. The findings for all of the variables are shown in Table 12.

Table 11

Frequencies of the I-BEST Managers and their immediate Supervisors

I-BEST Role	<i>N</i>	Percentage
Managers	28	54.9
Supervisors	23	45.1

Note. Three cases with imputed values were excluded from this table.

Table 12

Means, standard deviations, and levels of significance for Research Question Two

Variables	Managers		Supervisors		<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Release Time	2.75	1.00	3.43	1.12	.03*
Equal Time	3.14	1.15	3.65	1.03	.10
Testing	3.43	0.92	3.52	1.08	.74

Table 10 Continued

Variables	Managers		Supervisors		<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Adequate Resources	3.36	1.28	3.09	1.08	.43
Feel Supported	3.79	0.96	3.83	0.89	.88
ESL Students	2.25	1.17	1.93	0.74	.25
Cut Back	2.54	0.88	2.28	1.29	.41
College Mission	2.71	1.30	2.83	1.34	.76
Instructor Supply	3.54	1.00	3.13	1.29	.23
Transportation	3.21	0.96	3.22	0.95	.98
Program Funding	2.86	1.24	2.74	1.29	.74
Retain Instructors	2.64	1.09	2.74	1.21	.75
Local Needs	3.75	0.93	3.87	0.97	.66
Hiring Strategies	2.86	0.89	3.22	1.13	.21
Optimism	4.46	0.74	4.41	0.65	.78
Little Interest	2.04	1.04	2.09	0.85	.84
Career Context	4.11	0.79	3.96	1.11	.58
Verbally Discuss	4.18	0.77	3.96	0.77	.32
Marketing	3.54	1.26	3.68	0.97	.65
Campus-wide	3.46	1.20	3.67	1.18	.54
Personal Contact	2.38	0.99	2.70	1.17	.30
Collect Data	3.93	1.12	3.25	1.20	.04*

Table MI Continued

Variables	Managers		Supervisors		<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Effective Practices	2.82	1.25	2.87	1.06	.88
Support Services	2.36	1.03	2.33	0.92	.91
Eliminate Programs	2.61	0.88	3.07	0.90	.07
Board Approval	3.93	0.72	3.49	0.94	.07
Employer Demands	3.04	1.14	3.23	1.20	.56
Student Outcomes	2.50	1.11	3.35	1.03	.01**

Note. * $p < .05$. ** $p < .01$.

Research Question Three

The third research question explores whether perceptions of I-BEST instructors on rural campuses differed significantly from those of instructors on non-rural campuses. An independent-samples *t* test was used to determine if there were significant differences between these two groups. The distribution of instructors located in either a rural or non-rural college is displayed in Table 13. The results show two items where the groups differ significantly with an alpha level of $< .05$. Rural instructors ($M = 3.13$, $SD = 1.08$) were more likely than non-rural instructors ($M = 2.52$, $SD = 1.04$) to perceive the amount of release time as adequate, $t(106) = 2.93$, $p < .01$. Also, rural and non-rural instructors differed in their perception of the provision of institutional data on effective practices. Rural instructors ($M = 3.28$, $SD = 0.88$) were more likely than non-rural instructors ($M = 2.92$, $SD = 0.95$) to agree the institutions provided data on effective practices, $t(106) =$

2.01, $p = .05$. All of the items comparing rural and non-rural instructors are shown in Table 14.

Table 13

Frequencies of Rural and Non-rural I-BEST Instructors

I-BEST Role	<i>N</i>	Percentage
Rural Instructors	44	41.9
Non-rural Instructors	61	58.1

Note. Five cases with imputed values were excluded from this table.

Table 14

Means, standard deviations, and levels of significance for Research Question Three

Variables	Rural Instructors		Non-rural Instructors		<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Release Time	3.13	1.08	2.52	1.04	.00**
Equal Time	2.98	1.22	3.26	1.09	.21
Testing	3.79	0.93	3.77	0.90	.93
Adequate Resources	3.69	0.93	3.46	1.22	.27
Feel Supported	3.91	0.65	3.70	1.17	.25
ESL Students	2.60	0.97	2.62	1.05	.89
Cut Back	2.59	0.85	2.57	0.69	.94
College Mission	3.26	1.01	3.00	1.14	.23

Table 10 Continued

Variables	Rural Instructors		Non-rural Instructors		<i>P</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Instructor Supply	3.47	0.91	3.33	0.96	.44
Transportation	3.02	0.87	2.97	0.91	.76
Program Funding	2.98	0.97	2.89	0.95	.62
Retain Instructors	2.83	0.79	2.87	1.01	.84
Local Needs	3.96	0.69	3.74	0.85	.15
Hiring Strategies	3.07	0.94	3.07	1.03	.99
Optimism	4.33	0.66	4.40	0.64	.57
Little Interest	2.30	0.93	2.00	1.08	.13
Career Context	4.04	0.86	4.00	0.97	.81
Verbally Discuss	4.15	0.72	4.05	0.78	.50
Marketing	3.65	0.76	3.56	1.01	.58
Campus-wide	3.42	0.71	3.33	1.00	.57
Personal Contact	2.52	1.02	2.48	1.03	.82
Collect Data	3.01	0.96	3.21	1.10	.30
Effective Practices	3.28	0.88	2.92	0.95	<.05*
Support Services	3.06	0.92	2.89	0.97	.35
Eliminate Programs	2.85	0.59	2.89	0.66	.76
Board Approval	3.15	0.66	3.02	0.70	.30
Employer Demands	3.22	0.55	3.35	0.73	.29

Table 14 Continued

Variables	Rural Instructors		Non-rural Instructors		<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Student Outcomes	3.15	0.83	3.33	0.98	.33

Note. * $p < .05$. ** $p < .01$.

Research Question Four

The next research question asks whether there are statistical significant differences in the perceptions of rural and non-rural managers regarding the I-BEST program. Table 15 shows the number of managers in rural and non-rural areas. An independent-samples *t* test was used to determine if there were differences between rural and non-rural managers. The results found two statistically significant items. The alpha level was set at .05. Rural program managers ($M = 2.38$, $SD = 1.02$) were less likely than non-rural managers ($M = 1.50$, $SD = 0.71$) to disagree their students showed little interest in learning basic skills, $t(29) = 2.45$, $p = .02$. Secondly, rural managers ($M = 2.76$, $SD = 1.04$) were more likely to report the level of support services met their students' needs more frequently than non-rural managers ($M = 1.80$, $SD = 0.63$), $t(29) = 2.68$, $p = .01$. The results comparing the groups on all of the items are displayed in Table 16.

Table 15

Frequencies of Rural and Non-rural I-BEST Program Managers

I-BEST Role	<i>N</i>	Percentage
Rural Managers	18	58.1
Non-rural Managers	10	32.3

Note. Percentages do not sum to 100% because three cases with imputed values were excluded from this table.

Table 16

Means, standard deviations, and levels of significance for Research Question Four

Variables	Rural Managers		Non-rural Managers		<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Release Time	2.71	1.01	3.00	0.94	.45
Equal Time	3.19	1.08	3.10	1.20	.83
Testing	3.43	0.98	3.40	0.97	.94
Adequate Resources	3.38	1.12	3.40	1.51	.97
Feel Supported	3.95	0.74	3.30	1.16	.07
ESL Students	2.38	1.12	1.80	1.23	.20
Cut Back	2.76	0.94	2.30	0.95	.21
College Mission	2.95	1.16	2.50	1.58	.38
Instructor Supply	3.29	1.10	3.70	0.95	.32
Transportation	3.19	0.98	3.10	0.88	.81
Program Funding	2.95	1.12	2.80	1.40	.75

Table M1 Continued

Variables	Rural Managers		Non-rural Managers		<i>P</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Retain Instructors	2.52	0.81	2.98	1.49	.39
Local Needs	3.95	0.74	3.20	1.03	.06
Hiring Strategies	2.81	0.87	2.90	0.88	.79
Optimism	4.33	0.80	4.60	0.52	.34
Little Interest	2.38	1.02	1.50	0.71	.02*
Career Context	4.05	0.86	4.20	0.63	.62
Verbally Discuss	4.14	0.79	4.00	0.82	.65
Marketing	3.62	1.16	3.20	1.40	.39
Campus-wide	3.48	1.08	3.40	1.35	.87
Personal Contact	2.26	1.04	2.30	0.95	.92
Collect Data	3.71	1.06	4.10	1.29	.38
Effective Practices	2.95	1.20	2.60	1.17	.45
Support Services	2.76	1.04	1.80	0.63	.01**
Eliminate Programs	2.76	0.83	2.30	0.82	.16
Board Approval	3.81	0.60	4.00	0.94	.50
Employer Demands	3.24	1.04	2.70	1.16	.21
Student Outcomes	2.76	1.04	2.20	1.14	.18

Note. * $p < .05$. ** $p < .01$.

Research Question Five

The final research question explores whether there are perceptual differences between rural and non-rural supervisors regarding I-BEST. The distribution of rural and non-rural supervisors is presented in Table 17. An independent-samples *t* test was used to determine if there were significant differences between rural and non-rural supervisors. There was one item where the two groups' responses differed significantly. The alpha level was set at .05. Non-rural supervisors ($M = 3.65$, $SD = .84$) were more likely than rural supervisors ($M = 2.58$, $SD = 1.08$) to agree a sufficient amount of class time was being spent teaching students effective hiring strategies, $t(24) = 2.82, p = .01$. Table 18 shows the results of all of the survey items for rural and non-rural supervisors.

Table 17

Frequencies of Rural and Non-rural Program Managers' Supervisors

I-BEST Role	<i>N</i>	Percentage
Rural Supervisors	9	34.6
Non-rural Supervisors	14	53.8

Note. Percentages do not sum to 100% because three cases with imputed values were excluded from this table.

Table 18

Means, standard deviations, and levels of significance for Research Question Five

Variables	Rural Supervisors		Non-rural Supervisors		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Release Time	3.25	1.06	3.57	1.09	.45
Equal Time	3.33	1.15	3.86	0.77	.20
Testing	3.92	1.00	3.14	1.10	.07
Adequate Resources	3.25	1.21	3.07	0.92	.67
Feel Supported	3.42	1.00	4.07	0.62	.06
ESL Students	2.00	0.95	1.82	0.60	.56
Cut Back	2.58	1.38	2.25	1.31	.54
College Mission	3.25	1.29	2.64	1.34	.25
Instructor Supply	3.00	1.41	3.07	1.21	.89
Transportation	3.00	0.95	3.29	0.91	.44
Program Funding	2.92	1.31	2.71	1.20	.69
Retain Instructors	3.17	1.34	2.43	0.94	.11
Local Needs	3.83	0.94	3.79	0.97	.90
Hiring Strategies	2.58	1.08	3.65	0.84	.01 =
Optimism	4.25	0.75	4.46	0.50	.41
Little Interest	2.33	0.98	2.01	0.68	.35
Career Context	3.83	1.27	4.07	0.92	.58

Table 10 Continued

Variables	Rural Managers		Non-rural Managers		<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Verbally Discuss	3.75	0.87	4.01	0.68	.41
Marketing	3.58	1.08	3.61	0.92	.94
Campus-wide	3.42	1.08	3.82	1.17	.38
Personal Contact	2.25	1.22	2.79	1.17	.27
Collect Data	3.36	1.15	3.11	1.21	.60
Effective Practices	2.92	1.00	2.86	1.03	.88
Support Services	2.58	1.08	2.32	0.82	.49
Eliminate Programs	2.92	0.90	3.12	0.87	.56
Board Approval	3.50	0.80	3.45	1.01	.89
Employer Demands	3.33	0.98	3.16	1.29	.71
Student Outcomes	3.25	0.75	3.44	1.15	.64

Note. **p*<.05. ***p*<.01.

Conclusion

This chapter presented the findings of the responses from the I-BEST instructors, managers, and supervisors who participated in this research. Although the groups shared congruent perceptions on most items, nevertheless differences in the groups did emerge. A summary of the significant differences is presented in Table 19. In the first research question, administrators were more likely than instructors to report data collection requirements as difficult and existing support services as inadequate. On the other hand,

instructors were more likely than administrators to perceive performance testing as a better measure of effectiveness.

In the second question, managers were more likely than their supervisors to report finding data collection as difficult and perceiving the release time for instructors as insufficient. The supervisors were more likely to report employment outcomes being used to modify instruction. The third question identified two differences between rural and non-rural instructors. Rural instructors were more likely than non-rural instructors to perceive the amount of release time as sufficient. Rural instructors were also more likely to agree their institutions provided them with institutional data on effective I-BEST practices. The fourth question observed non-rural managers were more likely than rural managers to disagree their students showed little interest in learning basic skills. The final question looked at differences between rural and non-rural supervisors. Rural supervisors were more likely than non-rural supervisors to disagree a sufficient amount of class time was spent teaching hiring practices to students.

Table 19

Summary of Significant Differences

Research Question	Survey Item	<i>p</i>
Question One	Performance Testing	.05*
	ESL Student Needs	.00**
	Data Collection	.01**
	Student Support Services	.00**
	State Board Pace	.00**
	Student Employment Outcomes	.04*
Question Two	Instructor Release Time	.03*
	Data Collection	.04*
	Student Employment Outcomes	.01**
Question Three	Instructor Release Time	.00**
	Effective Practices	.05*
Question Four	Interest in Basic Skills	.02*
	Student Support Services	.01**
Question Five	Teaching Hiring Strategies	.01**

Note. * $p < .05$. ** $p < .01$.

The following chapter presents a discussion of the findings regarding perceptions of the I-BEST program from the instructors and administrators who have been asked to implement it. The chapter contains conclusions, implications for community college leaders, and recommendations related to I-BEST which may be useful in strengthening the

program as it expands. This discussion includes references to the body of research currently available regarding I-BEST and other basic skills programs geared to ameliorating skill deficiencies in adult students. The following chapter concludes with suggestions for future studies and the researcher's overall observations of the study results.

CHAPTER 5

DISCUSSION AND CONCLUSION

The purpose of this chapter is to provide a further explication of the results of this research and their implications for community college professionals. Before proceeding with the discussion it is important to reiterate why this research was conducted. The nation is losing ground in its competitiveness in the global economy. Serious financial consequences lie ahead for the country unless significant numbers of citizens acquire marketable skills geared for the demands of the 21st Century. Experienced employees are moving into retirement but employers are failing to fill those vacancies with adequate numbers of skilled workers. A concomitant problem is so many Americans lack even the most basic of skills. Despite years of effort, 14% of the population still lacks even basic literacy skills (White & Dillow, 2005.). Unfortunately for the country, the classes designed to educate these adults have shown little success in curing the problem because most students drop out before showing significant improvement in skills (Amstutz & Sheared, 2000; O'Donnell, 2006).

The problem of a highly skilled generation leaving the workforce which is evident on the national landscape is seen in microcosm in Washington State. The Washington state Office of Financial Management (2008) estimates the number of citizens aged 65 or older will comprise nearly 20% of the State's population by the year 2030. Furthermore, the basic skills problem plaguing the nation also plagues Washington state. One estimate is that approximately 15% of Washington state's adult population functions at the lowest literacy level with the capability of reading only simple materials (Washington State Institute for Public Policy, 2008.). Officials have recognized the threat to the financial well-being of the

state and piloted a novel approach to basic skills training during the 2004 - 2005 academic year. The Integrated Basic Education and Skills Training (I-BEST) program combines basic skills with career training in order to equip students with skills to rapidly step into living-wage jobs.

Most of the prior research on the I-BEST program focused on the program's impact on students. The early findings have been very positive in terms of students' success (Bloomer, 2008; Cooper, 2007; Jenkins, Zeidenberg, & Kienzl, 2009; WSBCTC, 2008), but they have failed to address the important role administrators and instructors play in the program. One study which did look at the administrator's role (Bragg et al., 2007) limited itself to a single community college in a non-rural setting. The current research expanded upon prior research by looking at the perceptions of instructors and administrators at all 34 of the community colleges in Washington state.

Purpose Statement and Research Questions

The purpose of this study was (a) to explore whether there are any differences in the perceptions of administrators and instructors regarding the I-BEST program, (b) to explore whether instructors and administrators in rural and non-rural institutions differ in their perceptions of the I-BEST program, and (c) to identify factors contributing to the success or failure of the I-BEST program.

This study has been guided by the following questions:

- 1) Is there a statistically significant difference in the perceptions of I-BEST instructors compared to the perceptions of administrators regarding the I-BEST program?

- 2) Is there a statistically significant difference in the perceptions of I-BEST program managers compared to the perceptions of their immediate supervisors regarding the I-BEST program?
- 3) Is there a statistically significant difference in the perceptions of instructors at rural community colleges compared to the perceptions of instructors at non-rural community colleges regarding the I-BEST program?
- 4) Is there a statistically significant difference in the perceptions of program managers at rural community colleges compared to the perceptions of program managers at non-rural community colleges regarding the I-BEST program?
- 5) Is there a statistically significant difference in the perceptions of administrators at rural community colleges compared to the perceptions of administrators at non-rural community colleges regarding the I-BEST program?

Overview of the Methodology

A cross-sectional electronic survey instrument was developed, tested, and used to explore the perceptions of instructors and administrators. The Administrators and Instructors I-BEST Survey (AIIPS) instrument utilized a five-point Likert-type scale to assess participants' perceptions regarding the program. After pilot testing the AIIPS instrument, an electronic mail notification along with a link to the survey was sent out to the instructors, program managers, and the managers' supervisors. The survey restricted itself to only those people involved with I-BEST during the fall 2009 term. The data collection took place during the first three weeks of December, 2009. As a means of encouraging a high response rate, respondents could enter a drawing to win a \$50 gift certificate. Gift certificates were awarded for each of the three weeks of the collection

period. At the end of the three weeks the data were downloaded into SPSS 15.0 for analysis. Descriptive statistics on the participants and *t* tests were generated to answer the research questions.

The *t* test calculations identified several significant differences between the groups surveyed in this study. The analysis for the first question found six items where instructors differed from the administrators. The administrators were more likely to perceive the adequacy of support services to ESL and other I-BEST students less favorably than were the instructors. On the other hand, instructors were more likely to perceive performance testing as a better measure of program effectiveness.

The second question explored differences between the managers and their immediate supervisors. The managers were more likely to perceive the amount of instructor release time as inadequate, and the data collection demands for I-BEST students as difficult. The differences between rural and non-rural instructors were addressed in the third question. Rural instructors were more likely than their non-rural counterparts to view the amount of release time as sufficient.

The final two research questions examined differences between rural and non-rural administrators (i.e., I-BEST program managers and the managers' supervisors). Rural managers were more likely to perceive their students as having little interest in learning basic skills. In addition, the rural managers also were more likely to see the level of support services as adequate. The last research question looked at differences between rural and non-rural supervisors. The findings show rural supervisors were more likely than the non-rural supervisors to disagree that their classes allocate sufficient time to teach effective hiring strategies to students.

Discussion of the Findings

The research generated a great deal of enthusiasm among the participants. The survey obtained a response rate of 58.3% which is very good considering it was administered at a time of the year when many individuals are focusing on the holidays and winter break. Several college presidents, mid-level administrators, and instructors expressed interest in the research and its findings. One explanation for the interest is the awareness that the perceptions of the people who are most deeply involved with I-BEST have been largely unexplored in prior research. The findings of this study will begin addressing the perceptions of a group of people whose professionalism is essential for I-BEST's success.

The findings will be discussed for each of the research questions in light of the professional literature. Before discussing differences between I-BEST implementers it is noteworthy to comment there was far more congruence in participants' perceptions than there was divergence. For example, the groups agreed I-BEST students appeared more self-confident and optimistic about their futures. The finding is important because it suggests these basic skills students are having a positive educational experience which is an essential ingredient in order to achieve the State Board's intention of engaging them until they attain the "tipping point" (Prince & Jenkins, 2005) in their training. Ultimately, students' positive regard toward education is likely to translate into fulfilling I-BEST's promise of developing a skilled workforce equipped to compete in a high-skills economy. Also noteworthy is the majority of respondents said they felt supported in their curricular decisions by senior administrators. The finding suggests the support of top-level decision makers for the program is having a noticeable impact on staff perceptions.

I-BEST Instructors and Administrators

The first research question asked whether there were any statistical differences between I-BEST instructors and administrators. The results found there were significant differences between the two groups. The instructors were more likely to view performance tests as the better indicator of I-BEST's effectiveness. The finding seems consistent with prior work which noted instructors' preference for non-standardized assessments because they facilitate planning instruction, and the administrators' preference for standardized tests because they aid in program accountability (Askov, Van Horn, & Carman, 1997). Although the assessment of workforce skills can be measured by standardized tests (e.g., CASAS Workforce Skills Certificates), the findings suggest instructors perceive these types of instruments as lacking the specificity required to demonstrate the program's effectiveness. The use of performance tests may also be beneficial because their real-world context allows students to feel confident about the work-based skills they will need after graduation (Torraco, 2008).

A second difference regarded the perceived needs of ESL students. The findings of this research contradict earlier work which found administrators did not perceive ESL students as needing additional support (Gray, Rolph, & Melamid, 1996; Szelenyi & Chang, 2002). In the current study, I-BEST administrators were more inclined than instructors to perceive ESL students as needing additional support services beyond current levels. The finding may be a result of lack of awareness on the part of instructors since most of them do not work with ESL students and have no way of knowing what additional supports they may need. The administrators' awareness of the ESL students' needs is significant for two reasons: first, community colleges will continue to play an important role in the lives of

immigrant students (Valadez, 2008), and second, this student population is critical to the State Board's strategy of meeting the region's workforce needs (WSBCTC, 2008).

The instrument also revealed differences in perceptions regarding the difficulty in data collection because of other professional demands. The administrators were more likely than instructors to report collecting data on I-BEST as difficult because of their other demands. College staff rather than instructors are frequently tasked with the responsibility of meeting the data requirements of upper level administrators (Skolits & Graybeal, 2007), and this can be especially difficult when combined with all the other issues of a young program.

Another difference between instructors and administrators concerned the issue of the adequacy of student support services. Administrators were more inclined than I-BEST instructors to perceive the current levels of support services as inadequate. One possible explanation of this finding is the administrators, especially the program managers, are more involved with coordinating support services for the students than are the instructors. As a consequence of their role and knowledge of students' needs, the administrators perceive current levels as being inadequate. There is little doubt support services are needed and have played an important role in the program's success (Bragg et al., 2007). The perceptions of the administrators suggest further research should explore which particular services are failing so appropriate steps can be taken to address students' needs.

Professional responsibilities also may help to explain another group difference. Instructors and administrators differed in their perceptions of the State Board approval process for I-BEST programs. Administrators were more likely than instructors to view the pace of program approval as appropriate. The finding seems consistent with the degree of

involvement administrators have in preparing the necessary documentation for program approval. The instructors might offer some input but the process is largely administrative, and the managers and their supervisors would have a keener sense of the responsiveness of the State Board.

The last significant difference noted between the two groups pertained to the use of student employment outcomes to modify instruction. The instructors were more likely than the administrators to agree that student employment outcomes were routinely used to modify instruction. The finding seems consistent with respect to the roles each group has within the institution. The instructors, especially vocational instructors, interact to a greater degree with employers or former students than do the administrators. Through professional and social networks the instructors may be gaining insights into the effectiveness of the training program. The findings of the current study suggest there is movement in the direction of heeding recommendations which some have made (Deil-Amen & Rosenbaum, 2004) to strengthen ties between the college and area employers.

Program Managers and their immediate Supervisors

The second research question explored whether there were significant differences in the perceptions of the program managers and their immediate supervisors regarding I-BEST. The survey identified three items where the perceptions of the managers differed from their supervisors. The first difference addressed the issue of instructor release time. The managers perceived the current levels of release time as inadequate for instructors. The finding is not unexpected since managers are aware of the demands the program makes on instructors, and are in an ideal position to gauge how they are coping with the challenge (Bragg et al., 2007; Prince & Bloomer, 2005). The results suggest managers have had to

address instructors' comments or complaints about the demands I-BEST makes on their schedules. The managers may also feel powerless about the situation because there is little they can do to alleviate the burden I-BEST places on the instructors. Since supervisors would be less likely than the managers to interact on a routine basis with instructors it is less likely they would see the struggles some instructors face.

The two other differences uncovered in this question were (1) finding data collection difficult and (2) using employment outcomes to modify instruction. The hierarchy of administrative responsibilities may help to explain some of the differences. The task of data collection is predominantly a managerial function while the task of analyzing information and reporting findings is more of a supervisory function (Skolits & Graybeal, 2007). The managers may have been more likely than the senior administrators to see the data collection process as difficult because the task largely fell under their purview of responsibilities.

The final difference explored the issue of using student employment outcomes to modify course instruction. Supervisors were more likely than managers to see that the employment outcomes served to modify classroom instruction. This finding seems counterintuitive because the managers, with their frequent contacts with students and instructors, should be in a much better position to know if outcomes are being used. However, supervisors are more likely than managers to be involved in external relations for the institution, such as serving on advisory boards or involvement in community organizations (Hellowell & Hancock, 2001; Kisker & Carducci, 2003) where they could obtain information directly from employers.

Rural and Non-rural Instructors

The third question examined the perceptions of rural and non-rural instructors. The first significant difference between the groups was their perceptions on instructor release time. Non-rural groups were more likely to perceive the amount of release time for I-BEST as inadequate. The finding appears to concur with research which noted greater satisfaction in workload among minority rural faculty than minority non-rural faculty (Isaac & Boyer, 2007). However, the results seem to contradict the findings which show rural institutions frequently operate with fewer resources and their instructors are required to perform a broader range of functions than in non-rural colleges (Hardy & Katsinas, 2007; Wolfe & Strange, 2003). The instructors also differed in their perceptions of the provision of institutional data for effective teaching practices. The rural instructors were more likely than non-rural instructors to respond that their institutions provided this type of information. Rural institutions tend to be smaller than the non-rural colleges which would increase the likelihood of personal contact and information exchanges between implementers (Serenko, Bontis, & Hardie, 2007). The increased frequency of informal meetings may facilitate the knowledge gained from the successes and failures of others at the institution. Regardless of how the information is exchanged, it appears from these findings that rural practitioners are more engaged in data transmission throughout the hierarchical structure than the non-rural practitioners.

Rural and Non-rural Administrators

The total number of program managers and their supervisors who took part in this study was rather small, so to facilitate the analysis and discussion of this topic the groups were combined. The research question more broadly asks if there are differences in the

perceptions of rural and non-rural administrators. The results found rural administrators were more likely to perceive I-BEST students as showing little interest in learning basic skills. Furthermore, rural administrators were more likely to disagree there was a sufficient amount of classroom time being spent on teaching effective hiring strategies. The findings seems consistent with prior research (Cavan, 1995; Gillett-Karam, 1995) which noted the important economic role community colleges can play in overcoming the challenges of high unemployment and low job growth in rural areas. The findings also suggest rural administrators are aware of the large earnings and education disparities which exist between the rural and non-rural areas of Washington (United States Department of Agriculture, 2009).

The rural administrators may be more acutely aware of the need to have students develop employment acquisition skills because of the limited opportunities available to them in their communities. A comparison of the labor supply-demand ratios in highly urbanized King County to the largely rural areas of Southwest Washington, North Central Washington, and Eastern Washington helps to illustrate this point. A ratio of less than one represents a shortage in the labor supply, while a number greater than one indicates a surplus. In 2008, the statewide supply-demand ratio was .53. At this time the ratio in the King County-Seattle area was .23, but in Southwest Washington the ratio was 1.25, in North Central Washington the ratio was 1.74, and in Eastern Washington the ratio was .87. As the effects of the recession have deepened, no area of the state has been spared but rural areas have been especially hard hit. The latest figures for 2009 show the statewide supply-demand ratio climbing to 1.84, but in King County-Seattle the ratio is significantly lower at 1.08. In Southwest Washington the latest labor supply-demand ratio is 3.66, in North

Central Washington it is 3.63, and in Eastern Washington it is 1.97 (Mills, 2009). The responses of the rural participants in this research may reflect the urgency they see in their communities to gain meaningful employment. While the rural administrators' perceptions may reflect those of their communities, they should be careful about being short-sighted in not instilling the basic skills needed for long-term employability and career advancement.

Unexpected Findings

Generally, the groups shared many of the same perceptions regarding the items on the survey. For example, the groups largely agreed I-BEST students appeared optimistic and self-confident about their futures. Another item which garnered a great deal of consensus addressed the issue of whether their college had a clear strategy to eliminate unneeded I-BEST programs. The majority of the respondents (57.8%) selected the "Neutral/Don't Know" response. Participants may be aware of the strategy and have no opinion about it one way or another (i.e., neutral). However, it is possible the majority does not know their college's strategy, and this poses some doubts about senior administrators' ability to clearly identify when changes need to be made.

One of the main attractions to students is that I-BEST provides training in career fields which are in demand in the marketplace. In order for the colleges to meet market demands the entire institution needs to learn to adjust to changing conditions (Marsick & Watkins, 2003) which will involve the elimination of unwanted programs (Jacobs, 2001; Maguire, Freely, Clymer, & Conway, 2009). Yet, it becomes difficult to end unneeded programs when implementers are unaware of their institution's policy. Leaders must have a clearly defined program termination procedure in place. Moreover, the policy must be clearly understood by all of the implementers so they can provide feedback to leadership on

when to make changes. The feedback system helps insure I-BEST's flexibility which is one of its greatest strengths. The responses of the participants suggest a possible deficiency in the program which college leaders need to correct by clearly articulating their program termination guidelines.

As previously mentioned, many of the participants selected the "Neutral/Don't Know" response to the survey item addressing their institutional policy for eliminating programs. The participants responded similarly to several other items. The "Neutral/Don't Know" response exceeded 30% or more on nine of the survey items. In certain cases the response selection is understandable. For example, the item addressing the pace at which the State Board approves programs would likely be unknown to instructors unless they were actively involved in the approval process at their college. The selection of the "Neutral/Don't Know" response to some of the other items is more troubling especially since most of the participants had prior experience with I-BEST. For example, one survey item addressed the issue of routine monitoring of employer demands to determine the needs of particular programs. On this particular item the "Neutral/Don't Know" response was the dominant selection for respondents. The frequency of the response selection should send a warning to senior administrators to better engage all of the implementers in multiple facets of the program and not merely in their proscribed roles of instructor, manager, or manager's supervisor.

Implications

The findings pose several implications for decision-makers to consider as I-BEST evolves. Exploring the implications may illuminate particular factors which should be addressed to enhance the program's overall effectiveness. The findings indicate instructor

and administrator differences regarding student support services. Administrators were more likely than instructors to view services as inadequate. Not all students will seek out services on their own or come to the attention of an administrator who could connect them to the appropriate agency. A more proactive role on the part of instructors is required to insure students get the support services they need. The failure of some instructors to monitor and follow-up on the adequacy of services increases the likelihood of challenging problems going undetected and students leaving the program. The presence of two instructors in the classroom should facilitate the appraisal of students who may be experiencing a particularly difficult time in their lives and who could benefit from assistance. The findings do not suggest all I-BEST instructors are unmindful of the struggles many of their students face in returning to school, but faculty members should help to insure adequate support is being provided to their students. Implementing this suggestion would not add any additional expenses to the program but could have a profound effect on students' lives.

The contrasting perceptions of program managers and their supervisors regarding I-BEST identify some issues which decision makers should consider. The managers are more likely than senior administrators to come into frequent contact with the instructors to hear their grievances. The failure to provide adequate release time could adversely impact classroom performance, damaging the program's reputation. One of the most visible results of insufficient release time could be increased instructor turnover in I-BEST classes.

Many vocational instructors could see their situation as a lack of administrative support and may opt to leave the college rather than tolerate a situation they view as unacceptable (Ruhland, 2001). Senior instructors could choose to return to their regular classes, leaving I-BEST staffed with less experienced part-time instructors, which prior

research has shown to be less effective with basic skills students (Fitzgerald & Young, 1997). The departure of one or both of the I-BEST instructors will result in the frequent shuffling of classroom instructors. The lack of stability with the instructors could inhibit the strength of the collaborative experience which needs time to develop. Administrators and instructors will need to maintain open and honest communication channels so each side becomes aware when working conditions are too demanding and extra release time needs to be appropriated.

Another difference between managers and their supervisors regarded the data collection on I-BEST students. The program managers were more likely than their supervisors to report finding it difficult to collect data in addition to their other duties. The key for administrators and other decision makers is to narrow the needed data set to avoid overwhelming managers. The data collection process should not become so overly burdensome as to defeat the purpose for which it is intended, namely to improve program performance. The State Board and college leaders need to remember data collection is time-intensive, costly, and can be prone to error (United States Government Accountability Office, 2005). Also, it will be important for the State Board to provide the colleges with useful findings so institutions understand that data collection is meaningful.

The perception of rural administrators that students are less interested in learning basic skills may have unintended long-term economic implications. Rural administrators may be accurately assessing the desires of their students to immediately acquire a job, and of their area employers' needs for workers. While gaining employment is certainly essential, it underestimates the importance basic skills provide in laying the foundation students need to acquire new knowledge and to become life-long learners who have skills

which can be transferred from one job to another. Administrators need to insure their programs promote the skills necessary for continuous learning and problem solving, rather than merely job-specific skills, even though this may be the students' main intent (Ayers, Miller-Dyce, & Carlone, 2008; Dirkx, Kielbaso, & Smith, 2004; Torraco, 2008). Students also need to understand the mere acquisition of a specific set of job skills fails to acknowledge the rapidity with which the workplace (e.g., technology) is changing, leaving an employee vulnerable to layoffs. Students should understand their ability to profit from further training and avoid skills obsolescence depends in part on their capacity to learn and on their prior subject knowledge (Van Loo, De Grip, & De Steur, 2001). In the long run, strengthening students' basic skills will allow them to move up the career ladder, thus expanding their personal prosperity and the regional prosperity as well.

Recommendations

The findings of this study point to areas which the State Board and college leaders should consider modifying to enhance the program. I-BEST is still a relatively new and evolving program so implementing recommendations may be more acceptable to participants than if it were a long-standing program with rigid policies. One of the challenges for State Board and senior administrators will be to make data management easier by keeping targeted indicators to a minimum. For example, administrators could follow Workforce Investment Act (1998) guidelines and track student employment outcomes for at least six months after completing training. Also, longitudinal data following student promotion rates should be monitored.

Simplifying the process by reducing the performance indicators will decrease the overall chances of errors being reported and ease the burden on the program managers who

are charged with this responsibility. Another advantage of employment information is it is a useful tool in marketing the program to prospective students whose primary goal is to increase their standard of living. Employment information could also be used to market the program to elected officials and community leaders as evidence of an educational program which is working and should be supported. There may be certain employment indicators which are more desirable than others for colleges to track. For example, officials may not always want to monitor graduates' wages per hour because labor prices could fall as a function of the broader market rather than program effectiveness. Nevertheless, these indicators should be examined and followed to have valid and reliable studies on employment information and the effectiveness of publicly supported programs such as I-BEST. Additionally, decision makers need to recognize that setting specific dollar per hour targets may not align with the mission colleges fill for their individual communities (Dougherty & Natow, 2009).

The State Board and the college presidents need to insure I-BEST implementers are clear on when programs should be terminated. Every college should have a clear policy in place and have the sagacity to follow-through and eliminate unneeded programs. There may be reluctance on the part of some implementers to actively monitor the marketplace. For example, vocational instructors may fear seeing their programs cut because of market saturation in a particular career field. Many programs will be able to adapt to market demands by offering more advanced training but this may not be true in all cases. Nevertheless, in the long run it is to the colleges' advantage to retain only those programs where there is a clear demand or a real potential for future demand, because this will help

to establish trust with key stakeholders such as the students in the I-BEST program and those who employ them. This will help to enhance the credibility of the I-BEST program.

Students will be more inclined to return to the community college for their future educational needs if they have had a positive educational experience. Colleges can help insure this by offering programs with a future after course completion. It is disingenuous for the colleges to promote programs to students for non-existent jobs (Hull, Jury, & Zacher, 2007; Valadez, 2000). Like students, area employers also want the college to remain relevant in a changing economy. Many employers rely on the colleges to provide training to their employees so they can keep abreast of their competitors. Community colleges can assure the loyalty of these important clients only if they are willing to change with the demands of the market.

One of the ways colleges stay current with market forces is by forging personal ties with employers in the community. In workforce programs such as I-BEST, it is essential everyone at the college work at establishing ties with companies which can provide students with employment. Forming ties requires campus-wide entrepreneurialism and full involvement rather than a task assigned to a few select individuals (Roueche & Jones, 2005). The survey asked participants if I-BEST had increased their level of personal contact with area employers. None of the groups in this study agreed this was the case. All of the mean responses fell between "Disagree" and "Neutral/Don't Know" which is disappointing considering the critical role employers should play in shaping the curriculum and providing employment to program graduates. The findings from the current study suggest there does not appear to be a clear mandate from the college leadership for total involvement from all institutional sectors to forge business ties with their community.

A majority of the respondents to the survey (42%) did not believe their level of contact with employers increased as a result of the program. It is unfortunate that this is more than twice the number of participants (20%) who agreed that I-BEST had increased their contacts. Since many I-BEST students lack the networking resources possessed by college administrators and faculty, they would benefit from having institutional voices speak up on their behalf (Santos & Reigadas, 2002). Just as the college leadership needs to encourage their institutions to show discipline in eliminating programs, they must also nurture institutional risk-taking by having everyone reach out to area employers and by making the most of new opportunities (Roueche & Jones, 2005).

One of the exciting qualities of I-BEST is its ability to adapt. Respondents from rural institutions tended to adapt the program to fit their local needs to a slightly greater degree than non-rural participants. In looking at differences between groups the only one which approaches significance (i.e., $p < .06$) is between rural and non-rural program managers. When the three groups of implementers are collapsed and the data is analyzed comparing locations, a significant difference is apparent with rural institutions showing a greater propensity to adapt I-BEST to their needs (see Appendix M). Economic necessity may be a driver which compels rural colleges to seize advantage of I-BEST's flexibility. The ability to adapt to differing circumstances suggests I-BEST may be facilitating an institutional transformative process, especially among rural community colleges. Every college president should encourage this process in their I-BEST programs because it can serve as the wellspring of rejuvenation and revitalization for each institution.

The program's ability to adjust to local circumstances should assure its long term viability as an important tool in meeting the state's educational requirements. I-BEST's

adaptability will be put to the test because the era of reduced governmental support for college programs is likely to continue. The community colleges may need to operate the program on fewer funds. Decision makers should consider operating some courses with only a career-vocational instructor who could also provide basic skills instruction. There is no doubt this situation would put pressure on the students and the instructor, but curricular accommodations could be made, and it may be more suitable in some courses than others. The idea has been successfully used before (Evaluation and Training Institute, 1993). Modifying the required presence of both a basic skills instructor and a career-vocational instructor may be one way to keep program costs under control.

Nearly all the respondents to the survey identified their ethnicity as white. Interestingly, none of the participants were Hispanic. Increasing the level of Hispanics in I-BEST is critical to meeting the workforce needs of Washington. The Office of Financial Management (2009) reported as of April 2008 that Hispanics comprised approximately 9.32% of the population, which ranks Washington 13th out of all the states in the number of Hispanic/Latino citizens. If proportional ethnic diversity were represented in the I-BEST program, 15 of the respondents should have identified themselves as Hispanic. I-BEST should begin increasing the level of diversity among the instructors and administrators in the program. Since the Hispanic population is an increasingly important non-dominant group in the state it would be prudent to increase their representation in the program. For most basic skills students, returning to an educational environment can be intimidating. They may look to I-BEST implementers as role models or mentors. Prior research observed mentors who share similar ethnicities as their students may be in a better position to recognize the challenges minority students face, resulting in greater student success

(Campbell & Campbell, 2007; Santos & Reigadas, 2002). Increasing the level of diversity among instructors and administrators should be a top priority for college leaders, as the program reaches more students of diverse backgrounds.

A final recommendation concerns the issue of marketing. When the respondents were asked whether their institutions actively marketed the program, the vast majority affirmed they did. There certainly is evidence of growth in the program because the state Board reported the fall 2009 enrollment for I-BEST increased by approximately 27.5% from the fall 2008 figures (i.e., 993 students to 1268 students) (WSBCTC, 2008,2010). Although the percentage increase is impressive it still represents a relatively small number of students being served in basic skills training. College leaders should consider evaluating their current marketing programs to see if the dollars spent and the man-hours allocated are yielding a commensurate return on their investment.

Many I-BEST students come from traditionally underserved populations who have been disenfranchised from higher education. I-BEST graduates would be wonderful representatives for the program because they have first hand knowledge of the challenges the underserved must face. One of the community colleges developed a strategy of using I-BEST students sharing their experiences with their families and friends (Goto, Spitzer, & Sadouk, 2009). This type of marketing strategy is relatively inexpensive and provides students with public speaking opportunities. Furthermore, when students act as role models they can help potential students navigate the institutional pathways, which can be confusing and intimidating to people unfamiliar with higher education (Goto & Martin, 2009). Navigational barriers concern the ability to maneuver through institutions which were not created with people from non-dominant or first-generation students in mind. The

underserved may be unfamiliar with the numerous support systems available to help them succeed in college. Furthermore, disenfranchised populations may become easily confused by the terms used in the vernacular of community college professionals. I-BEST students can bridge these gaps and provide help to others who might otherwise avoid a program which could enhance their lives.

Future Studies

Future research should explore factors of success and failure in extreme cases of the program. Much could be learned from the institutions which have had great success with I-BEST, as well as those programs which have had disappointing results. One of the obstacles of conducting this type of study is getting the full participation of faltering programs. Many people are understandably concerned about the funding of higher education and do not want to shine a spotlight on their particular institution's challenges, yet such research would prove very beneficial. There is no guarantee today's successful program may not falter in the future. In fact, it is almost axiomatic that because of changing market conditions every institution will experience some struggles.

Further research should also interview I-BEST graduates and their employers. The interviews could provide feedback on how well I-BEST prepared students for their positions. Such information would be useful in identifying deficiencies or obsolete skills which could then be used to modify program instruction. The students could also provide information on promotion opportunities which may help to provide some indication of advancement or future labor demand within a particular career field. Employers' information could help corroborate student reports and provide suggestions on how to innovate existing programs.

The current research did not explore perceptual differences between full-time and part-time workers or between males and females. Employment status and gender differences should be explored in future studies because of the number of female and part-time employees working in the community college system. Also longitudinal studies should explore how long term collaborations in I-BEST compare with those in other higher education environments. Lastly, future research may want to look at the perceptions of senior level community college leaders since their attitudes toward I-BEST play such a significant role in its implementation.

Conclusion

The framers of I-BEST should be pleased the program has been so well received by students and the personnel asked to implement it. Although this study found some significant differences between the various groups, there was far more congruence than divergence in the participants' perceptions of the I-BEST program. Perhaps most importantly, the I-BEST implementers in this study appear satisfied with the level of support they receive from senior leaders which is essential for the program to flourish. While leadership appears to be providing adequate support, the findings also indicate leaders need to address two important issues: first, implementers need to be more fully engaged in I-BEST, and second, institutions need to increase the level of diversity among instructors and administrators in the program.

The recommendation for greater engagement stems from the findings of the high frequency in which participants selected the "Neutral/Don't Know" response. Implementers should have a very clear awareness of I-BEST on their campuses, and the finding suggests leaders have not communicated certain important program goals. For

example, leaders have failed to clearly articulate termination policies and procedures for unneeded programs. Furthermore, many respondents appeared to lack knowledge on critical issues such as the monitoring of employer demands for I-BEST programs. I-BEST implementers must be more fully engaged in the entire process which involves everything from alerting administrators on terminating moribund programs to establishing ties to employers in their communities. Non-rural institutions would be well served to follow the example of rural institutions both with adapting the program to meet their local needs, and increasing information flow among everyone involved in implementing I-BEST. An increased level of engagement at all levels of the institution will be required as I-BEST expands.

Leaders should insist their institutions have greater diversity in the I-BEST program. The findings of this research show a general lack of diversity among the implementers of the program. Minority students could benefit from having mentors and role models who share their ethnicity. Moreover, minority-owned businesses may be more inclined to forge bonds with the college if approached by an implementer who is also a member of a minority group. The rapid expansion of minorities within the state of Washington makes increasing their numbers as implementers of I-BEST a priority for college leaders.

The growth process is likely to be uncomfortable for some institutions, but dwindling State funding and increased demand will force rapid change. Fortunately, I-BEST appears to be an adaptive program capable of handling the demands of different communities around the state. The participants from rural colleges in this study expressed they have shaped the program so it best serves their specific needs. The rural colleges have

shown I-BEST to be an adaptable program capable of meeting the challenges which come from serving in areas with limited resources. The lessons these colleges have learned could assist everyone. The State Board and college leaders should encourage greater communication between institutions, so the hard-earned lessons of one college do not have to be repeated by others. The learning process will go more smoothly if institutions can draw on the collective experience of other I-BEST programs.

Another aspect of the learning process is a willingness to participate in research so additional insights can be shared with the larger community and greater numbers of students can improve their lives. The current research is indebted to the men and women of Washington's community colleges for their willingness to participate in this study. The study has attempted to give the I-BEST implementers a voice which had not previously been reported. As additional studies are performed, further insights into instructors' and administrators' experiences will be uncovered. The current study is merely the first step in a long journey. While this research is only a beginning, hopefully the findings may be useful to college leaders as they reach out to greater numbers of basic skills adults and present an educational program which can transform their lives.

REFERENCES

- Adelman, C. (2005). *Moving into town—and moving on: The community college in the lives of traditional-age students*. Retrieved September 23, 2009, http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/28/07/dd.pdf
- Amstutz, D. D., & Sheared, V. (2000). The crisis in adult basic education [Electronic version]. *Education and Urban Society*, 32(2), 155-166.
- Askov, E. N., Van Horn, B. L., & Carman, P. S. (1997). Assessment in adult basic education programs. *New Directions for Adult and Continuing Education*, 75, 65-74.
- Ayers, D. F., Miller-Dyce, C., & Carlone, D. (2008). Security, dignity, caring relationships, and meaningful work: Needs motivating participation in a job-training program. *Community College Review*, 55(4), 257-276.
- Bakken, L., Clark, F. L., & Thompson, J. (1998). Collaborative teaching: Many joys, some surprises, and a few worms [Electronic version]. *College Teaching*, 46(4), 154-157.
- Banachowski, G. (1996). ERIC Review: Perspectives and perceptions: The use of part-time faculty in community colleges [Electronic version]. *Community College Review*, 24(2), 49-62.
- Battell, E., Gesser, L., Rose, J., Sawyer, J., & Twiss, D. (2004). *Hardwired for hope: Effective ABE/literacy instructors*. Retrieved November 11, 2008, from <http://www.nald.ca/fulltext/hwired/hwired.pdf>
- Beder, H. (2007). Quality instruction in adult literacy education. In A. Belzer (Ed.),

- Toward defining and improving quality in adult basic education*, (pp. 87-106). Mahwah, NJ: Lawrence Erlbaum Associates.
- Belcher, G., McCaslin, N. L., & Bradrick, W. (1998). Postsecondary technical and occupational instructors' perceived use of student assessment information [Electronic version]. *Journal of Vocational Education*, 23(1) 55-69.
- Belzer, A. (2004). "It's not like normal school": The role of prior learning contexts in adult learning [Electronic version]. *Adult Education Quarterly*, 55(1), 41-59.
- Bingman, M. B., Ebert, O., & Bell, B. (2000). *Outcomes of participation in adult basic education: The importance of learners' perspectives*. Retrieved September 21, 2008, from http://www.ncsall.net/fileadmin/resources/research/op_bingman.pdf
- Bloomer, T. (2008). Education + work skills = jobs. *Literacy Update*, 75(1), 1,9, 11.
- Boyle, M. E. (1999). Immigrant workers and the shadow education system [Electronic version]. *Educational Policy* 13(2). 251-279.
- Bragg, D. D., Bremer, C. D., Castellano, M., Kirby, C., Mavis, A., Schadd, D., et al. (2007). *A cross-case analysis of career pathway programs that link low-skilled adults to family-sustaining wage careers*. Retrieved June 8, 2009, from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/3d/65/73.pdf
- Bunch, G. C., & Panayotova, D. (2008). Latinos, language minority students, and the construction of ESL: Language testing and placement from high school to community college [Electronic version]. *Journal of Hispanic Higher Education*, 7(1), 6-30.
- Burke, J. C., & Minassians, H. (2002, January 1). *The preferred "no cost" accountability*

- program: The sixth annual report*. Retrieved February 16, 2008, from <http://www.rockinst.org/WorkArea/showcontent.aspx?id=7152>
- Campbell, J. P., & Bozeman, W. C. (2008). The value of student ratings: Perceptions of students, teachers, and administrators [Electronic version]. *Community College Journal of Research and Practice*, 32(1), 13-24.
- Campbell, T. A., & Campbell, D. E. (2007). Outcomes of mentoring at-risk college students: Gender and ethnic matching effects. *Mentoring & Tutoring: Partnership in Learning*, 15(2), 135-148.
- Carnegie Foundation for the Advancement of Teaching. (2009). *Carnegie Classifications Data File, April 12, 2009*. Retrieved June 4, 2009, from <http://www.carnegiefoundation.org/classifications/index.asp?key=809>
- Cavan, J. (1995). The comprehensive mission of the rural community college [Electronic version]. *New Directions for Community Colleges*, 90, 9-16.
- Chinitz, J., Osorio, D., Reese, J., & Smith, G. (2007). *The race for wages: Living wage jobs in the current economy*. Retrieved October 12, 2008, from the Northwest Federation of Community Organizations Web site at http://nwfco.org/pubs/2007.1218_NWJG.The.Race.For.Wages.pdf
- Comings, J. P., & Cuban, S. (2007). Supporting the persistence of adult basic education students. In A. Belzer (Ed.), *Toward defining and improving quality in adult basic education*, (pp. 125-140). Mahwah, NJ: Lawrence Erlbaum Associates.
- Comings, J., Reder, S., & Sum, A. (2001). *Building a level playing field: The need to expand and improve the national and state adult education and literacy system*. Retrieved on October 16, 2008, from the National

Center for the Study of Adult Learning and Literacy at

http://www.ncsall.net/fileadmin/resources/research/op_comings2.pdf

- Comings, J., Sum, A., & Uvin, J. (2000). *New skills for a new economy: Adult education's key role in sustaining economic growth and expanding opportunity*. Boston: Massachusetts Institute for a New Commonwealth.
- Condelli, L. (2007). Accountability and program quality: The third wave. In A. Belzer (Ed.), *Toward defining and improving quality in adult basic education*, (pp. 11-31). Mahwah, NJ: Lawrence Erlbaum Associates.
- Conference Board, Inc. (2006). *Are they really ready to work? Employers' perspectives on the basic knowledge and applied skills of new entrants to the 21st Century U.S. workforce*. Retrieved March 26, 2009, from http://www.21stcenturyskills.org/documents/FINAL_REPORT_PDF09-29-06.pdf
- Conner, T. N., & Williams, J. A. (1987). Oral communication apprehension among adult learners: A factor to be considered in adult basic education [Electronic version]. *Adult Education Quarterly*, 55(1), 14-20.
- Cook, C., Heath, F., & Thompson, R. L. (2000). A meta-analysis of response rates in web or internet-based surveys [Electronic version]. *Educational and Psychological Measurement*, 60(6), 821-836.
- Cooper, K. (2007). *I-BEST: Integrated Basic Education Skills Training*. (Presentation at the RISE Leadership Conference, Madison, WI.) Retrieved September 28, 2008, from http://risepartnership.org/pdf/rise_conference_100907_kathy_cooper.pdf
- Crandall, J., & Shepard, K. (2004, December 13). *Adult ESL and the community college*.

Retrieved April 26, 2009 from the Council for the Advancement of Adult Literacy
Web site <http://www.caalusa.org/eslreport.pdf>

- Creamer, E. G. (2004). Collaborators' attitudes about differences of opinion [Electronic version]. *The Journal of Higher Education*, 75(5), 556-571.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Crow, M. A. (2007). Enterprise: The path to transformation for emerging public universities [Electronic version]. *The Presidency*, 10(2), 24-28, 30.
- Curry, M. J. (2001). *Adult ESL students in the contact zone: Exploring the effects of multiple educational attainment levels on the community college writing classroom*. Seattle, WA: American Educational Research Association. (ERIC Document Reproduction Service No. ED454706)
- Curry, M. J. (2004). UCLA community college review: Academic literacy for English language learners [Electronic version]. *Community College Review*, 32(2), 51-68.
- Deil-Amen, R., & Rosenbaum, J. E. (2004). Charter building and labor markets contacts in two-year colleges [Electronic version]. *Sociology of Education*, 77(3), 245-265.
- Dirkx, J. M., Kielbaso, G., & Smith, R. O. (2004). Epistemic beliefs of teachers in technology-rich community college technical education programs [Electronic version]. *Community College Review*, 31(4), 25-47.
- Dougherty, K. J., & Natow, R. S. (2009). *The demise of higher education performance funding in three states*. Retrieved February 13, 2010, from the Community College Research Center Web site at <http://ccrc.tc.columbia.edu/Publication.asp?UID=693>

- Dugan, K., & Letterman, M. (2008). Student appraisals of collaborative teaching [Electronic version]. *College Teaching*, 56(1), 11-15.
- Dwyer, A. (1998). *WINS: Workplace Improvement of Necessary Skills. Final report*. Retrieved September 23, 2008, from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/17/30/el.pdf
- Eaton, J. S. (1994). *Strengthening collegiate education in community colleges*. San Francisco: Jossey-Bass.
- Emshoff, J., Blakely, C., Gray, D., Jakes, S., Brounstein, P., Coulter, J., et al. (2003). An ESID case study at the federal level [Electronic version]. *American Journal of Community Psychology*, 52(3/4), 345-357.
- Evaluation and Training Institute. (1993). *Promising practices: Vocational education resource package*. Retrieved February 12, 2009, from ERIC database. (ED357797)
- Fitzgerald, N. B., & Young, M. B. (1997). The influence of persistence on literacy learning in adult education [Electronic version]. *Adult Education Quarterly*, 47(2), 78-91.
- Friedman, T. L. (2005). *A world is flat: A brief history of the twenty-first century*. New York: Farrar, Straus, and Giroux.
- Gillett-Karam, R. (1995). Women and minorities in rural community colleges: Programs for change [Electronic version]. *New Directions for Community Colleges*, 90,43-53.
- Gladieux, L. E., King, J. E., & Corrigan, M. E. (2005). The federal government and

- higher education. In P. G. Altbach, R. O. Berdahl, & P. J. Gumpert (Eds.), *American higher education in the twenty-first century: Social, political, and economic challenges*, (pp. 163-197). Baltimore: Johns Hopkins University Press.
- Gleazer, E. J., Jr. (1980). *The community college: Values, vision, & vitality*. Washington, DC: American Association of Community and Junior Colleges. (ERIC Document Reproduction Service No. EDI 87364)
- Goto, S. T., & Martin, C. (2009). Psychology of success: Overcoming barriers to pursuing higher education. *The Journal of Continuing Higher Education*, 57(1),10-21.
- Goto, S., Spitzer, R., & Sadouk, J. (2009). Reaching adults who want more education: The power of peers. *Adult Basic Education and Literacy Journal*, 3(1), 44-47.
- Goulding, M. R., Rogers, M. E., & Smith, S. M. (2003, February). Public health and aging: Trends in aging - United States and worldwide. *MMWR*, 52(6), 101-106. Retrieved April 10, 2008, from <http://www.cdc.gov/mmWpreview/mmwrhtml/mm5206a2.htm>
- Gray, M. J., Rolph, E., & Melamid, E. (1996). *Immigration and higher education: Institutional responses to changing demographics*. Santa Monica, CA: RAND Corporation. (ERIC Document Reproduction Service No. ED399862)
- Green, G. P., & Galetto, V. (2005). Employer participation in workforce development networks [Electronic version]. *Economic Development Quarterly*, 19(3), 225-231
- Green, S. G., & Salkind, N. J. (2005). *Using SPSS for Windows and Macintosh: Analyzing and understanding data* (4th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

- Grubb, W. N., Badway, N., & Bell, D. (2003). Community colleges and the equity agenda: The potential of noncredit education [Electronic version]. *The ANNALS of the American Academy of Political and Social Science*, 556(1), 218-240.
- Hamilton, G. (2002). *Moving people from welfare to work: Lessons from the national evaluation of welfare-to-work strategies*. New York: Manpower Demonstration Research Corporation. (ERIC Document Reproduction Service No. ED 469794)
- Hardy, D. E. (2005). *A two-year college typology for the 21st century: Updating and utilizing the Katsinas-Lacey classification system*. Ph.D. dissertation, University of North Texas, United States — Texas. Retrieved June 22, 2009, from Dissertations & Theses: Full Text database. (Publication No. AAT 3181046).
- Hardy, D. E., & Katsinas, S. G. (2007). Classifying community colleges: How rural community colleges fit [Electronic version]. *New Directions for Community Colleges*, 137, 5-17.
- Hellawell, D., & Hancock, N. (2001). A case study of the changing role of the academic middle manager in higher education: Between hierarchical control and collegiality? *Research Papers in Education*, 16(2), 183-197.
- Hohenbrink, J., Johnston, M., & Westhoven, L. (1997). Collaborative teaching of a social studies methods course: Intimidation and change [Electronic version]. *Journal of Teacher Education*, 48(4), 293-300.
- Hull, G. A., Jury, M., & Zacher, J. (2007). Possible selves: Literacy, identity, and development in work, school, and community. In A. Belzer (Ed.), *Toward defining and improving quality in adult basic education*, (pp. 299-318). Mahwah, NJ: Lawrence Erlbaum Associates.

- Ignash, J. M. (1995). Encouraging ESL student persistence: The influence of policy on curricular design. *Community College Review*, 23(3), 17-34.
- Inderbitzin, M., & Storrs, D. A. (2008). Mediating the conflict between transformative pedagogy and bureaucratic practice [Electronic version]. *College Teaching*, 55(1), 47-52.
- Isaac, E. P., & Boyer, P. G. (2007). Voices of urban and rural community college minority faculty: Satisfaction and opinions. *Community College Journal of Research and Practice*, 31(5), 359-369.
- Jacobs, J. (2001). What is the future of post-secondary occupational education [Electronic version]? *Journal of Vocational Education Research*, 26(2), 172-205.
- Jenkins, D. (2006, August). *Career pathways: Aligning public resources to support individual and regional economic advancement in the knowledge economy*. Retrieved December 2, 2008 from http://www.workforcestrategy.org/publications/WSC_pathways8.17.06.pdf
- Jenkins, D., Zeidenberg, M., & Kienzl, G. (2009, May). *Educational outcomes of I-BEST, Washington State community college and technical college system's Integrated Basic Education and Skills Training program: Findings from a multivariate analysis*. Retrieved June 14, 2009, from <http://ccrc.tc.columbia.edu/Publication.asp?UID=692>
- Karoly, L. A., & Panis, C. W. A. (2004). *The 21st century at work: Forces shaping the future workforce and workplace in the United States* [Monograph No. 0-8330-3492-8], Retrieved April 27, 2009, from http://www.rand.org/pubs/monographs/2004/RAND_MG164.pdf

- Kilgore, D., & Bloom, L. R. (2002). "When I'm down, it takes me a while": Rethinking transformational education through narratives of women in crisis [Electronic version]. *Adult Basic Education*, 12(3), 123-133.
- King, K. P. (2000). The adult ESL experience: Facilitating perspective transformation in the classroom [Electronic version]. *Adult Basic Education*, 10(2), 69-90.
- King, K. P., & Wright, L. (2003). New Perspectives on gains in the ABE classroom: Transformational results confirmed [Electronic version]. *Adult Basic Education*, 13(2), 100-123.
- Kirsch, I., Braun, H., Yamamoto, K., & Sum, A. (2007). *America's perfect storm: Three forces changing our nation's future*. Retrieved March 12, 2008, from http://www.ets.org/Media/Education_Topics/pdfAmericasPerfectStorm.pdf
- Kisker, C. B., & Carducci, R. (2003). Community college partnerships with the private sector-organizational contexts and models for successful collaboration [Electronic version]. *Community College Review*, 31(3), 55-74.
- Kluth, P., & Straut, D. (2003). Do as we say and as we do: Teaching and modeling collaborative practice in the university classroom [Electronic version]. *Journal of Teacher Education*, 54(3), 228-240.
- Kumar, R. (2005). *Research methodology: A step-by-step guide for beginners* (2nd ed.). Thousand Oaks, CA: Sage.
- Levin, H. M. (2005). The social costs of inadequate education. *Teacher's College Symposium on Educational Equity*. Retrieved June 21, 2008, from http://www.tc.columbia.edu/i/a/3082_socialcostsofinadequateEducation.pdf
- Levin, H. M., & Calcagno, J. C. (2008). Remediation in the community college: An

- evaluator's perspective [Electronic version]. *Community College Review*, 35(3), 181-207.
- Levin, J. S., Kater, S., & Wagoner, R. L. (2006). *Community college faculty: At work in the new economy*. New York: Palgrave MacMillan.
- Little, J. W. (1990). The persistence of privacy: Autonomy and initiative in teachers' professional relations [Electronic version]. *Teachers College Record*, 91(A), 509-536.
- Lodico, M. G., Spaulding, D. T., & Voegtler, K. H. (2006). *Methods in educational research : From theory to practice*. San Francisco: Jossey-Bass.
- Maguire, S., Freely, J., Clymer, C., & Conway, M. (2009). Job training that works: Findings from the Sectoral Employment Impact Study. *Public/Private Ventures*, 7, 1-11.
- Major, C. H., & Palmer, B. (2006). Reshaping teaching and learning: The transformation of faculty pedagogical content knowledge [Electronic version]. *Higher Education*, 51(4), 619-647.
- Marsick, V. J., & Watkins, K. E. (2003). Demonstrating the value of an organization's learning culture: The Dimensions of the Learning Organization Questionnaire [Electronic version]. *Advances in Developing Human Resources*, 5(2), 132-151.
- Mazzeo, C., Rab, S. Y., & Alssid, J. L. (2003). *Building bridges to college and careers: Contextualized basic skills programs at community colleges*. Retrieved November 5, 2008, from http://www.workforcestrategy.org/publications/contextualized_report.pdf
- Mellard, D., Scanlon, D., Kissam, B., & Woods, K. (2005). Adult education instructional

- environments and interaction patterns between teachers and students: An ecobehavioural approach [Electronic version]. *Literacy & Numeracy Studies*, 14(1), 49-68.
- Merriam, S. B. (2004). The role of cognitive development in Mezirow's transformational learning theory. *Adult Education Quarterly*, 55(1), 60-68.
- Mendoza, I. D. (2008). *California EDGE campaign: Moving adults from basic skills to careers*. Retrieved September 28, 2008, from <http://www.californiaedgcampaign.org/download/BasicSkillsWASStatePres.pdf>
- Mezirow, J. (2003). Transformative learning as discourse [Electronic version]. *Journal of Transformative Education*, 7(1), 58-63.
- Mills, J. (2009, October). *Changes in occupational supply and demand*. Retrieved March 7, 2010, from the Washington State Employment Security Department Web site: http://www.workforceexplorer.com/admin/uploadedPublications/10032_JMills2009EconSymp.pdf
- Minnesota Workforce Education. (n.d.). *The National Literacy Act - pre WIA*. Retrieved September 21, 2008, from http://wihna.themlc.org/sites/16cec0ee-aef3-4c04-8f97-502cf5f03d63/uploads/WIA_and_MN_ABE.ppt
- National Association of Manufacturers. (2005). *2005 skills gap report: A survey of the American manufacturing workforce*. Retrieved July 21, 2007, from http://www.nam.org/s_nam/bin.asp?TrackID=&SID=1&DID=235731&CID=9&YID=2
- Neese, R. (2003). A transformational journey from clinician to educator [Electronic version]. *The Journal of Continuing Education in Nursing*, 34(6), 258-262.

- O'Donnell, K. (2006). *Adult education participation in 2004-05* (NCES 2006-077). U. S. Department of Education. Washington, DC: National Center for Education Statistics.
- O'Shea, D., & King, C. T. (2001). *The Workforce Investment Act of 1998: Restructuring workforce development initiatives in states and localities*. Retrieved April 4, 2009, from [http://www.utexas.edu/research/cshr/pubs/pdf/wia_final_2001 .pdf](http://www.utexas.edu/research/cshr/pubs/pdf/wia_final_2001.pdf)
- Outcalt, C. L. (2000). ERIC Review: Community college teaching - toward collegiality and community [Electronic version]. *Community College Review*, 28(2), 57-70.
- Paolillo, J. G. P. (1981). Manager's self assessments of managerial roles: The influence of hierarchical level [Electronic version]. *Journal of Management*, 7(1), 43-52.
- Parker, J. T. (1990). Modeling a future for adult basic education. *Adult Learning*, 7(4), **16-18, 28.**
- Patterson, M. B., & Mellard, D. (2007). Program characteristics that predict improved learner outcomes [Electronic version]. *Adult Basic Education and Literacy Journal*, 1(2), 83-92.
- Pennington, K., & Williams, M. R. (2002). *Building institutional capacity at rural community colleges through consortia*. Retrieved June 9, 2009, from ERIC database (ED471538)
- Pennington, K., Williams, M. R., & Karvonen, M. (2006). Challenges facing rural community colleges: Issues and problems today and over the past 30 years [Electronic version]. *Community College Journal of Research & Practice*, 30(8), 641-655.
- Prentice, C. M. (2001). ERIC Review: Integrating academic and occupational instruction

- [Electronic version]. *Community College Review*, 29(2), 80-93.
- Prince, D., & Bloomer, T. (2005). *I-BEST: A program integrating adult basic education and workforce training* (Research Report No. 05-2). Retrieved February 28, 2008, from http://www.sbctc.ctc.edu/docs/data/research_reports/resh_05-2_i-best.pdf
- Prince, D., & Jenkins, D. (2005). *Building pathways to success for low-skill adult students: Lessons for community college policy and practice from a statewide longitudinal tracking study*. Retrieved October 16, 2008, from the Community College Research Center Web site at:
<http://ccrc.tc.columbia.edu/Publication.asp?UID=204>
- ProLiteracy Worldwide. (2006). *The state of adult literacy 2006*. Retrieved June 19, 2008, from <http://www.proliteracy.org/downloads/stateoflit06pdf.pdf>
- Purcell-Gates, V., Degener, S., & Jacobson, E. (1998). *U.S. adult literacy program practice: A typology across dimensions of life-contextualized/decontextualized and dialogic/monologic*. Retrieved November 6, 2008, from <http://www.ncsall.net/fileadmin/resources/research/rep2.pdf>
- Roueche, J. E., & Jones, B. R. (Eds.). (2005). *The entrepreneurial community college*. Washington, DC: Community College Press.
- Ruhland, S. K. (2001). Factors that influence the turnover and retention of Minnesota's technical college teachers [Electronic version]. *Journal of Vocational Education Research*, 26(1), 56-76.
- Sandford, B. A., & McCaslin, N. L. (2004). *Assessment of professional development*

- activities, instructional needs, and delivery methods of part-time technical and occupational faculty in U.S. community colleges*. Retrieved June 8, 2009, from <http://cehd.umn.edu/NRCCTE/publications/PDFResearch/AssessmentSanford.pdf>
- Santos, S. J., & Reigadas, E. T. (2002). Latinos in higher education: An evaluation of a university faculty mentoring program. *Journal of Hispanic Higher Education*, 1(1), 40-50.
- Seattle Community Colleges, (n.d.). *Seattle Community College district policy: Definition of an administrator*. Retrieved April 23, 2009, from <http://www.seattlecolleges.com/custom.aspx?page=policies&pagec=documentdisplay&policyID=pol465>
- Seppanen, L. (1991). *Adult basic education in Washington community colleges: A follow-up study*. Washington State Board for Community Colleges. (ERIC Document Reproduction Service No. ED330397)
- Serenko, A., Bontis, N., & Hardie, T. (2007). Organizational size and knowledge flow: A proposed theoretical link [Electronic version]. *Journal of Intellectual Capital*, 9(4), 610-627.
- Shapiro, E. J., & Dempsey, C. J. (2008). Conflict resolution in team teaching [Electronic version]. *College Teaching*, 56(3), 157-162.
- Shen, J., Yang, H., Cao, H., & Warfield, C. (2008). The fidelity adaptation relationship in non-evidence-based programs and its implication for program evaluation [Electronic version]. *Evaluation*, 14(A), 467-481.
- Skolits, G. J., & Graybeal, S. (2007). Community college institutional effectiveness: Perspectives of campus stakeholders. *Community College Review*, 34(A), 302-323.

- Smith, L. C. (1998). *Professional development through teacher collaboration: The experiences of a co-teaching triad in an intensive ESL program*. Ed.D dissertation, Columbia University Teachers College, United States ~ New York. Retrieved November 10, 2008, from Dissertations & Theses: Full Text database. (Publication No. AAT 9839125).
- Smith, C., & Hofer, J. (2003). *The characteristics and concerns of adult basic education teachers*. National Center for the Study of Adult Learning and Literacy. Retrieved June 8, 2009, from <http://www.ncsall.net/fileadmin/resources/research/report26.pdf>
- Smith, W., Wittner, J., Spence, R., & Van Kleunen, A. (2002). *Skills training works: Examining the evidence*. Retrieved January 25, 2009, from http://www.cjc.net/publications/4_Skills_Training_PDFs/skills_training_works_rpt.pdf
- Somers, P., Cofer, J., Austin, J. L., Inman, D., Martin, T., Rook, S., et al. (1998). Faculty and staff: The weather radar of campus climate [Electronic version]. *New Directions for Institutional Research*, 98, 35-52.
- Song, B. (2006). Failure in a college ESL course: Perspectives of instructors and students [Electronic version]. *Community College Journal of Research and Practice*, 30(5/6), 417-431.
- Sparks, B. (2002). Adult literacy as cultural practice. *New Directions for Adult and Continuing Education*, 96, 59-68.
- Stanley, P. (2008, October 31). Lessons from a 2-year-college 'master class' [Electronic version]. *Chronicle of Higher Education*. Retrieved May 24, 2009, <http://chronicle.com/weekly/v55/i10/10b02301.htm>

- Stein, S. G. (2007). Equipped for the future and standards-based educational improvement: Achieving results that matter for adult learners. In A. Belzer (Ed.), *Toward defining and improving quality in adult basic education*, (pp. 33-51). Mahwah, NJ: Lawrence Erlbaum Associates.
- Szelenyi, K., & Chang, J. C. (2002). ERIC review: Educating immigrants: The community college role [Electronic version]. *Community College Review*, 30(2), 55-73.
- Szulanski, G., & Winter, S. (2002). Getting it right the second time [Electronic version]. *Harvard Business Review*, 80(1), 62-69.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Pearson Education.
- Taylor, E. W. (2008). Transformative learning theory [Electronic version]. *New Directions for Adult and Continuing Education*, 119, 5-15.
- Teitel, L. (1991). The transformation of a community college [Electronic version]. *Community College Review*, 19(1), 7-13.
- Terry, M. (2006). Making a difference in learners' lives: Results of a study based on adult literacy programs [Electronic version]. *Adult Basic Education*, 16(1), 3-19.
- Thousand, J. S., Villa, R. A., & Nevin, A. I. (2006). The many faces of collaborative planning and teaching [Electronic version]. *Theory into Practice*, 45(3), 239-248.
- Torraco, R. J. (2008). Preparation for midskilled work and continuous learning in nine community college occupational programs. *Community College Review*, 35(3), 208-236.
- Twombly, S. (2005). Values, policies, and practices affecting the hiring process for full-

- time arts and sciences faculty in community colleges [Electronic version]. *The Journal of Higher Education*, 76(4), 423-447.
- Twombly, S., & Townsend, B. K. (2008). Community college faculty: What we know and what we need to know [Electronic version]. *Community College Review*, 36(1), 5-24.
- Tyler, J. H. (2001). *What do we know about the economic benefits of the GED? A synthesis of the evidence from recent research*. Retrieved October 16, 2008, from http://www.brown.edu/Departments/Education/resources/what_do_we_know.pdf
- United States Department of Agriculture. (2009, December). *State fact sheets: Washington*. Retrieved March 7, 2010, from the United States Department of Agriculture Web site: <http://www.ers.usda.gov/StateFacts/WA.HTM>
- United States Department of Education. (2007). *Adult basic education to community college transitions symposium*. Jessup, MD: Author.
- United States Government Accountability Office. (2005, October). *Education's data management initiative: Significant progress made, but better planning needed to accomplish project goals*. Retrieved February 20, 2010, from the Government Accountability Web site at <http://www.gao.gov/new.items/d066.pdf>
- Valadez, J. R. (2000). Searching for a path out of poverty: Exploring the achievement ideology of a rural community college [Electronic version]. *Adult Education Quarterly*, 50(3), 212-230.
- Valadez, J. R. (2008). Shaping the educational decisions of Mexican immigrant high school students. *American Educational Research Journal*, 45(4), 834-860.

- Van Horn, P. S., Green, K. E., & Martinussen, M. (2009). Survey response rates and survey administration in counseling and clinical psychology: A meta-analysis [Electronic version]. *Educational and Psychological Measurement, 69*(3), 389-403.
- Van Loo, J., De Grip, A., & De Steur, M. (2001). Skills obsolescence: Causes and cures. *International Journal of Manpower, 22*(1/2), 121-138. Retrieved February 20, 2010, from the ABI/INFORM Global database.
- Venezky, R. L., Bristow, P. S., & Sabatini, J. P. (1994). Measuring change in adult literacy programs: Enduring issues and a few answers [Electronic version]. *Educational Assessment, 2*(2), 101-131.
- Washington State Board for Community and Technical Colleges. (n.d.). *General information/about us*. Retrieved October 12, 2008, from http://www.sbctc.ctc.edu/general/a_index.aspx
- Washington State Board for Community and Technical Colleges. (1999). *Welfare enrollments and the start-up of Workfirst wage and skill progression training* (ED 430632). Retrieved September 20, 2008, from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/17/93/ba.pdf
- Washington State Board for Community and Technical Colleges. (2005). *Workfirst: Fifth year accountability report for Workfirst training programs conducted in 2002-03*. Retrieved September 12, 2008, from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/28/08/eb.pdf
- Washington State Board for Community and Technical Colleges. (2007, October).

Student achievement initiative. Retrieved April 19, 2008, from

<http://hecb.wa.gov/boardmtgs/documents/CTCincentivepilot.pdf>

Washington State Board for Community and Technical Colleges. (2008, January). *Fall*

2008 enrollment report. Retrieved May 31, 2009, from

http://www.sbctc.ctc.edu/docs/data/research_reports/fall_reports/fall2008fterreport/2008fall_fte_report.pdf

Washington State Board for Community and Technical Colleges. (2008, January).

Increasing student achievement for basic skills students (Research Report No. 08-

1). Retrieved April 13, 2008, from

http://www.sbctc.ctc.edu/college/education/resh_rpt_08_1_student_achieve_basic_skills.pdf

Washington State Board for Community and Technical Colleges. (2008).

Enrollment and staffing report: Fall 2008. Retrieved February 15, 2010, from

http://www.sbctc.ctc.edu/college/abepds/fall_quarter_report_08.pdf

Washington State Board for Community and Technical Colleges. (2009, March). *Access*

and success for people of color in Washington community and technical colleges:

Progress report (Research Report No. 09-2). Retrieved May 2, 2009, from

http://www.sbctc.ctc.edu/college/education/resh_rpt_09_2people_of_color.pdf

Washington State Board for Community and Technical Colleges. (2010).

Wash State SBCTC February 15, 2010, from

http://www.sbctc.ctc.edu/docs/data/research_reports/fall_reports/fall2009fterReport.doc

Washington State Economic and Revenue Forecast Council. (2007, October).

Washington State Economic Climate Study. Retrieved April 13, 2008, from <http://www.erfc.wa.gov/pubs/climl007.pdf>

Washington State Employment Security Department, (n.d.). *Qualifying occupations: Local area demand/decline occupations*. Retrieved October 12, 2008, from <http://www.wilma.org/wdclists/default.htm>

Washington State Institute for Public Policy. (2008, December). *Adult literacy education study*. Retrieved on March 4, 2010, from http://www.wsipp.wa.gov/rptfiles/AdultLiteracyEdStudy_December2008.pdf

Washington State Office of Financial Management. (2006, March). *Projections of the State population by age, gender, and race/ethnicity: 2000-2030*. Retrieved May 1, 2009, from http://www.ofrn.wa.gov/pop/race/methodology_0306.pdf

Washington State Office of Financial Management. (2008). *Long-term forecast of the Washington laborforce*. Retrieved March 29, 2009, from <http://www.ofm.wa.gov/economy/longterm/2008/lt08ch2.pdf>

Washington State Office of Financial Management. (2009, September). *2009 population trends*. Retrieved February 13, 2010, from the State of Washington Web site at: <http://www.ofm.wa.gov/pop/poptrends/poptrends.pdf>

Washington State Workforce Training and Education Coordinating Board. (2002). *High skills, high wages: Washington's strategic plan for workforce development. Our agenda for action*. Retrieved September 15, 2008, from <http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/contentstorageO1/0000019b/80/1a/d2/9c.pdf>

- West, L. L. (2005). *Meeting the challenge: A history of adult education in California, from the beginnings to the twenty-first century*. Retrieved August 19, 2008, from:
[http://www.otan.us/images/publicarchive/
ArchivesDigitalFiles/ref_3807_meetchallenge.pdf](http://www.otan.us/images/publicarchive/ArchivesDigitalFiles/ref_3807_meetchallenge.pdf)
- Wilhelmson, L. (2006). Dialogue meetings as nonformal adult education in a municipal context [Electronic version]. *Journal of Transformative Education*, 4(3) 243-256.
- White House Office of the Press Secretary. (2009, April). *Remarks by the President on higher education*. Retrieved June 7, 2009, from
[http://www.scribd.com/doc/14629135/President-Obamas-Remarks-on-Higher-
Education-April-24-2009-Transcript-and-Video](http://www.scribd.com/doc/14629135/President-Obamas-Remarks-on-Higher-Education-April-24-2009-Transcript-and-Video)
- White, S., & Dillow, S. (2005). *Key concepts and features of the 2003 National Assessment of Adult Literacy* (NCES 2006-471). Retrieved on March 4, 2010, from the National Center for Education Statistics Web site at
<http://nces.ed.gov/NAAL/PDF/2006471.PDF>
- Wolfe, J. R., & Strange, C. C. (2003). Academic life at the franchise: Faculty culture in a rural two-year branch campus [Electronic version]. *The Review of Higher Education*, 26(3), 343-362.
- Woolley, J. T., & Peters, G. (n.d.). *The American Presidency Project*. Retrieved April 28, 2009 from the University of California, Santa Barbara Web site
<http://www.presidency.ucsb.edu/ws/index.php?pid=27101&st=education&st1=cure>
- Workforce Investment Act, 20 U.S.C. § 9201 (1998).

APPENDIX A

Expert Panel Participation Request

Dear

My name is Robert Fox and I am working on my doctoral dissertation at Old Dominion University. I am about to begin the data collection process but I would appreciate your help before doing so. My study explores the perceptions of I-BEST instructors, program managers, and the managers' immediate supervisors. I have created a survey instrument to measure the participants' perceptions of I-BEST but I need a set of independent reviewers to see if the survey appears valid. I am assembling a panel of experts to examine the survey. I believe you would be a wonderful addition to the panel because of your professional expertise. I know your time is limited and I appreciate the sacrifice you would be making on my behalf. The survey will consist of no more than 30 items. I am asking the panelists to read the statements and rate each one. I would appreciate any comments or suggestions you wish to provide. I would like to send you the survey sometime during the week of October 12th. I will need to have the survey back within two weeks so I can make any revisions before pilot testing the survey in November. Please let me know if you are willing to participate. Thank you so much.

Bob

APPENDIX B

Expert Panelist Request Reminder

Hi_____:

I don't know if you received the email I sent out a few weeks ago. I need your help with the research for my dissertation. Specifically, I would like you to be one of the panelists to review my I-BEST survey. The survey explores the perceptions of I-BEST instructors and administrators. Please let me know if you are able to help. I will be sending the survey out in mid-October to the panel members for their comments. I need the survey back in two weeks. There are 30 items on the survey. I look forward to hearing from you. I hope you had a great summer.

Take care,

Bob

APPENDIX C

Expert Panel Survey Notification

Dear

Thank you for agreeing to serve on a panel of content experts who will review my survey instrument on the Integrated Basic Education and Skills Training (I-BEST) Program. The purpose of this study is to explore whether there are any differences in the perceptions of administrators and instructors regarding I-BEST. The study is intended to benefit those who administer I-BEST at Washington State's 34 community colleges, and ultimately, those who participate in the I-BEST program. Your assistance in this effort is appreciated. Below you will find the research questions I will be addressing in my dissertation followed by a draft of the survey instrument.

I am seeking your assistance in establishing the content validity of the instrument. Please rate each item with a rating of a 1 (item should be deleted), 2 (item is acceptable), or 3 (item should be included). Please add any comments you wish regarding (a) additional items which should be included on the survey instrument, (b) whether the instructions are clear, and (c) whether the wording of each item is clear and unambiguous. The survey has been kept intentionally brief to elicit as many responses as possible. Thank you for your time and assistance in supporting this research.

Research Question One: Is there a statistically significant difference in the perceptions of I-BEST instructors compared with the perceptions of administrators regarding the I-BEST program?

Research Question Two: Is there a statistically significant difference in the perceptions of I-BEST program managers compared to the perceptions of their immediate supervisors regarding the I-BEST program?

Research Question 3: Is there a statistically significant difference in the perceptions of instructors at rural community colleges compared to the perceptions of instructors at non-rural community colleges regarding the I-BEST program?

Research Question 4: Is there a statistically significant difference in the perceptions of program managers at rural community colleges compared to the perceptions of program managers at non-rural community colleges regarding the I-BEST program?

Research Question 5: Is there a statistically significant difference in the perceptions of administrators at rural community colleges compared to the perceptions of administrators at non-rural community colleges regarding the I-BEST program?

APPENDIX D

Pilot Group Notification

Good Morning_____:

My name is Robert Fox and I am a doctoral candidate at Old Dominion University. I am researching the perceptions of I-BEST instructors and administrators for my dissertation. I have created a new survey for this research which needs to be pilot tested to insure its reliability. A test-retest procedure will be used to establish reliability. One week from today I will be sending you another email which will provide a link to the survey. The survey will be available for one day only. I apologize for the short availability period but it is necessary in order to insure no extraneous variables confound the results. The retest of the survey will be conducted two weeks after the initial test. I wish to thank you for your willingness to participate in this research. Your assistance will help improve the program by providing college leaders with important information. If you have any questions please feel free to contact me.

Yours,

Bob Fox

(360)782-1317

rfoxx005@odu.edu

APPENDIX E

Pilot Group Test Announcement

Hello_____:

You will be able to access the questionnaire on Survey Monkey by clicking the link listed below this paragraph. Please remember the survey will only be available until midnight tonight. I have tried to keep the instrument brief. You will find 38 items requiring responses plus four open-ended questions asking your opinion about the survey. I will ask you to retake the same test again on Monday November 30th as a check on the instrument's reliability. Thank you very much for your help in this study.

Bob

https://www.surveymonkey.com/s.aspx?sm=FU14KXNKJcXpqWU5MAJD30g_3d_3d

APPENDIX F

Pilot Group Retest Announcement

Hello_____:

The retest of the I-BEST survey is available. Please remember to complete the retest as soon as possible because it will be available for one day only. Thank you again for taking the time to help in this research. Please use the following link to access the survey:

<https://www.surveymonkey.com/s/FVWM7CC>

Thank you.

Bob

APPENDIX G

Notification to the Presidents

Dear President _____:

My name is Robert Fox and I am a doctoral candidate in the Community College Leadership program at Old Dominion University in Norfolk, Virginia. I am conducting an electronic survey on the I-BEST program for my dissertation. Specifically, I am researching the perceptions of instructors, program coordinators, and the coordinators' direct supervisors regarding I-BEST. The research has been approved by the University's Human Subjects Review Committee and endorsed by the Community College Leadership faculty. I will be electronically notifying I-BEST implementers at your institution to take the survey on December 2, 2009. The findings of this study will provide college leaders with information which is important for the success of I-BEST. The participation of your college is critical so please encourage your administrators and faculty to assist in the research. Participation is voluntary and the survey is brief. I will be happy to share the findings of my research with you at the conclusion of the study. Thank you for your time.

Respectfully yours,

Robert Fox
(360) 782-1317
rfox005@odu.edu

Dr. Mitchell R. Williams
Committee Chairman
Old Dominion University
Norfolk, Virginia
Darden College of Education
(757) 683-6693
mrwillia@odu.edu

APPENDIX H

Announcement to the I-BEST Implementers

Hello _____:

My name is Bob Fox and I am conducting a survey of I-BEST professionals for my doctoral dissertation at Old Dominion University. Prior research on I-BEST has predominantly focused on students but your perceptions of the program are essential to its long term success. Your input will help the State Board and college leaders better appreciate the challenges you face and give them direction in improving the program. At the end of my study I will be happy to send you a copy of the findings if you would like to read them. I will be sending you another email one week from today (i.e., December 2, 2009) which will provide you the link to access the survey. Thank you for your help.

Bob Fox
(360)782-1317
rfoxx005@odu.edu

APPENDIX I

AIIPS

The intent of the Administrators & Instructors I-BEST Perception Survey (AIIPS) is to record the impressions of the college personnel who are actively involved in implementing I-BEST. The findings of this study will help provide direction on how to improve the program for you and your students. Thank you very much for your participation in this research. Please answer these questions about yourself before moving on to the items in Section Two.

SECTION ONE

Gender: Male Female

Ethnicity: African-American Hispanic Asian White Other

Primary Role with I-BEST: Program Coordinator Coordinator's Supervisor Instructor

Primary Teaching Status with I-BEST: Full-time Part-time N/A

Primary Teaching Role with I-BEST: ABE ESL Professional/Technical N/A

Total Years of College Teaching Experience: <1 Yr 1-3 Yrs 4-7 Yrs 8+ Yrs N/A

Total Years of College Administration Experience: <1 Yr 1-3 Yrs 4-7 Yrs 8+Yrs N/A

Number of Quarters You Have Taught I-BEST 1-2Qt 3-4Qt 5-6Qt 7+Qt N/A

Number of Quarters in Administering I-BEST 1 -2Qt 3-4Qt 5-6Qt 7+Qt N/A

Location of the college where you work: Group A Group B

Group A: Bellingham Technical College, Big Bend Community College, Centralia College, Columbia Basin College, Grays Harbor College, Lower Columbia College, Olympic College, Peninsula College, Skagit Valley College, South Puget Sound Community College, Spokane Community College, Spokane Falls Community College, Walla Walla Community College, Wenatchee Valley College, Whatcom Community College, Yakima Valley Community College.

Group B: Bates Technical College, Bellevue College, Cascadia Community College, Clark College, Clover Park Technical College, Edmonds Community College, Everett Community College, Green River Community College, Highline Community College, Lake Washington Technical College, North Seattle Community College, Pierce College-Fort Steilacoom, Pierce College-Puyallup, Renton Technical College, Shoreline Community College, Seattle Central Community College, South Seattle Community College, Tacoma Community College.

SECTION TWO

Please make a selection to the statements based on your experience with I-BEST.

SD=Strongly Disagree. D=Disagree. N=Neutral/Don't Know. A=Agree. SA=Strongly Agree.

1. I-BEST instructors receive sufficient release time for their courses.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

2. The basic skills and professional-career instructors contribute equal amounts of time to the I-BEST classes.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

3. Performance tests rather than standardized tests should be used to assess I-BEST's effectiveness.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

4. My superiors provide sufficient resources to insure I-BEST is successful.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

5. I-BEST staff feels supported in their curricular decisions by senior administrators.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

6. ESL students who are involved in I-BEST do not require any additional support services (e.g., counseling, child care) over and above what is currently provided.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

7. The resources required for I-BEST has forced us to cut or scale-back on other programs.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

8. My college has an adequate number of staff to implement I-BEST in a manner which fulfills our mission to the community.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

9. There are a sufficient number of qualified instructors to teach I-BEST in our service area.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

10. Transportation is a major challenge for I-BEST students because of the distance they live from campus.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

11. The level of I-BEST funding at my institution is adequate.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

12. It is a challenge to retain I-BEST instructors at my college.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

13. My institution has adapted I-BEST to meet our local needs.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

14. Our I-BEST courses allocate a sufficient amount of class time to teach students effective hiring strategies.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

15. As the course progressed, I-BEST students appeared more self-confident and optimistic about their future.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

16. Most I-BEST students show little interest in learning basic skills.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

17. Teaching basic skills geared to career contexts is the leading factor in I-BEST students' success.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

18. I-BEST students verbally discuss decisions in their lives with their instructors and fellow students.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

19. My college has been active in marketing the program.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

20. I-BEST has elevated the significance of basic skills instruction campus-wide.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

21. I-BEST has increased my level of personal contact with local employers.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

22. I find it difficult to collect data on the progress of I-BEST students because of my other professional demands.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

23. The college provides instructors with institutional data on effective I-BEST practices.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

24. The current level of student support services (e.g., counseling, child care) adequately meets I-BEST students' needs.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

25. The college has a clear strategy in place to identify when to eliminate any unneeded I-BEST programs.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

26. The pace new I-BEST programs are approved by the State Board appears to be appropriate.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

27. My institution routinely monitors employer demands to determine the needs of particular I-BEST programs.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

28. Student employment outcomes are routinely used to modify course instruction.

Strongly Agree

Agree

Neutral/Don't Know

Disagree

Strongly Disagree

APPENDIX J

Cover Letter to Implementers

Hello_____:

I would like to invite you to participate in a survey exploring the perceptions of I-BEST implementers. I am a doctoral candidate at Old Dominion University and am conducting this study for my dissertation. The survey is now accessible and will be available to you until December 23, 2009. The survey will take approximately 5 to 10 minutes to complete.

No individual identifying information will be requested and the tracking feature on SurveyMonkey is turned off so you will remain anonymous. Although the findings of this research will be used in my dissertation, you will not be personally identified.

There are no foreseen risks for your participation in this research. One of the benefits for participating in this research is the findings can aid decision-makers in making improvements to the program which will assist your students. Your participation in this research is voluntary. If at any point during the research you no longer wish to participate, you are free to stop.

The submission of the survey is your consent to participate and acknowledgment you understand the purpose, risks, and benefits of this study. If you have any questions now or at some point in the future you may contact me at my phone number or email address: Bob Fox (360) 782-1317 or my email address - rfoxx005@odu.edu

You may enter a drawing to win one of three \$50 gift certificates at the end of the survey. After submitting the survey you will be redirected to a different web site to provide your contact information. The two sites are not linked so your personal information cannot be traced back to your survey responses. There will be one winner selected each week and if you did not win your name will be re-entered for the next drawing. The sooner you complete the survey the greater your chances of winning the gift certificate.

Thank you for participating in this research and your commitment to serve the students of Washington. Please click on the link below to access the survey.

<https://www.surveymonkey.com/s/BZFB5VH>

APPENDIX K

First Reminder

Hello_____:

I wish to congratulate Mike Brandstetter at Bates Technical College for winning the first gift certificate. If you did not win this time, there will be two more chances for you to win a gift certificate. I wish to thank you for you taking the time to complete the I-BEST survey.

Respectfully,

Bob

APPENDIX L

Final Email Reminder to the I-BEST Implementers

Hello _____:

I wish to thank you for taking the time to complete the I-BEST survey. If you have not taken the survey, I encourage you to do so quickly because the data collection period will end on December 23rd. If you need me to send you the link to the survey, I will be happy to send it to you.

The winner of our second gift certificate is Teri Odegard from Edmonds Community College. Congratulations to Terri! Remember everyone still has one more chance to win. This is my last email and I would like to wish you all the very best during this holiday season. Thank you again for your help because your participation is providing me the data to be of service to the community colleges and fulfill a lifelong dream.

Respectfully,

Bob

APPENDIX M

Table M1

Means, standard deviations, and levels of significance for Rural and Non-rural Colleges

Variables	Rural Colleges		Non-rural Colleges		<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Release Time	3.01	1.09	2.75	1.10	.14
Equal Time	3.07	1.21	3.34	1.08	.13
Testing	3.74	0.92	3.62	0.96	.43
Adequate Resources	3.53	1.06	3.39	1.21	.43
Feel Supported	3.89	0.75	3.72	1.11	.25
ESL Students	2.51	1.00	2.39	1.07	.47
Cut Back	2.57	0.91	2.49	0.85	.54
College Mission	3.14	1.09	2.88	1.23	.18
Instructor Supply	3.43	1.01	3.33	1.00	.52
Transportation	3.09	0.92	3.04	0.91	.69
Program Funding	2.93	1.08	2.85	1.04	.61
Retain Instructors	2.78	0.91	2.81	1.06	.88
Local Needs	3.99	0.73	3.68	0.90	.02*
Hiring Strategies	2.95	0.98	3.14	1.00	.22
Optimism	4.34	0.73	4.43	0.60	.40
Little Interest	2.30	0.98	1.94	0.99	.03*
Career Context	4.01	0.93	4.04	0.92	.88

Table M1 Continued

Variables	Rural Colleges		Non-rural Colleges		<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Little Interest	2.30	0.98	1.94	0.99	.03*
Career Context	4.01	0.93	4.04	0.92	.88
Verbally Discuss	4.15	0.75	4.04	0.76	.35
Marketing	3.68	0.90	3.52	1.04	.31
Campus-wide	3.44	0.89	3.42	1.07	.86
Personal Contact	2.50	1.03	2.51	1.04	.97
Collect Data	3.26	1.06	3.30	1.16	.84
Effective Practices	3.15	1.03	2.87	0.99	.08
Support Services	2.88	1.01	2.66	0.98	.18
Eliminate Programs	2.85	0.72	2.86	0.74	.96
Board Approval	3.38	0.73	3.20	0.84	.16
Employer Demands	3.23	0.79	3.24	0.91	.95
Student Outcomes	3.04	0.91	3.21	1.08	.28

Note. * $p < .05$.

VITA

University of California, San Diego CA
Bachelor of Arts, Psychology

Old Dominion University, Norfolk VA
Masters of Science, Education

Old Dominion University, Norfolk VA
Doctor of Philosophy, Community College Leadership

Real Estate Appraiser. Property valuation services in Southern California for three years prior to moving to Washington State. Sole proprietor of an appraisal business in Kitsap County, Washington for 19 years.

Substitute teacher for the Bremerton School District in Bremerton, Washington. Served as a teacher at all grade levels from K thru 12.